Inequality, Polarization, and Culture Wars*

Peter Buisseret and Richard Van Weelden[†]

September 19, 2025

Abstract

Income inequality and political polarization have risen sharply in recent decades. Yet, over the same period, elections have become increasingly centered on cultural conflicts largely peripheral to redistribution. We develop a theoretical framework to explain this pattern. When parties compete on taxes, the Left party holds a numerical advantage, as the poor form a majority; the Right party holds a financial advantage in campaigns, as it draws support from the rich. Culture wars disrupt this alignment by moving some poor voters to Right and some rich donors to Left—shifting votes and money in opposite directions. Our model predicts when culture wars emerge, and which party initiates them, as a function of inequality, campaign finance, and the breadth and intensity of cultural polarization.

^{*}We thank seminar audiences for comments and feedback. We especially acknowledge Avi Acharya, Scott Ashworth, Chris Berry, Steve Callander, Juan Dodyk, Daniel Goldstein, Cathy Hafer, Mattias Polborn, Jonathan Rodden, Guido Tabellini and Hye Young You. We are also grateful to Alessandro Lizzeri for suggesting the alternative title, "What's the Matter with the Upper East Side?".

[†]Buisseret: Department of Government, Harvard University, pbuisseret@fas.harvard.edu. Van Weelden: Department of Economics, University of Pittsburgh, rmv22@pitt.edu.

1. Introduction

Since the 1980s, advanced economies have experienced steadily rising income inequality (Blanchet, Chancel and Gethin, 2022; Auten and Splinter, 2024) accompanied by growing political polarization (McCarty, Poole and Rosenthal, 2008). Intuitively, greater inequality should heighten polarization on economic issues by increasing the stakes of taxation and redistribution for both rich and poor voters. Yet, despite these rising economic stakes, electoral competition has increasingly centered on *culture war* issues—topics largely peripheral to questions of inequality (Gamm et al., 2024).

Culture war issues include gender identity, national identity, reproductive rights, sexual orientation, 'wokeness,' gun control, moral values taught in schools, and the role of religion in public life. While important, these issues are largely orthogonal to economic inequality and redistribution. Partisan polarization around cultural debates in the United States has intensified steadily since their emergence in the 1970s (Hunter, 1992; Gamm et al., 2024), coinciding with sharp increases in both income inequality and elite polarization (McCarty, Poole and Rosenthal, 2008). Culture wars have more recently expanded beyond the United States, emerging prominently in Canada, the United Kingdom, and Europe.

Emphasizing cultural issues in electoral campaigns has a clear strategic logic: it exploits divisions within income-based political coalitions by prioritizing issues on which preferences are less correlated with income. But why *now*? What features of the contemporary economic and political environment encourage these strategies? Under what conditions should we expect the 'Left' party, rather than the 'Right' party, to initiate culture wars? And which types of cultural issues are most advantageous for parties to exploit: broad-based or niche concerns, deeply polarizing or moderately contentious issues? Finally, how does the rise of culture wars affect

¹The Economist. "The culture wars have come to Canada." October 12, 2023.

²The Independent. "Rishi Sunak says 100% of women do not have a penis." April 14, 2023.

³ The Nation. "Giorgia Meloni's Bootstrap Ideology." January 2023.

polarization around traditional economic issues?

We address these questions in a theoretical model of two-party electoral competition. We start from the premise that when parties compete exclusively on taxation, poorer voters support the *Left* party, offering higher taxes and redistribution, while richer voters support the *Right* party, offering lower taxes. Left enjoys a numerical majority, whereas Right holds a financial advantage through contributions from the wealthy. When either party diverges from its opponent on cultural issues—effectively launching a culture war—it triggers a partial realignment: some low-income voters shift to Right and some high-income voters shift to Left. This reshapes both electoral coalitions and the distribution of financial resources. In our framework, campaign money enables parties to attract the support of "impressionable" voters. Because successful campaigns require both financial resources and policy-driven voter support, either party can gain strategically from this realignment.

To see how a party can benefit from taking an unpopular stance on a cultural issue—even when preferences on cultural and economic issues are independent—consider the following example. Suppose Right advocates low taxes/redistribution, whereas Left advocates high taxes. A fraction r < 1/2 of voters are rich, while 1 - r are poor. On the cultural dimension, there are two possible positions: one majority-preferred and one minority-preferred. Let $u \in (r, 1/2)$ denote the fraction of voters supporting the minority-preferred position, and assume all voters care more about cultural policy than they care about taxes. Finally, assume that only the rich donate, and only to their preferred party.

If parties differ only on taxes, the poor vote for Left and the rich both vote and donate to Right. In this case, Left secures 1-r of the votes, while Right secures all of the donations. Now suppose Right adopts the minority-preferred cultural position. Its vote share rises from r to u. If instead Left adopts the minority-preferred position, it gains some donations from the rich.

This simple example illustrates a key idea: Right can expand its electoral base, and Left can boost its fundraising, by diverging from its opponent on the cultural issue. The more general

principle—that parties can benefit from creating cultural divisions, even when taking unpopular positions—emerges in a richer model of redistribution and campaign finance, and does not require culture to be more important than economics.

Single-issue competition is stable only when there is broad consensus on cultural issues. Absent such consensus, culture wars are driven by the Right to broaden its voter appeal when money plays a limited role, while Left drives culture wars to attract wealthy donors when money is critical. The economic environment directly shapes this tradeoff. When income and tax polarization are high, the stakes of redistribution rise, fundraising intensifies, and Left has a greater incentive to initiate a culture war. At the same time, greater inequality increases the importance of redistribution, making both parties more willing to adopt polarized cultural positions for electoral advantage. Paradoxically, then, income inequality fuels culture wars precisely because redistribution becomes more important.

Different cultural issues strategically benefit different parties. Because the Right uses culture wars primarily to win votes, while the Left uses them to fundraise, Right provokes culture wars on issues that a large swathe of voters care about ("high breadth" issues) to induce more crossover voting. Conversely, Left emphasizes niche but intensely felt ("high intensity") issues to attract substantial donations without alienating its broader base. An implication of this is that, regardless of which party initiates a culture war, Right consistently has stronger incentives to highlight cultural divisions among voters.

Finally, we show that, although economic polarization can trigger culture wars, the emergence of such conflicts reduce the parties' polarization on taxes. To demonstrate this, we endogenize each party's choice of tax rate, assuming party policies reflect the average preferences of their supporters. Under purely economic competition, Right cannot appeal to poorer voters and thus maximizes polarization on taxes to attract donations from the wealthy; in response, Left moderates its tax proposals below what its poorer voters prefer. Higher inequality increases both Left's preferred tax and the power of the rich, and so has an ambiguous effect on its tax

platform.

The onset of culture wars partially reshapes the electorate, drawing affluent liberals into Left's coalition and thereby shifting its preferred economic platform rightward. At the same time, cultural polarization raises the stakes of electoral victory, since outcomes now affect policy in two dimensions rather than one. Both forces reinforce convergence toward the tax preferences of the wealthy. As a result, when Left elevates niche cultural issues to attract wealthy liberals, it simultaneously risks appearing to economically abandon its traditional base.

Money is important in electoral campaigns everywhere, but private donations have long played an outsized role in the United States. Campaign spending exploded following the Supreme Court's 2010 *Citizens United* decision, which allowed nearly unlimited campaign contributions and amplified wealthy donors' influence.⁴ More recently, strained public budgets, rising campaign costs, and declining support for established parties reduced public funding and thus also increased reliance on private donors outside the U.S. (Cagé, 2020). This shift has coincided with an increased emphasis on culture wars internationally.

In 2015, Canada's Conservative government phased out federal per-vote party subsidies, increased individual donation limits, and permitted longer, costlier election campaigns—measures widely viewed as leveraging their fundraising advantage (Scarrow, 2016). Similarly, in 2023, the UK's Conservative government raised general-election spending caps by 80% (from £19.5m to £35m), reinforcing their traditional financial edge over Labour and intensifying both major parties' reliance on "super donors" (Draca, Green and Homroy, 2023). Italy abolished public party subsidies entirely in 2017, replacing them with voluntary taxpayer contributions of 0.2% of taxable liability. This reform coincided with the rapid ascent of Giorgia Meloni's culturally conservative Fratelli d'Italia (FdI), which became the second largest recipient of private donations and

⁴Open Secrets estimates that over \$18 billion was spent in the 2020 U.S. election, compared to \$8 billion in 2008 and \$5.6 billion in 2000.

won the 2022 election.⁵

Contribution. Our model of public finance builds directly on Romer (1975), Roberts (1977), and Meltzer and Richard (1981), in which parties compete by proposing taxes, but generates three different predictions. First, we predict that *both* parties propose taxes below the median income voter's preference, regardless of their cultural policies. Second, we show that higher income inequality need not lead to higher taxes. Third, by incorporating cultural issues, our model predicts that some poor support the Right, and some rich support the Left.

We are not the first to consider redistributive policy with cultural identities. Roemer (1998) focuses on a setting in which cultural issues dominate tax concerns so that competition is effectively one-dimensional. His parties converge to the median cultural preference type's preferred tax policy. If the cultural median is relatively wealthy, the parties' taxes are below the preferred rate of the population median. Because we emphasize the role of money in elections, our argument does not require a particular correlation between income and culture, and it does not require that culture is inherently more salient than taxes. Krasa and Polborn (2012, 2014), Matakos and Xefteris (2017), Buisseret and Van Weelden (2022) and Besley and Persson (2023) study multiple issues but fixed policies in one dimension, thereby restricting parties to select platforms only on one policy dimension.

Esteban and Ray (2008) explore the incentives to create coalitions along dimensions other than rich and poor in the context of ethnic conflict; their focus is on whether conflict will emerge and whether it's along class or ethnic lines whereas we focus on simultaneous polarization across both dimensions. Desai (2020) develops a model in which parties choose tax policy and campaign effort to heighten the salience of a majority-minority ethnic cleavage. The party representing the rich always invests more in ethnic appeals to offset its redistributive disadvantage

⁵See Meloni's widely-covered 2022 speech emphasizing cultural and religious conservatism: 'Yes to the natural family, no to the LGBT lobby. Yes to sexual identity, no to gender ideology. Yes to the culture of life, no to the abyss of death. Yes to the universality of the cross, no to Islamist violence. Yes to safe frontiers, no to massive immigration."

by attracting poor voters. Unlike his framework, ours predicts that cultural appeals may be pursued by either the Left or the Right, and that the appeal may be successful even when a party's cultural position is minority-preferred.

Shayo (2009) allows cultural identities to affect the intensity of voters' preferences over taxes but does not explore how political parties strategically shape their importance. Enke, Polborn and Wu (2025) argue that cultural values may be a 'luxury' good and thus the weight voters place on cultural issue relative to taxes increases with income. In our framework, this would make the rich even more susceptible to cultural appeals by the Left.

A recent empirical literature documents patterns of realignment across voters and political parties—for example, Gethin, Martínez-Toledano and Piketty (2022). The predominant explanations for this realignment focus on primitive shifts in voters' cultural characteristics—their education (Zeira, 2021), or salience of their cultural identities (Bonomi, Gennaioli and Tabellini, 2021; Gennaioli and Tabellini, 2023). Our framework is complementary to these approaches: our voters' underlying cultural attitudes need not change, and need not be correlated with their income, in order for parties to strategically adopt divergent cultural positions.

Longuet-Marx (2025) estimates a structural model to quantify the drivers of working-class realignment in the U.S. He finds that Democrats' reduced emphasis on redistributive economic policy and increased focus on cultural issues explain much of their erosion in support among less-educated voters. Our model analyzes why Democrats may nonetheless emphasize these issues.

Central to our framework is that money can affect elections: we follow Baron (1994), Grossman and Helpman (1996) and others in assuming that campaign spending can influence impressionable voters. While many seminal papers view donors as exchange driven, recent work has also focused on non-instrumental 'small' donors who contribute for consumption reasons. Bouton, Castanheira and Drazen (2024) model costly donor mobilization with fixed party platforms, and Bouton et al. (2022) document small-donor patterns empirically. Related models that

embed such giving—e.g., Campante (2011), Feddersen and Gul (2014), Vlaicu (2018), Buisseret, Montagnes and Van Weelden (2025)—show wealthy donors can amplify polarization or depress redistribution. Marz (2024) finds that campaign contributions can reduce economic polarization, so if there is already polarization on a second dimension (such as climate) the election becomes focused on that issue. Our focus is when one-dimensional polarization is stable and how money reallocates polarization between economic and cultural dimensions.

2. Model

Two parties L and R compete in an election by offering platforms: party $j \in \{L, R\}$'s platform is $p_j = (\tau_j, z_j)$, where $\tau_j \in [0, 1]$ is its linear income tax and $z_j \in \{0, 1\}$ is its cultural policy. The parties compete for the support of a mass 1 of *policy* voters and a mass $\eta > 0$ of *impressionable* voters. We describe the behavior and payoffs of each, in turn.

Policy Voters. Mass 1 of policy voters both vote and contribute money based on the utility they receive from each party's platform. A share $r \in (0, 1/2)$ of policy voters are 'rich' with income $y_r \equiv 1 + \lambda$ and the remaining 1 - r > 1/2 are 'poor' with income $y_p = 1$. Parameter $\lambda > 0$ therefore captures the difference between the income of the rich and the poor. To facilitate comparative statics, we assume $\lambda \leq \overline{\lambda}$ where $\overline{\lambda}$ is some (perhaps very large) upper bound on inequality.

Given tax rate τ , the post-tax income of a voter with pre-tax income $y^i \in \{y_p, y_r\}$ is

$$W(y^{i}, \tau) \equiv (1 - \tau)y^{i} + (\tau - c(\tau))\overline{y}$$

where $\overline{y} \equiv 1 + r\lambda$ is average income and $c(\tau) = \tau^2/2$ is the deadweight loss of taxation. As taxes are a deadweight-loss inducing transfer from rich to poor, the payoff of the rich is strictly decreasing in the tax rate. Conversely the poor's post-tax income is strictly concave in the tax rate and maximized at

$$\tau_p \equiv \frac{r\lambda}{1+r\lambda} \in (0,1). \tag{1}$$

In addition to their after-tax income, each policy voter receives payoff b^iz from cultural policy $z \in \{0,1\}$. A fraction $\delta \in (0,1)$ of the voters have $b^i=0$, implying that they don't care about the cultural issue. The remaining $1-\delta$ voters of income type $y^i \in \{y_p,y_r\}$ have a continuously distributed cultural preference $b^i \sim U[b_\mu - b, b_\mu + b]$.

Parameter $\delta \in (0,1)$ reflects whether the culture war issue is broad (δ small) or niche (δ large). The parameter b reflects the intensity of disagreement among those who are polarized. Thus δ and b reflect the *breadth* and *intensity* of polarization on the cultural issue. It will be useful to distinguish between these two types of cultural polarization within the electorate when making predictions about which party benefits from provoking a culture war.

Finally, the parameter b_{μ} reflects the relative popularity of the two cultural policies, and without loss we assume $b_{\mu} \geq 0$. When $b_{\mu} = 0$ voters are evenly divided between the two cultural policies, but a higher $b_{\mu} > 0$ reflects that a greater fraction supports policy 1. For simplicity and transparency our baseline model assumes that the distribution of cultural preferences is the same for both rich and poor, but this is not critical; see Appendix B. Finally, we assume $b_{\mu} < b$ so that each cultural policy is preferred by a positive share of voters.

A policy voter i with preference type (y^i, b^i) 's value from party $j \in \{L, R\}$'s platform $p_j = (\tau_j, z_j)$ is therefore

$$\Pi(y^i, b^i, p_j) \equiv W(y^i, \tau_j) + b^i z_j.$$

For policy pair $p=(p_L,p_R)$, let $\mathcal{L}(p)$ denote the set of policy voters that prefer party L, its "supporters", and $\mathcal{R}(p)$ denote R's supporters:

$$\mathcal{L}(p) \equiv \{i : \Pi(y^i, b^i, p_L) > \Pi(y^i, b^i, p_R)\} \cup \{i : \Pi(y^i, b^i, p_L) = \Pi(y^i, b^i, p_R), y^i = y_p\},\tag{2}$$

$$\mathcal{R}(p) \equiv \{i : \Pi(y^i, b^i, p_R) > \Pi(y^i, b^i, p_L)\} \cup \{i : \Pi(y^i, b^i, p_L) = \Pi(y^i, b^i, p_R), y^i = y_r\}.$$
 (3)

That is, all voters support the party that gives them higher utility, with indifference broken towards the party which represents their income type. This tie breaking assumption rules out an equilibrium where the parties converge in both dimensions and party membership is independent of preferences.

Letting $H(y^i, b^i)$ denote the joint distribution of income and cultural preferences, the total policy vote for party $J \in \{L, R\}$ with supporters $\mathcal{J}(p)$ is:

$$v_J(p) = \int_{i \in \mathcal{J}(p)} dH(y^i, b^i)$$

and we define

$$\Delta V(p) = v_R(p) - v_L(p)$$

to be the net support for party R among policy voters.

Each policy voter is also a small donor. We assume each voter gives to her preferred party J a proportion α of the product of her income y^i and her net value from one party over the other. We assume α is small so contributions are only a fraction of total income; see Assumption 1 below. Party $J \in \{L, R\}$'s total campaign donations from the unit mass of policy voters is therefore:

$$m_J(p) \equiv \alpha \int_{i \in \mathcal{J}(p)} y^i (\Pi(y^i, b^i, p_J) - \Pi(y^i, b^i, p_{-J})) dH(y^i, b^i).$$
 (4)

Obviously it is not important whether all or only some contribute. What matters is that contributions from any subset of the electorate increases in those voters' income and preference intensity.⁶

Impressionable Voters. The mass $\eta > 0$ of impressionable voters do not make campaign contributions or evaluate candidates based on their policies: they choose between the parties on the basis of differences between the parties' campaign spending. Specifically, the fraction of impres-

⁶While we assume contributions are proportional to income, the empirical evidence suggests they are very convex in wealth (Kates et al., 2025). This would strengthen our results by increasing the relative importance of the rich in terms of fundraising.

sionable voters that support party $j \in \{L, R\}$ is governed by a contest success function:

$$\frac{m_j(p) + \beta/2}{\beta + m_L(p) + m_R(p)},$$

where $\beta > 0.7$ That is, each party benefits from increasing its money and decreasing the money of the other party, with money having a greater marginal benefit for the party with less. Decreasing returns to campaign spending is intuitive and plays an important role in the analysis. Since $\beta > 0$ the marginal value of each dollar is higher for the poorer party, but the same percentage increase in contributions benefits the richer party more; higher β means the marginal value of money is decreasing less quickly, so closer to constant.⁸

The net support in terms of impressionable voters for party Right relative to Left is therefore:

$$\Delta M(p) = \frac{m_R(p) - m_L(p)}{\beta + m_L(p) + m_R(p)}.$$

Win Probability. Following Callander and Carbajal (2022) we assume that election outcomes are stochastic, and that a party's probability of winning is a strictly increasing function of its net votes—the difference of its votes and its opponent's—from both policy and non-policy voters. The Right party therefore wins with probability

$$\Phi_R(p) = \Phi(\Delta V(p) + \eta \Delta M(p)) \tag{5}$$

where $\Phi: [-1-\eta, 1+\eta] \to [0,1]$ is continuously differentiable and strictly increasing. Left thus wins with probability $\Phi_L(p) = 1 - \Phi_R(p) = 1 - \Phi(\Delta V(p) + \eta \Delta M(p))$.

Party Objectives and Equilibrium. Each party maximizes the expected utility of its supporters

⁷Jia (2012) provides a stochastic choice foundation for our functional form.

⁸ Holding other parameters fixed higher β also makes money less important, but with high η and β money is very important and has close to constant returns.

given its opponent's policy, where the set of supporters is endogenously determined by the policy profile. Specifically, (p_L^*, p_R^*) is an *equilibrium* if and only if for each $J \in \{L, R\}$:

$$p_J^* \in \arg\max_{p_J \in [0,1] \times \{0,1\}} \quad \int_{i \in \mathcal{J}(p_J^*,p_{-J}^*)} \Phi_J(p_J,p_{-J}^*) (\Pi(y^i,b^i,p_J) - \Pi(y^i,b^i,p_{-J}^*)) \, dH(y^i,b^i)$$

where $\mathcal{L}(p^*)$ and $\mathcal{R}(p^*)$ are determined according to (2) and (3). That is, a profile of strategies is an equilibrium if both parties' policies maximize the average utility of its (endogenously determined) supporters.

Timing. The timing is as follows.

- 1. Each party $j \in \{L, R\}$ chooses policy.
- 2. Policy voters donate to their preferred candidate.
- 3. Both policy and impressionable voters cast their ballots.
- 4. The election winner is determined by nature, the winning party implements its platform, and payoffs are realized.

We impose the following parameter restrictions.

Assumption 1. $b > \overline{\lambda}$ and $\alpha < \frac{1}{3b}$.

Recall that inequality λ is bounded by $\overline{\lambda}$. The first condition ensures that some voters cast their ballots on the basis of cultural policies if preferences are divided (i.e., when $b_{\mu}=0$). The second condition ensures that each citizen donates only a fraction of their income to their preferred candidate, no matter the parties' platforms.

Preferred Taxes and Measure of Inequality. As discussed, a rich voter's preferred tax is zero while a poor voter's preferred tax is $\tau_p = \frac{r\lambda}{1+r\lambda}$, given by (1). As in Meltzer and Richard (1981), this tax rate strictly increases in the gap between the income of the rich and poor, λ . The poor's optimal tax rate τ_p also corresponds to the share of total income held by the rich, and the Gini coefficient is equal to $(1-r)\tau_p$. Thus we interpret λ as a measure of inequality.

Discussion

Our results do not rely on small donors being the only source of campaign finance. Adding PACs, corporate money, public finance, party coffers, or "mega-donors" leaves the logic fundamentally unchanged. If outside funding is symmetric (e.g. public funding) this would effectively decrease the value of money. Conversely, if outside funding skews Right (e.g. corporate donations), Left's relative incentive to tap small donors simply rises. And, because large donors include both liberals and conservatives on cultural issues, the Left still benefits from appealing to culturally liberal mega-donors.

We assume each party's policy motives reflect the preferences of its supporters, following Baron (1993) and Roemer (2001), for two reasons. Substantively, when competition is only over taxes, the Left represents primarily poor voters and the Right rich voters. Introducing cultural issues mixes rich and poor supporters in both parties, and our assumption captures how this reshapes each party's ideological priorities. Technically, giving parties motives on both dimensions helps to ensure the existence of pure-strategy equilibria, as shown later.

3. Preliminary Results: Votes and Money

We begin our analysis by considering how the parties' support and money from policy voters varies with taxes and cultural policies.

Votes and Money with Cultural Convergence

Suppose the parties' tax policies are $0 \le \tau_R < \tau_L \le \tau_p$ and that the two parties converge on the cultural issue: $z_L = z_R = z$ for either cultural policy $z \in \{0,1\}$. Define $\Delta \tau \equiv \tau_L - \tau_R > 0$ and $\Delta c \equiv c(\tau_L) - c(\tau_R) = \tau_L^2/2 - \tau_R^2/2 > 0$. Since the parties divide solely on taxes, a rich policy voter's net (economic) value from party R is

$$W(y_r, \tau_R) - W(y_r, \tau_L) = (1 - r)\lambda \Delta \tau + (1 + r\lambda)\Delta c \equiv b_r(\tau_L, \tau_R) > 0,$$

and a poor voter's net value from party L is

$$W(y_p, \tau_L) - W(y_p, \tau_R) = r\lambda \Delta \tau - (1 + r\lambda)\Delta c \equiv b_p(\tau_L, \tau_R) > 0.$$

That $b_p(\tau_L, \tau_R) > 0$ follows because $W(y_p, \cdot)$ is strictly concave in τ and both τ_L and τ_R are below τ_p . Moreover both b_r and b_p are strictly positive since $\Delta \tau > 0$. Finally, the condition $\overline{\lambda} < b$ in Assumption 1 ensures b_r and b_p are less than b for all $\lambda \in [0, \overline{\lambda}]$.

Under cultural convergence rich policy voters, fraction r < 1/2 of the population, unanimously support Right. Similarly, all poor policy voters, the remaining 1-r, support Left. So, when $z_L = z_R = z \in \{0,1\}$, R's net votes are:

$$\Delta V(\tau_L, z, \tau_R, z) = r - (1 - r) = 2r - 1 < 0.$$
(6)

We next turn to the parties' net money. By (4),

$$m_R(\tau_L, z, \tau_R, z) = \alpha r y_r b_r(\tau_L, \tau_R) \tag{7}$$

and

$$m_L(\tau_L, z, \tau_R, z) = \alpha (1 - r) y_p b_p(\tau_L, \tau_R). \tag{8}$$

When $\Delta \tau = 0$ all individuals are indifferent and no money is raised. But when $\Delta \tau > 0$ Right's money advantage in a single-issue election generates an advantage in impressionable voters of

$$\Delta M(\tau_L, z, \tau_R, z) = \frac{m_R(\tau_L, z, \tau_R, z) - m_L(\tau_L, z, \tau_R, z)}{\beta + m_R(\tau_L, z, \tau_R, z) + m_L(\tau_L, z, \tau_R, z)}$$

$$= \frac{(1 - r)r\lambda^2 \Delta \tau + \overline{y}^2 \Delta c}{\beta / \alpha + r(1 - r)(y_r^2 - y_p^2) \Delta \tau + (ry_r - (1 - r)y_p)\overline{y}\Delta c}$$

$$> 0.$$
(9)

This leads to the following result.

Lemma 1. When $z_L = z_R$ and $\tau_R < \tau_L$ party R holds a money advantage $\Delta M(\tau_L, z, \tau_R, z) > 0$. Moreover, if $\beta \geq \alpha \overline{\lambda}$, this advantage increases in inequality and the parties' polarization on taxes. That is, when $\beta \geq \alpha \overline{\lambda}$, $\Delta M(\tau_L, z, \tau_R, z)$ increases in λ and τ_L and decreases in τ_R .

If parties diverge only on taxes, Right always holds a funding advantage, whatever the level of inequality or the share of poor voters. The rich, though fewer, bear larger redistribution costs—the transfer size is inversely proportional to group share—and tax deadweight losses amplify their stakes while diminishing those of the poor.

If β is not too small, Right's fundraising advantage rises with both inequality and tax polarization: higher stakes draw in more donations, widening Right's lead. The β -threshold guarantees that returns to spending are not so concave that this exchange benefits Left more. Because only the ratio β/α matters, the condition is always met when α is small; under Assumption 1 it holds whenever $\beta \geq 1/3$.

When the parties diverge only in one dimension the vote and money advantages are independent of preferences over the second issue. We now consider cultural divergence.

Votes and Money with Cultural Divergence

Suppose that the parties adopt divergent positions on the cultural issue when $0 \le \tau_R < \tau_L \le \tau_p$. Consider first the case in which $z_L = 1$ and $z_R = 0$. By (2) and (3), a poor voter supports L so long as her relative preference for R's cultural policy isn't too negative:

$$W(y_p, \tau_L) + b^i - W(y_p, \tau_R) \ge 0 \iff b^i \ge -b_p(\tau_L, \tau_R). \tag{10}$$

Similarly, a rich voter supports R so long as her relative preference for L's cultural policy isn't too large:

$$W(y_r, \tau_R) - (W(y_r, \tau_L) + b^i) \ge 0 \iff b^i \le b_r(\tau_L, \tau_R).$$
(11)

Analogously, if $z_L=0$ and $z_R=1$ then a poor voter supports L if and only if $b^i \leq b_p(\tau_L,\tau_R)$ and a rich voter supports R when $b^i \geq -b_r(\tau_L,\tau_R)$.

When the parties diverge on the cultural policy each party wins the support of some rich and poor voters, though a greater fraction of rich than poor voters still support the Right party. Cultural divergence thus results in an exchange of votes and money across the two parties. Which party benefits from this exchange? We break down the effect on support from policy voters and money separately.

Cultural Divergence and Votes. Cultural divergence can result in a strictly positive net transfer of policy voters from L to R even when a majority of voters strictly prefer L's cultural policy. To illustrate this, consider again cultural divergence to $z_L = 1$ and $z_R = 0$ and let $F(b^i)$ denote the (uniform) cumulative distribution of b^i . R's net policy votes are thus:

$$\Delta V(\tau_L, 1, \tau_R, 0) = \delta(2r - 1) + (1 - \delta)r(2F(b_r(\tau)) - 1) + (1 - \delta)(1 - r)(2F(-b_p(\tau)) - 1).$$

The first term captures the share $\delta \in (0,1)$ of voters that are indifferent to the cultural issue and so vote exclusively on taxes. These voters divide between parties according to their income. The second term is R's net votes among the rich voters that care about the cultural issue: using expression (11), share $F(b_r(\tau))$ support R while $1 - F(b_r(\tau))$ support L. Similarly, the third term is R's net votes among the poor voters that care about the cultural issue, derived from (10).

Recalling that, by (6), $\Delta V(\tau_L, z, \tau_R, z) = 2r - 1$ when parties converge on cultural policies, the net effect of cultural divergence on votes simplifies to

$$\Delta V(\tau_L, 1, \tau_R, 0) - \Delta V(\tau_L, z, \tau_R, z) = 2(1 - \delta) \left((1 - r)F(-b_p(\tau)) - r(1 - F(b_r(\tau))) \right). \tag{12}$$

That is, mass $(1 - \delta)(1 - r)F(-b_p(\tau))$ of poor voters shift from Left to Right due to cultural

divergence and mass $(1 - \delta)r(1 - F(b_r(\tau)))$ rich voters switch from Right to Left. Consequently,

$$\Delta V(\tau_L, 1, \tau_R, 0) - \Delta V(\tau_L, 1, \tau_R, 1) > 0 \iff \frac{1 - r}{r} > \frac{1 - F(b_r(\tau))}{F(-b_p(\tau))}.$$
 (13)

We have the following result.

Lemma 2. For any $\tau_R < \tau_L$, Right's net vote gain in policy voters from cultural divergence,

$$\Delta V(\tau_L, 1, \tau_R, 0) - \Delta V(\tau_L, 1, \tau_R, 1),$$

strictly decreases in b_{μ} and there exists $b_{\mu}^{V} \in (0, b - b_{p})$ such that its net gain is positive if and only if $b_{\mu} < b_{\mu}^{V}$. When $b_{\mu} < b_{\mu}^{V}$, Right's net gain in policy voters decreases in δ .

There are two reasons Right can gain policy voters even by taking a position that is less popular. First, the poor are a numerical majority and, all else equal, the small party benefits from dividing support across a second dimension (Buisseret and Van Weelden, 2025). This is reflected in the fraction $\frac{1-r}{r}$ in the LHS of (13) being strictly greater than one, which means that if each party loses a similar share of supporters the right party benefits.

Second, the rich policy voters care relatively more about tax policy:

$$b_r(\tau) = (1-r)\lambda\Delta\tau + (1+r\lambda)\Delta c > r\lambda\Delta\tau - (1+r\lambda)\Delta c = b_p(\tau)$$

and thus when b_{μ} isn't too large (13)'s RHS is strictly less than one. Rich voters care more about taxes because the transfer from rich to poor is divided across more poor than rich voters. This means that a change in the tax rate has a greater impact on a rich voter's income. This logic is independent of the cost of taxation, but the fact that taxes are distortionary further increases the disutility for the rich and decreases the benefit to the poor. Finally note that as b_{μ} increases a greater fraction of both the rich and poor support the Left party and, by (10), no poor voters support Right if $b_{\mu} - b \ge -b_p$. So there is a cutoff $b_{\mu}^V \in (0, b - b_p)$ such that Right wins more policy

voters if and only if $b_{\mu} < b_{\mu}^{V}$.

Whenever the net gain is positive, Right benefits the most when a large share $1 - \delta$ of voters care about the issue and so more vote on the cultural issue than the economic issue. That is, Right benefits the most from culture wars on issues with the greatest *breadth* of disagreement.

Cultural Divergence and Money. We showed that Right's share of support from policy voters increases due to cultural divergence on an issue on which voters are roughly evenly divided. What about money? We now show that when voters are close to evenly divided, Left receives a monetary boost from divergence. To see this, suppose now that the parties diverge with Left taking the weakly less popular position: $z_L = 0$ and $z_R = 1$. Right's total money is then

$$m_{R}(\tau_{L}, 0, \tau_{R}, 1) = \delta \alpha r y_{r} b_{r}(\tau) + (1 - \delta) \alpha r y_{r} \int_{-b_{r}(\tau)}^{b_{\mu}+b} \frac{b^{i} + b_{r}(\tau)}{2b} db^{i} + (1 - \delta) \alpha (1 - r) y_{p} \int_{b_{p}(\tau)}^{b_{\mu}+b} \frac{b^{i} - b_{p}(\tau)}{2b} db^{i}.$$
(14)

Right wins money from the fraction δ of rich that don't care about the cultural issue. It also wins money from the $1-\delta$ of rich who care about the cultural policy and either agree or don't disagree too strongly with the party's policy (i.e., rich voters for whom $b^i \geq -b_r$). Finally, Right wins money from the $1-\delta$ of poor who care about the cultural issue and hold a sufficiently strong preference for Right's cultural policy over Left's (i.e., poor voters for whom $b^i > b_p$).

Similarly, *L*'s total money is

$$m_{L}(\tau_{L}, 0, \tau_{R}, 1) = \delta \alpha (1 - r) y_{p} b_{p}(\tau) + (1 - \delta) \alpha r y_{r} \int_{b_{\mu} - b}^{-b_{r}(\tau)} \frac{-b^{i} - b_{r}(\tau)}{2b} db^{i} + (1 - \delta) \alpha (1 - r) y_{p} \int_{b_{\mu} - b}^{b_{p}(\tau)} \frac{-b^{i} + b_{p}(\tau)}{2b} db^{i}.$$

$$(15)$$

Using (14) and (15) we obtain the difference in the parties' fundraising under cultural diver-

gence:

$$m_R(\tau_L, 0, \tau_R, 1) - m_L(\tau_L, 0, \tau_R, 1) = \alpha r y_r b_r(\tau) - \alpha (1 - r) y_p b_p(\tau) + \alpha (1 - \delta) b_\mu \overline{y}$$

$$= \underbrace{m_R(\tau_L, 1, \tau_R, 1) - m_L(\tau_L, 1, \tau_R, 1)}_{\text{difference of fundraising under cultural convergence}} + \alpha (1 - \delta) b_\mu \overline{y}. \quad (16)$$

The second equality follows because the corresponding difference in fundraising under cultural convergence is the difference of (7) and (8).

Equation 16 links the fundraising gap to the income-weighted utility gap between the parties. The first term gives the net income-weighted preference for Right created by tax polarization; the second gives the corresponding preference from cultural polarization. Because donations are driven by preference intensity, setting $b_{\mu}=0$ leaves the average utility gap—and thus net donations—from rich and poor unchanged. Cultural divergence, however, causes some policy voters to donate to the other party; with net contributions fixed, these crossover donations raise the total contributions each income group provides. Essentially, cultural divergence increases the average net preference intensity, and thus total money raised.

Recall that Right's net money advantage is $\Delta M(p) = \frac{m_R(p) - m_L(p)}{\beta + m_R(p) + m_L(p)}$, so if the total raised increases but the difference is unchanged this benefits the poorer party. The next result shows that Left can reduce its money disadvantage with cultural divergence, as long as its position is not too unpopular.

Lemma 3. When $\tau_R < \tau_L$, $\Delta M(\tau_L, 0, \tau_R, 1) - \Delta M(\tau_L, 1, \tau_R, 1)$ strictly increases in b_μ and there is a threshold $b_\mu^M \in (0, b - b_r)$ such that it is negative if and only if $b_\mu < b_\mu^M$. Furthermore Left's net money improvement increases in b.

When Left initiates a culture war by adopting the less popular cultural stance, Left mitigates its funding deficit not by closing the fundraising gap, but by inducing a general rise in dona-

tions that diminishes the marginal value of Right's monetary advantage. Because preference intensity increases with the cultural-polarization parameter b, total contributions rise with b, benefiting resource-constrained Left. The irony is that Left's gain from culture wars is due to the financial power of wealthy donors, even though securing donations may require policies disliked by most voters, rich and poor alike.

Lemma 3 shows that Left gains more financially from cultural divergence as b increases. However, Assumption 1 requires that the donation rate α decreases when b becomes sufficiently large to ensure individual contributions never exceed income. While a lower α reduces donations in absolute terms, only the ratio β/α matters for equilibrium behavior, so holding it constant preserves the overall influence of money. As cultural polarization b becomes large, culturally motivated donations overwhelm economic ones, effectively eliminating Right's financial advantage. Thus, Left benefits most from cultural divergence precisely when Right's monetary edge under cultural convergence is strongest. We obtain the following result.

Lemma 4. Suppose $\beta/\alpha \geq \overline{\lambda}$ is constant in b. There exists a \overline{b} such that, for all $b > \overline{b}$,

$$\Delta M(0, \tau_L, 1, \tau_R) - \Delta M(z, \tau_L, z, \tau_R)$$

decreases in λ and τ_L and increases in τ_R .

When cultural preferences aren't too imbalanced, Right benefits from cultural divergence by drawing votes from Left's base, and those gains increase in the breadth of polarization, $1 - \delta$. Conversely, Left benefits by attracting donations from Right's base, with financial gains rising in the intensity of polarization, b. Moreover, when cultural polarization is strong, Left's advantage from divergence is amplified by greater economic and income polarization.

⁹If Left instead takes the more popular cultural position, the fundraising gap narrows directly; with sufficient popular support for its cultural policy, Left's money could even surpass Right.

4. Equilibrium Cultural Platforms with Fixed Taxes

We begin by analyzing equilibrium cultural policies under fixed taxes $\tau_L > \tau_R$. Later, we endogenize both cultural policies *and* taxes. The first question is whether it is an equilibrium for both parties to converge to the same cultural policy. Recall that each party's objective is determined endogenously by the preferences of its supporters. If parties converge on culture, all poor voters align with Left and all rich voters with Right, so each party maximizes the expected utility of its respective income group.

We begin with the special case in which $b_{\mu}=0$, i.e., in which the average net preference for cultural policy z=1, is zero. Since culturally motivated voters are evenly split each party's average voter payoff is independent of its cultural position. So they choose the cultural stance that maximizes its probability of winning. Since Right's win probability is $\Phi_R(p)=\Phi(\Delta V(p)+\eta M(p))$, Left and Right aim to minimize and maximize $\Delta V(p)+\eta M(p)$, respectively. Here, η reflects the mass of impressionable voters and thus the electoral importance of money. From Lemma 2, divergence increases ΔV ; from Lemma 3, it decreases ΔM . Hence, Left prefers divergence when η is large, and Right does when η is small.

Proposition 1. There exists a unique $\eta^*(r, \alpha, \beta, \delta, b, \tau_L, \tau_R, \lambda)$ such that, when $b_\mu = 0$, cultural divergence benefits Right if $\eta < \eta^*$ and Left if $\eta > \eta^*$. Threshold $\eta^*(r, \alpha, \beta, \delta, b, \tau_L, \tau_R, \lambda)$ decreases in b and δ and, if $\beta \geq \alpha \overline{\lambda}$ and b is sufficiently large, decreases in τ_L , increases in τ_R , and decreases in λ .

Proposition 1 characterizes which party benefits from cultural divergence. As the intensity of cultural polarization b rises, Left gains more financially since culturally liberal wealthy donors increase their contributions. An increase in the breadth of polarization $1 - \delta$ also raises donations but this is offset by the cost to Left of losing poor policy voters who now vote based on culture rather than economics. Thus, when voters are evenly split on the cultural issue, Left is most likely to benefit from divergence on narrow, high-intensity issues: these are valuable for fundraising without shifting many votes. Finally, when b is high, cultural divergence is espe-

cially advantageous to Left when $\Delta \tau$ and λ are large—that is, when Right holds the greatest advantage when parties are polarized only on taxes.

When $b_{\mu}=0$ a convergent equilibrium is impossible unless $\eta=\eta^*$; one party always prefers convergence, the other divergence. What if $b_{\mu}>0$, so that z=1 is favored by a strict majority? Convergence to the popular policy z=1 becomes easier to sustain for two reasons. First, by Lemma 2 and Lemma 3, a party's win probability increases with the popularity of its cultural stance, reducing the incentive to adopt z=0. Second, since each party maximizes the welfare of its supporters, adopting an unpopular position directly lowers their utility. Convergence to the less popular policy, conversely, can never occur.

To state the next result define ϕ to be the maximum of $|\Phi'(x)|$ over all $x \in [-1 - \eta, 1 + \eta]$.

Proposition 2. There exists a $\overline{\phi}_1(r, \eta, \alpha, \beta, \delta, b, \tau_L, \tau_R, \lambda) > 0$ such that, if $\phi < \overline{\phi}_1$, a pure strategy equilibrium exists. Moreover, there exists a strictly convex function $b_{\mu}(\eta)$, minimized at $b_{\mu}(\eta^*) = 0$, such that:

- 1. a culturally convergent equilibrium exists if and only if $b_{\mu} \geq b_{\mu}(\eta)$. In this equilibrium: $z_L = z_R = 1$.
- 2. If $0 \le b_{\mu} < b_{\mu}(\eta)$, then a culturally divergent equilibrium, in which $z_L \ne z_R$, exists.

A convergent equilibrium exists if and only if there is a sufficient consensus on the cultural issue, in which case parties choose the more popular cultural policy. A divergent equilibrium may also exist in this case, but if the parties converge on the popular policy neither has an incentive to deviate. Conversely, when b_{μ} is close to 0, one of the parties has an incentive to trigger a culture war: either Right in pursuit of votes or Left in pursuit of money.

To see the importance of assuming parties maximize the welfare of their supporters, consider instead purely office-seeking parties or parties that care only about economic policy. In that case, a convergent equilibrium could exist if b_{μ} is sufficiently large, but otherwise the equilibrium would involve mixed strategies. The cultural-policy game becomes zero-sum: since

neither party values culture directly, one party's incentive to differentiate implies the other's incentive to mimic. Thus, when b_{μ} is low, the unique equilibrium involves randomization—a classic "chase-and-evade" dynamic (Aragones and Palfrey, 2002; Buisseret and Van Weelden, 2022).

In our framework, parties care about cultural policy because their objectives reflect the preferences of their supporters. This reinforces divergence: each party is willing to sacrifice some electoral probability to pursue the cultural goals of its base. The upper bound on ϕ ensures a sufficient amount of 'noise' in the election for policy motivated parties to support divergence in pure strategies; alternatively conditions that b and/or $1-\delta$ are large enough would also be sufficient. The equilibrium need not be unique: for some parameters it can be an equilibrium for either party to adopt either cultural position. However, only one party has an incentive to initiate a culture war by deviating from cultural convergence, and the threshold at which this incentive bites is unique.

Discussion. While the analysis in this section is "partial", taking the tax policy of each party as given, it generates many important insights into culture war politics.

Who Initiates the Culture War? We can interpret the party that would deviate from cultural convergence as the one initiating a culture war—that is, the party whose incentives render convergence unsustainable. Propositions 1 and 2 show that high inequality combined with polarization makes cultural divergence more likely to be driven by Left, which is otherwise at a severe financial disadvantage and needs to attract wealthy donors. Conversely, when tax polarization falls, Right's fundraising advantage narrows, creating incentives for it to divide Left's broader coalition.

This logic aligns with the view that Republicans brought culture wars to the national stage in the 1990s (Hemmer, 2022). In our model, this move is not explained by moral reaction to President Clinton, but by economic centrism on the part of Democrats weakening Republican financial advantages. By moderating on redistribution, Democrats reduce the preference in-

tensity of wealthy and business-aligned donors, reducing Republicans' financial advantage. In turn, Right seeks to divide the electorate along cultural lines. The same mechanism applies to the UK under Tony Blair's New Labour government.

What Kind of Culture War? Left has the strongest incentive to diverge on cultural issues that few voters care about ($\delta \approx 1$) but that elicit intense preferences from a small group of wealthy donors. While our model treats δ as exogenous, Right would benefit from making culture wars more broadly salient—that is, lowering δ . Thus, regardless of which party initiates cultural divergence, Right is incentivized to elevate cultural salience in political campaigns. Conversely, if Left could advance culturally liberal positions covertly—appealing to donors without publicizing them—it would always prefer to do so.

Effect of Campaign Finance Laws: Our model predicts that changes in campaign finance rules can alter which party (if either) initiates culture wars. Reforms that increase reliance on private donations—such as raising donation limits (e.g., Citizens United in the U.S. and recent reforms in the UK), extending campaign length (Canada), or eliminating public funding (Canada, Italy)—make parties more reliant on donations from the wealthy. While this mechanically benefits Right, it also exerts indirect pressure on Left to adopt unpopular cultural positions to secure funding, which may in turn aid Right electorally. One possible example is the post-Citizens United shift in Democratic positioning: the party has raised money through cultural appeals but also hemorrhaged working-class support (Longuet-Marx, 2025).

Partisan Alignment and the "Party of Elites": Our framework helps explain how Left can be viewed as the party of "elites" even though high-income voters still largely support Right. Republicans also receive a disproportionate share of donations from the wealthy, even though this pattern has softened in the Trump era (Kates et al., 2025). In our model, cultural divergence

¹⁰ In the 2020 U.S. presidential election, Joe Biden received 57% of the two-party vote among households earning less than \$100,000, and 43% among those earning more. https://shorturl.at/lqNV2

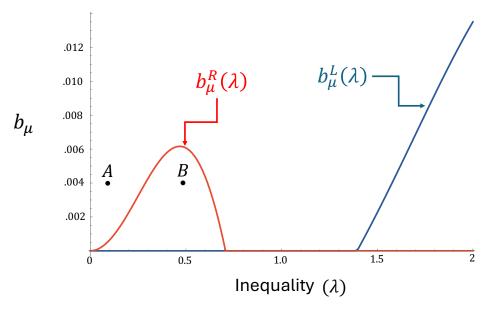


Figure 1 – The horizontal axis plots inequality (λ). Right's best response to Left's choice of $z_L=1$ is to also choose $z_R=1$ if and only if $b_\mu \geq b_\mu^R$. Symmetrically, b_μ^L is the threshold at which Left's best response to $z_R=1$ is $z_L=1$. Proposition 2 identifies b^μ as the maximum of these two thresholds. *Primitives*: r=.4, $\delta=.4$, $\eta=4$, b=3.5, $\beta=.22$, $\Phi(p)=1/2+.3(\Delta V(p)+\eta\Delta M(p))$, $\alpha=.11$.

weakens—but does not eliminate—the correlation between income and support for Right.

So why is Left often perceived as the party of elites? In our model, Left adopts cultural positions that reduce support from its economic base in order to secure donations from culturally liberal rich donors. Precisely because it diverges from the wealthy on economic issues, Left depends more heavily on culturally liberal elites. Right, by contrast, is financed by economically conservative donors and thus does not face financial pressure to elevate cultural issues. As shown by Broockman and Malhotra (2020), Republican donors are economically conservative, while Democratic donors are disproportionately socially liberal. This pattern emerges in our model even if preferences over economic and cultural policy are uncorrelated, since wealthy voters support and donate to Left only when they are culturally very liberal.

More Inequality, More Culture Wars? It might seem paradoxical that as the stakes from taxation rise with greater inequality, parties increasingly compete on culture war issues that are largely peripheral to inequality. Our framework suggests this is no coincidence. We illustrate this in

Figure 1, which plots two critical thresholds. The red line shows b_{μ}^R : Right's best response to $z_L=1$ is also $z_R=1$ if and only if $b_{\mu}\geq b_{\mu}^R$. Symmetrically, the blue line shows b_{μ}^L , the minimum threshold at which Left's best response to $z_R=1$ is $z_L=1$.

When inequality is low, Right's advantage in campaign donations is negligible, giving it an electoral incentive to diverge from Left in pursuit of votes. Yet because inequality is small, the economic stakes of the election are limited, while a majority of all voters—including the rich—prefer cultural policy 1. As a result, Right will only adopt the minority-preferred cultural position for electoral gains if voters are nearly evenly split on that issue.

At high levels of inequality, Right enjoys a strong advantage in campaign donations, putting Left at a severe electoral disadvantage when competing solely on economic grounds. Although there may be broad consensus in favor of cultural policy z=1, the stakes of redistribution are so large that Left is willing to take a position that a clear majority—even of its own voters—opposes, in order to attract donations from a wealthy minority. Thus, greater inequality heightens Left's incentive to diverge on culture, even in the face of overwhelming consensus.

Nonetheless, high inequality can generate culture wars driven by either Left or Right. Given Proposition 1 it is easy to see why Left may initiate a culture war when inequality is high. Why might Right? Suppose b_{μ} is not too large. At low levels of inequality, Right would improve its electoral prospects by deviating on culture, but it refrains from doing so because its supporters' primary goal is securing cultural policy z=1. This is depicted by point A in Figure 1, where $b^{\mu} > b^{R}_{\mu}$, so that convergence is an equilibrium. When inequality increases, the stakes from taxes and redistribution become higher, so Right becomes willing to compromise on cultural policy. This is depicted in moving to point B, with $b_{\mu} < b^{R}_{\mu}$ and a Right-driven culture war.

Correlation Between Income and Cultural Preferences: So far we assumed that cultural attitudes are independent of income. There is, however, an argument that cultural preferences vary by income, with the wealthy more liberal on certain cultural issues (Gilens, 2012; Page, Bartels and Seawright, 2013). How, then, could the same party be *both* culturally conservative *and* low tax?

In the Appendix B, we allow for rich voters to lean slightly toward z=0, and poor voters to lean toward z=1, while preserving the overall average cultural preference. This change leaves the vote comparison between convergence and divergence unchanged, but it does affect money. As a result, Left has a stronger fundraising benefit from diverging to cultural policy z=0. This makes cultural divergence more electorally attractive to Left, but it also more costly in terms of policy as more poor voters prefer z=1. When inequality is high correlation increases Left's incentive to trigger a culture war: inequality both magnifies the fundraising returns to culture wars and raises the relative importance of taxes for Left's base.

5. Equilibrium Cultural and Tax Policies

Having considered the strategic incentives to polarize on the cultural issue we now study how the parties' cultural positions impact their choice of taxes. To make headway, we assume that Right's probability of winning increases linearly in its net votes.

Assumption 2.
$$\Phi(\Delta V(p) + \eta M(p)) = \frac{1}{2} + \phi(\Delta V(p) + \eta \Delta M(p)).$$

This linear functional form arises naturally in probabilistic voting models with mean-zero, uniformly distributed aggregate uncertainty. We maintain Assumption 2 throughout this section, with ϕ small enough that winning probabilities remain interior.

We characterize an equilibrium in which each party J selects a tax rate τ_J and a cultural policy z_J that maximizes the average payoff of its members, given the opposing party's choice τ_{-J} and z_{-J} .

Equilibrium Taxes with Fixed Cultural Policies. To begin, we establish existence of an equilibrium pair of tax rates at any fixed pair of cultural policies. Regardless of cultural policies, both parties select taxes below the ideal rate of the poor (median) voter, producing a pro-rich bias. Greater cultural polarization amplifies this pro-rich bias, reducing the parties' economic conflict by lowering Left's tax.

Proposition 3. There exists a $\overline{\phi}_2(r, \lambda, b, \eta, \beta, \alpha, \delta) > 0$ such that if $\phi < \overline{\phi}_2$, then for any $(z_L, z_R) \in \{0, 1\}^2$, an equilibrium pair of taxes exists. Moreover:

1. if $z_L = z_R = z \in \{0, 1\}$, the equilibrium is unique:

$$\tau_R = 0, \quad \tau_L = \tau(z, z) \in (0, \tau_p).$$

2. *if* $z_L \neq z_R$, then in any equilibrium:

$$\tau_R = 0, \quad \tau_L \in (0, \tau(z, z)).$$

Regardless of cultural policies, Right makes no electoral concessions to the poor, whereas Left concedes partially to the rich. Consider first the case of cultural convergence: all poor voters back Left, and all rich voters back Right. Since Right cannot win over poor policy voters, it instead seeks to maximize its financial advantage by heightening polarization (Lemma 1). This gives Right both a policy and an electoral incentive to set taxes as low as possible. Left, by contrast, trades off reducing Right's financial advantage against pursuing poor voters' policy goals, leading it to choose a tax rate between the ideals of the rich and the poor.

Recall that, as inequality rises, so does the poor's ideal tax, $\tau_p = \frac{r\lambda}{1+r\lambda}$. The effect on Left's equilibrium tax rate, however, is ambiguous. Greater inequality simultaneously increases Left's policy incentive to tax the rich and strengthens the rich's electoral influence through campaign contributions. When inequality is low, the former effect dominates; when inequality is high, electoral considerations may force Left to lower taxes. Figure 2 illustrates this trade-off under cultural convergence, showing Left's preferred tax (τ_p , in *green*) and equilibrium tax ($\tau(z,z)$, in *blue*) against inequality λ .

How does cultural divergence impact the parties' polarization on taxes? Under cultural divergence, the equilibrium may not be unique, but every equilibrium features lower taxes than under cultural convergence.¹¹ Specifically, Right maintains $\tau_R = 0$, while cultural conflict pushes

¹¹The potential multiplicity is due to the endogenous preferences of the party. The higher

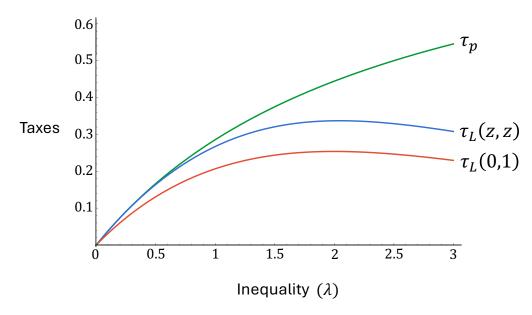


Figure 2 – Left's equilibrium tax rate under exogenous cultural policies. The horizontal axis is inequality (λ). The green line shows τ_p , the unconstrained preferred tax of poor voters. The blue line shows $\tau_L(z,z)$, Left's equilibrium tax under culturally convergent platforms. The red line shows Left's equilibrium tax under cultural divergence with $z_L=0$ and $z_R=1$, which we call $\tau_L(0,1)$. For these primitives, $\tau_L(0,1)$ is unique. *Primitives*: $b_\mu=.02$, r=.4, $\eta=3$, b=4, $\delta=.9$, $\beta=\frac{1}{4}$, $\alpha=\frac{1}{12}$, $\phi=.35$, $\lambda\in[0,3]$.

Left's equilibrium tax rate downward.

To understand why recall that, under cultural divergence, Left draws support from poor voters who do not strongly oppose its cultural stance and from rich voters who strongly favor it. Rich cultural liberals would, all else equal, prefer lower taxes. Because Left's objective reflects the preferences of its supporters, its ideal tax rate under cultural divergence is strictly lower than the poor's ideal tax τ_p . Cultural divergence also heightens the intensity of electoral competition, inducing Left to compromise more on policy.

Right's incentives are different. Rich voters dislike taxes even at their bliss point of zero, so gaining some poor supporters does not necessarily move Right's ideal tax. And because tax polarization strengthens its fundraising advantage, there is no electoral incentive to moderate. As a result, Right sets $\tau_R = 0$ even under cultural divergence.

Left's tax rate, the more the parties sort on income, and hence the higher is Left's ideal tax rate.

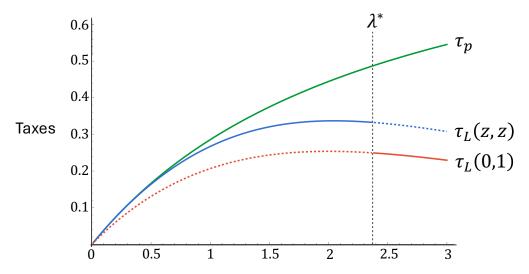


Figure 3 – Equilibrium taxes and cultural platforms vs. inequality (λ). Green: τ_p , the poor's unconstrained preferred tax. Blue: $\tau_L(z,z)$, Left's equilibrium tax under cultural convergence ($z_L=z_R$). Red: $\tau_L(0,1)$, Left's equilibrium tax under divergence ($z_L=0, z_R=1$). For $\lambda \leq \lambda^* \approx 2.37$, a convergent equilibrium obtains with $\tau_R=0$ and $\tau_L=\tau_L(z,z)$. For higher inequality ($\lambda < \lambda^*$), a divergent equilibrium arises with $z_L=0, z_R=1, \tau_R=0$, and $\tau_L=\tau_L(0,1)$. *Primitives*: $b_\mu=.02$, $\delta=.9$, r=.4, $\eta=3$, b=4, $\beta=\frac{1}{4}$, $\alpha=\frac{1}{12}$, $\phi=.35$, $\lambda \in [0,3]$.

Equilibrium Taxes *and* **Cultural Policies.** We can finally integrate the results of Propositions 2 and 3, solving for the equilibrium when parties are free to choose *both* taxes *and* cultural policies. The full equilibrium characterization combines the partial analyses of the previous sections.

Proposition 4. There exists a $\overline{\phi}_3(r, \eta, \alpha, \beta, \delta, b, \lambda) > 0$ such that if $\phi < \overline{\phi}_3$, a pure strategy equilibrium exists. Moreover, there is a unique threshold $b_{\mu}^* \geq 0$ (generically, $b_{\mu}^* > 0$) such that:

1. A culturally convergent equilibrium exists if and only if $b_{\mu} \geq b_{\mu}^*$. In this equilibrium:

$$z_L = z_R = 1, \quad \tau_R = 0, \quad \tau_L = \tau(1, 1) \in (0, \tau_p).$$

2. If $b_{\mu} < b_{\mu}^*$ then in every equilibrium:

$$z_L \neq z_R, \quad \tau_R = 0, \quad \tau_L \in (0, \tau(1, 1)).$$

Cultural convergence can be sustained only when there is a sufficient consensus in favor of one policy. In a convergent equilibrium both parties choose the popular cultural policy and taxes are uniquely pinned down. Otherwise, any equilibrium must involve cultural divergence.

Multiple culturally divergent equilibria can co-exist but in any of these equilibria Right's tax remains zero while Left's tax is lower than under cultural convergence. A pure strategy equilibrium, either involving cultural convergence or divergence, is guaranteed to exist when there is enough noise in the election.¹²

Figure 3 illustrates Left-driven culture wars. The primitives and taxes are the same as in Figure 2, but we now identify a threshold level of inequality λ^* below which a culturally convergent equilibrium can be sustained, together with the associated taxes $\tau_R = 0$ and $\tau_L = \tau_L(z, z)$. Above λ^* , cultural convergence fails due to Left's incentives to raise money from the rich. In that case, a divergent equilibrium exists in which Left locates at the minority-preferred cultural policy, and the taxes are $\tau_R = 0$ and $\tau_L = \tau_L(0, 1)$. If money is not very effective (η low), Right-driven culture wars can also emerge when λ is high with a similar drop in Left's taxes.

6. Conclusion

We introduced a model of two-party elections in which competition unfolds simultaneously over taxes and cultural policies. By dividing rich and poor voters, culture wars reallocate both voters and donors between Left and Right. When private money is decisive in elections, Left may initiate culture wars to offset Right's financial advantage; when money's role is constrained—by spending limits or public financing—Right may turn to culture wars to fracture the poor majority. The parties' preferred cultural battlegrounds differ: Right benefits most from broad, widely salient issues, while Left gains from narrower but intensely felt ones. High inequality makes culture wars especially likely, as redistribution becomes sufficiently high-stakes for both parties to compromise on other issues.

Although inequality spurs culture wars, they reduce partisan polarization on taxes, regard-

¹² See Acharya and Duggan (2025) for a more general analysis equilibrium existence in multidimensional elections. While their results do not directly apply to our environment, election uncertainty plays a key role in ensuring that a pure strategy equilibrium exists in both papers.

less of which side initiates them. Even as redistributive pressures rise with inequality, the rich retain a disproportionate influence on electoral outcomes—not only through fundraising advantages associated with low-tax platforms, but also by shifting the axis of competition toward cultural divisions that weaken redistributive conflict and are electorally more favorable to Right.

References

Acharya, Avidit and John Duggan. 2025. "Multidimensional Elections." Working Paper.

Aragones, Enriqueta and Thomas Palfrey. 2002. "Mixed equilibrium in a Downsian model with a favored candidate." *Journal of Economic Theory* 103(1):131–161.

Auten, Gerald and David Splinter. 2024. "Income inequality in the United States: Using tax data to measure long-term trends." *Journal of Political Economy* 132(7):2179–2227.

Baron, David P. 1993. "Government formation and endogenous parties." *American Political Science Review* 87(1):34–47.

Baron, David P. 1994. "Electoral competition with informed and uninformed voters." *American Political Science Review* 88(1):33–47.

Besley, Timothy and Torsten Persson. 2023. "Origins of new political cleavages: education, incomes, and values." CEPR Discussion Paper.

Blanchet, Thomas, Lucas Chancel and Amory Gethin. 2022. "Why is Europe more equal than the United States?" *American Economic Journal: Applied Economics* 14(4):480–518.

Bonomi, Giampaolo, Nicola Gennaioli and Guido Tabellini. 2021. "Identity, beliefs, and political conflict." *Quarterly Journal of Economics* 136(4):2371–2411.

Bouton, Laurent, Julia Cagé, Edgard Dewitte and Vincent Pons. 2022. "Small campaign donors." Working Paper.

- Bouton, Laurent, Micael Castanheira and Allan Drazen. 2024. "A theory of small campaign contributions." *The Economic Journal* 134(662):2351–2390.
- Broockman, David and Neil Malhotra. 2020. "What do partisan donors want?" *Public Opinion Quarterly* 84(1):104–118.
- Buisseret, Peter, Pablo Montagnes and Richard Van Weelden. 2025. "Money and Motivations: When Do Campaign Contributions Create Polarization?" Working Paper.
- Buisseret, Peter and Richard Van Weelden. 2022. "Polarization, valence, and policy competition." *American Economic Review: Insights* 4(3):341–352.
- Buisseret, Peter and Richard Van Weelden. 2025. "Pandora's ballot box: Electoral politics of direct democracy." *American Journal of Political Science* 69(2):501–515.
- Cagé, Julia. 2020. The price of democracy: How money shapes politics and what to do about it. Harvard University Press.
- Callander, Steven and Juan Carlos Carbajal. 2022. "Cause and effect in political polarization: A dynamic analysis." *Journal of Political Economy* 130(4):825–880.
- Campante, Filipe. 2011. "Redistribution in a model of voting and campaign contributions." *Journal of Public Economics* 95(7-8):646–656.
- Desai, Zuheir. 2020. "A theory of electoral competition in developing democracies." *Journal of Politics*. Forthcoming.
- Draca, Mirko, Colin Green and Swarnodeep Homroy. 2023. "Financing UK democracy: a stock-take of 20 years of political donations disclosure." *Fiscal Studies* 44(4):433–449.
- Enke, Benjamin, Mattias Polborn and Alex Wu. 2025. "Values as luxury goods and political polarization." *Journal of the European Economic Association*. Forthcoming.

- Esteban, Joan and Debraj Ray. 2008. "On the salience of ethnic conflict." *American Economic Review* 98(5):2185–2202.
- Feddersen, Timothy and Faruk Gul. 2014. "Polarization and income inequality: A dynamic model of unequal democracy." Working Paper.
- Gamm, Gerald, Justin Phillips, Matthew Carr and Michael Auslen. 2024. "The Culture War and Partisan Polarization: State Political Parties, 1960–2018." *Studies in American Political Development* 38(2):117–137.
- Gennaioli, Nicola and Guido Tabellini. 2023. "Identity politics." Working Paper.
- Gethin, Amory, Clara Martínez-Toledano and Thomas Piketty. 2022. "Brahmin left versus merchant right: Changing political cleavages in 21 western democracies, 1948–2020." Quarterly Journal of Economics 137(1):1–48.
- Gilens, Martin. 2012. *Affluence and influence: Economic inequality and political power in America*. Princeton University Press.
- Grossman, Gene and Elhanan Helpman. 1996. "Electoral competition and special interest politics." *Review of Economic Studies* 63(2):265–286.
- Hemmer, Nicole. 2022. Partisans: The conservative revolutionaries who remade American politics in the 1990s. Basic Books.
- Hunter, James Davison. 1992. *Culture Wars: The Struggle to Control the Family, Art, Education, Law, and Politics in America*. Avalon Publishing.
- Jia, Hao. 2012. "Contests with the probability of a draw: a stochastic foundation." *Economic Record* 88(282):391–406.
- Kates, Sean, Eric Manning, Tali Mendelberg and Omar Wasow. 2025. "Plutopopulism: Wealth and Trump's Financial Base." *American Political Science Review* pp. 1–18.

- Krasa, Stefan and Mattias Polborn. 2012. "Political Competition Between Differentiated Candidates." *Games and Economic Behavior* 76(1):249–271.
- Krasa, Stefan and Mattias Polborn. 2014. "Social Ideology and Taxes in a Differentiated Candidates Framework." *American Economic Review* 104(1):308–22.
- Longuet-Marx, Nicolas. 2025. "Party Lines or Voter Preferences? Explaining Political Realignment." Working Paper.
- Marz, Waldemar. 2024. "Income Inequality and Political Polarization." Working Paper.
- Matakos, Konstantinos and Dimitrios Xefteris. 2017. "Divide and rule: redistribution in a model with differentiated candidates." *Economic Theory* 63:867–902.
- McCarty, Nolan, Keith Poole and Howard Rosenthal. 2008. *Polarized America: The Dance of Ideology and Unequal Riches*. Cambridge: MIT Press.
- Meltzer, Allan and Scott Richard. 1981. "A rational theory of the size of government." *Journal of Political Economy* 89(5):914–927.
- Page, Benjamin, Larry Bartels and Jason Seawright. 2013. "Democracy and the policy preferences of wealthy Americans." *Perspectives on Politics* 11(1):51–73.
- Roberts, Kevin. 1977. "Voting over Income Tax Schedules." *Journal of Public Economics* 8(3):329–340.
- Roemer, John. 1998. "Why the poor do not expropriate the rich: an old argument in new garb." *Journal of Public Economics* 70(3):399–424.
- Roemer, John. 2001. Political Competition: Theory and Applications. Harvard University Press.
- Romer, Thomas. 1975. "Individual welfare, majority voting, and the properties of a linear income tax." *Journal of Public Economics* 4(2):163–185.

Scarrow, Susan. 2016. "The state of political finance regulations in Canada, the United Kingdom and the United States." Stockholm: International Institute for Democracy and Electoral Assistance (International IDEA).

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

Vlaicu, Razvan. 2018. "Inequality, participation, and polarization." *Social Choice and Welfare* 50:597–624.

Zeira, Joseph. 2021. "The rise of the educated class." CEPR Discussion Paper No. DP16572.

A. Appendix: Proofs of Results

Recall that $F(b^i)$ and $f(b^i)$ denote the cdf and pdf of b^i , which is assumed to be uniform on $[b_{\mu} - b, b_{\mu} + b]$.

Proof of Lemma 1. $\Delta M(\tau_L, z, \tau_R, z) > 0$ follows from inspection of (9). For comparative statics, recognize that for any policy $p = (\tau_L, z, \tau_R, z)$ and primitive $x \in \{\lambda, \tau_L, \tau_R\}$ the sign of the derivative of $\Delta M(\tau_L, z, \tau_R, z)$ with respect to x is the same as the sign of

$$\beta \left(\frac{\partial m_R(p)}{\partial x} - \frac{\partial m_L(p)}{\partial x} \right) + 2 \left(\frac{\partial m_R(p)}{\partial x} m_L(p) - \frac{\partial m_L(p)}{\partial x} m_R(p) \right). \tag{17}$$

Differentiating the difference of (7) and (8) it follows that

$$\frac{\partial m_R(p)}{\partial \lambda} - \frac{\partial m_L(p)}{\partial \lambda} = 2\alpha r [(1 - r)\lambda \Delta \tau + (1 + r\lambda)\Delta c],\tag{18}$$

$$\frac{\partial m_R(p)}{\partial \Delta \tau} - \frac{\partial m_L(p)}{\partial \Delta \tau} = \alpha (1 - r) r \lambda^2, \tag{19}$$

and

$$\frac{\partial m_R(p)}{\partial \Delta c} - \frac{\partial m_L(p)}{\partial \Delta c} = \alpha \overline{y}^2. \tag{20}$$

All three are strictly positive.

By (7) and (8), for $x \in \{\Delta \tau, \Delta c\}$

$$\frac{\partial m_R(p)}{\partial x}m_L(p) - \frac{\partial m_L(p)}{\partial x}m_R(p) = \alpha^2 r(1-r)(1+\lambda)\left(\frac{\partial b_r}{\partial x}b_p - \frac{\partial b_p}{\partial x}b_r\right).$$

First note that

$$\frac{\partial b_r}{\partial \Delta c} b_p - \frac{\partial b_p}{\partial \Delta c} b_r = (1 + r\lambda) [(r\lambda \Delta \tau - (1 + r\lambda)\Delta c) + ((1 - r)\lambda \Delta \tau + (1 + r\lambda)\Delta c)]$$
$$= (1 + r\lambda)\lambda \Delta \tau > 0.$$

Given that (20) is strictly positive this implies that (17) is too.

Turning to the derivative with respect to $\Delta \tau$, note that

$$\frac{\partial b_r}{\partial \Delta \tau} b_p - \frac{\partial b_p}{\partial \Delta \tau} b_r = (1 - r)\lambda(r\lambda \Delta \tau - (1 + r\lambda)\Delta c) - r\lambda((1 - r)\lambda \Delta \tau + (1 + r\lambda)\Delta c)$$

$$= -\lambda(1 + r\lambda)\Delta c$$

$$\geq -\frac{r^2\lambda^3}{1 + r\lambda},$$

where the last inequality follows because $\tau_R, \tau_L \in [0, \tau_p]$. Combined with (19) it then follows that (17) is positive when

$$\beta \ge 2\alpha \frac{r^2\lambda(1+\lambda)}{1+r\lambda}.$$

We can thus conclude that ΔM is increasing in λ whenever $\beta/\alpha \geq 2r\overline{\lambda}$, which is implied by $\beta \geq \alpha\overline{\lambda}$ as r < 1/2.

Finally we turn to the derivative with respect to inequality. Differentiating (7) and (8) with respect to λ gives

$$\frac{\partial m_R(p)}{\partial \lambda} = \alpha r[(1+2\lambda)(1-r)\Delta \tau + (1+r+2r\lambda)\Delta c] \ge 0$$

and

$$\frac{\partial m_L(p)}{\partial \lambda} = \alpha (1 - r) r (\Delta \tau - \Delta c) \le \alpha (1 - r) r \Delta \tau.$$

Thus

$$\frac{\partial m_R(p)}{\partial \lambda} m_L(p) - \frac{\partial m_L(p)}{\partial \lambda} m_R(p) \ge -\alpha (1-r) r \Delta \tau m_R.$$

So, using (18), (17) is strictly positive with respect to λ if

$$\lambda \beta \geq m_R$$
.

Using that $\tau_L, \tau_R \in [0, \tau_p]$, when $\beta \geq \alpha \overline{\lambda}$ it follows that

$$m_R \le \alpha r(1-r)(1+\lambda)\left(\frac{(1-r)r\lambda^2}{1+r\lambda} + \frac{r^2\lambda^2}{1+r\lambda}\right) \le \alpha r(1-r)\lambda^2 < \frac{(1-r)}{2}\beta\lambda < \beta\overline{\lambda},$$

and so (17) is strictly positive.

It thus follows that if $\beta \geq \alpha \overline{\lambda}$ that ΔM is increasing in all three parameters. Finally note that $\Delta \tau$ and Δc both increase in τ_L and decrease in τ_R which gives the desired comparative statics on each party's taxes. \Box

Proof of Lemma 2. It follows from (12) that

$$\Delta V(\tau_L, 1, \tau_R, 0) - \Delta V(\tau_L, z, \tau_R, z) = 2(1 - \delta) \left((1 - r)F(-b_p(\tau_L, \tau_R)) - r(1 - F(b_r(\tau_L, \tau_R))) \right)$$

$$= 2(1 - \delta) \frac{(1 - r)(b - b_\mu - b_p(\tau_L, \tau_R)) - r(b_\mu + b - b_r(\tau_L, \tau_R))}{2b},$$
(21)

which strictly decreases in b_{μ} and equal to 0 when $b_{\mu}^{V} = b(1-2r) + rb_{r}(\tau_{L}, \tau_{R}) - (1-r)b_{p}(\tau_{L}, \tau_{R}) \in (0, b-b_{p}(\tau_{L}, \tau_{R}))$. As the net vote change is proportional to $1-\delta$ it follows that when $b_{\mu} < b_{\mu}^{V}$ that the net benefit is larger when δ is smaller. \square

Proof of Lemma 3. It follows immediately from inspection of (14) and (15) that $m_R(\tau_L, 0, \tau_R, 1)$ strictly increases in b_μ , and $m_L(\tau_L, 0, \tau_R, 1)$ strictly decreases in b_μ and so $\Delta M(\tau_L, 0, \tau_R, 1)$ strictly increases in b_μ . Recalling that $\Delta M(\tau_L, 1, \tau_R, 1)$ is independent of b_μ it follows that $\Delta M(\tau_L, 0, \tau_R, 1) - \Delta M(\tau_L, 1, \tau_R, 1)$ strictly increases in b_μ . Since (16) establishes that when $b_\mu = 0$ this difference is negative it remains only to show it is positive when $b_\mu = b - b_r$. We establish this by showing that when $b_\mu = b - b_r$, $m_R(\tau_L, 0, \tau_R, 1) > m_R(\tau_L, 1, \tau_R, 1)$ and $m_L(\tau_L, 0, \tau_R, 1) < m_L(\tau_L, 1, \tau_R, 1)$. This follows because when $b_\mu = b - b_r$ there are no rich voters who support Left and so

$$m_R(\tau_L, 0, \tau_R, 1) - m_R(\tau_L, 1, \tau_R, 1) = \delta y_r r b_r(\tau) + (1 - \delta) r y_r (b_\mu + b_r(\tau))$$

$$+ (1 - \delta)(1 - r)y_p \int_{b_p(\tau)}^{b_\mu + b} (b^i - b_p(\tau))f(b^i)db^i - y_r r b_r(\tau)$$

$$= (1 - \delta)r y_r b_\mu + (1 - \delta)(1 - r)y_p \int_{b_p(\tau)}^{b_\mu + b} (b^i - b_p(\tau))f(b^i)db^i$$

$$> 0,$$

and

$$\begin{split} m_L(\tau_L, 0, \tau_R, 1) - m_L(\tau_L, 1, \tau_R, 1) &= \delta y_p (1 - r) b_p(\tau) \\ &+ (1 - \delta) (1 - r) y_p \int_0^{b_p(\tau)} (-b^i + b_p(\tau)) f(b^i) db^i - y_p (1 - r) b_p(\tau) \\ &< (1 - \delta) y_p (1 - r) (-b_p(\tau)) (1 - F(b_p(\tau))) \\ &< 0. \end{split}$$

Now consider the comparative statics with respect to b. Note that $\Delta M(\tau_L, 1, \tau_R, 1)$ is independent of b and, by (16), so too is the money difference $m_R(\tau_L, 0, \tau_R, 1) - m_L(\tau_L, 0, \tau_R, 1)$. However $m_R(\tau_L, 0, \tau_R, 1) + m_L(\tau_L, 0, \tau_R, 1)$ increases in b by (14) and (15) and thus $\Delta M(\tau_L, 0, \tau_R, 1) - \Delta M(\tau_L, 1, \tau_R, 1)$ decreases in b. \square

Proof of Lemma 4. First note that if β/α is constant in b it follows from (9) that $\Delta M(\tau_L, 1, \tau_R, 1)$ is too. When $b_\mu = 0$, (16) implies that the ratio $\frac{\Delta M(\tau_L, 0, \tau_R, 1)}{\Delta M(\tau_L, 1, \tau_R, 1)}$ is equal to

$$\frac{\beta + m_R(\tau_L, 1, \tau_R, 1) + m_L(\tau_L, 1, \tau_R, 1)}{\beta + m_R(\tau_L, 1, \tau_R, 1) + m_L(\tau_L, 1, \tau_R, 1) + \frac{(1 - \delta)}{2b}(ry_r(b - b_r(\tau))^2 + (1 - r)y_p(b - b_p(\tau))^2)}.$$

Applying L'Hopital's rule

$$\lim_{b \to \infty} \frac{(1 - \delta)}{2b} (ry_r(b - b_r(\tau))^2 + (1 - r)y_p(b - b_p(\tau))^2)$$

$$= \lim_{b \to \infty} (1 - \delta)(ry_r(b - b_r(\tau)) + (1 - r)y_p(b - b_p(\tau)))$$

$$= \infty.$$

It then follows that

$$\lim_{b \to \infty} \frac{\Delta M(\tau_L, 0, \tau_R, 1)}{\Delta M(\tau_L, 0, \tau_R, 1)} = 0$$

and, given that $\Delta M(\tau_L, 1, \tau_R, 1)$ is bounded between 0 and 1, that

$$\lim_{b \to \infty} \Delta M(\tau_L, 0, \tau_R, 1) = 0. \tag{22}$$

Thus

$$\lim_{b \to \infty} \Delta M(\tau_L, 0, \tau_R, 1) - \Delta M(\tau_L, 1, \tau_R, 1) = -\Delta M(\tau_L, 1, \tau_R, 1)$$

which decreases in λ and τ_L and increases in τ_R . \square

Proof of Proposition 1. When $b_{\mu}=0$ Left's probability of winning is strictly higher when $z_L=z\in\{0,1\}$ and $z_R=z'\in\{0,1\}\setminus z$ if and only if

$$\Delta V(\tau_L, z', \tau_R, z) - \Delta V(\tau_L, z, \tau_R, z) + \eta(\Delta M(\tau_L, z', \tau_R, z) - \Delta M(\tau_L, z, \tau_R, z)) < 0,$$

and conversely Right's probability of winning is strictly higher when this expression is strictly positive. Lemmas 2 and 3 showed that when $b_{\mu}=0$, $\Delta V(\tau_L,z',\tau_R,z)-\Delta V(\tau_L,z,\tau_R,z)>0$ and $\Delta M(\tau_L,z',\tau_R,z)-\Delta M(\tau_L,z,\tau_R,z)<0$. So, Left's probability of winning strictly increases with cultural divergence if and only if the mass of impressionable voters η is large enough:

$$\eta > \eta^*(r, \lambda, \tau_L, \tau_R, b) = \frac{\Delta V(\tau_L, z', \tau_R, z) - \Delta V(\tau_L, z, \tau_R, z)}{\Delta M(\tau_L, z, \tau_R, z) - \Delta M(\tau_L, z', \tau_R, z)} > 0.$$

Otherwise, Right's probability of winning increases with cultural divergence.

For the comparative statics notice the numerator of η^* when $b_{\mu} = 0$ is

$$(1-\delta)\left((1-2r)+\frac{-(1-r)b_p(\tau_L,\tau_R))+rb_r(\tau_L,\tau_R)}{b}\right).$$

Note that this increases linearly in $1 - \delta$ and decreases in b since $rb_r > (1 - r)b_p$.

Conversely, the denominator of η^* is

$$\Delta M(\tau_L, z, \tau_R, z) - \Delta M(\tau_L, 0, \tau_R, 1)$$

$$= \Delta M(\tau_L, z, \tau_R, z) \frac{(1 - \delta) \left(r(1 + \lambda) \frac{(b - b_r(\tau))^2}{2b} + (1 - r) \frac{(b - b_p(\tau))^2}{2b} \right)}{m_R(\tau_L, z, \tau_R, z) + m_L(\tau_L, z, \tau_R, z) + (1 - \delta) \left(r(1 + \lambda) \frac{(b - b_r(\tau))^2}{2b} + (1 - r) \frac{(b - b_p(\tau))^2}{2b} \right)}.$$

This expression increases in $1 - \delta$ but less than linearly, so threshold η^* increases in $1 - \delta$ and therefore decreases in δ . The comparative statics on b obtain from the observation that η^* 's numerator strictly decreases in b, while its denominator strictly increases in b.

Finally we consider the comparative statics in τ_L , τ_R and λ as $b \to \infty$. Note that by (22),

$$\lim_{b \to \infty} \eta^*(r, \alpha, \beta, \delta, b, \tau_L, \tau_R, \lambda) = \frac{\lim_{b \to \infty} \Delta V(\tau_L, z', \tau_R, z) - \Delta V(\tau_L, z, \tau_R, z)}{\Delta M(\tau_L, z, \tau_R, z)}$$

and

$$\lim_{b\to\infty} \Delta V(\tau_L,z',\tau_R,z) - \Delta V(\tau_L,z,\tau_R,z) = (1-\delta)\Delta V(\tau_L,z,\tau_R,z) - \Delta V(\tau_L,z,\tau_R,z) = \delta(1-2r),$$

since culturally polarized voters divide evenly between the two parties in the limit of cultural polarization. So η^* is inversely related to $\Delta M(\tau_L, z, \tau_R, z)$ and thus decreases in λ and τ_L and increases in τ_R . \square

Proof of Proposition 2. We first show part 1, that a culturally convergent equilibrium exists with $z_L = z_R$ if and only if $b_\mu \ge b_\mu(\eta)$. We then establish part 2, that when a convergent equilibrium fails to exist a pure strategy culturally divergent equilibrium exists if ϕ is below a threshold U > 0.

Proof of part 1: To determine when a culturally convergent equilibrium exists, note that when

 $z_L=1$ Right's supporters' net value of winning when it too offers the cultural policy $z_R=1$ is:

$$\Phi_R(\tau_L, 1, \tau_R, 1) r(W(y_r, \tau_R) - W(y_r, \tau_L)).$$

If Right instead offers the cultural policy z = 0, rich voters' average net value of winning is:

$$\Phi_R(\tau_L, 1, \tau_R, 0) r(W(y_r, \tau_R) - W(y_r, \tau_L) - (1 - \delta)b_u).$$

When $z_L = 1$ Right's best response is therefore to select $z_R = 1$ if and only if

$$b_{\mu} \ge \left(1 - \frac{\Phi(\tau_L, 1, \tau_R, 1)}{\Phi(\tau_L, 1, \tau_R, 0)}\right) \frac{b_r(\tau)}{1 - \delta}.$$
 (23)

By a similar argument, Left favors the convergent policy if and only if

$$b_{\mu} \ge \left(1 - \frac{1 - \Phi(\tau_L, 1, \tau_R, 1)}{1 - \Phi(\tau_L, 0, \tau_R, 1)}\right) \frac{b_p(\tau)}{1 - \delta}.$$
 (24)

The RHS of both (23) and (24) strictly decrease in b_{μ} : as z=1 becomes more popular the electoral and policy benefit of taking position z=0 decreases. Finally, Proposition 1 states that when support is balanced across the two cultural policies ($b_{\mu}=0$) the RHS of (23) is strictly positive if and only if $\eta < \eta^*$, while the RHS of (24) is strictly positive if and only if $\eta > \eta^*$.

Finally note that as $b_{\mu}^{*}(\eta) > 0$ when $\eta \neq \eta^{*}$ there cannot be an equilibrium where $z_{L} = z_{R} = 0$ when $\eta \neq \eta^{*}$.

<u>Proof of part 2:</u> We show that there exists a constant $\overline{\phi}_1 > 0$ such that if $\phi < \overline{\phi}_1$, a divergent equilibrium exists whenever $b_\mu < b_\mu(\eta)$. We prove the claim for $b_\mu < b_\mu(\eta)$ and $\eta < \eta^*$; the argument for $b_\mu < b_\mu(\eta)$ and $\eta > \eta^*$ is similar. Let $\mathcal{U}_J(\tilde{p}_J;p)$ denote the net value of winning for party J under the conjecture $p = (p_L, p_R)$, when party J's actual platform is \tilde{p}_J . Under the conjecture of fixed taxes, we provide conditions for a culturally divergent equilibrium in which

$$p_L = (\tau_L, 1)$$
 and $p_R(\tau_R, 0)$, where $0 \le \tau_R < \tau_L \le \tau_p$.

We start with party L. Under a conjecture of fixed taxes, $\tilde{p}_L = (\tau_L, 1)$ is a best response if and only if

$$(1 - \Phi(\Delta V(\tau_L, 1, \tau_R, 0) + \eta M(\tau_L, 1, \tau_R, 0)) \mathcal{U}_L(\tau_L, 1; p)$$

$$\geq (1 - \Phi)(\Delta V(\tau_L, 0, \tau_R, 0) + \eta M(\tau_L, 0, \tau_R, 0)) \mathcal{U}_L(\tau_L, 0; p)$$

which is equivalent to

$$\frac{1 - \Phi(\Delta V(\tau_L, 1, \tau_R, 0) + \eta M(\tau_L, 1, \tau_R, 0))}{1 - \Phi(\Delta V(\tau_L, 0, \tau_R, 0) + \eta M(\tau_L, 0, \tau_R, 0))} \ge \frac{\mathcal{U}_L(\tau_L, 0; p)}{\mathcal{U}_L(\tau_L, 1; p)}.$$
 (25)

We first argue that this constraint is most demanding when $b_{\mu}=0$. Notice that the LHS of (25) strictly increases in b_{μ} , because the numerator strictly increases in b_{μ} while the denominator is constant in b_{μ} . It is easy to verify that the RHS strictly decreases in b_{μ} . Hence, it enough to verify L's best response at $b_{\mu}=0$, which we take in subsequent steps.

Under the conjecture $\eta < \eta^*$ and $b_\mu < b_\mu(\eta)$, the LHS of (25) is strictly less than one. We argue that the RHS of (25) is *also* strictly less than one. To see why, recognize that

$$\mathcal{U}_L(\tau_L, 1; p) = \delta(1 - r)b_p + (1 - \delta)(1 - r)\int_{-b_p}^{b} \frac{b^i + b_p}{2b} db^i + (1 - \delta)r\int_{b_p}^{b} \frac{b^i - b_p}{2b} db^i$$

while

$$\mathcal{U}_{L}(\tau_{L}, 0; p) = \delta(1 - r)b_{p} + (1 - \delta)(1 - r) \int_{-b_{p}}^{b} \frac{0 + b_{p}}{2b} db^{i} + (1 - \delta)r \int_{b_{r}}^{b} \frac{0 - b_{r}}{2b} db^{i}$$
$$= \mathcal{U}_{L}(\tau_{L}, 1; p) - \frac{1 - \delta}{2b} \left[b^{2} - (1 - r)b_{p}^{2} - rb_{r}^{2} \right].$$

Call
$$x(\delta) \equiv \Delta V(\tau_L, 1, \tau_R, 0) + \eta M(\tau_L, 1, \tau_R, 0)$$
, and $\ell \equiv \Delta V(\tau_L, 1, \tau_R, 1) + \eta M(\tau_L, 1, \tau_R, 1)$. We

showed that when $b_{\mu} = 0$, (25) is equivalent to

$$\frac{1 - \Phi(x(\delta))}{1 - \Phi(\ell)} \ge 1 - \frac{\frac{1 - \delta}{2b} \left[b^2 - (1 - r)b_p^2 - rb_r^2 \right]}{\mathcal{U}_L(\tau_L, 1, p)} \tag{26}$$

Notice that when $\delta=1$, the LHS and the RHS are identically equal to one, since $x(1)=\ell$. Recall that we assume $\Phi: [-1-\eta, 1+\eta] \to (0,1)$ is continuously differentiable on its support. Call $g(\delta) \equiv \frac{\mathcal{U}_L(\tau_L,0,p)}{\mathcal{U}_L(\tau_L,1,p)}$, and $\kappa=1-\Phi(\ell)$.

Lemma A.1. Condition (26) holds if

$$\sup_{x \in [-1-\eta, 1+\eta]} \left| \Phi'(x) \right| < \frac{\kappa m}{Z} \tag{27}$$

where

$$m = \inf_{\delta \in (0,1)} g'(\delta)$$

and

$$Z \ge \sup_{\delta \in (0,1)} |x'(\delta)|$$

Proof. Recognize that

$$|\Phi'(x(\delta)))x'(\delta)| \le \sup_{x \in [-1-\eta, 1+\eta]} |\Phi'(x)| \sup_{\delta \in [0,1)} |x'(\delta)|$$

Together with (27), these facts imply

$$\kappa^{-1}|\Phi'(x(\delta))x'(\delta)| < m < g'(\delta)$$
(28)

for all $\delta \in [0,1)$. Using the fact that $\kappa^{-1}(1-\Phi(x(1)))=g(1)=1$, we have

$$1 - \kappa^{-1}(1 - \Phi(x(\delta))) = \kappa^{-1} \int_{\delta}^{1} \Phi'(x(t))x'(t) dt, \quad 1 - g(\delta) = \int_{\delta}^{1} g'(t) dt$$
 (29)

We can therefore bound the first expression in (29), for any $\delta \in [0, 1)$:

$$1 - \kappa^{-1}(1 - \Phi(x(\delta))) = \kappa^{-1} \int_{\delta}^{1} \Phi'(x(t))x'(t) dt \le \kappa^{-1} \int_{\delta}^{1} |\Phi'(x(t))x'(t)| dt$$

$$\le \kappa^{-1} \int_{\delta}^{1} \sup_{x \in [-1 - \eta, 1 + \eta]} |\Phi'(x)| \sup_{\delta \in [0, 1)} |x'(\delta)| dt$$

$$\le \kappa^{-1} \sup_{x \in [-1 - \eta, 1 + \eta]} |\Phi'(x)| \sup_{\delta \in [0, 1)} |x'(\delta)| \kappa^{-1}(1 - \delta)$$

$$< m(1 - \delta)$$

where the last step uses (28). Similarly, we can bound the second term in expression (29) for any $\delta \in [0, 1)$:

$$1 - g(\delta) = \int_{\delta}^{1} g'(t) dt \ge \inf_{\delta \in [0,1)} g'(\delta)(1 - \delta) = m(1 - \delta) > 0$$

which follows from the fact $g(\delta)$ strictly increases. Thus,

$$1 - \kappa^{-1}(1 - \Phi(x(\delta))) < 1 - g(\delta) \iff \frac{1 - \Phi(x(\delta))}{1 - \Phi(\ell)} > \frac{\mathcal{U}_L(\tau_L, 0, p)}{\mathcal{U}_L(\tau_L, 1, p)},$$

for every $\delta \in [0,1)$. \square

We can now calculate explicit bounds. We start with m. First, write:

$$\mathcal{U}_{L}(\tau_{L}, 0, p) = \delta(1 - r)b_{p} + (1 - \delta) \int_{-b_{p}}^{b} \frac{b^{i} + b_{p}}{2b} db^{i} + (1 - \delta) \int_{b_{r}}^{b} \frac{b^{i} - b_{r}}{2b} db^{i}$$

$$= \delta(1 - r)b_{p} + \frac{1 - \delta}{2b} \left[(1 - r)(b_{p}b + 1/2b^{2} + 1/2b_{p}^{2}) + r(-b_{r}b + 1/2b^{2} + 1/2b_{r}^{2}) \right]$$

$$= \delta(1 - r)b_{p} + \frac{1 - \delta}{2b} \left[(1 - r)b_{p}b - rb_{r}b + \frac{1}{2}b^{2} + \frac{1}{2}((1 - r)b_{p}^{2} + rb_{r}^{2}) \right]$$

This expression strictly decreases linearly in δ . We have

$$\Phi_L(y)g'(\delta) = \frac{C}{\mathcal{U}_L(\tau_L, 0, p)^2} \quad C = \frac{\kappa(1 - r)b_p}{4b} \left(b^2 - ((1 - r)b_p^2 + rb_r^2) \right)$$

Since $b > b_r \ge b_p$ and $r \in (0, \frac{1}{2})$, C > 0, hence the derivative is positive, and bounded for any $\delta \in [0, 1)$ by the following:

$$g'(\delta) \le \frac{C}{[A(0)]^2}, \quad A(0) = \mathcal{U}_L(\tau_L, 0, p)|_{\delta = 0}.$$

That gives us m in (27). Now we turn to Z. Let ∂_q denote the partial derivative with respect to q. Recognize that

$$\partial_{\delta} \Delta V(\tau_L, 1, \tau_R, 0) = 2r - 1 + \frac{(1-r)b_p - rb_r}{b}.$$

To get $\partial_{\delta}\Delta M(\tau_L, 1, \tau_R, 0)$, define

$$M \equiv (1 - r) b_p - r(1 + \lambda) b_r, \tag{30}$$

$$K \equiv b^{2}(1+r\lambda) + (1-r)b_{p}^{2} + r(1+\lambda)b_{r}^{2}, \tag{31}$$

$$L \equiv (1 - r) b_p + r(1 + \lambda) b_r. \tag{32}$$

Then the numerator of $\Delta M(\tau_L, 1, \tau_R, 0)$ is $-2b\,M$, and the denominator simplifies as

$$(1 - \delta)K + 2b\beta/\alpha + 2b\delta L. \tag{33}$$

Set

$$D_0 \equiv K + 2b\beta/\alpha, \qquad D_1 \equiv 2bL - K. \tag{34}$$

Then

$$\Delta M(\tau_L, 1, \tau_R, 0) = -\frac{2b M}{D_0 + \delta D_1}.$$
(35)

So:

$$\partial_{\delta} \Delta M(\tau_L, 1, \tau_R, 0) = -2bM \left(-\frac{D_1}{(D_0 + \delta D_1)^2} \right) = \frac{2b \, M \, D_1}{\left(D_0 + \delta D_1 \right)^2}. \tag{36}$$

Using $\lambda > 0$, we have

$$\min_{\delta \in [0,1]} (D_0 + \delta D_1)^2 = (2b\beta/\alpha + \min\{K, 2bL\})^2$$

and

$$|D_1| = |2bL - K| \le 2bL + K.$$

So

$$\sup_{\delta \in [0,1)} |x'(\delta)| \le |2r - 1 + (1-r)b_p/b - rb_r/b| + \eta \frac{|M|(2bL + K)}{(2b\beta/\alpha + \min\{K, 2bL\})^2}$$

Putting all of this together,

$$\frac{m}{Z} = \frac{\frac{C}{[A(0)]^2}}{\left|2r - 1 + (1 - r)b_p/b - rb_r/b\right| + \eta \frac{|M|(2bL + K)}{\left(2b\beta/\alpha + \min\{K, 2bL\}\right)^2}}. \quad \Box$$

We now verify that if $\eta < \eta^*$ and $b_{\mu} < b_{\mu}(\eta)$, Right's best response to conjecture $(\tau_L, 1)$ and $(\tau_R, 0)$ is $z_R = 0$.

Lemma A.2. If $b_{\mu} < b_{\mu}(\eta)$ and $\eta < \eta^*$, then under exogenous taxes, $(\tau_R, 0)$ is R's strict best response to a conjecture $p = (\tau_L, 1, \tau_R, 0)$.

Proof. Let $p = (\tau_L, 1, \tau_R, 1)$, and $\hat{p} = (\tau_L, 1, \tau_R, 0)$. Then, $\eta < \eta^*$ and $b_\mu < b_\mu(\eta)$ implies

$$\Phi_{R}(\Delta V(\tau_{L}, 1, \tau_{R}, 0) + \eta M(\tau_{L}, 1, \tau_{R}, 0)) \mathcal{U}_{R}(\tau_{R}, 0; p)
> \Phi_{R}(\Delta V(\tau_{L}, 1, \tau_{R}, 1) + \eta M(\tau_{L}, 1, \tau_{R}, 1)) \mathcal{U}_{R}(\tau_{R}, 1; p).$$
(37)

Moreover, \hat{p}_R is a strict best response to \hat{p} if and only if

$$\Phi_{R}(\Delta V(\tau_{L}, 1, \tau_{R}, 0) + \eta M(\tau_{L}, 1, \tau_{R}, 0)) \mathcal{U}_{R}(\tau_{R}, 0; \hat{p})$$

$$> \Phi_{R}(\Delta V(\tau_{L}, 1, \tau_{R}, 1) + \eta M(\tau_{L}, 1, \tau_{R}, 1)) \mathcal{U}_{R}(\tau_{R}, 1; \hat{p})$$
(38)

(37) implies (38) if

$$\mathcal{U}_R(\tau_R, 0; \hat{p}) - \mathcal{U}_R(\tau_R, 0; p) > 0 > \mathcal{U}_R(\tau_R, 1; \hat{p}) - \mathcal{U}_R(\tau_R, 1; p).$$

To verify the first inequality, we have

$$\mathcal{U}_{R}(\tau_{R}, 0; \hat{p}) - \mathcal{U}_{R}(\tau_{R}, 0; p) = \delta r b_{r} + (1 - \delta) r \int_{b_{\mu} - b}^{b_{r}} \frac{b_{r} - b^{i}}{2b} db^{i} + (1 - \delta) (1 - r) \int_{b_{\mu} - b}^{-b_{p}} \frac{-b_{p} - b^{i}}{2b} db^{i}
- \delta r b_{r} - (1 - \delta) r \int_{b_{\mu} - b}^{b_{\mu} + b} \frac{b_{r} - b^{i}}{2b} db^{i}
> (1 - \delta) r \int_{b_{\mu} - b}^{b_{r}} \frac{b_{r} - b^{i} - b_{r} + b^{i}}{2b} db^{i} - (1 - \delta) r \int_{b_{r}}^{b_{\mu} - b} \frac{b_{r} - b^{i}}{2b} db^{i}
= (1 - \delta) r \int_{b_{r}}^{b_{\mu} - b} \frac{b^{i} - b_{r}}{2b} db^{i}
> 0.$$

To verify the second inequality, we have

$$\mathcal{U}_{R}(\tau_{R}, 1; \hat{p}) - \mathcal{U}_{R}(\tau_{R}, 1; p) = \delta r b_{r} + (1 - \delta) r \int_{b_{\mu} - b}^{b_{r}} \frac{b_{r} + b^{i}}{2b} db^{i} + (1 - \delta) (1 - r) \int_{b_{\mu} - b}^{-b_{p}} \frac{-b_{p} + b^{i}}{2b} db^{i}$$
$$- \delta r b_{r} - (1 - \delta) r \int_{b_{\mu} - b}^{b_{\mu} + b} \frac{b_{r} + b^{i}}{2b} db^{i}$$
$$< (1 - \delta) r \int_{b_{\mu} - b}^{b_{r}} \frac{b_{r} + b^{i} - b_{r} - b^{i}}{2b} db^{i} - (1 - \delta) r \int_{b_{r}}^{b_{\mu} - b} \frac{b_{r} + b^{i}}{2b} db^{i}$$
$$< 0. \quad \Box$$

Having verified both L's and R's best responses, we are done. \square

Proof of Proposition 3. Recall that a conjecture $p = (\tau_L, z_L, \tau_R, z_R)$ pins down each party's supporters $\mathcal{L}(p)$ and $\mathcal{R}(p)$, determining each party's policy objective.

Road Map. The proof proceeds in four parts.

- (1) There is a $\phi_2^I(r,\lambda,b,\eta,\beta,\alpha,\delta)>0$ such that if $\phi<\phi_2^I$, then for any $\tau_R\leq\tau_L$, any $(z_L,z_R)\in\{0,1\}^2$, and for either $\tilde{z}_L\in\{0,1\}$, Left has a strictly positive best response tax that is bounded from below by $\tau_p\frac{\delta 2(1-r)}{\delta 2(1-r)+1-\delta}>0$.
- (2) There is a $\phi_2^{II}(r,\lambda,b,\eta,\beta,\alpha,\delta)$ such that if $\phi < \phi_2^{II}$, then for any $\tau_L > \tau_p \frac{\delta 2(1-r)}{\delta 2(1-r)+1-\delta}$, any $(z_L,z_R) \in \{0,1\}^2$, any $\tau_R \leq \tau_L$, and for either $\tilde{z}_R \in \{0,1\}$, Right's best response tax is zero.
- (3) When $\phi < \min\{\phi_2^I, \phi_2^{II}\}$, a mutual best response pair of taxes exists for any fixed pair of cultural platforms $(z_L, z_R) \in \{0, 1\}^2$ (i.e., restricting $\tilde{z}_L = z_L$ and $\tilde{z}_R = z_R$). These mutual best responses satisfy $\tau_R = 0$ and $\tau_L \in (0, \tau_p)$. When $z_L = z_R \in \{0, 1\}$, Left's best response tax is unique.
- (4) There is a $\phi_3^{III}(r,\lambda,b,\eta,\beta,\alpha,\delta)$ such that any equilibrium Left tax under any cultural divergent platform lies below its unique equilibrium tax under cultural convergence.

Notice that it is without loss of generality to restrict attention to equilibria such that $\tau_R \leq \tau_L$, and we maintain this restriction in all of the following analysis. Note that while we impose it as an equilibrium condition, we allow parties to deviate to taxes that violate the restriction, and verify that no such deviation is optimal.

Lemma A.3. There exists

$$\phi_2^I(r,\lambda,b,\eta,\beta,\alpha,\delta) > 0$$

such that for any $0 \le \tau_R \le \tau_L \le 1$, any $(z_L, z_R) \in \{0, 1\}^2$, and either $\tilde{z}_L \in \{0, 1\}$, if $0 < \phi < \phi_2^I$ then Left has a unique best response tax:

$$\tau^{BR}(\tau_L; \tau_R, \phi, z_L, \tilde{z}_L, z_R, r, \lambda, b, \eta, \beta, \alpha, \delta, b_\mu) > \tau_p \frac{\delta 2(1-r)}{\delta 2(1-r) + 1 - \delta}.$$

Proof. Define

$$\hat{\tau}(\tau_L; \tau_R, z_L, \tilde{z}_L, z_R, r, \lambda, b, \eta, b_\mu, \delta) \equiv \arg \max_{\tilde{\tau}_L \in [0,1]} \mathcal{U}_L(\tilde{\tau}_L, \tilde{z}_L; \tau_L, z_L, \tau_R, z_R).$$

It is easy to verify that $\mathcal{U}_L(\tilde{\tau}_L, \tilde{z}_L; \tau_L, z_L, \tau_R, z_R)$ is strictly concave in $\tilde{\tau}_L$ under any conjecture $p = (\tau_L, z_L, \tau_R, z_R)$ and either $\tilde{z}_L \in \{0, 1\}$. This implies that a unique $\hat{\tau}(\tau_L; \tau_R, z_L, \tilde{z}_L, z_R, r, \lambda, b, \eta, b_\mu, \delta)$ exists and—if interior—is characterized by the first-order condition:

$$\partial_{\tilde{\tau}_L} \mathcal{U}_L(\hat{\tau}_L, \tilde{z}_L; \tau_L, z_L, \tau_R, z_R) = 0.$$

Define

$$\tau^{\min}(r, \lambda, b, \delta) \equiv \tau_p \frac{\delta 2(1-r)}{\delta 2(1-r) + 1 - \delta}.$$

Notice that $\tau^{\min}(r, \lambda, b, \delta) < \tau_p$. We show that for any $0 \le \tau_R \le \tau_L \le 1$, $\tau^{\min}(r, \lambda, b, \delta)$ is a strict lower bound on $\hat{\tau}$.

To see why, suppose $z_L = z_R$. Then, $\hat{\tau} = \tau_p > \tau^{\min}(r, \lambda, b, \delta)$, since Left's payoff is the average payoff of poor voters. Suppose, instead, $z_L \neq z_R$: here we consider $z_L < z_R$, since the remaining case is similar. Then,

$$\mathcal{U}_{L}(\tilde{\tau}_{L}, \tilde{z}_{L}; \tau_{L}, z_{L}, \tau_{R}, z_{R}) = \delta(1 - r)b_{p}(\tilde{\tau}_{L}, \tau_{R}) + r(1 - \delta) \int_{b_{\mu} - b}^{-b_{r}(\tau_{L}, \tau_{R})} \frac{-b_{r}(\tilde{\tau}_{L}, \tau_{R}) - \psi(\tilde{z}_{L})b^{i}}{2b} db^{i} + (1 - r)(1 - \delta) \int_{b_{\mu} - b}^{b_{p}(\tau_{L}, \tau_{R})} \frac{b_{r}(\tilde{\tau}_{L}, \tau_{R}) - \psi(\tilde{z}_{L})b^{i}}{2b} db^{i},$$

where $\psi(\cdot)$ is an indicator that takes the value one if $\tilde{z}_L = 0$, and zero otherwise. Notice that the limits of the integrals depend on the *conjectured* taxes, but the integrand depends on the *actual* taxes.

As a consequence:

$$\partial_{\tilde{\tau}_L} \mathcal{U}_L(\tilde{\tau}_L, \tilde{z}_L; p) = \delta(1 - r) \partial_{\tilde{\tau}_L} b_p(\tau) + (1 - \delta) \left[(1 - r) F(b_p(\tau_L, \tau_R)) \partial_{\tilde{\tau}_L} b_p(\tilde{\tau}_L, \tau_R) \right] - r(1 - \delta) F(-b_r(\tau)) \partial_{\tilde{\tau}_L} b_r(\tilde{\tau}_L, \tau_R) \right]. \tag{39}$$

By the Implicit Function Theorem, for any $\tilde{\tau}_L < \tau_p$, the solution $\hat{\tau}(\tau_L; \tau_R, z_L, \tilde{z}_L, z_R, r, \lambda, b, \delta, b_\mu)$ to (39) strictly increases in both $b_p(\tau) \geq 0$ and $b_r(\tau) \geq 0$, which implies that $\hat{\tau}$ is minimized at any pair (τ_L, τ_R) such that $\tau_L = \tau_R = \check{\tau} \in [0, 1]$, so that $b_p(\check{\tau}, \check{\tau}) = b_r(\check{\tau}, \check{\tau}) = 0$. Substituting into the FOC yields the solution:

$$\hat{\tau}(\check{\tau}; \check{\tau}, z_L, \tilde{z}_L, z_R, r, \lambda, b, \delta, b_{\mu}) = \tau_p \frac{\delta 2b(1-r)}{\delta 2b(1-r) - (1-\delta)(b_{\mu} - b)}$$

$$> \tau_p \frac{\delta 2(1-r)}{\delta 2(1-r) + 1 - \delta}$$

$$= \tau^{\min}(r, \lambda, b, \delta).$$

To conclude this step: if $\tau_R \leq \tau_L$, then for any $(z_L, z_R) \in \{0, 1\}^2$, and for either $\tilde{z}_L \in \{0, 1\}$, the average payoff of Left's supporters is maximized by a tax that is strictly greater than $\tau^{\min}(r, \lambda, b, \delta)$.

Recall that, under a conjecture $\tau_R \leq \tau_L$, Left's objective is

$$(1 - \Phi(\tilde{\tau}_L, \tilde{z}_L, \tau_R, z_R)) \mathcal{U}_L(\tilde{\tau}_L, \tilde{z}_L; p). \tag{40}$$

When $\phi=0$, the second derivative of (40) with respect to $\tilde{\tau}_L$ is $\mathcal{U}_L''<-\delta(1+r\lambda)$ for any $0\leq \tau_R\leq \tau_L\leq 1$, any $(z_L,z_R)\in\{0,1\}^2$, and either $\tilde{z}_L\in\{0,1\}$. We may therefore find $\tilde{\phi}_2^A(z_L,z_R,r,\lambda,b,\eta,\beta,\alpha,\delta)>0$ such that, for any $b_\mu\geq 0$, (40) is strictly concave in $\tilde{\tau}_L$ for any $\phi<\tilde{\phi}_2^A$, any $0\leq \tau_L\leq \tau_R\leq 1$, and $\tilde{z}\in\{0,1\}$, that $\tau^{BR}(\tau_L;\tau_R,\phi,z_L,\tilde{z}_L,z_R,r,\lambda,b,\eta,\beta,\alpha,\delta,b_\mu)$, its unique maximizer, is a continuous function of ϕ , and that it satisfies

$$\tau^{BR}(\tau_L;\tau_R,0,z_L,\tilde{z}_L,z_R,r,\lambda,b,\eta,\beta,\alpha,\delta,b_\mu) = \hat{\tau}(\tau_L;z_L,z_R,r,\lambda,b,\delta,b_\mu) > \tau^{\min}(r,\lambda,b,\delta).$$

We may thus find $\tilde{\phi}_2^B(z_L, z_R, r, \lambda, b, \eta, \beta, \alpha, \delta)$ such that, for any $b_\mu \geq 0$, if $\phi < \min\{\tilde{\phi}_2^A, \tilde{\phi}_2^B\}$, then for any $\tau_R \leq \tau_L \leq 1$, Left has a unique best response tax platform

$$\tau^{BR}(\tau_L; \phi, z_L, \tilde{z}_L, z_R, r, \lambda, b, \eta, \beta, \alpha, \delta, b_{\mu}) > \tau^{\min}(r, \lambda, b, \delta).$$

Letting

$$\phi_2^A(r,\lambda,b,\eta,\beta,\alpha,\delta) = \min_{(z_L,z_R)\in\{0,1\}^2} \tilde{\phi}_2^A(z_L,z_R,r,\lambda,b,\eta,\beta,\alpha,\delta)$$
$$\phi_2^B(r,\lambda,b,\eta,\beta,\alpha,\delta) = \min_{(z_L,z_R)\in\{0,1\}^2} \tilde{\phi}_2^B(z_L,z_R,r,\lambda,b,\eta,\beta,\alpha,\delta)$$

and, finally, defining

$$\phi_2^I(r,\lambda,b,\eta,\beta,\alpha,\delta) \equiv \min\left\{\phi_2^A(r,\lambda,b,\eta,\beta,\alpha,\delta), \phi_2^B(r,\lambda,b,\eta,\beta,\alpha,\delta)\right\}$$

we are done. \square

Lemma A.4. There exists a

$$\phi_2^{II}(r,\lambda,b,\eta,\beta,\alpha,\delta) > 0$$

such that if $\phi < \phi_2^{II}$, then for any $\tau_L > \tau_L^{min}(r, \lambda, b, \delta)$, and $0 \le \tau_R \le \tau_L$, $(z_L, z_R) \in \{0, 1\}^2$, and either $\tilde{z}_R \in \{0, 1\}$:

$$\arg \max_{\tilde{\tau}_R > 0} \Phi_R(\tau_L, z_L, \tilde{\tau}_R, \tilde{z}_R) \mathcal{U}_R(\tilde{\tau}_R, \tilde{z}_R; p) = \{0\}.$$

Proof. First, we argue that $\mathcal{U}_R(\tilde{\tau}_R, \tilde{z}_R; p)$ is strictly concave in $\tilde{\tau}_R$, and strictly decreases in $\tilde{\tau}_R \in [0, 1]$ for any $\tau_L \in [0, 1]$ and $\tau_R \leq \tau_L$. If $z_R = z_L$, then

$$\mathcal{U}_R(\tilde{\tau}_R, \tilde{z}_R; p) = rb_r(\tau_L, \tilde{\tau}_R) + r(1 - \delta)b^{\mu} \left(\mathbf{1}[\tilde{z}_R > z_L] - \mathbf{1}[\tilde{z}_R < z_L]\right)$$

and since $b_r(\tau_L, \tilde{\tau}_R)$ is strictly concave and strictly decreases in $\tilde{\tau}_R \in [0, 1]$, the claim follows.

Suppose, instead, $z_R \neq z_L$. Here, we take $z_R < z_L$, since the remaining case of $z_R > z_L$ is similar:

$$\mathcal{U}_{R}(\tilde{\tau}_{R}, \tilde{z}_{R}; p) = \delta r b_{r} + r(1 - \delta) \int_{b_{\mu} - b}^{b_{r}(\tau)} \frac{b_{r}(\tilde{\tau}) - \psi(\tilde{z}_{R}) b^{i}}{2b} db^{i} + (1 - r)(1 - \delta) \int_{b_{\mu} - b}^{-b_{p}(\tau)} \frac{-b_{p}(\tilde{\tau}) - \psi(\tilde{z}_{R}) b^{i}}{2b} db^{i},$$

where $\psi(\tilde{z}_R)=1$ if $\tilde{z}_R=z_R$, and 0 otherwise. It is easy to verify that for *any* conjecture p, and either $\tilde{z}_R \in \{0,1\}$, $\partial_{\tilde{\tau}_R} \mathcal{U}_R(\tilde{\tau}_R, \tilde{z}_R; p) < 0$ and $\partial_{\tilde{\tau}_R}^2 \mathcal{U}_R(\tilde{\tau}_R, \tilde{z}_R; p) < 0$. Moreover, so long as $\tau_R \leq \tau_L$:

$$\partial \mathcal{U}_{R}(\tilde{\tau}_{L}, \tilde{z}_{R}; p) = \delta r \partial_{\tilde{\tau}_{R}} b_{r}(\tau_{L}, \tilde{\tau}_{R}) + (1 - \delta) r F(b_{r}(\tau_{L}, \tau_{R})) \partial_{\tilde{\tau}_{R}} b_{r}(\tau_{L}, \tilde{\tau}_{R})$$
$$- (1 - \delta)(1 - r) F(-b_{p}(\tau_{L}, \tau_{R})) \partial_{\tilde{\tau}_{R}} b_{p}(\tau_{L}, \tilde{\tau}_{R})$$
$$< 0$$

since $\tau_R \leq \tau_L$ implies $F(b_r(\tau_L, \tau_R)) \geq F(-b_p(\tau_L, \tau_R))$ and, further, $\partial_{\tilde{\tau}_R} b_r(\tau_L, \tilde{\tau}_R) < \partial_{\tilde{\tau}_R} b_p(\tau_L, \tilde{\tau}_R) < 0$.

Now, recognize that

$$\Phi_{R}(\tau_{L}, z_{L}, \tau_{R}, z_{R}) = \frac{1}{2} + \phi \begin{cases} \delta(2r - 1) + \Delta V(\tau_{L}, 1, \tau_{R}, z_{R}) + \eta \Delta M^{-}(\tau_{L}, 1, \tau_{R}, z_{R}) & \text{if } \tau_{R} \leq \tau_{L} \\ \delta(1 - 2r) + \Delta V(\tau_{L}, 1, \tau_{R}, z_{R}) + \eta \Delta M^{+}(\tau_{L}, 1, \tau_{R}, z_{R}) & \text{if } \tau_{R} > \tau_{L}, \end{cases}$$

where

$$\Delta M^{-}(\tau_{L}, 1, \tau_{R}, z_{R}) = \frac{m_{R}^{-}(\tau_{L}, 1, \tau_{R}, z_{R}) - m_{L}^{-}(\tau_{L}, 1, \tau_{R}, z_{R})}{\beta/\alpha + m_{R}^{-}(\tau_{L}, 1, \tau_{R}, z_{R}) + m_{L}^{-}(\tau_{L}, 1, \tau_{R}, z_{R})}$$

and

$$\Delta M^{+}(\tau_{L}, 1, \tau_{R}, z_{R}) = \frac{m_{R}^{+}(\tau_{L}, 1, \tau_{R}, z_{R}) - m_{L}^{+}(\tau_{L}, 1, \tau_{R}, z_{R})}{\beta/\alpha + m_{R}^{+}(\tau_{L}, 1, \tau_{R}, z_{R}) + m_{L}^{+}(\tau_{L}, 1, \tau_{R}, z_{R})},$$

and

$$m_R^-(\tau_L, 1, \tau_R, z_R) \equiv \delta r y_r b_r(\tau_L, \tau_R) + (1 - \delta) r y_r \int_{b_\mu - b}^{b_r(\tau)} \frac{b_r(\tau_L, \tau_R) - \psi(\tau_R) b^i}{2b} db^i$$

+
$$(1 - \delta)(1 - r)y_p \int_{b_\mu - b}^{-b_p(\tau)} \frac{-b_p(\tau_L, \tau_R) - \psi(\tau_R)b^i}{2b} db^i$$
,

and

$$m_R^+(\tau_L, 1, \tau_R, z_R) \equiv m_R^-(\tau_L, 1, \tau_R, z_R) - \delta r y_r b_r(\tau_L, \tau_R) + \delta (1 - r) y_p |b_p(\tau_L, \tau_R)|,$$

and

$$m_L^-(\tau_L, 1, \tau_R, z_R) \equiv \delta(1 - r) y_p b_p(\tau_L, \tau_R) + (1 - \delta) r y_r \int_{b_r(\tau)}^{b_\mu + b} \frac{-b_r(\tau_L, \tau_R) + \psi(\tau_R) b^i}{2b} db^i + (1 - \delta) (1 - r) y_p \int_{-b_p(\tau)}^{b_\mu + b} \frac{b_p(\tau_L, \tau_R) + \psi(\tau_R) b^i}{2b} db^i,$$

and

$$m_L^+(\tau_L, 1, \tau_R, z_R) \equiv m_L^-(\tau_L, 1, \tau_R, z_R) - \delta(1 - r)b_p(\tau_L, \tau_R) + \delta r y_r |b_r(\tau_L, \tau_R)|.$$

To understand these expressions, recognize that if $\tilde{\tau}_R$ crosses τ_L from below, a mass δ of rich and poor voters switch their support, since they only care about taxes. This introduces a discontinuity in R's net votes and net money.

There are two steps to the argument. The first is to verify conditions under which Right's preferred tax in the interval $[0, \tau_L]$ is $\tilde{\tau}_R = 0$ ("local analysis"), and the second is to verify that Right prefers a tax of zero to any tax $\tilde{\tau}_R > 0$ ("large deviation"). The necessity of the second step is that when R's tax crosses L's from below, its net votes and money shift discontinuously, and this deviation cannot be ruled out by an appeal to R's policy motivation, since its objective includes policy goals with respect to both taxes and the cultural policy. Lemma A.3 showed that the interval $[0, \tau_L]$ is non-empty, so that by taking ϕ small enough we can rule out a large deviation, i.e., a deviation to the right of τ_L , on the grounds of R's policy motivation.

$$\tilde{\phi}_2^C(z_L, z_R, r, \lambda, b, \eta, \beta, \alpha, \delta) > 0$$

such that for any $\tau_L > \tau_L^{\min}(r, \lambda, b, \delta)$, and $\tau_R \leq \tau_L$, R's payoff decreases in $\tilde{\tau}_R \in [0, \tau_L]$, for either $\tilde{z}_R \in \{0, 1\}$, if $\phi < \tilde{\phi}_2^C$. The intuition is that as the election becomes sufficiently noisy (lower ϕ), the first-order impact of local changes in taxes on R's payoff is through $\partial_{\tilde{\tau}_R} \mathcal{U}_R(\tilde{\tau}_R, \tilde{z}_R; p)$, which we already showed is strictly negative for all $\tilde{\tau}_R \in [0, 1]$.

Using the observations that $\mathcal{U}_R(\tilde{\tau}_R, \tilde{z}_R; p)$ is strictly concave and strictly decreases in $\tilde{\tau}_R \geq 0$, and that $\Delta V(\tau_L, 1, \tilde{\tau}_R, \tilde{z}_R)$ weakly decreases and is weakly concave in $\tilde{\tau}_R \in [0, \tau_L]$, it is sufficient to find a $\tilde{\phi}_2^C(z_L, z_R, r, \lambda, b, \eta, \beta, \alpha, \delta)$ such that for either $\tilde{z}_R \in \{0, 1\}$, $\tau_L > \tau_L^{\min}(r, \lambda, b, \delta)$, and $\tau_R \leq \tau_L$:

$$\phi \max_{\tilde{\tau}_R \in [0, \tau_L]} \partial_{\tilde{\tau}_R} \eta \Delta M(\tau_L, z_L, \tilde{\tau}_R, \tilde{z}_R) \mathcal{U}_R(0, \tilde{z}_R; p) + \min_{\tilde{\tau}_R \in [0, \tau_L]} \Phi(\tau_L, z_L, \tilde{\tau}_R, \tilde{z}_R) \partial_{\tilde{\tau}_R} \mathcal{U}_R(0, \tilde{z}_R; p) < 0$$
 (41)

We claim that for any $0 \le \tau_L \le \tau_p$ and $(z_L, z_R) \in \{0, 1\}^2$:

$$|\partial_{\tilde{\tau}_R} \Delta M(\tau_L, z_L, \tau_R, z_R)| \le (\alpha/\beta) 2(2 - \delta) \left[r(1 + \lambda)^2 + (1 - r) \max\{1, r\lambda\} \right]. \tag{42}$$

We verify these bounds for the case $z_R < z_L$: the reader can easily verify that they also apply whenever $z_R > z_L$. Then:

$$\partial_{\tau_R} m_R(\tau_L, z_L, \tau_R, z_R) = r(1+\lambda) \left[\delta + (1-\delta) F(b_r(\tau_L, \tau_R)) \right] \partial_{\tau_R} b_r(\tau_L, \tau_R)$$
$$- (1-\delta) (1-r) F(-b_p(\tau_L, \tau_R)) \partial_{\tau_R} b_p(\tau_L, \tau_R)$$

and

$$\partial_{\tau_R} m_L(\tau_L, z_L, \tau_R, z_R) = (1 - r) \left[\delta + (1 - \delta)(1 - F(-b_p(\tau_L, \tau_R))) \right] \partial_{\tau_R} b_p(\tau_L, \tau_R)$$
$$- (1 - \delta)(1 - r)(1 - F(-b_r(\tau_L, \tau_R))) \partial_{\tau_R} b_r(\tau_L, \tau_R).$$

Thus, for any conjectured τ_R :

$$|\partial_{\tau_R} m_R - \partial_{\tau_R} m_L| \le r(1+\lambda) |\partial_{\tau_R} b_r(\tau_L, \tau_R)| + (1-r) |\partial_{\tau_R} b_p(\tau_L, \tau_R)|,$$

and

$$\begin{aligned} |\partial_{\tau_R} m_R + \partial_{\tau_R} m_L| &\leq r(1+\lambda) |\partial_{\tau_R} b_r(\tau_L, \tau_R)| + (1-\delta)(1-r) |\partial_{\tau_R} b_p(\tau_L, \tau_R)| \\ &+ (1-r) |\partial_{\tau_R} b_p(\tau_L, \tau_R)| + (1-\delta)r |\partial_{\tau_R} b_r(\tau_L, \tau_R)| \\ &= (2-\delta) \big[r(1+\lambda) |\partial_{\tau_R} b_r(\tau_L, \tau_R)| + (1-r) |\partial_{\tau_R} b_p(\tau_L, \tau_R)| \big], \end{aligned}$$

Recognize that

$$\partial_{\tau_R} \Delta M = \frac{(m_R' - m_L')(\beta + m_R + m_L) - (m_R - m_L)(m_R' + m_L')}{(\beta/\alpha + m_R + m_L)^2}$$

so taking absolute values and using $|m_R - m_L| \le m_R + m_L$:

$$|\partial_{\tau_R} \Delta M| \le \frac{|m_R' - m_L'| + |m_R' + m_L'|}{\beta/\alpha + m_R + m_L}.$$

Finally, $|\partial_{\tau_R} b_r(\tau_L, \tau_R)| \le 1 + r\lambda$, and $|\partial_{\tau_R} b_p(\tau_L, \tau_R)| \le \max\{1, r\lambda\}$. Putting all of this together with $m_R + m_L \ge 0$ yields the stated bound in (42).

For either $\tilde{z}_R \in \{0,1\}$, (41) therefore holds at any $\tau_L > \tau_L^{\min}(r,\lambda,b,\delta)$ and $\tau_R \leq \tau_L$ if:

$$\phi 2(2 - \delta)\eta(\alpha/\beta) [r(1 + \lambda)^2 + (1 - r) \max\{1, r\lambda\}] \mathcal{U}_R(0, \tilde{z}_R; p) - (\frac{1}{2} + \phi(1 - 2r - \eta)) r(1 - r)\lambda < 0, \quad \tau_L > \max\{\tau_R, \frac{1}{2}\tau_L^{\min}(r, \lambda, b, \delta)\}.$$

When $\phi=0$, the condition is equivalent to $-r(1-r)\lambda<0$. Therefore, there exists a $\tilde{\phi}_2^C(z_L,z_R,r,\lambda,b,\eta,\beta,\alpha,\delta)>0$ such that for either $\tilde{z}_R\in\{0,1\}$, any $\tau_L>\tau_L^{\min}(r,\lambda,b,\delta)$, and any

 $\tau_R \leq \tau_L$, $\phi < \tilde{\phi}_2^C$ ensures that R's best response to τ_L is $\tau_R = 0$. Then, we may take

$$\phi_2^C(r,\lambda,b,\eta,\beta,\alpha,\delta) \equiv \min_{(z_L,z_R) \in \{0,1\}^2} \tilde{\phi}_2^C(z_L,z_R,r,\lambda,b,\eta,\beta,\alpha,\delta),$$

to conclude that if $\phi < \phi_2^C$, then for any $(z_L, z_R) \in \{0, 1\}$, any $\tau_R \leq \tau_L$ with $\tau_L > \tau_L^{\min}(r, \lambda, b, \delta)$, and any $\tilde{z}_R \in \{0, 1\}$, R's preferred tax on the interval $[0, \tau_L]$ is zero.

Large deviation. We are therefore left only to rule out a 'large' deviation, whereby R chooses a tax $\tilde{\tau}_R > \tau_L$. Under the restriction that $\phi < \phi_2^C$, it is sufficient to verify that there is a $\tilde{\phi}_2^D(z_L, z_R, r, \lambda, b, \eta, \beta, \alpha, \delta) > 0$ such that if $\phi < \tilde{\phi}_2^D$, then for any $\tau_L > \tau_L^{\min}(r, \lambda, b, \delta)$ and $\tau_R \leq \tau_L$, and either $\tilde{z}_R \in \{0, 1\}$, Right strictly prefers $\tilde{\tau}_R = 0$ to any policy to the right of Left's tax, τ_L . When $\phi = 0$, this trivially holds, since for either $\tilde{z}_R \in \{0, 1\}$ and any $\tau_L > \tau_L^{\min}(r, \lambda, b, \delta)$:

$$\mathcal{U}_{R}(0, \tilde{z}_{R}; \tau_{L}, z_{L}, \tau_{R}, z_{R}) - \mathcal{U}_{R}(\tau_{L}, \tilde{z}_{R}; \tau_{L}, z_{L}, \tau_{R}, z_{R})$$

$$> \mathcal{U}_{R}(0, \tilde{z}_{R}; \tau_{L}^{\min}(r, \lambda, b, \delta), z_{L}, \tau_{R}, z_{R}) - \mathcal{U}_{R}(\tau_{L}^{\min}(r, \lambda, b, \delta), \tilde{z}_{R}; \tau_{L}^{\min}(r, \lambda, b, \delta), z_{L}, \tau_{R}, z_{R})$$

$$> 0.$$

We may therefore find $\tilde{\phi}_2^D(z_L, z_R, r, \lambda, b, \eta, \beta, \alpha, \delta) > 0$ such that if $\phi_2 < \tilde{\phi}_2^D$, Right strictly prefers a tax rate of zero. Then, we define

$$\phi_2^D(r,\lambda,b,\eta,\beta,\alpha,\delta) \equiv \min_{(z_L,z_R) \in \{0,1\}^2} \tilde{\phi}_2^D(z_L,z_R,r,\lambda,b,\eta,\beta,\alpha,\delta). \quad \Box$$

and set

$$\phi_2^{II}(r,\lambda,b,\eta,\beta,\alpha,\delta) \equiv \min \left\{ \phi_2^C(r,\lambda,b,\eta,\beta,\alpha,\delta), \phi_2^D(r,\lambda,b,\eta,\beta,\alpha,\delta) \right\}. \ \ \Box$$

The previous analysis implies that if $\phi < \min\{\phi_2^I, \phi_2^{II}\}$, then in any equilibrium either with fixed or endogenous cultural platforms: $\tau_R = 0$ and $\tau_L > 0$.

Lemma A.5. If $\phi < \min\{\phi_2^I, \phi_2^{II}\}$, then for any $(z_L, z_R) \in \{0, 1\}^2$ and $\tilde{z}_L \in \{0, 1\}$, there exists a pair of

mutual best response taxes (τ_L, τ_R) , i.e., satisfying $\tau_R = 0 < \tau_L$, and such that

$$\tau_L \in \arg\max_{\tilde{\tau}_L} \ \mathcal{U}_L(\tilde{\tau}_L, z_L; \tau_L, z_L, \tau_R, z_R) (1 - \Phi(\tilde{\tau}_L, z_L, \tau_R, z_R))$$
$$\tau_R \in \arg\max_{\tilde{\tau}_R} \ \mathcal{U}_R(\tilde{\tau}_R, z_R; \tau_L, z_L, \tau_R, z_R) \Phi(\tau_L, z_L, \tilde{\tau}_R, z_R).$$

Proof. We showed that if $\phi < \phi_2^{II}$, $\tau_R = 0$ is R's unique best response to any conjecture $\tau_L > \tau_L^{\min}(r, \lambda, b, \delta)$. We also showed that if $\phi < \phi_2^I$, then for any conjecture $p = (\tau_L, z_L, \tau_R, z_R)$, and either $\tilde{z}_L = z_L$, Left has a unique best response

$$\tau^{BR}(\tau_L; \phi, z_L, \tilde{z}_L, z_R, r, \lambda, b, \eta, \beta, \alpha, \delta) > \tau_L^{\min}(r, \lambda, b, \delta)$$

which is continuous in τ_L . If $z_L=z_R=z\in\{0,1\}$, then τ^{BR} is constant in τ_L , and so it is the unique equilibrium tax. Suppose, instead, $z_L\neq z_R$. Let $h(\tau_L)=\tau^{BR}(\tau_L;\cdot)-\tau_L$. We have $h(0)>0>h(\tau_p)$. The Intermediate Value Theorem implies that a root of $h(\cdot)$ exists and belongs to $(\tau_L^{\min}(r,\lambda,b,\delta),\tau_p)$. \square

Next, define the set of equilibrium tax platforms—summarized by L's platform, since R always chooses zero—under a fixed pair of cultural platforms, $(z_L, z_R) \in \{0, 1\}^2$, i.e., imposing $\tilde{z}_L = z_L$:

$$\mathcal{T}(z_L, z_R) = \{ t \in (0, \tau_p) : t \in \arg\max_{\tilde{t} \in (0, \tau_p)} (1 - \Phi(\tilde{t}, z_L, 0, z_R))) \mathcal{U}_L(\tilde{t}, z_L; t, z_L, 0, z_R) \}.$$

When $\phi < \min\{\phi_2^I, \phi_2^{II}\}$, $\mathcal{T}(z_L, z_R)$ is non-empty, and $\mathcal{T}(z, z)$ is a singleton: call $\mathcal{T}(z, z)$'s unique element $\tau(z, z)$.

Lemma A.6. There exists $\phi_2^{III}(r, \lambda, b, \eta, \beta, \alpha, \delta)$, such that if $\phi < \phi_2^{III}$, for any platforms $z \in \{0, 1\}$ and $z' \in \{0, 1\} \setminus z$: $t \in \mathcal{T}(z, z')$ implies t < t'.

Proof. Recall that the solution

$$\tau^{BR}(\tau_L; \phi, z_L, z_L, z_R, r, \lambda, b, \eta, \beta, \alpha, \delta, b_\mu)$$

is continuous in ϕ , and satisfies

$$\tau^{BR}(\tau_L; 0, z_L, \tilde{z}_L, z_R, r, \lambda, b, \eta, \beta, \alpha, \delta, b_\mu) = \arg\max_{\tilde{\tau}_L \in [0, 1]} \mathcal{U}(\tilde{\tau}_L, z_L; \tau_L, z_L, 0, z_R).$$

When $z_L = z_R = z$, then:

$$\arg \max_{\tilde{\tau}_L \in [0,1]} \mathcal{U}(\tilde{\tau}_L, z_L; \tau_L, z_L, 0, z_R) = \{\tau_p\}.$$

Suppose $z_L < z_R$. Then:

$$\partial_{\tilde{\tau}_L} \mathcal{U}(\tau_p, z_L; \tau_L, z_L, 0, z_R) = -(1 - \delta) r F(-b_r(\tau_L, 0)) \partial_{\tilde{\tau}_L} b_r(\tau_p, 0) < 0.$$

Suppose $z_L > z_R$. Then:

$$\partial_{\tilde{\tau}_L} \mathcal{U}(\tau_p, z_L; \tau_L, z_L, 0, z_R) = -(1 - \delta) r (1 - F(b_r(\tau_L, 0))) \partial_{\tilde{\tau}_L} b_r(\tau_p, 0) < 0.$$

We may therefore find a $\phi_2^{III}(r,\lambda,b,\eta,\beta,\alpha,\delta)>0$ such that if $\phi<\phi_2^{III}$, $t\in\mathcal{T}(z,z')$ implies $t<\tau(z,z)$. \square

To conclude the proof of the Proposition, set $\overline{\phi}_2(r,\lambda,b,\eta,\beta,\alpha,\delta) \equiv \min\{\phi_2^I,\phi_2^{II},\phi_2^{III}\}$. \square

Proof of Proposition 4. The proof of this proposition uses steps from the proofs of Proposition 2 and Proposition 3. Proposition 2 showed that if $\phi < \overline{\phi}_1(r,\lambda,b,\eta,\beta,\alpha,\delta)$, then for any fixed taxes, a mutual best response pair of cultural platforms exist. Proposition 3 showed that if $\phi < \overline{\phi}_2(r,\lambda,b,\eta,\beta,\alpha,\delta)$, then for any for any pair of cultural platforms, a mutual best response pair of taxes exist. The proof of Proposition 3 established two stronger results that

are useful for the current Proposition. First, if $\phi < \overline{\phi}_2(r,\lambda,b,\eta,\beta,\alpha,\delta)$, then for any conjecture $p = (\tau_L, z_L, \tau_R, z_R)$, and any *actual* choice of Left's cultural platform $\tilde{z}_L \in \{0,1\}$, Left has a unique optimal tax $\tau^{BR}(\tau_L; \phi, z_L, z_L, z_R, r, \lambda, b, \eta, \beta, \alpha, \delta, b_\mu) > \frac{1}{2}\tau_L^{\min}(r,\lambda,b,\delta)$. Second, under the same condition, then for any conjecture $p = (\tau_L, z_L, \tau_R, z_R)$ satisfying $\tau_L > \tau_L^{\min}(r,\lambda,b,\delta)$, and any *actual* choice of Right's cultural platform $\tilde{z}_R \in \{0,1\}$, Right's unique optimal tax is zero.

As a consequence, so long as $\phi < \overline{\phi}_2(r,\lambda,b,\eta,\beta,\alpha,\delta)$, we may restrict attention to equilibrium conjectures in which $p_R = (0,z_R)$ for $z_R \in \{0,1\}$, and further restrict attention to deviations by party R in which it maintains a tax rate of zero regardless of its choice of cultural platform. When considering deviations by party L, however, we must nonetheless account for the possibility that L's tax may also adjust with its cultural platform.

Lemma A.7. There exists a $\phi_3^I(r, \lambda, b, \eta, \beta, \alpha, \delta) > 0$, such that if $\phi < \phi_3^I$, a threshold $b_\mu^* > 0$ exists such that if and only if $b_\mu > b_\mu^*$, there is a culturally convergent equilibrium. In this equilibrium, the cultural policies are $z_L = z_R = 1$ and taxes are $\tau_R = 0$ and $\tau_L = \tau_L(1, 1) \in (0, \tau_p)$.

Proof. Take $\phi < \overline{\phi}_2(r,\lambda,b,\eta,\beta,\alpha,\delta)$, where $\overline{\phi}_2(r,\lambda,b,\eta,\beta,\alpha,\delta)$ is defined in Proposition 3. Then, the unique platform $\tau(1,1)$ is well-defined. We consider each party's incentives, separately. For party R, $\tilde{p}_R = (0,1)$ is a best response to $p = (\tau(1,1),1,0,1)$ if and only if

$$\Phi(\tau(1,1),1,0,1)b_r(\tau(1,1),0) \ge \Phi(\tau(1,1),1,0,0)) (b_r(\tau(1,1),0) - (1-\delta)b_\mu).$$
(43)

Re-arranging yields

$$b_{\mu} \ge \left(1 - \frac{\Phi(\tau(1,1), 1, 0, 1)}{\Phi(\tau(1,1), 1, 0, 0)}\right) \frac{b_r(\tau(1,1), 0)}{1 - \delta}.$$

Notice that this is the same threshold from Proposition 2, with the exception that we insert Right's best-response tax of $\tau_R = 0$, and Left's best-response tax of $\tau_L = \tau(1,1) \in (0,\tau_p)$.

The difference of the RHS and LHS strictly increases in b_{μ} , and when $b_{\mu}=0$, the RHS is

strictly positive if and only if $\eta < \eta^*$, where

$$\eta^* = \frac{\Delta V(\tau(1,1), 1, 0, 0) - \Delta V(\tau(1,1), 1, 0, 1)}{\Delta M(\tau(1,1), 1, 0, 1) - \Delta M(\tau(1,1), 1, 0, 0)}$$

We verified in Lemma 2 and Lemma 3 that $\eta^* > 0$ for any pair (τ_L, τ_R) satisfying $\tau_R < \tau_L$. Call b_μ^R the unique root of (43). We conclude that if $\eta < \eta^*$, $\tilde{p}_R = (0,1)$ is a best response to $p = (\tau(1,1),1,0,1)$ if and only if $b_\mu \geq b_\mu^R$.

We turn to party L. We have that $\tilde{p}_L = (\tau(1,1),1)$ is a best response to $p = (\tau(1,1),1,0,1)$ if and only if

$$(1 - \Phi(\tau(1,1), 1, 0, 1))b_p(\tau(1,1), 0) \ge \max_{\tilde{t} \in [0,1]} \left\{ (1 - \Phi(\tilde{t}, 0, 0, 1)) \left(b_p(\tilde{t}, 0) - (1 - \delta) b_\mu \right) \right\}. \tag{44}$$

Proposition 3's proof verified that when $\phi < \overline{\phi}_2(r, \lambda, b, \eta, \beta, \alpha, \delta)$, the maximizer is unique—we denote it $\tilde{\tau}(0, 1; b_\mu)$ —and it is continuous in $b_\mu \geq 0$. Thus, (44) becomes

$$(1 - \Phi(\tau(1,1),1,0,1))b_p(\tau(1,1),0) - (1 - \Phi(\tilde{\tau}(0,1;b_{\mu}),0,0,1;b_{\mu})) (b_p(\tilde{\tau}(0,1;b_{\mu}),0) - (1 - \delta)b_{\mu}) \ge 0.$$

Here, we explicitly index Right's probability of winning Φ under cultural divergence with the average net preference b_{μ} . Call the LHS of this inequality $H(b_{\mu})$. Then, we need to show that there exists $b_{\mu}^{L}>0$ such that $H(b_{\mu})>0$ if and only if $b_{\mu}\geq b_{\mu}^{L}$. It is easy to verify that $H(b_{\mu})$ strictly increases in b_{μ} , since Right's net votes and net money improve with b_{μ} when it exclusively locates at z=1. Further, if $b_{\mu}>\frac{b_{p}(\tilde{\tau}(0,1;b_{\mu}),0)}{1-\delta}$, (44) trivially holds. Finally:

$$\begin{split} H(0) = & (1 - \Phi(\tau(1,1),1,0,1))b_p(\tau(1,1),0) - (1 - \Phi(\tilde{\tau}(0,1),0,0,1;0))b_p(\tilde{\tau}(0,1;0),0) \\ = & (1 - \Phi(\tau(1,1),1,0,1))b_p(\tau(1,1),0) - (1 - \Phi(\tilde{\tau}(0,1),1,0,0;0))b_p(\tilde{\tau}(1,0;0),0) \\ < & (1 - \Phi(\tau(1,1),1,0,0))b_p(\tau(1,1),0) - (1 - \Phi(\tilde{\tau}(0,1),1,0,0;0))b_p(\tilde{\tau}(1,0;0),0) \\ \le & (1 - \Phi(\tilde{\tau}(1,0;0),1,0,0))b_p(\tilde{\tau}(0,1;0),0) - (1 - \Phi(\tilde{\tau}(1,0),1,0,0;0))b_p(\tilde{\tau}(1,0;0),0) \end{split}$$

The first line to the second follows because when $b_\mu=0$, for any fixed taxes τ_L and τ_R , $\Phi(\tau_L,0,\tau_R,1)=\Phi(\tau_L,1,\tau_R,0)$, i.e., swapping the cultural platforms does not change winning probabilities when the population is evenly divided on the cultural issue. The second line to the third line follows from $\eta>\eta^*$, which states that when $b_\mu=0$, $1-\Phi(\tau(1,1),1,0,1)<1-\Phi(\tau(1,1),0,0,1)$. The third line to the fourth line follows from the definition of $\tilde{\tau}(0,1;0),0)$. We conclude that if $\eta>\eta^*$, there exists $b^L_\mu>0$ such that $\tilde{p}_L=(\tau(1,1),1)$ is a best response to $p=(\tau(1,1),1,0,1)$ if and only if $b_\mu\geq b^L_\mu$. Note that when $\eta=\eta^*$, we have $b^L_\mu>0$ if $\tilde{\tau}(0,1;0)\neq \tau(1,1)$. Since $\tilde{\tau}(0,1;0)$ varies continuously with b, while $\tau(1,1)$ is constant in b, $\tilde{\tau}(0,1;0)=\tau(1,1)$ cannot hold on any interval of b. Thus, generically, $b^L_\mu>0$. The proof is completed by taking $b^*_\mu\equiv\min\{b^L_\mu,b^R_\mu\}$. \square

The final step is to verify that there exists $\overline{\phi}_3(r,\lambda,b,\eta,\beta,\alpha,\delta)$ such that if $\phi<\overline{\phi}_3$ a culturally divergent equilibrium exists whenever $b< b_\mu^*$. The arguments are very similar to the proof of Proposition 2, and we outline how they are extended to the setting with endogenous taxes. Consider $b_\mu < b_\mu^R$, since $b_\mu < b_\mu^L$ follows a similar argument. Conjecture a strategy profile $p=(\tau(1,0),1,0,0)$, where $\tau(1,0)\in \mathcal{T}(0,1)$ defined in the proof of Proposition 3. We need to verify that

$$(1 - \Phi(\tau(1,0), 1, 0, 0))\mathcal{U}_L(\tau(1,0), 1; p) \ge \max_{\tau \in [0,1]} \left\{ (1 - \Phi(\tau, 0, 0, 0))\mathcal{U}_L(\tau, 0; p) \right\}. \tag{45}$$

The proof of Proposition 3 verified that if $\phi < \overline{\phi}_2(r,\lambda,b,\eta,\beta,\alpha,\delta)$, then there is a unique τ^* that maximizes the RHS of (46) (recall that p is fixed). We claim that there exists $\tilde{\phi}_3^A(r,\lambda,b,\eta,\beta,\alpha,\delta)$ such that if $\phi < \tilde{\phi}_3^A$:

$$(1 - \Phi(\tau(1,0), 1, 0, 0))\mathcal{U}_L(\tau(1,0), 1; p) \ge (1 - \Phi(\tau^*, 0, 0, 0))\mathcal{U}_L(\tau^*, 0; p), \tag{46}$$

which is equivalent to

$$\frac{1 - \Phi(\tau(1,0), 1, 0, 0)}{1 - \Phi(\tau^*, 0, 0, 0)} \ge \frac{\mathcal{U}_L(\tau^*, 0; p)}{\mathcal{U}_L(\tau(1,0), 1; p)}.$$

The argument now proceeds similarly to Lemma A.1 in the proof of Proposition 2. When $\delta=1$, the two sides coincide (notice that when $\delta=1$, $\tau^*=\tau(1,0)$). Letting $g(\delta)\equiv\frac{\mathcal{U}_L(\tau^*,0;p)}{\mathcal{U}_L(\tau(1,0),1;p)}$, and $\kappa=1-\Phi(\tau^*,0,0,0)$, the remainder of the argument is a straightforward extension of the proof of Lemma A.1, and left to the reader.

We may take a similar argument for Right's incentives: platform $\tilde{p}_R = (0,0)$ is a best response to conjecture $p = (\tau_L(1,0), 1, 0, 0)$ if and only if

$$\frac{\Phi(\tau(1,0),1,0,0)}{\Phi(\tau(1,0),1,0,1)} \ge \frac{\mathcal{U}_R(\tau(1,0),1;p)}{\mathcal{U}_R(\tau(1,0),0;p)}.$$
(47)

and when $\delta=1$, both sides of the inequality are equal to one. Letting $h(\delta)\equiv \frac{\mathcal{U}_L(\tau^*,0;p)}{\mathcal{U}_L(\tau(1,0),1;p)}$, and $\kappa'=\Phi(\tau(1,0),1,0,1)$, we may again adapt the argument in Lemma A.1 to establish the existence of a uniform bound $\tilde{\phi}_3^B(r,\lambda,b,\eta,\beta,\alpha,\delta)>0$ such that if $\phi<\tilde{\phi}_3^B$, (47) holds for any $\delta\in[0,1)$.

To conclude, we set $\overline{\phi}_3(r,\lambda,b,\eta,\beta,\alpha,\delta) \equiv \min\{\overline{\phi}_2,\widetilde{\phi}_3^A,\widetilde{\phi}_3^B\}$. \square

B. Appendix: Correlation of Cultural Preferences with Income

We describe in more detail the model with correlation between income and cultural preferences. Suppose a rich voter's cultural preference is $b^i \sim U[b^r_\mu - b, b^r_\mu + b]$, and a poor voter's cultural preference is $b^i \sim U[b^p_\mu - b, b^p_\mu + b]$. We parameterize the income-specific means:

$$b_{\mu}^{r} = b_{\mu} - (1 - r)\varepsilon$$
 $b_{\mu}^{p} = b_{\mu} + r\varepsilon$, $\varepsilon > 0$.

Notice this implies that the average preference across the population remains

$$rb_{\mu}^{r} + (1-r)b_{\mu}^{p} = b_{\mu}.$$

All other aspects of the benchmark are unchanged. Right's net votes under cultural divergence are

$$\Delta V(\tau_L, 1, \tau_R, 0) = 2r - 1 + 2(1 - \delta) \left((1 - r) \frac{-b_p(\tau) - (b_\mu^p - b)}{2b} - r \frac{b_\mu^r + b - b_r(\tau)}{2b} \right)$$
$$\Delta V(\tau_L, 0, \tau_R, 1) = 2r - 1 + 2(1 - \delta) \left((1 - r) \frac{b_\mu^p + b - b_p(\tau)}{2b} - r \frac{-b_r(\tau) - (b_\mu^r - b)}{2b} \right)$$

Notice that

$$\begin{split} \Delta V(\tau_L, 1, \tau_R, 0) &- \Delta V(\tau_L, 1, \tau_R, 1) \\ &= 2(1 - \delta) \left((1 - r) \frac{-b_p(\tau) - (b_\mu^p - b)}{2b} - r \frac{b_\mu^r + b - b_r(\tau)}{2b} \right) \\ &= 2(1 - \delta) \left((1 - r) \frac{-b_p(\tau) - (b_\mu - b)}{2b} - r \frac{b_\mu + b - b_r(\tau)}{2b} - \frac{(1 - r)r\varepsilon - r(1 - r)\varepsilon}{2b} \right) \\ &= \frac{1 - \delta}{b} \left((1 - r)(-b_p(\tau) - (b_\mu - b)) - r(b_\mu - (b_r(\tau) - b)) \right). \end{split}$$

In words: net votes depend only on the population average, and are therefore unaffected by mean-preserving correlation between cultural preferences and income. The same observation

obviously holds with respect to the difference $\Delta V(\tau_L, 0, \tau_R, 1) - \Delta V(\tau_L, 1, \tau_R, 1)$.

What about money? Recognize that

$$m_{R}(\tau_{L}, 0, \tau_{R}, 1) - m_{L}(\tau_{L}, 0, \tau_{R}, 1)$$

$$= \alpha r y_{r} b_{r}(\tau) - \alpha (1 - r) y_{p} b_{p}(\tau) + \alpha (1 - \delta) (r y_{r} b_{\mu}^{r} + (1 - r) y_{p} b_{\mu}^{p})$$

$$= \alpha r y_{r} b_{r}(\tau) - \alpha (1 - r) y_{p} b_{p}(\tau) + \alpha (1 - \delta) b_{\mu} \overline{y} - \alpha (1 - \delta) \lambda r (1 - r) \varepsilon.$$

$$(48)$$

To understand how net votes are impacted by an increase in correlation (captured by an increase in $\varepsilon > 0$) define $S \equiv \beta/\alpha + m_R + m_L > 0$ and observe that:

$$\partial_{\varepsilon} \Delta M(\tau_L, 0, \tau_R, 1) \propto S(\partial_{\varepsilon} (m_R(\tau_L, 0, \tau_R, 1) - m_L(\tau_L, 0, \tau_R, 1)))$$
$$- (m_R(\tau_L, 0, \tau_R, 1) - m_L(\tau_L, 0, \tau_R, 1))(\partial_{\varepsilon} S).$$

By inspection of (48):

$$\partial_{\varepsilon}(m_R(\tau_L, 0, \tau_R, 1) - m_L(\tau_L, 0, \tau_R, 1)) = -\alpha(1 - \delta)r(1 - r)\lambda\varepsilon < 0,$$

and

$$\partial_{\varepsilon} S = \frac{(1-\delta)\left((1-r)(b_{\mu}^{p}-b_{p}(\tau))^{2}+r(1+\lambda)(b_{\mu}^{r}+b_{r}(\tau))^{2}\right)}{2b} + \frac{1}{2}b(1-\delta)(1+r\lambda)+\beta+b_{p}(\tau)\delta(1-r)+b_{r}(\tau)\delta r(1+\lambda) > 0.$$

Thus, a sufficient condition that $\Delta M(\tau_L, 0, \tau_R, 1)$ strictly increases in $\varepsilon \ge 0$ is that $m_R - m_L > 0$, which for any $\tau_L > \tau_R$ is true for any $b_\mu \ge 0$ whenever $\varepsilon \ge 0$ is small enough.

Recall from our baseline model with exogenous taxes that Left's condition to sustain cultural

convergence is

$$(1 - \Phi(\tau_L, 0, \tau_R, 1))(b_p(\tau) - (1 - \delta)b_u^p) \ge (1 - \Phi(\tau_L, 1, \tau_R, 1))b_p(\tau). \tag{49}$$

Our baseline analysis with $\varepsilon = 0$ established that if $\eta > \eta^*$, there is a unique $b_{\mu}(\eta) \in (0, \frac{b_p(\tau)}{1-\delta})$ below which this inequality fails. We provide conditions such that

$$\partial_{\varepsilon} \left[(1 - \Phi(\tau_L, 0, \tau_R, 1)) (b_p(\tau) - (1 - \delta)(b_\mu(\eta) + \varepsilon r) \right]_{\varepsilon = 0} > 0, \tag{50}$$

which means that correlation between cultural preferences and income *increases* Left's incentive to trigger a culture war.

Proposition 2's proof verifies that when $\eta < \eta^*$:

$$b_{\mu}(\eta) = \left(1 - \frac{1 - \Phi(\tau_L, 1, \tau_R, 1)}{1 - \Phi(\tau_L, 0, \tau_R, 1)}\right) \frac{b_p(\tau)}{1 - \delta}.$$

Substituting this into (50), we want to show

$$\partial_{\varepsilon} \left[(1 - \Phi(\tau_L, 0, \tau_R, 1)) \left(b_p(\tau) - (1 - \delta) \left(1 - \frac{1 - \Phi(\tau_L, 1, \tau_R, 1)}{1 - \Phi(\tau_L, 0, \tau_R, 1)} \right) \frac{b_p(\tau)}{1 - \delta} - (1 - \delta) \varepsilon r \right) \right]_{\varepsilon = 0} > 0,$$

or

$$\partial_{\varepsilon} \Big[(1 - \Phi(\tau_L, 0, \tau_R, 1)) (b_p(\tau) - (1 - \delta)\varepsilon r) \Big]_{\varepsilon = 0} > 0,$$

This is equivalent to:

$$-\frac{\left[\partial_{\varepsilon}\Phi(\tau_L,0,\tau_R,1)\right]_{\varepsilon=0}}{1-\Phi(\tau_L,0,\tau_R,1)} > \frac{(1-\delta)r}{b_p(\tau)}.$$
(51)

Recognize that the RHS of (51) strictly decreases in λ because $b_p(\tau)$ strictly increases in λ for any $\tau_L > \tau_R$. Moreover, the LHS denominator is strictly less than one. Finally, we know that $[\partial_{\varepsilon}\Phi(\tau_L,0,\tau_R,1)]_{\varepsilon=0} < 0$ since we showed that the only impact of increasing ε on Left's winning probability is through $\Delta M(\tau_L,0,\tau_R,1)$, which we showed strictly increases in $\varepsilon \geq 0$ sufficiently

small.

Putting all this together, a sufficient condition for (51) is:

$$\min_{x \in [-\eta - 1, \eta + 1]} |\Phi'(x)| |(\partial_{\varepsilon} \Delta M(\tau_L, z, \tau_R, z')_{\varepsilon = 0}| > \frac{(1 - \delta)r}{b_p(\tau)}.$$

If $\Phi(\cdot)$ is strongly monotone, then there exists $\kappa > 0$ such that $\min_{x \in [-\eta - 1, \eta + 1]} |\Phi'(x)| = \kappa$. Moreover, recalling our definition $S = \beta + m_R + m_L$ and that strictly increases in ε .

$$|\partial_{\varepsilon}\Delta M(\tau_L, z, \tau_R, z')| = \left|\frac{-\alpha(1-\delta)r(1-r)\lambda}{S} - \Delta M(\tau_L, z, \tau_R, z')\frac{S'}{S}\right| > \frac{r(1-r)\lambda}{S} > \frac{r(1-r)\lambda}{\frac{\beta}{\alpha} + 1 + r\lambda}.$$

Thus, a sufficient condition for (51) is that

$$\kappa \frac{r(1-r)\lambda}{\frac{\beta}{\alpha}+1+r\lambda} > \frac{(1-\delta)r}{b_p(\tau)},$$

and as long as $\overline{\lambda}$ is large enough, we can find a threshold $\lambda^* < \overline{\lambda}$ such that this condition holds whenever $\lambda > \lambda^*$, since the LHS tends to $\kappa(1-r)$ as $\lambda \to \infty$ and the RHS tends to 0 as $\lambda \to \infty$.

If inequality is large enough, introducing correlation therefore increases Left's incentive to mount a culture war because higher inequality makes its policy-motivated stakes from achieving higher taxes with a more electorally competitive platform more important than its losses on the cultural policy. Conversely, in contexts of very low inequality, the poor's intrinsic loss from offering cultural policy z=0 could dominate its electoral gains from lower taxes, in which case correlation would weaken Left's incentive to trigger a culture war.