Firms as Electoral Monopsonies*

Carlos F. Avenancio-León Adelina Barbalau Cyndi Xinyu Hou Alessio Piccolo

August 2025

We study how dominant employers can act as electoral monopsonies, directly shaping electoral outcomes by leveraging local labor market power. We consider a model where a dominant employer can reshape the political preferences of the local electorate by conditioning their degree of economic activity on electoral outcomes. This form of electoral interference creates *polarization* in the community: some voters turn against redistributive policy, in some cases strongly, as they may benefit from the firm's economic activity. Over time, however, the firm's influence undermines local institutions and labor markets, ultimately harming all voters and, in some cases, the firm itself. Using U.S. individual voting records data and a shift-share instrument based on national industry trends and historical local employment patterns, we test the model's predictions and show that areas with higher employment concentration are more likely to see increased voter registration, turnout, and campaign donations for the Republican party. These political shifts are accompanied by long-run declines in population, labor force, tax base, and per capita public sector size.

Keywords: Electoral monopsony, Employer concentration, Corporate political strategy.

JEL classification: D72, J42, P16.

*We are grateful to R. Andrew Butters, Yutao He, William Mullins, María Cecilia Pérez, Jessica Sims, and seminar participants at Indiana University (Kelley) for comments and suggestions. Avenancio-León: University of California – San Diego, Rady School of Management. Email: cavenancioleon@ucsd.edu. Barbalau: University of Alberta. Email: barbalau@ualberta.ca. Hou: Indiana University, Kelley School of Business. Email: houxiny@iu.edu. Piccolo: Indiana University, Kelley School of Business. Email: apiccol@iu.edu.

"I hope you make it very clear to your employees what you believe is in the best interest of your enterprise and therefore their job and their future in the upcoming elections... Nothing illegal about you talking to your employees about what you believe is best for the business, because I think that will figure into their election decision[.]"

– Mitt Romney, October 2012

1 Introduction

The relationship between economic power and political influence has long occupied a central place in debates within political economy and antitrust law (Brandeis 1914; Olson 1968; Acemoglu and Robinson 2006a; Khan 2017; Cowgill, Prat, and Valletti 2022). While most work has concentrated on national-level channels such as lobbying and campaign finance (Grossman and Helpman 1994; Bombardini and Trebbi 2011; Callander, Foarta, and Sugaya 2022), recent evidence suggests that firms can also exert political influence through personnel decisions, shaping hiring patterns (Colonnelli, Neto, and Teso 2022) and employee political contributions (Babenko, Fedaseyeu, and Zhang 2020) along partisan lines. Beyond these patterns, survey evidence (Hertel-Fernandez 2017), numerous anecdotal accounts in the media,[1] and the statutory record – reflected in the laws of more than a quarter of U.S. states[2] – point to a deeper phenomenon: employers using their economic leverage to directly sway electoral outcomes.

This *prima facie* evidence that firms have the potential to directly shape political behavior raises the question we address in this paper: how does the structure of local labor markets – particularly, the presence of dominant employers – create conditions for direct electoral influence? Where a single firm holds disproportionate sway over employment, it may leverage that position to shape political preferences in the community, sometimes in ways that conflict with the broader public interest. We conceptualize this dynamic as a form of "electoral monopsony" – where concentrated employer power shapes not only labor market outcomes, but also democratic participation. Understanding this phenomenon is especially important given the high levels of employer concentration across U.S. labor markets (Berger, Herkenhoff, and Mongey 2022), and their potential

[1] E.g., Steven Greenhouse (Oct. 26, 2012), "Here's a Memo From the Boss: Vote This Way," *New York Times*.
[2] See electoral codes of: Arizona, Idaho, Indiana, Kentucky, Maryland, Nebraska, New Jersey, Pennsylvania, Ohio, Rhode Island, South Dakota, Utah, West Virginia, and Wisconsin.

to undermine the responsiveness and equity of democratic processes from the ground up.

We formalize the link between employment concentration and politics in a simple model of a local community. In every period, firms hire from the pool of agents in the community, and each agent accepts a job at a local firm if the wage is larger than their outside option. Agents differ in their outside options, and firms in their size: there is a large, dominant firm, ℓ, who understands how its production choices affect local wages, and a mass of small, competitive firms, who take wages as given. The community votes – following a majority rule – on a policy that redistributes surplus from firms to agents (e.g., stricter enforcement of regulations or higher taxes on firms). Redistribution benefits the public, but is costly to the firms. So, the large firm may want to take actions to sway the public against the policy.

We assume that ℓ can commit to a production plan that is contingent on the voting outcome (e.g., through reputation (Kreps and Wilson 1982; Mailath and Samuelson 2006) or contractual agreements (Laffont and Tirole 1993)). We show that ℓ uses a combination of threats and concessions to the community to influence voting: it threatens to cut down production (e.g., relocate to another community) if the policy passes, and it concedes to expand production (e.g., new investments and more employment) if it does not. For agents that do seek jobs in the local economy, this creates an economic cost to redistribution, since they may lose their jobs or receive lower wages if the policy passes. If ℓ's production is sufficiently large compared to the total production of the competitive firms, and enough voters seek jobs in the local economy, the large firm has enough impact on voters' welfare that it can effectively control the elections. If it chooses to do so, ℓ uses the threats and concessions described above to make the median voter, who here is the agent with the median outside option, better off (at least weakly) if the policy does not pass.

Our first set of results relates to the short-run effects of the firm's influence on the voting process, where by short-run we mean the time horizon that firms and agents consider when making their choices. We compare the equilibrium where ℓ influences voting to a benchmark where the firm cannot manipulate the election and, as a consequence, the policy always passes. When it influences voting, ℓ always threatens to produce *less* than in the benchmark if the policy passes, to depress wages. If this is costly enough to the median voter, this threat alone is sufficient

to sway them against the redistributive policy. If the threat alone is not enough, the firm will also need to make concessions, which means committing to produce more and increase wages if the policy does *not* pass, just enough to make the median voter indifferent. Nevertheless, the median voter is always worse off than in the benchmark: They are at best indifferent about whether the policy passes or not, and, in the scenario where the policy passes, their wage is lower than in the benchmark. By a similar logic, agents with outside options that are larger, or not much lower, than the median voter are also always worse off than in the benchmark. The threat of cutting production, which would depress employment and wages, makes it then possible for ℓ to sway the public against redistribution *even though* the majority of the electorate is worse off than in a counterfactual where the firm does not engage in electoral influence.

Agents with small outside options, however, may be better off when ℓ influences voting. These agents are more exposed to the wage fluctuations induced by ℓ's strategy, since their outside options are low and they always work in the local economy. So, they benefit relatively more when wages rise above the benchmark equilibrium (due to the firm's commitment to produce more if the policy does not pass), to the point that the wage increase may more than compensate them for the lost transfer. This creates *polarization* in the community: Agents with outside options large enough are always in favor of redistribution; the other agents are against it, in some cases strongly, as they may even benefit from the firm's strategy to influence the election.

Next, we study the long-run effects of this form of electoral influence, which are unaccounted for by voters and firms. We assume that the vote on redistribution shapes the local economic environment in the long run, e.g., through the efficiency of the local government in investing for the community (Acemoglu, García-Jimeno, and Robinson 2015), or the inflows/outflows of people in the community (Kline and Moretti 2014; Diamond 2016). The main insight here is that the benefits of the firm's electoral influence may be a short-run phenomenon, for the voters who benefited from it in the short run, and, in some cases, for the large firm itself. The first result works through how ℓ's concessions change with the efficiency of the local government: a more efficient government generates more value from redistribution, so ℓ has to expand production more to compensate agents for the lost transfer. Over time, however, a government that does not engage in

redistribution becomes less efficient at it. So, the firm needs to make fewer concessions, and even the agents that supported its electoral influence in the short run end up ultimately regretting it.

In the long run, the firm itself may be worse off from having influenced voting in the past. As we discussed above, the majority of agents are worse off when the firm sways the election against redistribution. Over time, these agents may choose to move to other communities. This means that the local labor supply decreases, so ℓ has to pay higher wages, not as a strategy to influence the election, but to convince enough people to work for the firm. This increase in labor costs may outweigh the short-term gains of avoiding redistribution, in which case the firm ultimately regrets having influenced voting in the earlier periods. We also show that these dynamic effects may lead to "cycles of electoral influence," where firms influence the politics of a community and, as a result, the local economy becomes stagnant, to the point that it is no longer incentive-compatible for the firm to influence voting. The local economy may then regain enough traction to start another cycle, or remain stuck on a path of long-run decline.

Lastly, we use the model to examine how political parties that support redistribution should optimally respond to the firm's electoral interference. We let the transfer size (e.g., how strictly to enforce regulation, or how much to tax firms) be a policy choice for the pro-redistribution party. The threat of ℓ's electoral interference constrains the set of policies the party can commit to: If the transfer is too large, the firm influences workers and shifts the election in favor of a more business-friendly alternative. As a result, even the pro-redistribution party must initially adopt a relatively moderate, business-friendly platform to remain competitive. Over time, however, as redistribution is implemented and the local government becomes more efficient at offering public goods, ℓ needs increasingly more costly concessions to maintain its influence. This reduces the firm's willingness to interfere and gradually relaxes the electoral constraint, so that the pro-redistribution party can shift its platform toward more ambitious redistribution policies.

To empirically evaluate the link between local concentration and politics, we provide empirical evidence on how local labor market concentration shapes political behavior in the United States. Our empirical strategy links voter-level election data to county-level measures of employer concentration to produce cross-county variation in employer concentration, and within-neighborhood-

across-voter variation in partisan affiliation or partisan attachment. Using a shift-share instrument that predicts changes in employer concentration based on national industry trends and local employment composition, and controlling for neighborhood, individual voters' age, and state-party and age-party fixed effects, we isolate variation that reflects plausibly exogenous shifts in employer concentration that differentially affect individuals based on their partisan identity, conditional on finely grained geographic and individual-level demographic controls. This approach isolates how individuals differentially respond to employer concentration within the same political and geographic context, when exposure varies with individual-level traits such as party affiliation. Our focus is on the differences in electoral engagement across voters in different parties, or on the effects on affiliation for nonpartisan voters.

Our most consequential empirical finding is that exposure to a dominant employer systematically increases support for the Republican Party. We show that areas with higher employment concentration are more likely to see increased voter registration, turnout, and campaign donations for the Republican party. These effects are robust to a battery of controls, including pre-treatment economic controls, individual-level demographic characteristics, and neighborhood fixed effects. These results suggest that employer concentration not only shapes labor market outcomes but also shapes electoral choices at the individual level. We also show that the electoral influence of dominant employers has long-run economic costs. Consistent with the model's predictions, counties with rising employment concentration experience sharper population decline, reduced labor force participation, out-migration of workers, and outflow of taxable income. These shifts erode the local tax base and contribute to significant reductions in per capita public sector spending.

Our findings contribute to the understanding of how economic power translates into political influence by examining the role of employer concentration in shaping electoral outcomes through voter mobilization. As such, this paper contributes to the literature documenting employer voter mobilization and the literature documenting the effects of employer concentration.

Employer Voter Mobilization. Firms deliberately engage in voter mobilization, encouraging or pressuring employees to participate in politics in ways that advance corporate objectives. Hertel-

Fernandez (2017) documents that 46% of managers report their company did at least one thing to mobilize workers, that employer contact rates are similar in magnitude to those of unions, and that such mobilization can be equally effective in increasing political participation. Moreover, employee responsiveness is greatest when managers have the ability to monitor or sanction political behavior. Consistent with these findings, Bombardini and Trebbi (2025) highlight that firms view their workforce as a strategic electoral resource: employees' votes can substitute for costly financial contributions, with Wal-Mart providing a salient example of a corporation that secures political access by virtue of its employment base rather than its donations (Walker 2014; Hertel-Fernandez 2018). Reflecting these concerns, more than a quarter of U.S. states have enacted statutory prohibitions on employer coercion of employee political choices. Evidence from other contexts suggests this dynamic is not unique to the United States: employer attempts to sway worker-voters have been documented in Latin America (Baland and Robinson 2008) and in post-Soviet countries (Frye et al. 2014). We contribute to this literature by showing how firms in concentrated markets can deploy their local labor market power to directly shape electoral outcomes.

Employer Concentration. A large literature studies the consequences of market concentration for wages and the labor share. Benmelech et al. (2022) show that local labor market concentration lowers wages in U.S. Census plant-level data, with effects strongest when unionization is weak and when productivity gains would otherwise flow to workers. Azar et al. (2022) document similar patterns using vacancy-level data, finding that more concentrated labor markets post substantially lower wages. Rinz (2022) also finds a negative relationship between local labor market concentration and wages. Related work emphasizes concentration within product markets, linking higher markups to declining labor shares (Barkai 2020; De Loecker et al. 2020; Autor et al. 2017; Covarrubias et al. 2020). Whereas this research shows how concentration distorts economic outcomes – by reducing wages in labor markets or shifting income away from workers in product markets – our contribution is to demonstrate that concentration also distorts electoral outcomes. In particular, we show that dominant employers leverage their labor market position to shape voter registration, turnout, and partisan alignment, with consequences that extend beyond the distribution of income to the functioning of democratic institutions.

2 A Model of Electoral Monopsonies

2.1 Model Setup

Time is discrete and the horizon is infinite $t \in \{0, \ldots, \infty\}$. In each period, the local economy is populated by a mass $m_t > 0$ of agents (indexed by i), a large firm (indexed by ℓ), and a mass N of competitive firms (indexed by j). Firms sell their products outside the local economy, at an exogenous price p, but they hire locally from the pool of agents in the local economy, so they compete with each other in the labor market. Agents differ in their outside options or reservation wages, v_i, with $v_i \sim U[0, A]$, so agent i chooses to work if the wage w_t is larger than v_i.

The sequence of events in each period is: (i) firms make production plans; (ii) agents vote on a policy that redistributes surplus from firms to agents; (iii) agents choose whether to work, and wages adjust to balance supply and demand of labor; (iv) firms produce and sell their products. We use *subgame perfect equilibrium* as the equilibrium concept. We first describe how voting and production unfold in each period, and then the dynamics of how different periods are linked to each other.

A. Voting

Agents vote on whether to allow the local government to redistribute surplus from firms to agents. For simplicity, we assume that the government collects a fraction τ_t of each firm's profits, so that, unless firms try to influence voting, the transfer does not distort their production choices. The interpretation we have in mind is that agents vote between two different candidates to run the local government, one of which has a less business-friendly agenda (e.g., stricter enforcement of regulations or higher taxes on firms), with the transfer capturing the redistributive consequences of such agenda. We initially treat τ_t as a parameter, and then endogenize it in Section 3.3, where we allow the pro-redistribution candidate to choose its policy platform.

Π_t denotes the sum of ℓ's and the competitive firms' profits at time t. The value of the transfer to each agent is then $\frac{R_t}{m_t}$, with

$$R_t \equiv \delta_t \tau_t \Pi_t, \tag{1}$$

where δ_t captures the ability of the government to create value through redistribution.

The redistributive policy is implemented ($\mathcal{P}_t = r$) if a majority of agents vote in favor, and is discarded otherwise ($\mathcal{P}_t = nr$). As is typical in the voting literature, we analyze subgame perfect Nash equilibria in undominated strategies, which implies that agents vote as-if-pivotal.[3] Given wage w_t and transfer R_t, agent i's utility is

$$u_{it} = \max\{w_t, v_i\} + \mathbb{1}_{\mathcal{P}_t} \frac{R_t}{m_t}, \tag{2}$$

where $\mathbb{1}_{\mathcal{P}_t}$ is an indicator function taking the value 1 if the policy passes, and zero otherwise, and the max function takes into account that i chooses to work if w_t is larger than v_i, and chooses its outside option otherwise.

B. Production and electoral influence

In equilibrium, the mass of agents seeking jobs in the local economy is equal to the mass of agents with $v_i \leq w_t$, which, given our distributional assumption, is $m_t \frac{w_t}{A}$.

Each unit of output requires one unit of labor, and firms can produce up to their capacity constraints ($\underline{q}$ for the competitive firms, and $\overline{q}$ for the large firm, with $\overline{q} > \underline{q} > 0$). The competitive firms are atomistic, so they take equilibrium outcomes as given when making their production plans. Given wage w_t and production q_{jt}, firm j generates before-tax profits

$$\pi_{jt} = (p - w_t) q_{jt}. \tag{3}$$

Since j cannot influence equilibrium wages or voting, it commits to a supply function – a production level q_{jt} for each wage level w_t. The value of q_{jt} that maximizes π_{jt} is the same that maximizes $(1 - \tau_t)\pi_{jt}$, so j's optimal supply function, $S_{jt}(w_t)$, does not depend on whether the policy is implemented or not. Firm j's optimal supply function is then

$$S_{jt} = \begin{cases} \underline{q} & \text{if } p - w_t \geq 0 \\ 0 & \text{otherwise} \end{cases}, \tag{4}$$

[3] See, e.g., Baron and Ferejohn (1989), Austen-Smith and Banks (1996), and Levit, Malenko, and Maug (2024).

as j produces at full capacity if it can sell at a profit, and does not produce otherwise.

The competitive firms are identical, so they all choose the same supply function in equilibrium. To give the large firm ℓ a dominant position in the local economy, we assume that (a) it has market power in the local labor market – it takes into account how its production will affect wages, and (b) it has a larger production capacity than the competitive firms. (b) ensures ℓ produces more and makes more profits than the competitive firms, so that it has more influence on aggregate outcomes (both on wages, through its labor demand, and on the size of the transfer, through its profits). For a given production level $q_{\ell t}$, ℓ's before-tax profit is then

$$\pi_{\ell t} = (p - w_t) q_{\ell t}. \tag{5}$$

Given ℓ's production $q_{\ell t}$, the aggregate production and demand for labor is $NS_{jt}+q_{\ell t}$. Assuming that the labor market clears, the equilibrium wage is then the value of w_t that satisfies the market-clearing condition:

$$\underbrace{m_t \frac{w_t}{A}}_{\textit{Labor supply}} = \underbrace{NS_{jt} + q_{\ell t}}_{\textit{Labor demand}}. \tag{6}$$

We model ℓ's electoral influence through its ability to influence wages, as that gives the firm leverage over voters who seek jobs in the local labor market. ℓ commits to a menu of production levels $\{q^r_{\ell t}, q^{nr}_{\ell t}\}$ contingent on the voting outcome $\mathcal{P}_t \in \{r, nr\}$. Insofar as $q^r_{\ell t}$ is different than $q^{nr}_{\ell t}$, the market-clearing wage is different across the two policy regimes. Agent i then anticipates that its vote on the policy will not only affect its transfer, but also its wage prospects. We formalize ℓ's choice problem in Section 2.3, where we solve for the optimal production menu to influence voting.

In the main model, we assume that ℓ can credibly commit to a production menu based on the policy. In the Online Appendix, we show how the firm can, in practice, make its production choice contingent on the voting outcome via the design of managerial incentives (Online Appendix D.1) or its reputation for influencing elections (Online Appendix D.2).

Finally, we make the following assumption on the parameters.

Assumption 1 *We assume (i)* $\underline{q}N + \overline{q} \leq m_t$ *and (ii)* $\frac{m_t}{A}p \geq \overline{q} + 2N\underline{q}$ *for all periods* t*.*

Assumption 1.(i) ensures that the demand for labor is always lower than its supply, so the labor market clears in all periods. Assumption 1.(ii) ensures that industry profits are the smallest when ℓ chooses not to produce (i.e., at $q_{\ell t} = 0$), so that part of its optimal strategy to influence voting is to threaten to shut down production if redistribution passes.[4]

C. Dynamics

Our objective is to describe how firms leverage their labor market power to influence voters' preferences over policies, and study the long-run effects on the affected communities. For simplicity, we assume that firms and agents are either (a) short-lived, so that every period there are new firms and a new mass of voters, or (b) myopic, in the sense that they maximize only their current-period utility.[5]

We capture the long-run effects of the firm's influence on voting through the dynamic processes that govern the redistribution efficiency parameter δ_t, which captures the quality of the local institutions, and the mass of agents m_t, which captures the community's demographics. The way these parameters evolve over time depends on the political environment, that is, the history of voting outcomes in each period. Formally, we assume the following dynamic processes:

$$\begin{cases} \delta_t = \psi_\delta(\mathcal{P}_{t-1})\,\delta_{t-1} + \varepsilon_{\delta t} \\ m_t = \psi_m(\mathcal{P}_{t-1})\,m_{t-1} + \varepsilon_{mt} \end{cases}, \tag{7}$$

where $\mathcal{P}_{t-1}$ is the voting outcome in the previous period, and the noise terms are common, continuous, iid shocks, with $\varepsilon_{mt} > 0$.

We assume that the ψ functions and the initial values of the parameters at the beginning of the game, $\{\delta_0, m_0\}$, are such that Assumption 1 holds in every period. We describe the details of the

[4]Without Assumption 1.(ii), ℓ may prefer instead to threaten to produce enough that $w_t = p$ if redistribution passes, so that all firms make zero profits and, as a consequence, the transfer R_t is zero. Since $w_t = p$ is also the largest possible value for the equilibrium wages, this is an optimal threat from the perspective of minimizing voters' welfare under redistribution only in knife-edge cases (e.g., if δ_t is very large). Our insights carry through if we allow for these knife-edge cases, but the exposition becomes more cumbersome.

[5]The competitive firms are price-takers, so their choices would not change if we allowed them to optimize over a longer horizon. The large firm and voters would internalize some of the long-run effects we describe here, so the equilibrium thresholds for when ℓ is successful in influencing voting would be different, but our qualitative results would carry through. Online Appendix D.2 studies a version of the model where, in each period, ℓ continues to live also in the next period with positive probability.

history dependence for each parameter in Section 3, where we study the long-run effects of the firm's electoral influence.

2.2 Benchmark

Before we analyze the model, we briefly discuss the equilibrium in a benchmark where ℓ takes the voting outcome as given, so it does not change its production plans to influence voting. This will also be useful in characterizing the equilibrium of the full model, since ℓ's payoff in the benchmark is the same as in the full model when the firm chooses not to influence elections. We use $*$ to indicate the equilibrium outcomes in the benchmark.

In the benchmark, ℓ chooses its production to maximize its before-tax profits, since the firm has no influence on whether the transfer is implemented, and maximizing before or after-tax profits are equivalent problems. Formally, the equilibrium value $q^*_{\ell t}$ solves:

$$\max_{q_{\ell t} \in [0, \overline{q}]} \pi_{\ell t} = (p - w_t) q_{\ell t}, \tag{8}$$

where w_t is the market-clearing wage implied by Eqn. (6), and ℓ internalizes how $q_{\ell t}$ affects w_t.

The solution to Program (8), $q^*_{\ell t}$, together with the market-clearing condition in Eqn. (6), yields the other equilibrium outcomes, namely the equilibrium wage w^*_t, total profits $\Pi^*_t = \pi^*_{\ell t} + N\pi^*_{jt}$, and the equilibrium transfer R^*_t, which are described in Appendix B.1.

Lemma 1 (Voting in the benchmark) *In the benchmark where the large firm ℓ takes the voting outcome as given, all voters strictly support redistribution for any $\delta_t > 0$.*

In the benchmark model, the production choices of all firms in the local economy are not affected by the policy regime. The only effect of redistribution for voters is then that they receive the transfer, as the equilibrium wages are independent of the policy regime. Therefore, all voters are better off under, and thus vote in favor of, redistribution.

2.3 Equilibrium Analysis

To sway the public against redistribution, ℓ can commit to a menu of production levels $\{q^r_{\ell t}, q^{nr}_{\ell t}\}$ contingent on the voting outcome $\mathcal{P}_t \in \{r, nr\}$. The goal is to create a cost of redistribution for the public, through the impact that ℓ's production has on the equilibrium wages.

Formally, if it wants to influence voting, ℓ chooses the production menu $\{q^r_{\ell t}, q^{nr}_{\ell t}\}$ to solve the following optimization problem:

$$\max_{q^r_{\ell t}, q^{nr}_{\ell t} \in [0,\overline{q}]} \pi_{\ell t} = (p - w_t) q^{nr}_{\ell t} \tag{$P_{\ell t}$}$$

subject to

$$\mu(\mathcal{I}_t) \geq \frac{m_t}{2} \tag{MR_t}$$

where $\mu(\mathcal{I}_t)$ is the measure of agents who vote against the policy, that is, for whom the incentive-compatibility constraint below holds

$$\max\{w^{nr}_t, v_i\} \geq \max\{w^r_t, v_i\} + \frac{R_t}{m_t}, \tag{IC_{it}}$$

where the wages w^r_t and w^{nr}_t are the market-clearing ones implied by Eqn. (6).

ℓ chooses the menu $\{q^r_{\ell t}, q^{nr}_{\ell t}\}$ to maximize its profits conditional on the redistributive policy not being implemented, under the constraint that at least half of the agents votes against redistribution – the majority-rule constraint (MR_t). Since the redistribution being implemented is off the equilibrium path, ℓ receives the profits implied by $q^{nr}_{\ell t}$ in equilibrium. Still, ℓ can use both $q^{nr}_{\ell t}$ and $q^r_{\ell t}$ to sway voters against the redistribution, since both affect their incentive-compatibility constraint (IC_{it}) through the market-clearing wages w^r_t and w^{nr}_t. Satisfying (MR_t) may not be possible within the firm's capacity constraint, that is, for any $(q^r_{\ell t}, q^{nr}_{\ell t}) \in [0, \overline{q}]^2$, in which case influencing voting is not feasible, as the firm cannot convince enough people to vote against redistribution.

Swaying voter i against redistribution requires its wage and transfer under redistribution to be small, and the wage without redistribution to be large, so that i prefers to give up on the transfer to keep the higher wage. Voters with worse outside options (lower v_i) are easier to sway, as they are more likely to work in the local economy (that is, to satisfy $v_i \leq w_t$), so they are more exposed

to the wage effects of the policy. That means the standard median-voter theorem (Black 1958) holds in our setting: Voters can be ordered by their willingness to vote against redistribution, so the median type's preference decides the voting outcome.

Lemma 2 (Voting with electoral influence) *Fix the equilibrium wages w_t^r and w_t^{nr}, and the redistribution R_t; suppose that there exists a voter type $\tilde{v}_t$ who is against redistribution. Then any voter i with type $v_i < \tilde{v}_t$ will also be against redistribution. It follows that the voting outcome is determined by the preferences of the median type, $A/2$, which may be in favor or against the redistributive policy.*

Lemma 2 implies that, for ℓ to influence voting, it is sufficient to make the median type at least weakly better off without redistribution. Next, we describe the optimal way to do so, that is, the optimal menu $\{q_{\ell t}^r, q_{\ell t}^{nr}\}$ that solves Program ($P_{\ell t}$).

Proposition 1 (Optimal way to influence voting) *If influencing the voting outcome is feasible, the optimal way for ℓ to do so is by committing to shut down production ($q_{\ell t}^r = 0$) if the redistributive policy is implemented, which would result in the lowest possible wage $\underline{w}_t^r$ and transfer $\underline{R}_t$, and to produce more than in the benchmark if redistribution is not implemented, $q_{\ell t}^{nr} \geq q_{\ell t}^*$:*

1. *If threatening to shut down production is sufficient to sway the median voter against redistribution, ℓ can produce the same as in the benchmark in equilibrium, i.e., $q_{\ell t}^{nr} = q_{\ell t}^*$ and $w_t^{nr} = w_t^*$.*
2. *Otherwise, ℓ has to produce more than in the benchmark in equilibrium, just enough to make the median voter indifferent between whether redistribution is implemented or not, that is, produce $q_{\ell t}^{nr}$ such that $w_t^{nr} = \max\{\underline{w}_t^r, \frac{A}{2}\} + \frac{R_t}{A}$, where w_t^{nr} is larger than the benchmark wage w_t^*.*

Influencing voting is feasible iff the median voter is against redistribution at $\{q_{\ell t}^r, q_{\ell t}^{nr}\} = \{0, \overline{q}\}$.

Proposition 1 describes the optimal strategy to influence voting. The best way to make wages and transfers under redistribution small is to threaten to shut down production if the policy is implemented: A lower $q_{\ell t}^r$ reduces the labor demand and, therefore, the market-clearing wage w_t^r. It is also the case that ℓ makes less profits when it produces less which, all else equal, reduces the government collection and, thus, the value of the transfer. The competitive firms benefit from the

wage reduction and, thus, make more profits when $q^r_{\ell t}$ decreases. But they have less impact on aggregate outcomes (since they are less efficient and thus smaller than ℓ), so the total profits in the economy still decrease when ℓ produces less. So the optimal threat for ℓ is to commit to shut down production if redistribution passes the vote, which results in the lowest possible wage $\underline{w}^r_t$ and transfer $\underline{R}_t$. This makes redistribution relatively less attractive for voters.

The threat may be enough to sway the majority of voters against redistribution. If that is the case, the firm does not need to distort its production choices on the equilibrium path; that is, it can make the same production choice as in the benchmark model, where the firm solves an unconstrained problem. So, $q^r_{\ell t} = q^*_{\ell t}$ is the best production choice also in the model with electoral influence if ℓ can satisfy the majority-rule constraint by using only the off-equilibrium threat $q^r_{\ell t}$.

If the threat alone is not enough, ℓ will also have to make concessions to the community: By committing to increase production if the policy does not pass the vote – that is, to choose $q^r_{\ell t}$ above $q^*_{\ell t}$, so that the equilibrium wage w^{nr}_t is above the benchmark level w^*_t, ℓ makes redistribution even less attractive. Producing more than the unconstrained optimum is, all else equal, costly for ℓ. So, the firm will want to do that just enough to make the median voter indifferent between the two policies. That is, the majority-rule constraint is binding in equilibrium, and it pins down the optimal value of $q^r_{\ell t}$. Lastly, increasing production and, thus, w^{nr}_t enough to make the median voter indifferent may not be possible within the firm's capacity constraint. In that case, ℓ cannot influence the voting outcome, so the equilibrium will be the same as in the benchmark.

Even when it is feasible, influencing voting is thus costly for the firm. If the threat alone is not enough to satisfy (MR_t), the firm may have to produce more than its unconstrained optimal production to sway enough voters against redistribution. Depending on the parameters, ℓ may then be better off paying the transfer than interfering with the electoral process. Next, we turn to characterizing when it is optimal for the firm to influence the voting outcome.

Proposition 2 (When does the firm influence voting?) *The following results hold:*

1. ***(Concentration within the industry)*** *The large firm ℓ influences voting iff its employment at full capacity is a large fraction of total industry employment, that is, iff $\frac{\overline{q}}{N\underline{q}+\overline{q}}$ is sufficiently large.*

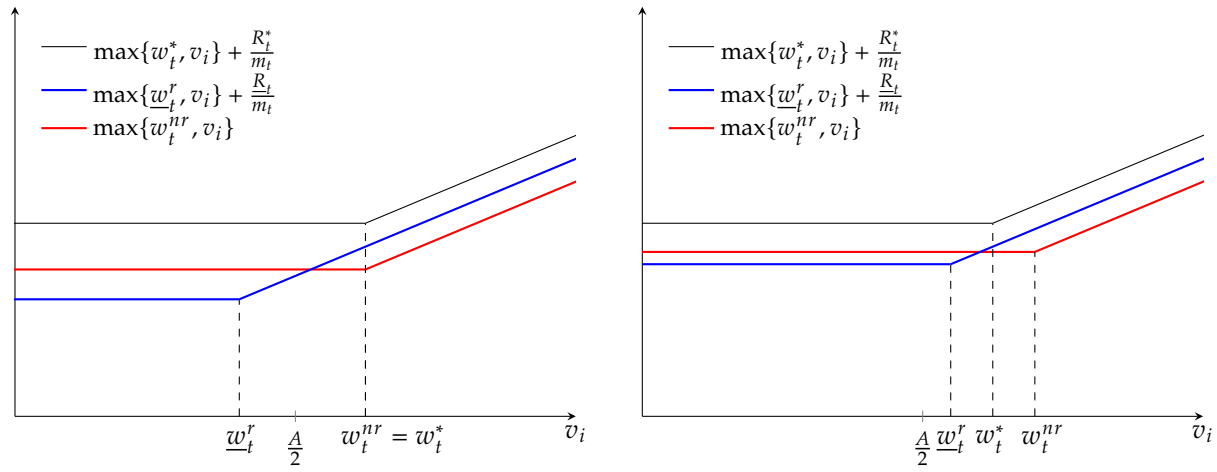


Figure 1: Illustration of voters' utility functions under two regimes.
Left: Threat-only regime where $w_t^{nr} = w_t^*$. In this case, it is sufficient to deviate from benchmark through the threat wage: the median voter is better off under nr.
Right: Threat + Concessions regime where $w_t^{nr} > w_t^*$. In this case only lowering the threat wage is not enough to make median voter prefer nr, firm has to increase wage in nr regime.

2. ***(Concentration within the community)*** *ℓ never influences voting if its employment at full capacity is a small fraction of the population, that is, if $\frac{\overline{q}}{m_t}$ is sufficiently small.*

If ℓ cannot or chooses not to influence voting, it commits to the same production level as in the benchmark model.

Proposition 2 describes two conditions for ℓ to be able and willing to influence voting. First, the firm must have a sufficiently dominant position within the industry: If the aggregate production of the competitive firms is too large, ℓ does not have a sufficiently large effect on equilibrium wages. In that case, neither the threat to shut down production nor the promise to increase it have a sufficiently large effect on the voters' utility to change their preferences about the policy. Second, ℓ must have a sufficiently dominant position as an employer within the community: if ℓ can employ at most only a small fraction of the population, the mass of voters who are exposed to its production decisions are too small for ℓ to change the voting outcome.

2.4 Welfare and Inequality

Because of the heterogeneity in voters' outside options, the threats and concessions ℓ uses to influence voting do not have the same effect on all voters. For example, those with high reservation wages do not participate in the local labor market and, therefore, are unaffected by the wage effects we described earlier. Before studying the dynamic effects, we investigate the aggregate and distributional effects of the firm's political interference on voters' welfare within each period.

Proposition 3 (Welfare & Inequality) *Within a period t, the following results hold:*

1. *Voters with reservation wages large enough ($v_i \geq \bar{v}_t$) are always worse off when ℓ influences voting compared to the benchmark equilibrium; voters with $v_j < \bar{v}_t$ may be worse off or better off. The median voter is always worse off when ℓ influences voting.*

2. *For positive δ_t, if the median voter works in the benchmark equilibrium, the aggregate voters' welfare is always smaller when ℓ influences voting. Otherwise, aggregate voters' welfare may be larger or smaller when ℓ influences voting.*

Proposition 3 compares voters' welfare when ℓ influences voting to the benchmark model without electoral influence, within a given period t. Voters with reservation wages large enough are always worse off when the firm influences voting, since they do not participate in the local labor market, so they always lose the transfer when ℓ influences voting, but never benefit from the increase in wages. That includes the median voter, who is made indifferent between the scenario where the redistribution policy passes, but the firm shuts down production and, thus, wages and transfers are the smallest, and the equilibrium path where the policy does not pass but the wage is at least as high as in the benchmark. Since the "threat" scenario is always worse than the benchmark equilibrium, the median voter is always strictly worse off in equilibrium.

If the firm makes concessions, voters with low reservation wages may be strictly better off under the equilibrium with electoral influence, since they work in the local economy and, thus, benefit from the wage increase. Perhaps surprisingly, the aggregate welfare may be larger than in the benchmark, even though more than half of the population is strictly worse off. This is because

the firm cannot "fine-tune" the wage increase, as it cannot offer different wages to different types, so it may have to leave large rents to voters with low outside options. This has an interesting implication: the firm's electoral interference has potentially large distributional effects, in the sense of making a minority of the population better off at the expense of the majority. We build on this implication in the analysis of dynamics in the next section.

3 Long-run Effects of Influencing Voters

3.1 Effects on Institutions

Our first step in understanding the long-run consequences of electoral influence is to study the effects on the quality or trust in the local institutions, through the dynamics of the redistribution efficiency parameter δ_t. Formally, we assume

$$\delta_t = \psi_\delta(\mathcal{P}_{t-1})\,\delta_{t-1} + \varepsilon_{\delta t}, \tag{9}$$

where $\psi_\delta(r) > \psi_\delta(nr) > 0$, and $\varepsilon_{\delta t}$ is an iid, continuous random shock (such as normal distribution).

The assumption $\psi_\delta(r) > \psi_\delta(nr)$ implies that $\mathbb{E}[\delta_{t+1}|\delta_t, \mathcal{P}_{t-1}]$ is larger when redistribution was implemented the last period, that is, when $\mathcal{P}_{t-1} = r$. So, the more often the government implements redistribution, the more efficient it becomes at creating value for the public from it (Acemoglu, García-Jimeno, and Robinson 2015).

We begin with examining the role of δ_t in the equilibrium characterization at time t. To turn voters against redistribution, ℓ has to create enough difference between the wages with and without redistribution to compensate the voters for the loss of the transfer. The larger the redistribution efficiency, the more difficult is to convince voters to give up on the transfer. That implies that we can rewrite the condition for when ℓ can and is willing to influence voting as a function of δ_t.

Lemma 3 (Role of Institutions) *Within a period t, the large firm ℓ influences voting iff the redistribution is sufficiently inefficient, that is, if $\delta_t \leq \overline{\delta}_t$.*

The large firm can and chooses to engage in electoral influence if the redistribution efficiency parameter δ_t is sufficiently small. For δ_t low enough, redistribution does not create much value for voters, so the threat to shut down production alone is then enough to turn the majority of voters against redistribution. In that case, influencing the voting outcomes is costless for the firm, so it always chooses to do so. For intermediate values of δ_t, the threat alone is not enough to to satisfy the majority-rule constraint, so the firm weighs the private cost of redistribution against the cost of influencing the election, that is, the distortion in the equilibrium production $q_{\ell t}^{nr}$. The larger is δ_t, the more attractive is redistribution for voters, so satisfying (MR_t) is either too costly, or no longer feasible. Figure 2 illustrates the results in Lemma 3.

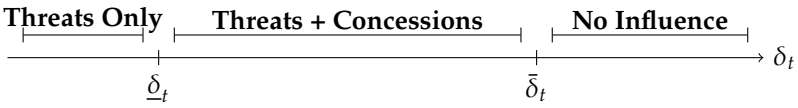


Figure 2: Equilibrium regimes based on redistribution efficiency parameter δ_t.

Having characterized how δ_t affects the equilibrium within each period, we can now study the effects on the equilibrium dynamics.

Proposition 4 (Weakening of Institutions) *Suppose the stochastic process governing the redistribution efficiency parameter δ_t is as described in Eqn. (9), and all other parameters are constant over time.*

1. *Suppose voter j is better off when the firm influences voting at time t. In expectation, j becomes worse off at time $t+s$ (that is, $\mathbb{E}_t[u_{j,t+s} \mid \mathcal{P}_t = nr] < \mathbb{E}_t[u_{j,t+s} \mid \mathcal{P}_t = r]$) if s is sufficiently large.*

2. *Over time, the expected welfare of voters in a community where the firm influenced voting at time t becomes increasingly smaller than in a community where it did not. That is, the difference $\mathbb{E}_t[\mathcal{V}_{t+s} \mid \mathcal{P}_t = r] - \mathbb{E}_t[\mathcal{V}_{t+s} \mid \mathcal{P}_t = nr]$ increases with $s \in \mathbb{Z}_{>0}$.*

When we account for the effects on the quality of local institutions, the potential benefits of electoral influence we highlighted earlier tend to disappear over time. This result works through how ℓ's concessions change with the efficiency of the local government: a more efficient government generates more value from redistribution, so ℓ has to expand production more to

compensate agents for the lost transfer. Over time, however, a government that does not engage in redistribution becomes less efficient at it. So, the firm needs to make fewer concessions over time, up to the point where it won't need to make any concessions, and even the agents that supported its electoral influence in the short-run end up ultimately regretting it.

For similar reasons, voters' welfare in a community where the firm influences voting diverges from that of a community without electoral influence. As the quality of local institutions decreases, it becomes easier for ℓ to turn the community against redistribution. So, the firm becomes increasingly more likely to influence voting. Over time, this creates a feedback loop: weaker institutions are more vulnerable to influence, and increased influence further deteriorates institutional quality. So, voters become increasingly more worse off in the community where ℓ influenced voting. This dynamics can resemble the phenomenon that Acemoglu and Robinson (2006b) describe as the "persistence of extractive institutions," in which elites shape policy to entrench their advantage. These results are illustrated in Figure 3.

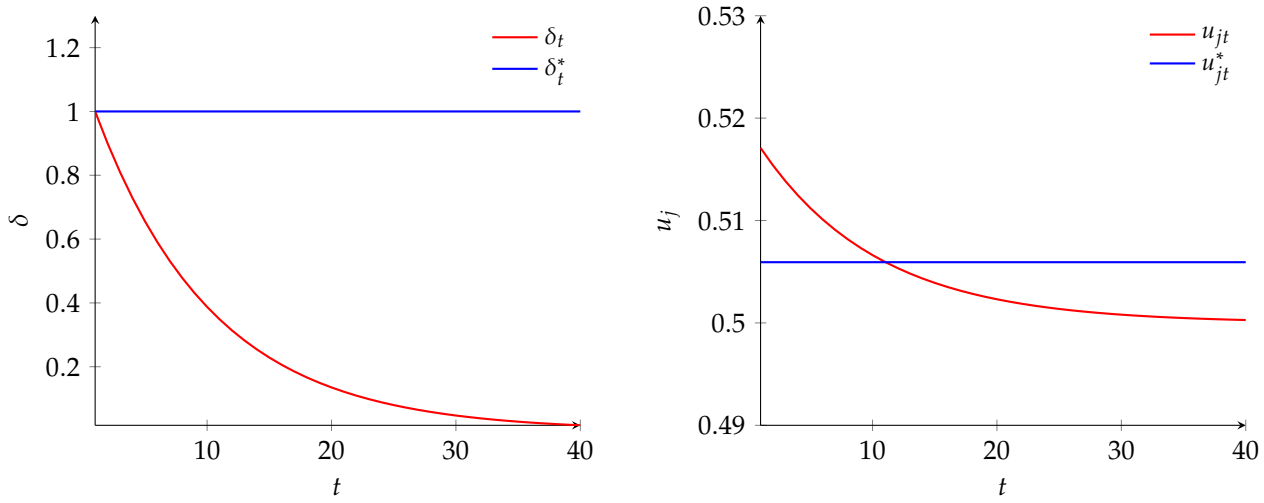


Figure 3: Long-run effects of electoral influence through the quality of institutions.
Left: Evolution of the efficiency of redistribution, δ_t, when ℓ influences the voting outcome (red line) and in the benchmark case when it does not (blue line). Over time, δ_t changes according to Eqn. (9) and all other parameters stay constant: $m = 16, n = 1, \underline{q} = 1, \overline{q} = 31/4, p = 39/64, A = 1, \tau = 0.5, \delta_0 = 1, \psi_\delta(r) = 1, \psi_\delta(nr) = 0.9$, and $\varepsilon_\delta = 0$.
Right: Evolution of the utility of agent j with reservation utility $v_j = 0.46$ in the case when ℓ influences the voting outcome (red line) and in the benchmark case when it does not (blue line). Parameters are the same as in the left panel.

3.2 Demographic Effects

Next, we explore the long-run effects of the firm's electoral influence on the demographics of the affected communities. The model captures two demographic aspects of the voter population: the mass of agents/voters m_t, and the distribution of their outside options $v_i \sim U[0, A]$. Both aspects interact with the politics *and* the economics of the local community: m_t describes both the size of the voting population and of the potential labor supply. The distribution of outside options determines what fraction of agents seek jobs in the local labor market and is therefore exposed to the threats and concessions that ℓ uses to influence the voting outcome.

Proposition 3 shows that most voters are worse off when ℓ influences the voting outcome. So, over time, some of these people may choose to move to other communities. We capture this effect through the properties of the dynamic process for m_t:

$$m_t = \psi_m(\mathcal{P}_{t-1})\, m_{t-1} + \varepsilon_{mt}, \tag{10}$$

where $\psi_m(r) > \psi_m(nr) > 0$, and ε_{mt} is an iid, positive random shock.

The assumption that $\psi_m(r) > \psi_m(nr)$ implies that the expected population size $\mathbb{E}[m_{t+1}|m_t, \mathcal{P}_{t-1}]$ is larger when redistribution was implemented the last period, that is, when $\mathcal{P}_{t-1} = r$. Next, we study how these dynamics affect the equilibrium outcomes over time.

Proposition 5 (Population Dynamics) *Suppose the stochastic process governing the population size m_t is as described in Eqn. (10), and all other parameters are constant over time.*

1. *The large firm ℓ may regret having influenced voting in the past. That is, suppose ℓ influenced voting at time t; the sum of its current and expected future profits over the next T periods may be smaller than if ℓ had not influenced voting at time t.*

2. *ℓ may influence voting in cycles, that is, $\mathcal{P}_t$ may oscillate between r and nr over time.*

Part 1 of Proposition 5 shows that, in the long run, the firm itself may be worse off from having influenced voting in the past. As the population shrinks as a byproduct of the firm's electoral influence, the local labor supply also decreases. Over time, ℓ then has to pay higher wages, not as

a strategy to influence the election, but to convince enough people to work for the firm. This may impose an overall larger cost on the firm than redistribution itself, so that ℓ ends up being worse off from having influenced the politics of the community in earlier periods.

For the sake of concreteness, consider two consecutive periods, t and $t+1$, and suppose it is optimal for ℓ to influence voting at time t, that is, $\pi_{\ell t}(q_{\ell t}^{nr}) > (1-\tau_t)\pi_{\ell t}^*$, where the left-hand side of the inequality is ℓ's profit when the firm influences voting, and the right-hand side is the benchmark profit. Since ℓ influenced voting, m_{t+1} decreases in expectation, and so does the firm's next-period profit $(1-\tau_{t+1}\mathbb{1}_{\mathcal{P}_{t+1}})\pi_{\ell,t+1}$. In some cases, the reduction in expected future profits is enough to flip the inequality when one considers the sum of profits over the two periods:

$$\pi_{\ell t}(q_{\ell t}^{nr}) + \mathbb{E}_t[(1-\tau_{t+1}\mathbb{1}_{\mathcal{P}_{t+1}})\pi_{\ell,t+1} \mid \mathcal{P}_t = nr] < \pi_{\ell t}^* + \mathbb{E}_t[(1-\tau_{t+1}\mathbb{1}_{\mathcal{P}_{t+1}})\pi_{\ell,t+1} \mid \mathcal{P}_t = r], \tag{11}$$

where $\mathbb{E}_t[(1-\tau_{t+1}\mathbb{1}_{\mathcal{P}_{t+1}})\pi_{\ell,t+1} \mid \mathcal{P}_t]$ is the expected equilibrium profits in the later period, where the expectation is taken with respect to m_{t+1}, and is conditional on the policy outcome in the earlier period, as this affects the conditional distribution of m_{t+1}. In this case, at time $t+1$, ℓ regrets having influenced voting at time t, as total profits would have been otherwise larger. The left panel in Figure 4 illustrates this result in a numerical example of the model.

Part 2 of Proposition 5 shows that the dynamics described above may lead to "cycles of electoral influence," with the equilibrium oscillating, over time, between the one with electoral influence and the benchmark. To understand this result, suppose ℓ influences voting in the earlier periods and, as a result, people begin to leave the community. As m_t shrinks, the per-capita value of the transfer increases: there are fewer agents that split the transfer, so each agent benefits more from redistribution. It also becomes increasingly more costly for the firm to give concessions to the community, since the pool of potential hires is smaller, and increasing employment is relatively more costly (the firm is forced to hire types with better outside options). Both these channels increase ℓ's cost of influencing the election. So, past a certain threshold for m_t, it is no longer incentive-compatible for the firm to influence voting, and the economy switches back to the benchmark equilibrium, where the redistribution policy passes and voters receive the transfer. The community then returns to being a relatively more attractive place to live in, and m_t can go back to an upward trend, until its realization passes the threshold again, and another cycle of

electoral influence begins. The right panel in Figure 4 illustrates the cycles we described above in a numerical example of the model.

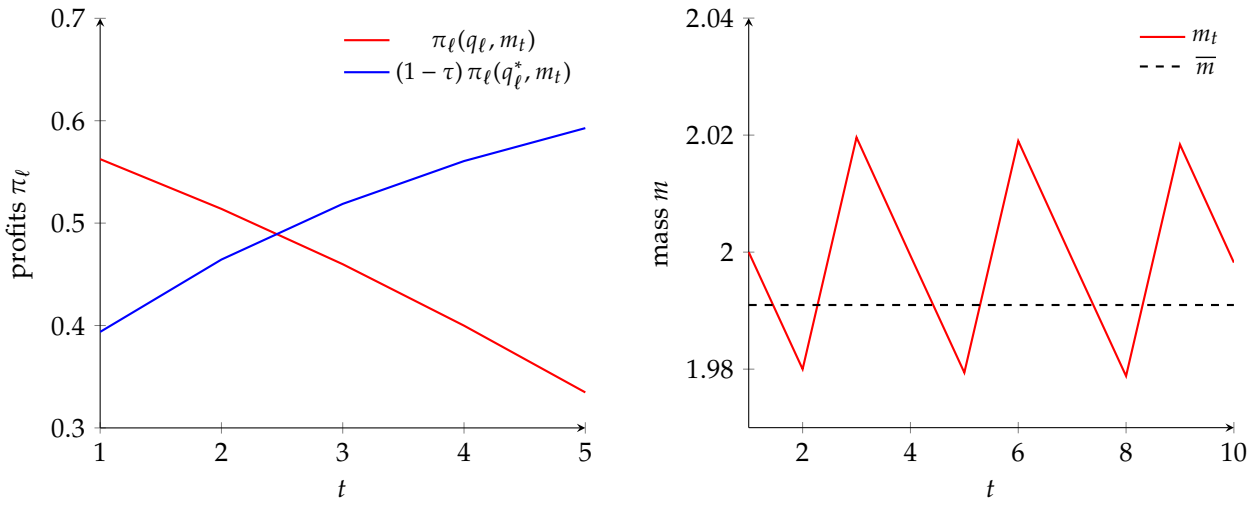


Figure 4: Long-run effects of electoral influence through demographic effects.
Left: Evolution of ℓ's profits in the case when it influences the voting outcome at the first date (red line) and in the case when it does not (blue line). In all other periods (t from 2 to 5), ℓ chooses whether to influence voting optimally based on the parameters. Over time, m_t changes according to Eqn. (10) and all other parameters stay constant: $N = 3/2$, $\underline{q} = 1/2$, $\overline{q} = 1$, $p = 1$, $A = 3/4$, $\delta = 1$, $\tau = 0.3$, $m_0 = 3$, $\psi_m(r) = 0.9$, $\psi_m(nr) = 1.3$ and $\varepsilon_m = 0$.
Right: Evolution of the mass of agents in the local economy, m_t, when ℓ influences the voting outcome. The dashed line indicates the indifferent threshold mass $\overline{m}$ above which the firm finds it optimal to exert influence. Over time, m_t changes according to Eqn. (10) and all other parameters stay constant: $N = 3/2$, $\underline{q} = 1/2$, $\overline{q} = 1$, $p = 1$, $A = 3/4$, $\delta = 1$, $\tau = 9/32$, $m_0 = 2$, $\psi_m(r) = 0.99$, $\psi_m(nr) = 1.02$ and $\varepsilon_m = 0$.

We conclude this section with a brief discussion of the potential compositional effects of the population dynamics. Proposition 3 shows that types with good outside options are more worse off than types with low outside options when the firm influences voting. A different exercise would be to assume that, when ℓ influences voting, only types with good outside options (e.g., skilled labor) leave the local community, but they are replaced by types with low outside options (e.g., unskilled labor), so that the total population size m_t stays the same, but the expected distribution of v_j shifts towards lower values. In our model, this is equivalent to assuming that, after ℓ influences voting, A decreases but m stays constant. Compared to the case when m_t changes, now the firm's incentives to influence voting are more likely to increase over time: As the distribution

of reservation utilities shifts toward lower values, it becomes cheaper (and, thus, more profitable) for ℓ to expand production. This increases the fraction of the population directly affected by the shifts in $q_{\ell t}$, which makes it easier for ℓ to influence voting.

3.3 Optimal Response to Electoral Monopsonies

Optimal collection We use our framework to examine how political parties that support redistribution should optimally respond to the firm's influence on the electorate. We consider two parties/candidates: one in favor of redistribution, one against redistribution. The candidate who is against redistribution always runs on a no-transfer agenda, which is aligned with the large firm's interests. The pro-redistribution candidate chooses the size of the transfer τ_t (e.g., how strictly to enforce regulation, or how much to tax firms) at the beginning of each period. For a given τ_t, the model nests our main model, so all the results we derived earlier carry through here.

We assume that the pro-redistribution candidate chooses the largest possible τ_t conditional on winning the election. Redistribution always wins the election if ℓ chooses not to interfere with the political process (Lemma 1), and it always loses the election if ℓ interferes (Proposition 1). So, the choice problem for the pro-redistribution candidate is to set the largest possible τ_t such that ℓ cannot or chooses not to influence the voting outcome. Since the majority of voters are worse off when ℓ influences voting compared when it does not (Proposition 3), the strategy of the pro-redistribution candidate is consistent with the objective of making a majority of people better off than if the other candidate were to win the election.

Formally, the pro-redistribution candidate chooses τ_t to solve:

$$\max \tau_t \in [0,1] \quad \text{subject to} \quad \pi_{\ell t}(q_{\ell t}^{nr}) \leq (1-\tau_t)\pi_{\ell t}^{*}, \tag{P_{rt}}$$

where $q_{\ell t}^{nr}$ is the solution to Program ($P_{\ell t}$), $\pi_{\ell t}^{*}$ is ℓ's before-tax profit in the benchmark equilibrium.

The threat of ℓ's electoral interference constrains how large of a transfer the pro-redistribution candidate can choose: If the transfer is too large, the firm influence voters and shifts the election in favor of the more business-friendly alternative. Our objective is to understand how this constraint interacts with the quality of local institutions, and how their interaction affects the evolution of

pro-redistribution policy platforms over time. We begin by studying how the severity of this constraint depends on the efficiency of redistribution within a given period.

Lemma 4 (Static Best-response) *Within a period t, the largest τ_t the pro-redistribution candidate can set to win the election, $\overline{\tau}_t$, increases with δ_t.*

As the local government becomes more efficient at offering public goods (δ_t increases), ℓ needs to give more concessions to the community to influence the voting outcome, that is, increase $q_{\ell t}^{nr}$ further from $q_{\ell t}^{*}$. As we discussed before, deviations from the benchmark production $q_{\ell t}^{*}$ are costly to the firm, as they move $q_{\ell t}$ further from the unconstrained optimum. This reduces the firm's willingness to interfere and, as a consequence, relaxes the constraint in Program (P_{rt}), so that the pro-redistribution party can increase τ_t.

Combining the result in Lemma 4 with the dynamics of how δ_t depends on the history of political outcomes described in Section 3.1, we obtain the following dynamics of best-response to firms' electoral interference.

Proposition 6 (Best-response Dynamics) *Suppose the stochastic process governing the redistribution efficiency parameter δ_t is as described in Eqn. (9), and all other parameters are constant over time. In expectation, the largest τ_t the pro-redistribution candidate can set to win the election, $\overline{\tau}_t$, increases over time.*

The threat of ℓ's electoral influence constrains the set of pro-redistribution policies that can win an election. As a consequence, even the pro-redistribution party must initially adopt a relatively moderate, business-friendly platform to remain competitive. Over time, however, as redistribution is implemented and the local government becomes more efficient at offering public goods, ℓ needs increasingly more costly concessions to maintain its influence. This reduces the firm's willingness to interfere and gradually relaxes the electoral constraint, so that the pro-redistribution party can shift its platform toward more ambitious redistribution policies.

Optimal redistribution We now extend the model by allowing the pro-redistribution party to choose two policy instruments: a tax rate τ_t, and a redistribution function $\mathcal{R}(v_i)$, which assigns

transfers to individual voters based on their reservation wage $v_i \in [0, A]$.

This is meant to better reflect the practice of public policy. Many redistributive programs in the real world are not uniform. Instead, they provide different benefits to different social or economic groups, depending on their background, employment status, or vulnerability. In our model, the reservation wage v_i summarizes a voter's outside option. Although it is not directly observable in practice, using it as a basis for redistribution allows us to consider a party's ability to allocate resources in a strategic way.

We want to point out that under this assumption, the optimal redistribution does not necessarily favor the "poorest" voters. In our framework, voters with high reservation wages may include both local elites — who have more flexible job opportunities and do not need to work for the dominant employer — and individuals who are too poor, disabled, or otherwise unable to participate in the labor market. These voters are either not directly affected by the firm's wage offers, or they represent the key swaying group in the election. As a result, they are more likely to support redistribution or can be more easily persuaded by the pro-redistribution party. From a strategic point of view, it is more efficient for the party to target these voters, since their voting behavior is less responsive to the firm's actions. This mechanism may help explain why, in real-world politics, some redistributive policies might appear to benefit politically stable or less economically active groups, rather than focusing only on the currently employed or visibly poor population.

Recall that the total firm profits in the economy are given by:

$$\Pi_t = \pi_{\ell t}(q_{\ell t}) + N \cdot \pi_{ft}(\underline{q}),$$

where $\pi_{\ell t}(\cdot)$ is the profit of the leading firm ℓ, and $\pi_{ft}(\cdot)$ is the profit of a fringe firm producing fixed quantity $\underline{q}$. The total redistributive budget is:

$$R_t = \delta_t \tau_t \cdot \Pi_t.$$

The redistribution function $\mathcal{R}(v_i)$ must satisfy the feasibility constraint:

$$R_t - \int_0^A \mathcal{R}(v_i) \cdot \frac{m_t}{A_t}\, dv_i \geq 0.$$

The party's goal is to choose $(\tau_t, \mathcal{R}(v_i))$ such that there is a set $\mathcal{S}_t \in [0, A]$ with measure at least $\frac{m_t}{2}$, for any voter $v_i \in \mathcal{S}_t$, they prefer the redistribution regime to the no-redistribution regime:

$$\max\{w_t^r, v_i\} + \mathcal{R}(v_i) \geq \max\{w_t^{nr}, v_i\}.$$

Proposition 7 (Who to redistribute to?) *Suppose the pro-redistribution candidate can redistribute the profits it collects from firms in an arbitrary way, that is, it can choose any function $\mathcal{R}(\cdot)$, such that $\mathcal{R}(v_i) \geq 0$ for all $v_i \in [0, A_t]$, and $\int_0^{A_t} \mathcal{R}(v_i)\frac{m}{A_t}dv_i \leq \delta_t \tau_t \Pi_t$; the following results hold:*

1. *Adopting a progressive policy, that is, one where $\mathcal{R}(v_i)$ decreases with v_i, always allows the pro-redistribution candidate to implement a (at least weakly) larger τ_t than a flat redistribution policy.*

2. *The optimal redistribution policy, that is, the one that either allows the candidate to implement the largest τ_t, or forces ℓ to give more concessions to the community, is progressive only in a right neighborhood of the median voter's type ($\frac{A}{2}$). Formally*

$$\mathcal{R}(v_i) = \begin{cases} 0, \text{ if } v_i \leq \frac{A}{2} \\ w_t^{nr} - \max\{w_t^r, v_i\}, \text{ if } \frac{A}{2} < v_i \leq w_t^{nr} \\ 0, \text{ if } v_i > w_t^{nr}. \end{cases} \tag{12}$$

3. *Fix τ_t; even if the pro-redistribution candidate adopts the optimal $\mathcal{R}(v_i)$ described in Part 2 above, it may still not be able to win the election. This is always the case if the industry is sufficiently concentrated, that is, $N\underline{q}$ is sufficiently small.*

4 Empirical Evidence on Concentration and Partisan Voting

4.1 Empirical Measure of Electoral Monopsony Power (EMP)

Proposition 2 formalizes the conditions under which a dominant employer finds it optimal to exert electoral influence in local elections, requiring high concentration both within the relevant industry and in the broader local labor market. In this section, we capture the structural conditions identified in the model into an empirical measure of electoral monopsony power that incorporates both within-industry concentration and the broader structure of the county's employer base. The

electoral influence of industry j in county c, denoted EMP_{jc}, depends on three components: the industry's employment share in the county, the degree of concentration within that industry, and the degree of concentration across all employers in the county. We define:

$$EMP_{jc} = s_{jc} \cdot HHI_{jc}^{\alpha} \cdot HHI_{c}^{1-\alpha} \tag{13}$$

where s_{jc} denotes the employment share of industry j in county c, HHI_{jc} is the Herfindahl-Hirschman Index (HHI) measuring within-industry concentration in the county, and HHI_c is the HHI of overall employer concentration in the county. The parameter $\alpha \in [0, 1]$ governs the relative importance of intra-industry versus inter-industry employer dominance in shaping electoral power.

This formulation allows for different specifications, including the special case where $\alpha = 0.5$, which corresponds to a geometric mean of the two concentration measures. In that case, equation (1) reduces to:

$$EMP_{jc} = s_{jc} \cdot \sqrt{HHI_{jc} \cdot HHI_{c}}. \tag{14}$$

The structure of Equation (13) is intentionally flexible. When $\alpha = 1$, electoral power derives solely from concentration within the industry. When $\alpha = 0$, it reflects only the concentration of the broader employer landscape. Intermediate values of α allow for joint influence. In all cases, the industry's size within the local labor market (s_{jc}) determines the scope of its potential political reach, while the concentration components capture its coordination capacity and contextual leverage.

This measure is motivated by the idea that industry-level political power arises from a combination of internal coordination and external dominance. Industries that are both large and highly concentrated within concentrated counties exert greater influence. Industries that are small but internally concentrated (low s_{jc}, high HHI_{jc}) exert limited influence, as their narrow employment base constrains reach despite strong coordination potential. Conversely, industries that are large but fragmented (high s_{jc}, low HHI_{jc}) wield only moderate power, as their scale is offset

by weak internal concentration. Electoral influence is strongest when an industry combines both substantial employment presence and high internal concentration, particularly within counties characterized by broader employer dominance. We use this structure in our empirical work to assess how industry-level employer configurations predict variation in political outcomes across counties.

4.2 Data

Our primary dataset consists of three components: voter records, County Business Patterns (CBP) data, and tract-level characteristics. The voter records are sourced from L2, a non-partisan data vendor commonly used in both political campaigns and academic research. The L2 data includes detailed information on all registered voters, such as birth year, gender, and ethnicity, with each voter assigned a unique ID for identification purposes. The CBP data is particularly valuable for constructing Herfindahl-Hirschman Index (HHI) measures, as it provides detailed industry-level employment and establishment counts at the county level. These data allow us to capture changes in industrial concentration over time up to the 2016 election, which we use to assess the relationship between local concentration and voter behavior.

4.3 Empirical Specification

We are interested in estimating the relationship between concentration and voter behavior. A naïve implementation of this analysis would directly estimate the relationship between county-level industrial concentration and individual-level voting outcomes without using an instrumental variable approach. A more demanding version of such regression would focus on differential behavior along an individual-level dimension, and include age and tract fixed effects to control for unobserved heterogeneity across demographic groups and geographic areas. The specification takes the form:

$$Y_{i,c} = \beta_2(\text{EMP}_c \times I_i) + X_{i,c}\Gamma + \delta_a + \delta_{\text{tract}} + \delta_{state \times I} + \epsilon_{i,c}$$

where $EMP_c = \sum_{j \in \mathcal{I}_c} s_{jc} \cdot HHI_{jc}^{\alpha} \cdot HHI_c^{1-\alpha}$, $Y_{i,c}$ represents an individual's voting behavior in county c, and HHI_c is the level of industrial concentration at the county level, measured using the

Herfindahl-Hirschman Index (HHI). The term I_i represents an individual-level characteristic, such as party affiliation or swing-voter status, allowing the effect of industrial concentration to vary across different voter groups. The coefficient β_2 captures how the relationship between industrial concentration and voting behavior differs based on the individual characteristic I_i.

The specification includes $X_{i,c}$, a vector of individual- and county-level controls, as well as age fixed effects (δ_a) to account for systematic differences in political behavior across age groups. Additionally, tract fixed effects (δ_{tract}) control for unobserved geographic variation at the neighborhood level that might influence both industrial concentration and voting patterns, and state × individual characteristic fixed effects ($\delta_{state \times I}$) control for heterogeneity in the individual characteristics across states. The main effect of HHI_c is omitted because it is collinear with the tract fixed effects, which already absorb all variation in industrial concentration at the local level. By including these fixed effects, the model improves identification by focusing on within-tract variation in how individuals with different characteristics respond to industrial concentration. However, as with the naïve specification, this approach may still suffer from endogeneity concerns, as industrial concentration may be correlated with unobserved local or individual-level factors. Without an appropriate instrument, the estimated effects may be biased due to omitted variable bias or reverse causality.

To account for potential endogeneity concerns, we use a Bartik instrument instead of directly regressing against local HHI. The first stage to our main specification thus takes on the following form:

$$EMP_c \times I_i = \beta(Z_c \times I_i) + X_{i,c}\Gamma + \delta_a + \delta_{\text{tract}} + \delta_{state \times I} + \epsilon_{i,c}. \tag{15}$$

As before, our specification also includes X_c, a set of control variables accounting for county-level factors like demographics, education, and policy changes. We also include age fixed effects (δ_a), which control for age-related variation in voting behavior, and tract fixed effects (δ_{tract}), which capture unobserved differences across census tracts that could influence economic or voting conditions, and state × individual characteristic fixed effects ($\delta_{state \times I}$). The error term, $\epsilon_{i,c}$, accounts for residual variation.

The key variable, Z_c, serves as the Bartik instrument and is constructed as:

$$Z_c = \sum_j \left(\text{Industry Share}_{c,j,t_0} \times \Delta \text{HHI}_j \right),$$

or

$$Z_c = \sum_j \left(\text{Industry Share}_{c,j,t_0}^{2-\alpha} \times \Delta \text{HHI}_j \right)$$

if we adjust for the uneven contribution of industrial growth to industry-level concentration (which enters linearly) *vis-à-vis* county-level concentration (which enters quadratically) by the contribution of each to electoral monopsony power, which is captured by α.[6] Here, the industry share reflects the fraction of employment in industry j within county c at a baseline time t_0, while national growth is defined as the change in HHI for industry j at the national level from $t_0 = 2000$ to 2014, the last electoral cycle prior to the 2016 election. This formulation assumes that shifts in national industry concentration (as captured by HHI changes) are largely exogenous to individual county economies, making them a useful instrument for studying how industrial consolidation impacts local labor markets.

Our identifying variation exploits the individual-level differential impact of local level exposure to national industry shocks conditional on tract, age, age × individual characteristic (such as party affiliation) and state × individual characteristic fixed effects. Not only our design isolates plausibly exogenous variation in local labor market concentration driven by differential exposure to national trends, rather than by local economic or political shocks, but more importantly variation that is plausibly exogenous to the individual, conditional on individual and neighborhood controls. The identifying assumption is thus that these national shocks are orthogonal to unobserved county-level characteristics that may be correlated with individual-level traits such as party affiliation, conditional on fixed effects. By interacting the instrument with individual political identity, we capture how employer concentration differentially affects individuals within the same geographic and political context, conditional on finely grained demographic and spatial controls.

[6] Each industry's contribution to county HHI is quadratic in its employment share ($HHI_c = \sum_i s_{jc}^2 \cdot HHI_{jc}$).

Choice of baseline time t_0. To select our baseline year for constructing industry shares, t_0, we need to ensure shares are not contaminating the construction of the instrument. Figures 5 and 6 show that both concentration and shares were relatively stable from 1998 to 2003, while there is a sharp change in concentration as we enter the great recession, and a structural change in the year-by-year dynamics of industrial composition. Given that this period marks a transitional moment in local concentration dynamics, we want to select a baseline year that strictly precedes this period. We thus set our baseline year – for selecting both county-level industrial shares and ex-county trends in industrial concentration – to be 2000. Setting shares prior to the large concentration changes in the mid-2000s minimizes mechanical correlation between the shares and subsequent concentration growth, consistent with the guidance in Goldsmith-Pinkham, Sorkin, and Swift (2020) on avoiding endogenous timing of shares in shift-share designs.

Relevance. Table 1 presents the first-stage regression results, which assess the relationship between the instrumental variable and local labor market concentration across different model specifications. Columns (1) and (2) examine the extent to which changes in labor market concentration influence partisan engagement, particularly among voters with Republican affiliation. The first column reports the estimate from the first-stage regression to our baseline specification, presented in Equation (15), without additional fixed effects. It shows a strong positive relationship between the instrument and local labor market concentration. The second column introduces state- and age-specific fixed effects interacted with Republican affiliation, which slightly reduces the coefficient but maintains statistical significance. The strong F-statistics across all columns suggest that the instrument is strongly correlated with the endogenous variable, indicating its relevance for the second-stage analysis.

Columns (3) and (4) replicate the analysis for swing voters to capture the effects of labor market concentration on voting behavior among those more likely to switch parties. The first column again shows a strong and positive association between the instrument and local labor market concentration for swing voters. This relationship persists after including additional fixed effects in column (4). As before, the F-statistics confirm the strength of the first-stage relationship across all specifications.

4.4 Main Empirical Results: Swaying Electoral Participation

To assess the relationship between local labor market concentration and voter behavior, we estimate the effect of labor market concentration (HHI) on participation, registration, political donations, and party affiliation changes according to Equation (15). To account for broader structural shifts in the labor market, we instrument for local labor market concentration using national industry shocks described above.

We present our results in Table 2. Across all specifications, we find that higher labor market concentration is associated with increased political engagement, with effects concentrated among Republican voters. In the voting participation regressions, the interaction between HHI and Republican affiliation is positive and statistically significant at the 1 percent level in both OLS and IV specifications. The OLS estimate suggests a 1.49 percentage point increase in Republican voting, while IV estimates range from 2.35 to 2.79 percentage points. A similar pattern emerges for first-time registration, where HHI is associated with a 0.96 percentage point increase in the OLS specification and between 1.48 and 1.66 percentage points in IV estimates, all statistically significant at the 1 percent level. Political donations also respond to labor market concentration, with the Republican-HHI interaction increasing donor likelihood by 0.27 percentage points in OLS and between 0.41 and 0.81 percentage points in IV models, again statistically significant at the 1 percent level. The IV estimates exceed those from OLS in magnitude, suggesting that simple correlations may understate the causal impact of labor market concentration on political engagement.

We next examine the extent to which labor market concentration influences party switching among swing voters. Table 3 shows the results. Here too, we find positive and statistically significant effects, with OLS estimating a 4.03 percentage point increase in the probability of party switching, while IV estimates range from 8.32 to 14.92 percentage points, all statistically significant at the 1 percent level.

These results suggest that labor market concentration plays a meaningful role in shaping partisan realignment, likely by influencing voters' economic perceptions. In highly concentrated labor markets, firms may gain greater leverage over workers, enabling them to adopt pro-business

stances that align with policies favored by firms. Empirically, these dynamics shape political preferences, as regions with dominant employers see voters become more closely aligned to parties advocating for business-friendly policies. Interpreting through the lens of our theoretical framework, this set of empirical patterns suggests that employer concentration can contribute to shifts in political support.

Selective Hiring. One potential interpretation is that the patterns documented in Tables 2 and 3 could be attributed to differential hiring or shifts in workforce composition. Our empirical design uses individual-level voter data to trace changes in behavior after controlling for their affiliation status. Increases in Republican turnout and campaign activity are concentrated among individuals already affiliated with the party – evidence of greater engagement at the intensive margin, not the result of firms hiring more partisan workers. Similarly, the observed increases in Republican affiliation occur among voters who were previously unaffiliated or weakly attached, a shift in partisan identity that takes place within the individual. Because these effects emerge at the individual level after holding constant party affiliation or affiliation attachment – and holding constant detailed geographic and demographic characteristics, they are unlikely to be driven by selective hiring. Instead, the results point to mechanisms of political persuasion or realignment in response to economic dependence on dominant employers.

4.5 Downstream Results: Electoral Influence and Long-Run Community Decline

Propositions 4 and 5 formalize a key dynamic insight of our model: when firms successfully sway local elections against redistribution, they may set in motion economic feedback loops that ultimately erode the vitality of the very communities they depend on. In the short run, a dominant employer's concessions may boost wages for some workers and help block redistributive policies. But over time, this strategy discourages investment in local public goods, reduces government efficiency, and, crucially, undermines the long-run sustainability of the local labor force.

Table 4 provides empirical support for this prediction. Areas with greater employer concentration experience significantly higher population decline, consistent with a diminished incentive for younger and higher-skilled residents to remain in or move to the community. As we discussed in

Section 3.2, when a firm's electoral influence leads to lower redistribution and underinvestment in public capacity, the resulting stagnation drives out precisely those individuals who could sustain a dynamic labor force. The decline in population contributes directly to a shrinking pool of workers and potential voters, compounding the employer's bargaining leverage.

This erosion of the local population also carries fiscal consequences. Table 5 shows that more concentrated counties experience a migration of the tax base, as higher-income households disproportionately exit these areas. These outflows represent not only a demographic shift but also a redistribution of fiscal capacity across geographies. The loss of higher earners –reflected in both reduced local tax revenue and declines in neighborhood-level income – further constrains the local government's ability to deliver services.

Indeed, Table 5 documents significant income outflows in concentrated counties, reinforcing the link between employer dominance and a declining tax base. The empirical evidence is consistent with the model: as the local environment becomes less attractive due to firm-imposed policy constraints, agents with better outside options exit. This dynamic weakens both the labor market and the public sector.

As a result, the per capita capacity of the public sector contracts. Table 4 confirms that concentrated counties see significant reductions in local public employment and expenditures per capita. This final step connects back to Proposition 4: as local governments lose fiscal resources and redistribution is blocked, the effectiveness of public investment declines. Over time, this further lowers the value of staying in the community – reinforcing the exit of workers and setting the stage for cycles of economic and political deterioration.

5 Conclusions

This paper provides formal and empirical evidence that dominant employers can act as electoral monopsonies, reshaping local democratic outcomes by leveraging their position in the labor market. Our model shows how a large firm, through contingent production threats and concessions, can induce polarization in the electorate and redirect political preferences, even when doing so leaves the majority of voters economically worse off. These dynamics emerge endogenously from

the strategic interaction between firm incentives and voter vulnerability, especially among workers with limited outside options.

Empirically, we show that areas with more concentrated employment exhibit higher Republican registration, turnout, and campaign contributions – consistent with the model's predictions that firm power can be mobilized to constrain redistributive preferences. These patterns are not driven by pre-existing economic or political trends, and the effects grow in contexts where firm interests are most salient. Over time, however, these short-run political gains come at the cost of long-run economic vitality: we document a decrease in population, labor market force, and aggregate income, and outmigration of the tax base, especially when measured by income flows.

Our results underscore how labor market structure can endogenously shape the boundaries of democratic choice. When employers internalize the political consequences of economic decisions, electoral outcomes may reflect not just voters' preferences, but also firms' strategic interests. In such environments, even policies favored by a majority can be blocked – not through lobbying or campaign finance, but through the quiet discipline of local economic dependence. These findings contribute to a growing literature on the economic foundations of political power and raise important normative questions about the health of democratic governance in concentrated labor markets.

References

Acemoglu, D., C. García-Jimeno, and J. A. Robinson (2015). State capacity and economic development: A network approach. *American economic review 105*(8), 2364–2409.

Acemoglu, D. and J. A. Robinson (2006a). De facto political power and institutional persistence. *American Economic Review 96*(2), 325–330.

Acemoglu, D. and J. A. Robinson (2006b). *Economic origins of dictatorship and democracy*. Cambridge University Press.

Austen-Smith, D. and J. S. Banks (1996). Information aggregation, rationality, and the condorcet jury theorem. *American political science review 90*(1), 34–45.

Autor, D., D. Dorn, L. F. Katz, C. Patterson, and J. V. Reenen (2017). Concentrating on the fall of the labor share. *American Economic Review 107*(5), 180–185.

Azar, J., I. Marinescu, and M. Steinbaum (2022). Labor market concentration. *Journal of Human Resources 57*(S), S167–S199.

Babenko, I., V. Fedaseyeu, and S. Zhang (2020). Do ceos affect employees' political choices? *The Review of Financial Studies 33*(4), 1781–1817.

Baland, J.-M. and J. A. Robinson (2008). Land and power: Theory and evidence from chile. *American Economic Review 98*(5), 1737–1765.

Barkai, S. (2020). Declining labor and capital shares. *The Journal of Finance 75*(5), 2421–2463.

Baron, D. P. and J. A. Ferejohn (1989). Bargaining in legislatures. *American political science review 83*(4), 1181–1206.

Benmelech, E., N. K. Bergman, and H. Kim (2022). Strong employers and weak employees: How does employer concentration affect wages? *Journal of Human Resources 57*(S), S200–S250.

Berger, D., K. Herkenhoff, and S. Mongey (2022). Labor market power. *American Economic Review 112*(4), 1147–1193.

Black, D. (1958). The theory of committees and elections.

Bombardini, M. and F. Trebbi (2011). Votes or money? theory and evidence from the us congress. *Journal of Public Economics 95*(7-8), 587–611.

Bombardini, M. and F. Trebbi (2025). The political power of firms. Technical report, National Bureau of Economic Research.

Brandeis, L. (1914). Other people's money and how the bankers use it stokes. *New York, NY*.

Callander, S., D. Foarta, and T. Sugaya (2022). Market competition and political influence: An integrated approach. *Econometrica 90*(6), 2723–2753.

Colonnelli, E., V. P. Neto, and E. Teso (2022). Politics at work. Technical report, National Bureau of Economic Research.

Covarrubias, M., G. Gutiérrez, and T. Philippon (2020). From good to bad concentration? us industries over the past 30 years. *NBER Macroeconomics Annual 34*(1), 1–46.

Cowgill, B., A. Prat, and T. Valletti (2022). Political power and market power. Technical report, CEPR Discussion Papers.

De Loecker, J., J. Eeckhout, and G. Unger (2020). The rise of market power and the macroeconomic implications. *The Quarterly journal of economics 135*(2), 561–644.

Diamond, R. (2016). The determinants and welfare implications of us workers' diverging location choices by skill: 1980–2000. *American economic review 106*(3), 479–524.

Frye, T., O. J. Reuter, and D. Szakonyi (2014). Political machines at work voter mobilization and electoral subversion in the workplace. *World politics 66*(2), 195–228.

Goldsmith-Pinkham, P., I. Sorkin, and H. Swift (2020). Bartik instruments: What, when, why, and how. *American Economic Review 110*(8), 2586–2624.

Grossman, G. M. and E. Helpman (1994). Protection for sale. *American Economic Review 84*(4).

Hertel-Fernandez, A. (2017). American employers as political machines. *The Journal of Politics 79*(1), 105–117.

Hertel-Fernandez, A. (2018). *Politics at work: How companies turn their workers into lobbyists*. Oxford University Press.

Khan, L. M. (2017). The ideological roots of america's market power problem. *Yale LJF 127*, 960.

Kline, P. and E. Moretti (2014). People, places, and public policy: Some simple welfare economics of local economic development programs. *Annu. Rev. Econ. 6*(1), 629–662.

Kreps, D. M. and R. Wilson (1982). Reputation and imperfect information. *Journal of economic theory 27*(2), 253–279.

Laffont, J.-J. and J. Tirole (1993). *A theory of incentives in procurement and regulation*. MIT press.

Levit, D., N. Malenko, and E. Maug (2024). Trading and shareholder democracy. *The Journal of Finance 79*(1), 257–304.

Mailath, G. J. and L. Samuelson (2006). *Repeated games and reputations: long-run relationships*. Oxford university press.

Olson, M. J. (1968). *The logic of collective action: Public goods and the theory of groups.*

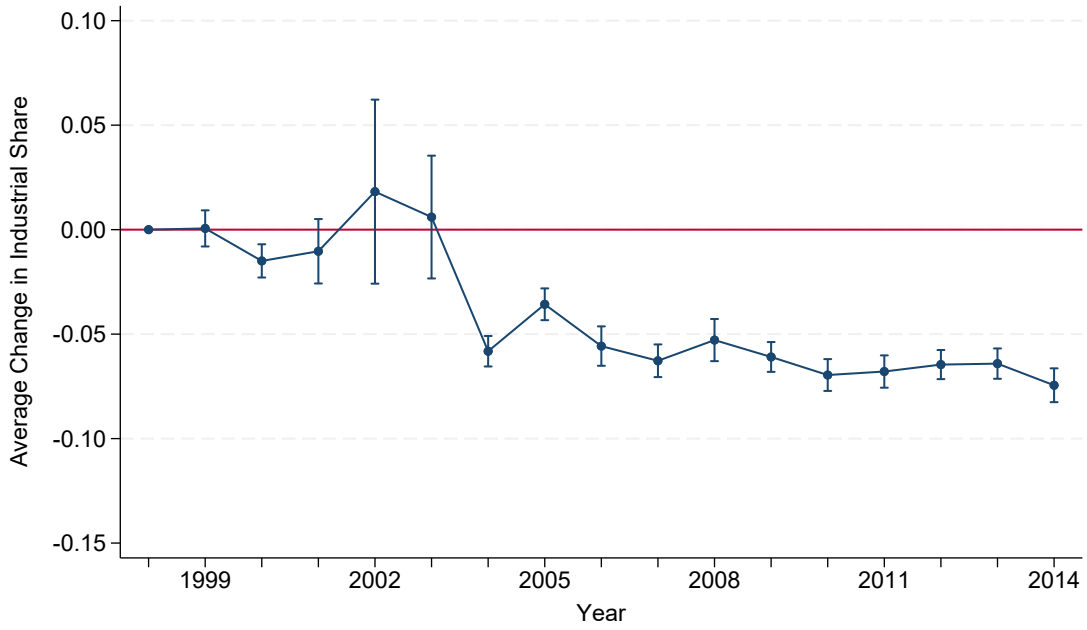
Rinz, K. (2022). Labor market concentration, earnings, and inequality. *Journal of Human Resources 57*(S), S251–S283.

Shaked, M. and J. G. Shanthikumar (2007). *Stochastic orders*. Springer.

Walker, E. T. (2014). *Grassroots for hire: Public affairs consultants in American democracy*. Cambridge University Press.

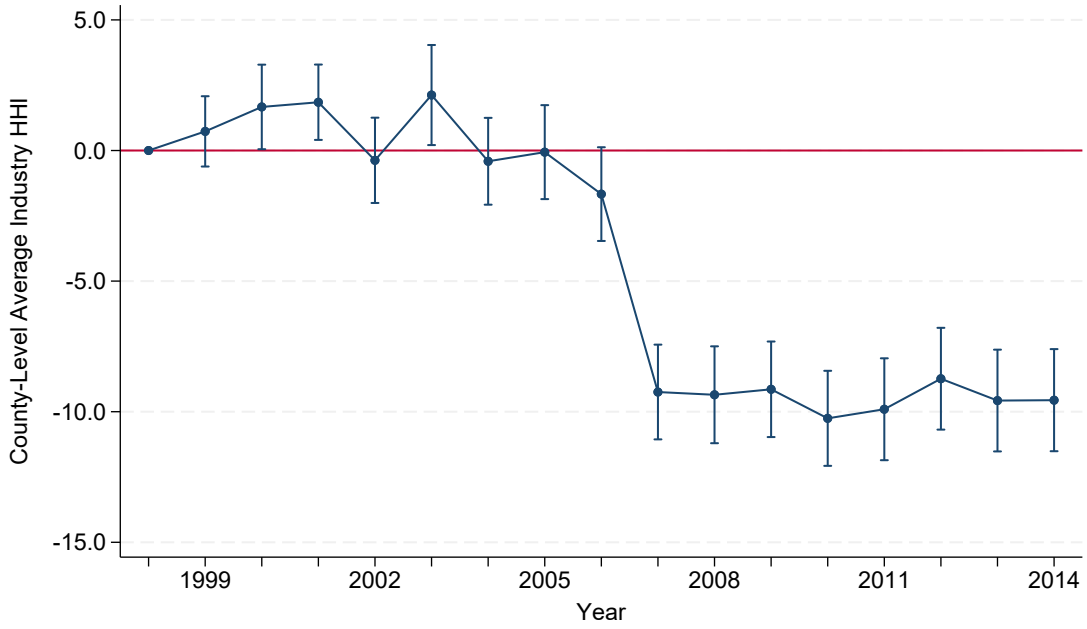
A Figures and Tables

Figure 5: Average %Change in Industrial Share



This figure shows trends in the yearly percentage change in average industry share across U.S. industries computed from County Business Patterns data. The dependent variable is the average percentage change in industrial share for each county. 95% confidence intervals are clustered by county.

Figure 6: Trends in Average Industrial Concentration at the Local Level



This figure shows trends in industrial concentration across U.S. industries measured using HHI (Herfindahl-Hirschman Index) computed from County Business Patterns data. The dependent variable is the average industry HHI for each county. 95% confidence intervals are clustered by county.

Table 1: First Stage Regressions

	Partisan Engagement		Affiliation	
First-Stage DV:	*HHI* × *Republican*		*HHI* × *Swing Voter*	
	(1)	(2)	(3)	(4)
Shift-Share$_{01–15}$ × Republican	0.5930***	0.5866***		
	(0.0466)	(0.0450)		
Republican	0.0051			
	(0.0258)			
Shift-Share$_{01–15}$ × Swing Voter			0.6105***	0.5903***
			(0.0461)	(0.0459)
Swing Voter			0.0237	
			(0.0275)	
F-Stat	162.1988	169.9829	175.7578	165.4745
N. obs.	61,157,784	61,157,784	61,157,784	61,157,784
N. Clusters	1,696	1,696	1,696	1,696
Tract FE	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes
State × Republican FE	No	Yes	No	No
Age × Republican FE	No	Yes	No	No
State × Swing Voter FE	No	No	No	Yes
Age × Swing Voter FE	No	No	No	Yes

Note: This table presents the first-stage results from instrumental variable (IV) regressions estimating the impact of partisan or swing-voter presence on local labor market concentration (measured by HHI). The instruments are constructed as interactions between shift-share national industry trends in concentration and individual-level partisan affiliation or partisan attachment (i.e., Republican or Swing Voter) in 2001–2015 following the methodology outlined in Section 4. Columns (1) and (2) report estimates for Republican affiliation; Columns (1) and (2) report estimates for Swing Voters. All specifications include tract and age fixed effects. Columns (2) and (4) additionally include interaction fixed effects by state and age with the relevant political group. Standard errors clustered at the county level. *** 1%, ** 5%, * 10% significance level.

Table 2: Effects of Local Concentration on Voters' Electoral Engagement

	OLS (1)	IV (2)	IV (3)	IV (4)
Panel A: Voting Percentage				
HHI × Republican	0.0149***	0.0235***	0.0254***	0.0279***
	(0.0018)	(0.0029)	(0.0027)	(0.0072)
Republican	0.0107***	0.0105***		
	(0.0018)	(0.0018)		
(log) Population $_{Pre}$ × Republican				0.0017
				(0.0038)
Panel B: First-Time Registration				
HHI × Republican	0.0096***	0.0166***	0.0148***	0.0157***
	(0.0010)	(0.0017)	(0.0015)	(0.0037)
Republican	0.0054***	0.0053***		
	(0.0012)	(0.0011)		
(log) Population $_{Pre}$ × Republican				0.0006
				(0.0017)
Panel C: Donor Likelihood				
HHI × Republican	0.0027***	0.0045***	0.0041***	0.0081***
	(0.0003)	(0.0006)	(0.0006)	(0.0019)
Republican	-0.0053***	-0.0053***		
	(0.0004)	(0.0004)		
(log) Population $_{Pre}$ × Republican				0.0027***
				(0.0009)
N. obs.	61,157,784	61,157,784	61,157,784	61,157,784
N. Clusters	1,696	1,696	1,696	1,696
Tract FE	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes
State × Republican FE	No	No	Yes	Yes
Age × Republican FE	No	No	Yes	Yes

Note: This table reports estimates of the effects of changes in local market concentration on three electoral outcomes: voting participation (Panel A), first-time voter registration (Panel B), and political donations (Panel C). Each panel shows OLS estimates and IV estimates using shift-share instruments constructed using the periods 2001–2015 following the methodology outlined in Section 4. The main interaction term $HHI \times Republican$ captures heterogeneous effects by party affiliation. All models include tract and age fixed effects. Columns (3) and (4) additionally include party-state and party-year fixed effects. Standard errors clustered at the county level. *** 1%, ** 5%, * 10% significance level.

Table 3: Effects of Local Concentration on Voters' Affiliation

	OLS	IV	IV	IV
	(1)	(2)	(3)	(4)
HHI × Swing Voter	0.0403***	0.0832***	0.0667***	0.1492***
	(0.0067)	(0.0124)	(0.0109)	(0.0308)
Swing Voter	0.0805***	0.0779***		
	(0.0097)	(0.0097)		
(log) Population $_{pre}$ × Swing Voter				0.0547***
				(0.0154)
N. obs.	61,157,784	61,157,784	61,157,784	61,157,784
N. Clusters	1,696	1,696	1,696	1,696
Tract FE	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes
State × Swing Voter FE	No	No	Yes	Yes
Age × Swing Voter FE	No	No	Yes	Yes

Note: This table reports estimates of the effect of local market concentration on party affiliation, measured as the likelihood of registering as a Republican among prior swing voters. The key regressor of interest is $\Delta HHI\times$ Swing Voter. Column (1) presents OLS estimates, while columns (2)–(4) present IV estimates using shift-share instruments constructed using the periods 2001–2015 following the methodology outlined in Section 4. All models include tract and age fixed effects, with some including interactions by state and age with swing voter status. Columns (3) and (4) additionally include state-swing voter and age-swing voter fixed effects. Standard errors clustered at the county level. *** 1%, ** 5%, * 10% significance level.

Table 4: Effects of Local Concentration on County-level Outcomes

	(1) log(Pop.)	(2) log(Agg. Income)	(3) log(Labor Force)	(4) log(Public Emp.) *Per Capita*	(5) log(Public Payroll) *Per Capita*
HHI_{01--15}	-0.0385*	-0.2529***	-0.0921**	-0.1710**	-0.2398**
	(0.0199)	(0.0922)	(0.0359)	(0.0775)	(0.0993)
(log) $Population_{Pre}$	1.0449***	1.0834***	1.0528***	-0.3579***	-0.2792***
	(0.0096)	(0.0408)	(0.0158)	(0.0393)	(0.0474)
N. obs.	2,967	2,967	2,967	2,966	2,966
N. Clusters	48	48	48	48	48
State FE	Yes	Yes	Yes	Yes	Yes
First Stage:	Coefficient: 0.1789***	SD: (0.0370)	F-Stat: 23.3992		

Note: This table reports estimates on the relationship between changes in local labor market concentration and population and other county-level outcomes. Columns (1), (2), and (3) present estimates of effects on population, aggregate income, and labor force, respectively. Columns (4)–(5) present results on public sector per capita size. All estimates control for pre-treatment county size and state fixed effects. The regressions are run at the county level, and standard errors are clustered at the state level. *** 1%, ** 5%, * 10% significance level.

Table 5: Effects of Local Concentration on Migration of Taxable Receipts

	(1) Net Migration	(2) Net Income Outflow	(3) log(Inflow)	(4) log(Outflow)
HHI_{01--15}	-0.0432**	0.0517**	-0.0083	0.0435**
	(0.0170)	(0.0202)	(0.0148)	(0.0183)
(log) $Population_{Pre}$	0.0372***	0.0376***	-0.0287***	0.0089
	(0.0070)	(0.0078)	(0.0082)	(0.0090)
N. obs.	2,967	2,967	2,967	2,967
N. Clusters	48	48	48	48
State FE	Yes	Yes	Yes	Yes

Note: This table reports estimates on the relationship between changes in local labor market concentration and tax base. Columns (1) presents estimates on net migration as measured by changes in the tax base. Column (2) presents estimates on net (log) income outflow. Columns (3) presents estimates on (log) income inflow. Columns (4) presents estimates on (log) income outflow. All estimates control for pre-treatment county size and state fixed effects. The regressions are run at the county level, and standard errors are clustered at the state level. *** 1%, ** 5%, * 10% significance level.

B Proofs

B.1 Benchmark equilibrium

Given fringe firm j's production $\underline{q}\mathbb{1}_{(p\geq w_t)}$ and ℓ's production $q_{\ell t}\mathbb{1}_{(p\geq w_t)}$, the aggregate supply (and therefore labor demand) as a function of $q_{\ell t}$ is

$$(N\cdot \underline{q}+q_{\ell t})\mathbb{1}_{(p\geq w_t)}.$$

Labor market clearing condition (6) implies that

$$w_t(q_{\ell t})=\frac{A}{m_t}(N\underline{q}+q_{\ell t})\mathbb{1}_{(p\geq w_t)}.$$

Firm ℓ has market power and internalizes that its production choices move wages. ℓ's problem is therefore

$$\max_{q_{\ell t}}\ \Pi(q_{\ell t})=(p-w(q_{\ell t}))q_{\ell t}. \tag{B.1}$$

Given Assumption 1(ii), the equilibrium wage and output are

$$q^*_{\ell t} = \min\left\{\frac{m_t p}{2A}-\frac{N\underline{q}}{2},\bar{q}\right\} \tag{B.2}$$

$$w^*_t = \min\left\{\frac{1}{2}(p+\frac{A}{m_t}N\underline{q}),\bar{w}_t\right\} \tag{B.3}$$

$$Q^*_t = \min\left\{\frac{m_t p}{2A}+\frac{N\underline{q}}{2},\bar{Q}_t\right\}, \tag{B.4}$$

where there upper bounds in this economy are

$$\bar{w}_t = \frac{A}{m_t}(N\underline{q}+\bar{q})<p \tag{B.5}$$

$$\bar{Q}_t = N\underline{q}+\bar{q}. \tag{B.6}$$

The equilibrium wage and production increase with the level of competition N and the product price p. The equilibrium wage decreases with a higher population density $\frac{m_t}{A}$, while production increases because a higher density allows ℓ to access the same labor supply at a lower wage. The reduced labor cost in turn encourages firms to produce more.

The before-collection profits of the firms with and without market power, respectively, are

$$\pi(q^*_{\ell t}) = \min\left\{\frac{m_t}{4A}(p-\frac{A}{m_t}N\underline{q})^2, (p-\frac{A}{m_t}(N\underline{q}+\bar{q}))\bar{q}\right\} \tag{B.7}$$

$$\pi^*_{jt} = \min\left\{\frac{1}{2}(p-\frac{A}{m_t}N\underline{q})\underline{q}, (p-\frac{A}{m_t}(N\underline{q}+\bar{q}))\underline{q}\right\}. \tag{B.8}$$

The total value of the redistribution, by (1), is

$$R^*_t = \delta_t\tau(\pi(q^*_{\ell t})+N\pi^*_{jt}) = \delta_t\tau\min\left\{\frac{m_t}{4A}\left(p^2-(\frac{AN\underline{q}}{m_t})^2\right), \left(p-\frac{A(N\underline{q}+\bar{q})}{m_t}\right)(N\underline{q}+\bar{q})\right\}.\blacksquare \tag{B.9}$$

B.2 Proof of Lemma 1

If the redistributive policy r were implemented, the government would collect a fraction τ of the firms' profits, leaving each firm with an after-collection profit of $(1-\tau)\pi_t$. Therefore, if firm ℓ does not influence the vote, its optimal choices of wage and output would remain unchanged with or without the policy, since the collection does not distort marginal incentives. Given the same wage and production, voters would prefer to vote for the policy, as they also benefit from the redistribution of collected profits.

Specifically, for any agent/voter i, the utility under the no-redistribution regime nr is:

$$u^{nr}_{it} = \max\{w^*_t, v_i\}, \tag{B.10}$$

where w^*_t and R^*_t are defined in (B.3) and (B.9), respectively.

Under the redistributive policy r, the utility of voter i is:

$$u^r_{it} = \max\{w^*_t, v_i\} + \frac{R^*_t}{m_t} > u^{nr}_{it}.\blacksquare \tag{B.11}$$

B.3 Proof of Lemma 2

Given any positive wages w^r_t and w^{nr}_t and redistribution amount R_t, and since there exists a voter of type $\hat{v}$ who strictly prefers the no-redistribution regime. Label this voter as $\hat{i}$. Then their utilities

satisfy:

$$u_{\hat{i}}^{nr} = \max\left\{w_t^{nr}, \hat{v}\right\} > \max\left\{w_t^{r}, \hat{v}\right\} + \frac{R_t}{m_t} = u_{\hat{i}}^{r}. \tag{B.12}$$

This inequality implies two things: (i) $w_t^{nr} > \hat{v}$, since otherwise the left-hand side would equal $\hat{v}$ and the inequality would be violated; and (ii) $w_t^{nr} > w_t^{r}$, because if $w_t^{nr} \leq w_t^{r}$, the right-hand side would be weakly greater, again contradicting the inequality.

Now consider any voter i with type $v_i < \hat{v}$ (i.e., $i < \hat{i}$). Their utility under regime nr is:

$$\begin{aligned}
u_i^{nr} &= \max\left\{w_t^{nr}, v_i\right\} = w_t^{nr} \\
&= \max\left\{w_t^{nr}, \hat{v}\right\} \quad (\text{since } w_t^{nr} > \hat{v}) \\
&> \max\left\{w_t^{r}, \hat{v}\right\} + \frac{R_t}{m_t} \\
&\geq \max\left\{w_t^{r}, v_i\right\} + \frac{R_t}{m_t} \quad (\text{since } \hat{v} > v_i) \\
&= u_i^{r}.
\end{aligned}$$

Hence, all voters with type below $\hat{v}$ strictly prefer the no-redistribution regime. This completes the proof.■

B.4 Proof of Proposition 1

In this proof, we derive the necessary and sufficient conditions for a firm to exert influence, and we show that there are two ways the firm influence: by threats only, or by threats plus concessions.

Show $q_{\ell t}^{r*} = 0$.

First, we need to show that the optimal strategy for firm ℓ is to threaten to shut down production, that is, to choose $q_{\ell t}^{r*} = 0$. Let the equilibrium set be given by $\{q_{\ell t}^{r*}, w_t^{r*}, R_t^*, q_{\ell t}^{nr*}, w_t^{nr*}\}$. Since firm ℓ must convince at least half of the voters to vote against the redistribution policy, Lemma 2 implies that the median voter must be at least as well off under the no-redistribution regime (nr). According to equation (IC_{it}), this requires that the wage levels satisfy:

$$\max\left\{w_t^{nr*}, \frac{A}{2}\right\} \geq \max\left\{w_t^{r*}, \frac{A}{2}\right\} + \frac{R_t^*}{m_t}.$$

Now, consider a modified allocation $\{\underline{q}^r_{\ell t}, \underline{w}^r_t, \underline{R}_t, q^{nr*}_{\ell t}, w^{nr*}_t\}$ where $\underline{q}^r_{\ell t}$ is chosen to minimize the right-hand side of the inequality, that is

$$\underline{q}^r_{lt} = \arg\min \left\{ \max\{\underline{w}^r_t, \frac{A}{2}\} + \frac{R_t}{m_t} \right\}.$$

Given that the inequality

$$\max\left\{w^{nr*}_t, \frac{A}{2}\right\} \geq \max\left\{\underline{w}^r_t, \frac{A}{2}\right\} + \frac{\underline{R}_t}{m_t}$$

still holds, and $q^{nr*}_{\ell t}, w^{nr*}_t$ remain unchanged, it follows that the modified set also constitutes an equilibrium.

We want to show that $\underline{q}^r_{lt} = 0$ solves

$$\underline{q}^r_{lt} = \arg\min \left\{ \max\{w_t(q_{\ell t}), \frac{A}{2}\} + \frac{R_t(q_{\ell t})}{m_t} \right\},$$

where

$$w_t(q_{\ell t}) = \frac{A}{m_t}(N\underline{q} + q_{\ell t}),$$

and

$$\frac{R_t(q_{\ell t})}{m_t} = \delta_t \tau (p - \frac{A}{m_t}(N\underline{q} + q_{\ell t}))\frac{N\underline{q} + q_{\ell t}}{m_t}. \tag{B.13}$$

Observe that $w_t(q_{\ell t})$ is strictly increasing in $q_{\ell t}$, since

$$\frac{\partial w_t(q_{\ell t})}{\partial q_{\ell t}} = \frac{A}{m_t} > 0.$$

Thus, $w_t(q_{\ell t})$ is minimized at $q_{\ell t} = 0$. It follows that

$$\max\left\{w_t(q_{\ell t}), \frac{A}{2}\right\}$$

is also weakly increasing in $q_{\ell t}$. So now we only need to show that the per-capital redistribution is minimized at $q_{\ell t} = 0$.

Assume

$$q^{alt}_{\ell t} \equiv \frac{m_t}{A}p - 2N\underline{q} \ \ (> \bar{q} \text{ by Assumption 1(ii)}).$$

Then we have

$$\frac{R_t(0)}{m_t} = \delta_t \tau (p - \frac{A}{m_t} N\underline{q})\frac{N\underline{q}}{m_t} = \frac{R_t(q^{alt}_{\ell t})}{m_t}.$$

Note that $\frac{R_t(q_{\ell t})}{m_t}$ is a concave quadratic in $q_{\ell t}$ with a unique maximum at $\frac{q_{\ell t}^{alt}}{2}$. Then for any feasible $q_{\ell t} \in [0, \bar{q}]$,

$$\frac{R_t(q_{\ell t})}{m_t} \geq \frac{R_t(0)}{m_t}.$$

Therefore, $q_{\ell t} = 0$ minimizes $\frac{R_t(q_{\ell t})}{m_t}$.

In conclusion,

$$\underline{q}_{lt}^r = 0 = \arg\min \left\{ \max \left\{ w_t(q_{\ell t}), \frac{A}{2} \right\} + \frac{R_t(q_{\ell t})}{m_t} \right\}. \tag{B.14}$$

Conditions for Equilibria.

Next, we derive the necessary and sufficient conditions under which it is beneficial for the firm ℓ to influence the vote, and under which it is not. As discussed, in equilibrium ℓ would implement the strongest threat to lower wages, which is to commit to completely halt production by setting $q_{\ell t}^r = 0$. This threat results in the lowest possible equilibrium wage

$$\underline{w}_t^r = \frac{AN\underline{q}}{m_t}, \tag{B.15}$$

and the lowest public transfer

$$\frac{\underline{R}_t}{m_t} = \delta_t \tau (p - \frac{A}{m_t} N\underline{q}) \frac{N\underline{q}}{m_t}. \tag{B.16}$$

In determining production under nr, firm ℓ seeks to set the equilibrium wage w_t^{nr} as close as possible to the benchmark equilibrium wage w_t^*, as defined in (B.3). Ideally, ℓ would choose $w_t^{nr} = w_t^*$ but if this is not feasible, ℓ it will deviate as little as necessary from w_t^*.

For the existence of equilibrium in which firm influences the vote, we need the following necessary and sufficient conditions:

$$w_t^r = \underline{w}_t^r \tag{B.17}$$

$$\max\{w_t^{nr}, \frac{A}{2}\} = \max\{\underline{w}_t^r, \frac{A}{2}\} + \frac{\underline{R}_t}{m_t} \tag{B.18}$$

$$w_t^{nr*} = \max\left\{w_t^*, w_t^{nr}\right\} \tag{B.19}$$

$$w_t^{nr*} \leq \bar{w}_t \tag{B.20}$$

$$\pi_\ell(q_{\ell t}^{nr*}) \geq (1-\tau)\pi_\ell(q_{\ell t}^*) \tag{B.21}$$

Condition (B.17) implies that the firm's optimal threat is to shut down production entirely, which reduces the wage to its minimum level. In Condition (B.18), the right-hand side represents the utility of the median voter under this maximal threat. The minimal wage required to sway at least half of the voters is the wage level that makes the median voter indifferent — any lower wage level cannot win majority support. Condition (B.19) states that the firm's preferred wage (under no redistribution) would be as close as possible to the benchmark production level. Therefore, if the indifference wage falls below the benchmark wage, the firm will choose the benchmark level instead. Condition (B.20) is the feasibility condition: the minimum wage to sway at least the median voter has to be within production ability of the large firm. Finally, Condition (B.21) is the profitability condition: for the firm to have an incentive to influence the vote, its after-tax profit under the no-redistribution regime must exceed that under the redistributive benchmark.

(B.17) through (B.19) can be better illustrated in Figure 7:

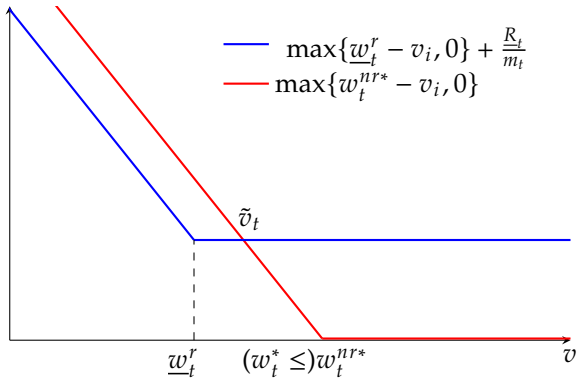


Figure 7: This figure illustrates the utilities of voters under two regimes: when the policy is implemented (blue) and when it is not (red). If the policy is implemented, every voter receives public redistribution, but firm ℓ threatens by cutting all its production. If the policy is not implemented, firm ℓ sets a wage that is equal to $\max\{w_t^*, w_t^{nr}\}$.

(B.17) through (B.19) indicates the following equilibrium quantity and market-clearing wage

$$w_t^{nr} = \max\{\underline{w}_t^r, \frac{A}{2}\} + \frac{R_t}{m_t} > \frac{A}{2} \tag{B.22}$$

$$w_t^{nr*} = \max\left\{w_t^*, w_t^{nr}\right\} \tag{B.23}$$

$$q_t^{nr*} = \frac{m_t}{A} w_t^{nr*} - N\underline{q}, \tag{B.24}$$

Feasibility of influence: If $w_t^{nr*} > \bar{w}_t$, then within the range of possible influence on the wage, the IC for median voter is violated. And hence one necessary condition is $w_t^{nr*} \leq \bar{w}_t$.

Profitability of influence: Plug in w_t^{nr*} into condition (B.21) and we have:

$$(p - w_t^{nr*}) \left[\frac{m_t}{A} w_t^{nr*} - N\underline{q} \right] \geq (1-\tau)(p - w_t^*) \left[\frac{m_t}{A} w_t^* - N\underline{q} \right]. \tag{B.25}$$

Since $p = 2w_t^* - \underline{w}_t^r$, we can rewrite (B.25) as

$$\begin{aligned}
(p - w_t^{nr*})(\frac{m_t}{A} w_t^{nr*} - N\underline{q}) &\geq (1-\tau)(p - w_t^*)(\frac{m_t}{A} w_t^* - N\underline{q}) \\
(2w^* - \underline{w}_t^r - w_t^{nr*})\frac{m_t}{A_t}(w_t^{nr*} - \underline{w}_t^r) &\geq (1-\tau)(w_t^* - \underline{w}_t^r)\frac{m_t}{A_t}(w_t^* - \underline{w}_t^r) \\
-(w_t^{nr*} - \underline{w}_t^r)(w_t^{nr*} - w_t^*) + (w_t^* - \underline{w}_t^r)(w_t^{nr*} - \underline{w}_t^r) &\geq (w_t^* - \underline{w}_t^r)^2 - \tau(w_t^* - \underline{w}_t^r)^2 \\
(w_t^{nr*} - \underline{w}_t^r)(w_t^{nr*} - w_t^*) - (w_t^* - \underline{w}_t^r)(w_t^{nr*} - w_t^*) &\leq \tau(w_t^* - \underline{w}_t^r)^2 \\
(w_t^{nr*} - w_t^*)^2 &\leq \tau(w_t^* - \underline{w}_t^r)^2.
\end{aligned}$$

Therefore, the second necessary condition for ℓ to choose to influence the vote is

$$0 \leq w_t^{nr*} - w_t^* \leq \sqrt{\tau}(w_t^* - \underline{w}_t^r), \tag{B.26}$$

where w_t^{nr*} is defined in (B.23).

Conclusion: The necessary and sufficient condition for firm ℓ to influence the vote is

$$w_t^{nr} \leq \min\left\{\bar{w}_t,\ \sqrt{\tau}(w_t^* - \underline{w}_t^r) + w_t^*\right\}. \tag{B.27}$$

Two ways to influence: There are two cases for how a firm may influence voters: (1) through threats only, and, (2) through a combination of threats and concessions.

(1) **Threats Only:** This occurs iff $w_t^{nr*} = w_t^*$, or equivalently,

$$w_t^{nr}(\delta_t) = \max\left\{\underline{w}_t^r, \frac{A_t}{2}\right\} + \frac{\overline{R(\delta_t)}_t}{m_t} < w_t^*.$$

That is, the median voter's utility under the firm's optimal threat to shut down (if the policy

is implemented) is less than or equal to the benchmark equilibrium wage. Hence, threat alone is sufficient to sway the majority of voters and the firm chooses the same wage as in the benchmark.

(2) **Threats + concessions:** This arises

$$\bar{w}_t \geq w_t^{nr}(\delta_t) > w_t^*.$$

If $w_t^{nr}(\delta_t)$ is larger than the benchmark but still smaller than the maximum wage in this economy when market clears, threats alone are insufficient to sway the median voter, firm ℓ must also offer concessions, namely, a wage higher than the benchmark to make the no-redistribution policy preferable to majority voters.

No Influence: If instead

$$w_t^{nr} > \min\left\{\bar{w}_t,\ \sqrt{\tau}(w_t^* - \underline{w}_t^r) + w_t^*\right\}$$

then either the firm's attempt to influence the vote is not profitable, or no feasible wage increase is sufficient to sway the median voter. In such cases, the equilibrium is no electoral influence.■

B.5 Proof of Proposition 2

Concentration within industry By inspection:

- w_t^r increases linearly in $N\underline{q}$.
- $\overline{w}_t$ increases linearly in $N\underline{q}$.
- w_t^* increases in $N\underline{q}$ (since both arguments in the min are increasing).
- $\underline{R}_t(\tau_t)$ increases in $N\underline{q}$ by Assumption 1.

As $N\underline{q}$ increases:

$$w_t^{nr*}(\tau_t) \quad \text{increases ,}$$

while

$$\sqrt{\tau_t}(w_t^* - w_t^r) + w_t^*$$

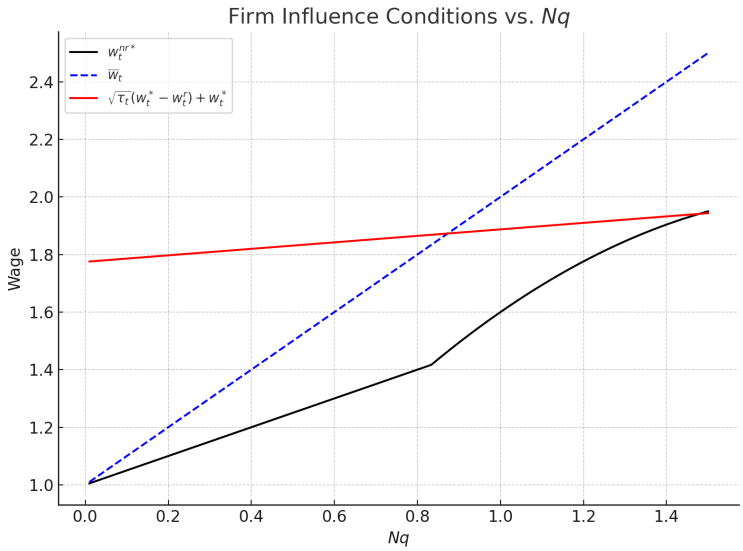


Figure 8: Firm influence conditions as a function of $N\underline{q}$ (how competitive is the market). The black line represents w_t^{nr*}, the wage the firm would offer to sway at least the median voter. The blue dashed line is $\overline{w}_t$, the full production wage ceiling, and the red line is the profitability threshold $\sqrt{\tau_t}(w_t^* - w_t^r) + w_t^*$. The figure illustrates a unique intersection point where feasibility or profitability constraints bind, determining the conditions under which the firm chooses to influence voting.

increases but with a smaller rate.

Moreover, while $\overline{w}_t$ also increases in $N\underline{q}$, the increase in $w_t^{nr*}(\tau_t)$ dominates because it is amplified by the redistribution rent component and the firm's promises.

Therefore, as $N\underline{q}$ grows:

Both feasibility and profitability conditions become harder to satisfy.

Thus, there exists a threshold $\bar{Q}_t$ such that:

$$\text{Firm } \ell \text{ influences voting} \iff N\underline{q} < \bar{Q}_t.$$

This is equivalent to

$$\frac{\overline{q}}{N\underline{q} + \overline{q}} > \frac{\overline{q}}{\bar{Q}_t + \overline{q}}.$$

Concentration within the community We prove the claim by showing that when $\frac{\overline{q}}{m_t} \to 0$, the equilibrium condition required for the firm to successfully influence the vote fails to hold. Since the condition is continuous in $\frac{\overline{q}}{m_t}$, it suffices to argue that for $\frac{\overline{q}}{m_t}$ sufficiently small, the firm will be unable to exert influence.

Recall that the necessary condition for the firm to influence the vote is given by (B.27), we evaluate the limits of each term as $\frac{\overline{q}}{m_t} \to 0$:

$$\lim_{\overline{q}/m_t \to 0} \bar{w}_t = \lim_{\overline{q}/m_t \to 0} \frac{A_t \left(N\underline{q} + \overline{q} \right)}{m_t} = 0, \quad (\underline{q} < \overline{q}),$$

$$\lim_{\overline{q}/m_t \to 0} \left\{ \sqrt{\tau} \left(w_t^* - \underline{w}_t^r \right) + w_t^* \right\} = \frac{1+\sqrt{\tau}}{2} p,$$

$$\lim_{\overline{q}/m_t \to 0} w_t^{nr} = \lim_{\overline{q}/m_t \to 0} \left\{ \max \left\{ \frac{A_t N \underline{q}}{m_t}, \frac{A_t}{2} \right\} + \delta\tau \left(p - \frac{A_t N \underline{q}}{m_t} \right) \frac{N\underline{q}}{m_t} \right\} = \frac{A_t}{2}.$$

Therefore,

$$\lim_{\overline{q}/m_t \to 0} w_t^{nr} = \frac{A_t}{2} > \min \left\{ 0, \ \frac{1+\sqrt{\tau}}{2} p \right\} = 0,$$

because both $\bar{w}_t \to 0$ and $\frac{1+\sqrt{\tau}}{2} p > 0$.

Thus, the necessary condition is violated at the limit:

$$\lim_{\overline{q}/m_t \to 0} w_t^{nr} > \lim_{\overline{q}/m_t \to 0} \min \left\{ \bar{w}_t, \ \sqrt{\tau}(w_t^* - \underline{w}_t^r) + w_t^* \right\}.$$

By continuity, this inequality holds for $\frac{\overline{q}}{m_t}$ sufficiently small. This implies that when firm concentration is low within the community, even the largest firm cannot set a wage high enough to sway the median voter (whose reservation wage equals $\frac{A_t}{2}$).

Therefore, if the firm does not have enough concentration in the local community (that is, $\frac{\overline{q}}{m_t}$ small), it will not be able to influence the vote.■

B.6 Proof of Proposition 3

Individual Voter Welfare: To complete the proof, we proceed in three steps.

Step 1: We show that the median voter is always worse off in equilibrium when the firm influences the vote, compared to the benchmark scenario without influence.

We begin by calculating the worker's utility in both cases. Recall that the utility of any voter i is

$$u_i = \max\{w_t, v_i\} + \frac{R_t}{m_t}\mathbb{1}_{\mathcal{P}_t}.$$

If $w_t^{nr*} = w_t^*$, then for any v_i,

$$u_i(\mathcal{P}_t = nr) = \max\{w_t^{nr*}, v_i\} < \max\{w_t^*, v_i\} + \frac{R_t^*}{m_t} = u_i(\mathcal{P}_t = r),$$

all the voters are (strictly) better off in the benchmark than the case in which the firm influences the vote.

Otherwise, if $w_t^{nr*} > w_t^*$, the median voter's IC constraint must be binding:

$$\begin{aligned} u_{0.5}(\mathcal{P}_t = nr) &= \max\{w_t^{nr*}, \frac{A_t}{2}\} \\ &= \max\{\underline{w}_t^r, \frac{A_t}{2}\} + \frac{R_t}{m_t} \\ &< \max\{w_t^*, \frac{A_t}{2}\} + \frac{R_t^*}{m_t} \text{ (from (B.14) that } q_{\ell t} = 0 \text{ is the optimal threat)} \\ &= u_{o.5}(\mathcal{P}_t = r), \end{aligned}$$

therefore we conclude that the median voter is always worse off.

Step 2: We show that all voters with reservation wages higher than that of the median voter are also worse off under electoral influence. For $v_i \geq \frac{A_t}{2}$, need to show

$$u_i(\mathcal{P}_t = nr) - u_i(\mathcal{P}_t = r) \leq u_{o.5}(\mathcal{P}_t = nr) - u_{o.5}(\mathcal{P}_t = r) (< 0) \tag{B.28}$$

$$\iff \max\{w_t^{nr*}, v_i\} - \max\{w_t^*, v_i\} \leq \max\{w_t^{nr*}, \frac{A_t}{2}\} - \max\{w_t^*, \frac{A_t}{2}\} \tag{B.29}$$

If $v_i \leq w_t^{nr*}$, (B.29) is equivalent to $w_t^{nr*} - \max\{w_t^*, v_i\} \leq w_t^{nr*} - \max\{w_t^*, \frac{A_t}{2}\}$, which holds.

If $w_t^{nr*} \leq v_i$, (B.29) is equivalent to $v_i - v_i \leq w_t^{nr*} - \max\{w_t^*, \frac{A_t}{2}\}$, which also holds.

So, we can conclude that $\forall v_i \geq \frac{A_t}{2}$,

$$u_i(\mathcal{P}_t = nr) < u_i(\mathcal{P}_t = r).$$

Step 3: We show that not all voters are necessarily worse off—some may benefit from the firm's influence, depending on their reservation wages. Specifically, for $v_i = 0$,

$$u_0(\mathcal{P}_t = nr) - u_0(\mathcal{P}_t = r) = w_t^{nr*} - w_t^* - \frac{R_t^*}{m_t}$$

which can be positive or negative.

This completes the proof of Proposition 4.1.

Total Voters' Welfare: Our goal is to compare the voters' welfare under electoral influence—when they vote for nr due to firm ℓ's influence—versus the benchmark scenario, if the firm does not influence.

We begin by calculating the voter's utility in the benchmark case, where firm ℓ does not influence the voting outcome. Recall that the utility of any voter i is

$$u_i = \max\{w_t^*, v_i\} + \frac{R_t^*}{m_t}$$

with w_t^* and R_t^* expressed in (B.3) and (B.9).

Voters with $v_i \leq w_t^*$ would work, and voters with $v_i > w_t^*$ do not work but enjoy public goods provided by the government. The total voter welfare is

$$\begin{aligned}
\mathcal{V}_t^* &= \int_{v_i \in [0, A_t]} u_i \frac{m_t}{A_t} dv_i \\
&= \int_0^{w_t^*} (w_t^* - v_i) \frac{m_t}{A_t} dv_i + \int_{v_i \in [0, A_t]} \frac{R_t^*}{m_t} \frac{m_t}{A_t} dv_i + \int_{v_i \in [0, A_t]} v_i \frac{m_t}{A_t} dv_i \\
&= \frac{(w_t^*)^2}{2} + R_t^* + V
\end{aligned}$$

where

$$V \equiv \int_{v_i \in [0, A_t]} v_i \frac{m_t}{A_t} dv_i$$

is the aggregate voter reservation wage, and is a constant.

Similarly, we compute the voters' welfare when electoral influence is the equilibrium, that is, when condition (B.26) is satisfied.

$$\begin{aligned}
\mathcal{V}_t^{nr*} &= \int_{v_i\in[0,A_t]} u_i \frac{m_t}{A_t} dv_i \\
&= \int_{v_i\in[0,A_t]} \max\{w_t^{nr*}, v_i\} \frac{m_t}{A_t} dv_i \\
&= \int_0^{w_t^{nr*}} (w_t^{nr*} - v_i) \frac{m_t}{A_t} dv_i + \int_{v_i\in[0,A_t]} v_i \frac{m_t}{A_t} dv_i \\
&= \frac{(w_t^{nr*})^2}{2} + V
\end{aligned}$$

To compare, we take the difference:

$$\begin{aligned}
\mathcal{V}_t^{nr*} - \mathcal{V}_t^{*} &= \frac{(w_t^{nr*})^2}{2} + V - (\frac{(w_t^{*})^2}{2} + R_t^* + V) \\
&= \frac{(w_t^{nr*})^2}{2} - \frac{(w_t^{*})^2}{2} - R_t^*.
\end{aligned}$$

We discuss by the two regimes of electoral influence:

(1) Threat only regime: If $\delta_t < \underline{\delta}_t$, then $w_t^{nr*} = w_t^*$. We have

$$\mathcal{V}_t^{nr*} - \mathcal{V}_t^{*} \begin{cases} > 0 \text{ if } \delta_t < 0 \\ = 0 \text{ if } \delta_t = 0 \\ < 0 \text{ if } \delta_t > 0 \end{cases}$$

(2) **Threat + Promise Regime:** If $\delta_t \geq \underline{\delta}_t (> 0)$, then $w_t^{nr*} = w_t^{nr} > w_t^*$.

If $w_t^* \geq \frac{A_t}{2}$, then since $w_t^* > \underline{w}_t^r$, it follows that

$$w_t^* + \frac{R_t^*}{m_t} > \max\left\{\frac{A_t}{2} + \frac{\underline{R}_t}{m_t}\right\} = w_t^{nr*},$$

and thus the aggregate voters' welfare is always lower when firm ℓ influences voting.

The aggregate welfare under electoral influence is given by:

$$\begin{aligned}
SW_t^{nr} &= \int_{v_i\in[0,A_t]} \max\{w_t^{nr*}, v_i\}\cdot\frac{m_t}{A_t}\,dv_i \\
&= \int_0^{w_t^*} w_t^{nr*}\cdot\frac{m_t}{A_t}\,dv_i + \int_{w_t^*}^{w_t^{nr*}} w_t^{nr*}\cdot\frac{m_t}{A_t}\,dv_i + \int_{w_t^{nr*}}^{A_t} v_i\cdot\frac{m_t}{A_t}\,dv_i \\
&< \int_0^{w_t^*}\left(w_t^*+\frac{R_t^*}{m_t}\right)\cdot\frac{m_t}{A_t}\,dv_i + \int_{w_t^*}^{w_t^{nr*}}\left(w_t^*+\frac{R_t^*}{m_t}\right)\cdot\frac{m_t}{A_t}\,dv_i + \int_{w_t^{nr*}}^{A_t} v_i\cdot\frac{m_t}{A_t}\,dv_i \\
&< \int_0^{w_t^*}\left(w_t^*+\frac{R_t^*}{m_t}\right)\cdot\frac{m_t}{A_t}\,dv_i + \int_{w_t^*}^{w_t^{nr*}}\left(v_i+\frac{R_t^*}{m_t}\right)\cdot\frac{m_t}{A_t}\,dv_i + \int_{w_t^{nr*}}^{A_t}\left(v_i+\frac{R_t^*}{m_t}\right)\cdot\frac{m_t}{A_t}\,dv_i \\
&= \int_0^{A_t}\left[\max\{w_t^*, v_i\}+\frac{R_t^*}{m_t}\right]\cdot\frac{m_t}{A_t}\,dv_i \\
&= \int_0^{A_t} u_{it}^*\cdot\frac{m_t}{A_t}\,dv_i \\
&= SW_t^*.
\end{aligned}$$

This completes the proof of Proposition 3.2.■

B.7 Proof of Lemma 3

Recall that the conditions for the firm to influence the vote is given by (B.27), we can analyze the threshold δ_t such that the conditions are held.

From the **Feasibility condition**

$$w_t^{nr*} \le \bar{w}_t,$$

since $w_t^* \le \bar{w}_t$, and $w_t^{nr}(\delta_t$ is linearly increasing in δ_t, and therefore there exists a unique $\delta_t = \bar{\delta}_1$, such that $w_t^{nr*}(\delta_1) = \bar{w}_t$, and the feasibility condition is

$$\delta_t \le \bar{\delta}_1. \tag{B.30}$$

From the **profitability condition**

$$w_t^{nr*} \le \sqrt{\tau}(w_t^* - \underline{w}_t^r) + w_t^*, \tag{B.31}$$

where w_t^{nr*} is defined in (B.23), w_t^{nr*} is a function strictly increasing in δ_t when $w_t^{nr*} - w_t^* > 0$, so

that there is a unique $\bar{\delta}_2$ such that

$$w_t^{nr*}(\bar{\delta}_2) = \sqrt{\tau}(w_t^* - \underline{w}_t^r) + w_t^*,$$

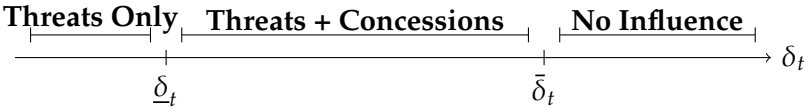
and the condition for profitability is

$$\delta_t \leq \bar{\delta}_2. \tag{B.32}$$

Conclusion: Then assume $\bar{\delta}_t \equiv \min\{\bar{\delta}_1, \bar{\delta}_2\}$, the necessary and sufficient condition for firm ℓ to influence the vote is

$$\delta_t \leq \bar{\delta}_t.$$

This completes the proof of the lemma.■



Two ways to influence: We can also describe the two cases for how a firm may influence voters in terms of δ_t.

(1) **Threats Only:** This occurs iff

$$\delta_t < \underline{\delta}_t,$$

where $\underline{\delta}_t$ is such that $w_t^{nr}(\underline{\delta}_t) = w_t^*$. In this case, δ_t is small enough, and thus, a majority can be swayed by the threat alone, without needing to promise higher wages.

(2) **Threats + concessions:** This arises iff

$$\underline{\delta}_t \leq \delta_t \leq \bar{\delta}_t.$$

If δ_t is larger but still smaller than $\bar{\delta}_t$ as defined above, threats alone are insufficient to sway the median voter, firm ℓ must also offer concessions, namely, a wage higher than the benchmark to make the no-redistribution policy preferable to majority voters.

No Influence: If instead $\delta_t > \bar{\delta}_t$, then either the firm's attempt to influence the vote is not profitable, or no feasible wage increase is sufficient to sway the median voter. In such cases, the equilibrium

is no electoral influence.

These three regions are shown in Figure 2.

B.8 Proof of Proposition 4

Prop 4(1): Short-term Gain, Long-term Loss in Voter Utility

Step 1. FOSD.

Since the stochastic process $\{\delta_t\}_{t=0}^{\infty}$ evolve according to the recurrence:

$$\delta_{t+1} = \psi_\delta(\delta_t) \cdot \delta_t + \epsilon_{t+1},$$

where $\{\epsilon_t\}$ are i.i.d. Gaussian noises with $\epsilon_t \sim \mathcal{N}(0, \sigma^2)$. Since for each t, the function $\psi_\delta : \mathbb{R} \to \mathbb{R}_+$ is measurable and non-decreasing, and satisfies:

$$\psi_\delta(\delta_t > \bar{\delta}) > \psi_\delta(\delta_t < \bar{\delta}).$$

Define:

$$X_s := \delta_{t+s} \mid \delta_t > \bar{\delta}, \qquad Y_s := \delta_{t+s} \mid \delta_t < \bar{\delta}.$$

We want to prove that for every $s \geq 0$, we have $X_s \succ_{\text{FOSD}} Y_s$.

We prove FOSD by induction on k.

Base Case ($s = 0$): By definition,

$$X_0 = \delta_t \mid \delta_t > \bar{\delta}, \quad Y_0 = \delta_t \mid \delta_t < \bar{\delta}.$$

These are two points which can be seen as conditional distributions on disjoint intervals. Since $\delta_t > \bar{\delta}$ implies strictly larger realizations than $\delta_t < \bar{\delta}$, we immediately have:

$$X_0 \succ_{\text{FOSD}} Y_0.$$

Inductive Step: Assume that for some $s \geq 0$, we have:

$$X_s = \delta_{t+s} \mid \delta_t > \bar{\delta} \succ_{\text{FOSD}} \delta_{t+s} \mid \delta_t < \bar{\delta} = Y_s.$$

We must show:

$$X_{s+1} = \delta_{t+s+1} \mid \delta_t > \bar{\delta} \succ_{\text{FOSD}} \delta_{t+s+1} \mid \delta_t < \bar{\delta} = Y_{s+1}.$$

Recall $\delta_{t+s+1} = \psi_\delta(\delta_{t+s}) \cdot \delta_{t+s} + \epsilon_{t+s+1}$ and the inductive hypothesis $X_s \succ_{\text{FOSD}} Y_s$.

Since $\psi_\delta(\cdot)$ is non-decreasing, the mapping $f(x) := \psi_\delta(x) \cdot x$ is also non-decreasing. By standard results on FOSD preservation under monotone functions:

$$f(X_s) \succ_{\text{FOSD}} f(Y_s),$$

that is

$$\psi_\delta(X_s) \cdot X_s \succ_{\text{FOSD}} \psi_\delta(Y_s) \cdot Y_s.$$

Now, we add the same independent noise term $\epsilon_{t+s+1} \sim \mathcal{N}(0, \sigma^2)$ to both:

$$X_{s+1} = \psi_\delta(X_s) \cdot X_s + \epsilon_{t+s+1},$$

$$Y_{s+1} = \psi_\delta(Y_s) \cdot Y_s + \epsilon_{t+s+1}.$$

Because convolution with a common continuous distribution preserves strict FOSD when the base variables are strictly FOSD (see Shaked and Shanthikumar (2007)), we conclude:

$$X_{s+1} \succ_{\text{FOSD}} Y_{s+1}.$$

Step 2.

Recall that

- Under regime $\mathcal{P}_t = nr$: $u^{nr}_{j,t}(\delta_t) = \max\{w^*_t, w^{nr}_t(\delta_t), v_j\}$.
- Under regime $\mathcal{P}_t = r$: $u^{r}_{j,t}(\delta_t) = \max\{w^*_t, v_j\} + \frac{R^*_t(\delta_t)}{m_t}$.

where $w^{nr}_t(\delta_t)$ and $R^*_t(\delta_t)$ are both strictly linearly increasing in δ_t.

Then, we need to prove that even if $u^{nr}_{j,t} > u^{r}_{j,t}$ for some $\delta_t < \bar{\delta}$, there exists $S > 0$ such that for all $s \geq S$,

$$\mathbb{E}_t[u_{j,t+s} \mid \mathcal{P}_t = nr] < \mathbb{E}_t[u_{j,t+s} \mid \mathcal{P}_t = r].$$

Proof. At time t, with $\delta_t < \bar{\delta}$, we assume $u^{nr}_{j,t} > u^{r}_{j,t}$. From the stochastic process, note that:

$$\delta^{nr}_{t+s} \mid \delta_t < \bar{\delta} \prec_{\text{FOSD}} \delta^{r}_{t+s} \mid \delta_t < \bar{\delta}, \quad \text{for all } s \geq 1,$$

as shown by induction using monotonicity and $\psi_\delta(\delta_t < \bar{\delta}) < \psi_\delta(\delta_t > \bar{\delta})$.

For any $s \geq 1$:

$$u^{nr}_{j,t+s} = \max\{w^*_t, w^{nr}_t(\delta_{t+s}), v_j\},$$
$$u^{r}_{j,t+s} = \max\{w^*_t, v_j\} + \frac{R^*_t(\delta_{t+s})}{m_t}.$$

Define:

$$h_{nr}(\delta) := \max\{w^*_t, w^{nr}_t(\delta), v_j\}, \quad h_r(\delta) := \max\{w^*_t, v_j\} + \frac{R^*_t(\delta)}{m_t}.$$

Since $\frac{R^*_t(\cdot)}{m_t}$ has a slope strictly greater than $w^{nr}_t(\cdot)$, there exists a threshold $\tilde{\delta}$ such that:

$$\forall \delta > \tilde{\delta}, \quad h_r(\delta) > h_{nr}(\delta).$$

By FOSD, for any $\varepsilon > 0$, there exists $S > 0$ such that for all $s \geq S$:

$$\mathbb{P}(\delta^{r}_{t+s} > \tilde{\delta}) > \mathbb{P}(\delta^{nr}_{t+s} > \tilde{\delta}) + \varepsilon.$$

Let $M := \min_{\delta > \tilde{\delta}} (h_r(\delta) - h_{nr}(\delta)) > 0$. Then:

$$\begin{aligned}\mathbb{E}_t[u^{r}_{j,t+s}] - \mathbb{E}_t[u^{nr}_{j,t+s}] &= \int h_r(\delta) f^{r}_s(\delta)\, d\delta - \int h_{nr}(\delta) f^{nr}_s(\delta)\, d\delta \\ &> M \cdot \left[\int_{\tilde{\delta}}^{\infty} f^{r}_s(\delta)\, d\delta - \int_{\tilde{\delta}}^{\infty} f^{nr}_s(\delta)\, d\delta \right] > M\varepsilon > 0.\end{aligned}$$

Thus,

$$\mathbb{E}_t[u^{r}_{j,t+s}] > \mathbb{E}_t[u^{nr}_{j,t+s}] \quad \text{for all } s \geq S. \quad \blacksquare$$

Prop 4(2): Welfare Difference Increasing under FOSD.

Since we have $X_s \succ_{\text{FOSD}} Y_s$, we aim to prove that for a function V_t satisfying:

- V_t is strictly increasing on $(-\infty, \bar{\delta})$ and on $(\bar{\delta}, \infty)$,

- $V_t(0) < V_t(\bar{\delta})$,
- $V_t(\delta)$ is unbounded above as $\delta \to \infty$,
- V_t may or may not have a downward jump at $\bar{\delta}$,

there exists $S > 0$ such that for all $s \geq S$:

$$\mathbb{E}[V_t(X_s)] > \mathbb{E}[V_t(Y_s)],$$

and the difference

$$\Delta_s := \mathbb{E}[V_t(X_s)] - \mathbb{E}[V_t(Y_s)]$$

is strictly increasing in s.

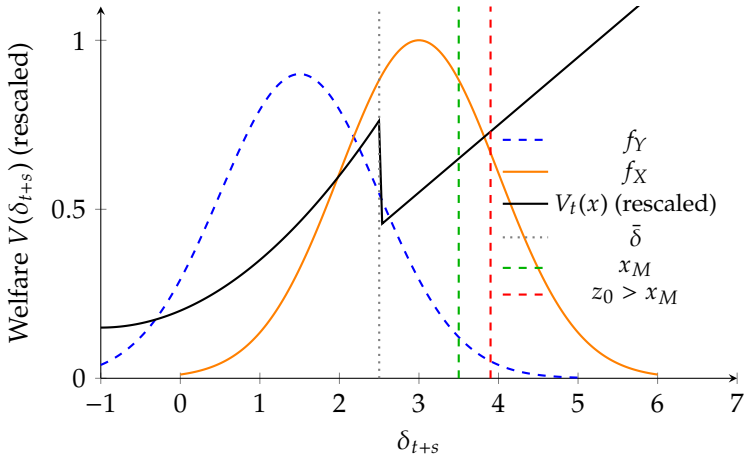


Figure 9: FOSD distributions, downward jump in $V_t(x)$ at $\bar{\delta}$, and tail dominance starting from x_M.

Fix $M > 0$. Since V_t is unbounded above on $(\bar{\delta}, \infty)$, there exists $x_M > \bar{\delta}$ such that $V_t(x_M) > M$.

Now we justify the existence of a threshold $z_0 > x_M$ such that for any given $\varepsilon > 0$ (small enough):

$$\int_{z_0}^{\infty} f_s^X(x)dx > \int_{z_0}^{\infty} f_s^Y(x)dx + \varepsilon.$$

Claim: If $X_s \succ_{\text{strict FOSD}} Y_s$ and the densities f_s^X, f_s^Y are continuous, then

$$\exists z_0 \in \mathbb{R},\ \varepsilon_0 > 0 \ \text{ such that } F_{Y_s}(z_0) - F_{X_s}(z_0) > \varepsilon_0.$$

Because $F_{Y_s}(z) - F_{X_s}(z)$ is continuous and strictly positive on a non-null interval (due to strict FOSD), we can choose any $\varepsilon < \varepsilon_0$ and corresponding z_0 satisfying the desired inequality. Since $\int_z^\infty f(x)dx = 1 - F(z)$, the inequality becomes:

$$\int_{z_0}^{\infty} f_s^X(x)dx > \int_{z_0}^{\infty} f_s^Y(x)dx + \varepsilon.$$

Now define $\Delta f_s(x) := f_s^X(x) - f_s^Y(x)$ and decompose:

$$\begin{aligned}\Delta_s &= \int_{-\infty}^{z_0} V_t(x)\Delta f_s(x)dx + \int_{z_0}^{\infty} V_t(x)\Delta f_s(x)dx \\ &=: \Delta_s^{<} + \Delta_s^{\geq}.\end{aligned}$$

$\Delta_s^{<}$ is bounded below (as V_t is bounded on $(-\infty, z_0]$), while:

$$\Delta_s^{\geq} = \int_{z_0}^{\infty} V_t(x)\left(f_s^X(x) - f_s^Y(x)\right)dx \geq \varepsilon M.$$

Therefore, by choosing arbitrarily large M, the positive contribution from the upper tail dominates any possible negative mass in the lower region. Thus, for all sufficiently large s, we have $\Delta_s > 0$ and Δ_s increases with s.■

B.9 Proof of Proposition 5

We prove the possibility results in Proposition 5 through the numerical examples in Figure 4.

B.10 Proof of Lemma 4

Recall that firm ℓ is willing to influence voting if and only if the wage that makes at least the median voter indifferent is feasible, that is, it is smaller than the highest wage this economy can achieve (full production) and the wage is not so large that the firm's profit falls below the benchmark. That is, the necessary and sufficient condition for the firm to choose to influence in equilibrium is:

$$w_t^{nr*}(\tau_t) \leq \overline{w}_t, \tag{B.33}$$

$$w_t^{nr*}(\tau_t) \leq \sqrt{\tau_t}(w_t^* - w_t^r) + w_t^*. \tag{B.34}$$

where

$$w_t^{nr*}(\tau_t) = \max\left\{\max\left\{\underline{w}_t^r, \frac{A_t}{2}\right\} + \frac{\underline{R}_t(\tau_t)}{m_t}, w_t^*\right\}, \tag{B.35}$$

$$\overline{w}_t = \frac{A_t\left(N\underline{q} + \overline{q}\right)}{m_t}, \tag{B.36}$$

$$\underline{w}_t^r = \frac{A_t N\underline{q}}{m_t}, \tag{B.37}$$

$$w_t^* = \min\left\{\frac{1}{2}\left(p + \frac{A_t N\underline{q}}{m_t}\right), \overline{w}_t\right\}, \tag{B.38}$$

$$\frac{\underline{R}_t(\tau_t)}{m_t} = \delta_t\tau_t\left(p - \frac{A_t N\underline{q}}{m_t}\right)\frac{N\underline{q}}{m_t}. \tag{B.39}$$

To determine the values of τ_t such that, given δ_t and other parameters, the firm is not willing to influence the vote, at least one of the feasibility or profitability conditions must be violated. Therefore, we next plot $w_t^{nr*}(\tau_t)$, $\overline{w}_t$, and $\sqrt{\tau_t}(w_t^* - w_t^r) + w_t^*$ as functions of τ_t.

There are two cases we need to discuss:

$$w_t^* > \frac{A_t}{2}, \quad \text{and} \quad w_t^* \leq \frac{A_t}{2},$$

which are shown in Figure 10.

Note that:

$$\frac{\partial}{\partial\delta_t} w_t^{nr*}(\tau_t) > 0.$$

That is, $w_t^{nr*}(\tau_t)$ is increasing in δ_t for any fixed τ_t, because $\underline{R}_t(\tau_t)$ is linear in δ_t.

Define:

$$\overline{\tau}_t(\delta_t) = \sup\left\{\tau_t : \text{firm unwilling to influence at } (\tau_t, \delta_t)\right\}.$$

We claim that $\overline{\tau}_t(\delta_t)$ is (weakly) increasing in δ_t.

To see this, fix any τ_t. As δ_t increases, $w_t^{nr*}(\tau_t)$ increases. This makes it easier for either (B.33) or (B.34) to fail, meaning that a higher τ_t can still satisfy the condition that the firm does not want to influence. In other words, the set of τ_t values such that the firm is unwilling to influence expands as δ_t increases.

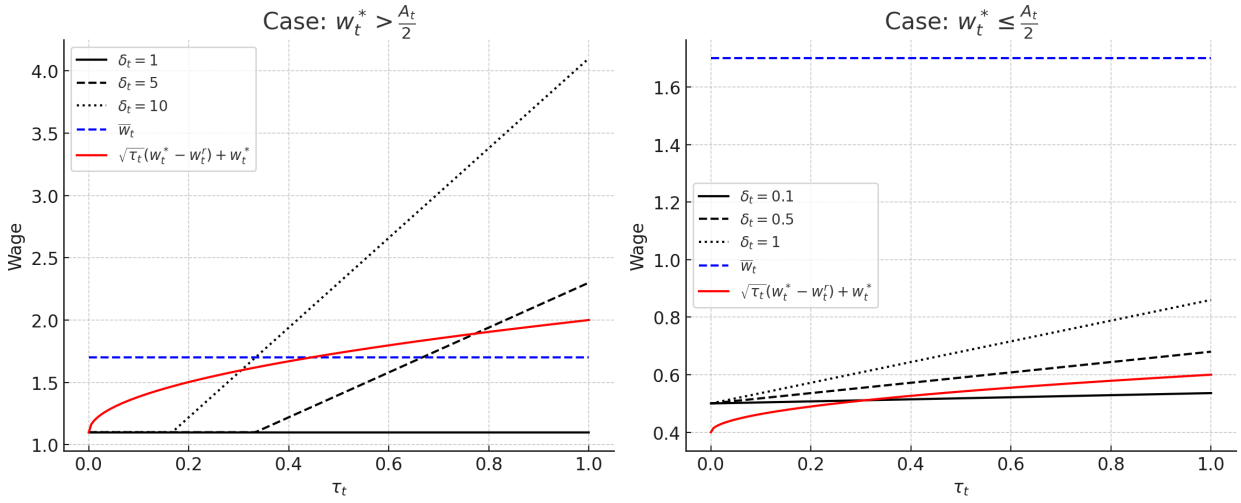


Figure 10: The relationship between the no-redistribution wage w_t^{nr*}, the full production wage $\overline{w}_t$, and the profitability threshold $\sqrt{\tau_t}(w_t^* - w_t^r) + w_t^*$ as functions of the tax rate τ_t. The left panel illustrates the case where $w_t^* > \frac{A_t}{2}$, while the right panel shows $w_t^* \leq \frac{A_t}{2}$. Solid, dashed, and dotted black lines correspond to different values of δ_t, representing the firm's political efficiency parameter. The blue dashed line denotes $\overline{w}_t$, and the red solid line represents the profitability threshold. The figure demonstrates how the firm's willingness to influence voting varies with τ_t and δ_t.

Formally:

$$\tau_t \leq \overline{\tau}_t(\delta_{t,1}) \implies \tau_t \leq \overline{\tau}_t(\delta_{t,2}), \quad \text{for } \delta_{t,2} > \delta_{t,1}.$$

Therefore:

$$\frac{\partial \overline{\tau}_t}{\partial \delta_t} \geq 0.$$

Generically, under interior solutions (where feasibility and profitability bind at some $\tau_t < 1$), this derivative is strictly positive:

$$\frac{\partial \overline{\tau}_t}{\partial \delta_t} > 0.$$

Thus, higher δ_t permits a larger τ_t before the firm finds it worthwhile to influence the election, completing the proof.

B.11 Proof of Proposition 6

By assumption

$$\mathbb{E}[\delta_t|\mathcal{P}_{t-1} = r] = \psi_\delta(\mathcal{P}_{t-1} = r)\delta_{t-1} + \mathbb{E}[\varepsilon_t^\delta] \geq \delta_{t-1},$$

where the inequality follows because $\psi_\delta(\mathcal{P}_{t-1} = r) \geq 1$ and ε_t^δ is zero in expectation.

From Prop. 4, since $\overline{\tau}_t$ is weakly increasing in δ_t, it follows on FOSD preservation that

$$\mathbb{E}[\overline{\tau}_t|\mathcal{P}_{t-1} = r] \geq \overline{\tau}_{t-1}.$$

Therefore, in expectation, the largest τ_t that the pro-redistribution candidate can set to win the election increases over time.

B.12 Proof of Proposition 7

1. progressive policy on τ_t: Suppose that, under a flat redistribution policy, there exists a feasible tax rate $\hat{\tau}_t < 1$ such that the firm does not engage in influence, either because influence is infeasible or unprofitable. In other words, at least one of the following two conditions does not hold:

$$w_t^{*nr}(\hat{\tau}_t) \leq \overline{w}_t, \tag{B.40}$$

$$\pi_{\ell t}^{nr} \geq (1 - \hat{\tau}_t)\pi_{\ell t}^{*}. \tag{B.41}$$

Consider now the redistribution function

$$\mathcal{R}_t(v_i) = \begin{cases} \frac{R_t}{m_t}, & \text{if } v_i \leq w_t^{*nr}(\hat{\tau}_t), \\ 0, & \text{otherwise.} \end{cases}$$

Under this policy, voter behavior remains unchanged, and the firm still refrains from influencing. Moreover, while the party collects the same total proceeds from the firm, it redistributes only a fraction of them.

Therefore, $\tau_t = \hat{\tau}_t$ remains a viable choice for the pro-redistribution party, ensuring that the firm is either unable or unwilling to influence.

2. optimal redistribution policy: Voters have reservation wages $v_i \sim U[0, A]$ with density m_t/A. Under no–redistribution, the wage component is $\max\{w_t^{nr}, v_i\}$. Under redistribution with the firm's optimal threat, the wage component is $\max\{\underline{w}_t^r, v_i\}$ (with $w_t^{nr} \geq \underline{w}_t^r$), and the party can add a transfer $\mathcal{R}(v_i) \geq 0$.

The party wins if it can make a set $S \subseteq [0, A]$ of measure $|S| = m_t/2$ weakly prefer redistribution:

$$\max\{\underline{w}_t^r, v_i\} + \mathcal{R}(v_i) \;\geq\; \max\{w_t^{nr}, v_i\}, \qquad \forall v_i \in S.$$

Among all such $(S, \mathcal{R})$, the party wants to *minimize* total transfers

$$\text{Cost}(S, \mathcal{R}) = \int_S \mathcal{R}(v_i)\, \frac{m_t}{A}\, dv_i,$$

because a lower cost either permits a higher τ_t (given the tax base) or forces ℓ to raise w_t^{nr} more to overturn the majority. Therefore these two objectives are equivalent to the same *minimum–cost majority* problem.

Step 1: Pointwise minimal transfer. For each type v_i, the smallest transfer that flips (or keeps) the voter is

$$\Delta(v_i) \;\equiv\; [\max\{w_t^{nr}, v_i\} - \max\{\underline{w}_t^r, v_i\}]_+ \;=\; \max\{w_t^{nr}, v_i\} - \max\{\underline{w}_t^r, v_i\},$$

since $w_t^{nr} \geq \underline{w}_t^r$. A simple partition gives

$$\Delta(v_i) = \begin{cases} w_t^{nr} - \underline{w}_t^r, & v_i \leq \underline{w}_t^r, \\ w_t^{nr} - v_i, & \underline{w}_t^r < v_i \leq w_t^{nr}, \\ 0, & v_i > w_t^{nr}. \end{cases}$$

Hence $\Delta(v_i)$ is weakly decreasing in v_i and equals zero for all $v_i > w_t^{nr}$.

Step 2: Which voters to target. The party must select a set S of measure $m_t/2$ and assign at least $\Delta(v_i)$ to each $v_i \in S$. The minimum total cost is therefore

$$\min_{S:\,|S| = m_t/2} \int_S \Delta(v_i)\, \frac{m_t}{A}\, dv.$$

Since $\Delta(\cdot)$ is weakly decreasing, the rearrangement inequality implies the minimizer $S^\star$ is the *upper tail* of the type space:

$$S^\star = [A/2,\ A],$$

because this collects exactly measure $m_t/2$ of the *lowest–cost* voters (those with largest v_i) under the uniform density.

Step 3: Optimal schedule on $S^\star$. The pointwise minimal transfer on $S^\star$ is $\mathcal{R}^\star(v_i) = \Delta(v_i)$ for $v_i \in [A/2, A]$ and $\mathcal{R}^\star(v_i) = 0$ otherwise. Using the piecewise form of $\Delta(v_i)$, this simplifies to

$$\mathcal{R}^\star(v_i) = \begin{cases} 0, & v_i \le \frac{A}{2}, \\ w_t^{nr} - \max\{\underline{w}_t^r, v_i\}, & \frac{A}{2} < v_i \le w_t^{nr}, \\ 0, & v_i > w_t^{nr}, \end{cases}$$

as claimed.

Progressivity only near the median. On $(\frac{A}{2},\ w_t^{nr}]$, we have $\mathcal{R}^\star(v_i) = w_t^{nr} - \max\{\underline{w}_t^r, v_i\}$, which is strictly decreasing in v_i when $v_i > \underline{w}_t^r$ and flat when $v_i \le \underline{w}_t^r$. Outside this interval, $\mathcal{R}^\star(v_i) = 0$. Therefore the schedule is progressive only on the right neighborhood of the median (up to w_t^{nr}), and is identically zero elsewhere.

Optimality for both objectives. Since $\mathcal{R}^\star$ attains the *minimum* transfer mass to secure a majority, it:

(i) frees the largest fiscal capacity for a given $=\tau_t$, hence supports a weakly larger τ_t than any alternative schedule that also secures a majority; and

(ii) for a given τ_t, leaves the least slack on the majority constraint, hence requires the firm to raise w_t^{nr} weakly more to break the majority.

This completes the proof.

3. role of competition: We compare (i) the *minimum total transfer* required to secure a majority under the optimal schedule $\mathcal{R}^\star$, and (ii) the *available redistributive budget* generated by the tax τ_t

under the firm's optimal threat.

Step 1. Minimum transfer required under $\mathcal{R}^\star$. From Part 2, the pointwise minimal transfer needed to flip a type v_i is

$$\Delta(v_i) \;\equiv\; \max\{w_t^{nr}, v_i\} - \max\{\underline{w}_t^r, v_i\},$$

and the minimum-cost majority is obtained by targeting the upper half of types. Hence the *minimum total transfer* required to secure a majority is

$$\text{Cost}_{\min}(w_t^{nr}, \underline{w}_t^r) \;=\; \frac{m_t}{A}\int_{A/2}^{A} \Delta(v_i)\, dv_i \;=\; \frac{m_t}{A}\int_{A/2}^{\min\{w_t^{nr},A\}} (w_t^{nr} - \max\{\underline{w}_t^r, v_i\})\, dv_i,$$

since $\Delta(v_i) = 0$ for $v_i > w_t^{nr}$. Two simple cases are useful and will be enough for a lower bound:

Case (i): $\underline{w}_t^r \le A/2 < w_t^{nr}$. Then $\max\{\underline{w}_t^r, v_i\} = v_i$ on $[A/2, w_t^{nr}]$ and

$$\text{Cost}_{\min} \;=\; \frac{m_t}{A}\int_{A/2}^{w_t^{nr}} (w_t^{nr} - v_i)\, dv_i \;=\; \frac{m_t}{A}\cdot\frac{(w_t^{nr} - A/2)^2}{2}. \tag{B.42}$$

Case (ii): $A/2 < \underline{w}_t^r < w_t^{nr}$. Splitting at $\underline{w}_t^r$ gives

$$\text{Cost}_{\min} \;=\; \frac{m_t}{A}\left[(w_t^{nr} - \underline{w}_t^r)(w_t^r - A/2) \;+\; \frac{(w_t^{nr} - \underline{w}_t^r)^2}{2}\right] \;\ge\; \frac{m_t}{A}\cdot\frac{(w_t^{nr} - A/2)^2}{2},$$

since $w_t^{nr} - A/2 = (w_t^{nr} - \underline{w}_t^r) + (\underline{w}_t^r - A/2)$ and $xy + \frac{x^2}{2} \ge \frac{(x+y)^2}{2} - \frac{y^2}{2} \ge \frac{(x+y)^2}{2} - \frac{(x+y)^2}{2} = 0$ yields the same quadratic lower bound as in (B.42).

In both cases we obtain the common and convenient lower bound

$$\text{Cost}_{\min}(w_t^{nr}, w_t^r) \;\ge\; \frac{m_t}{A}\cdot\frac{([w_t^{nr} - A/2]_+)^2}{2}. \tag{B.43}$$

Step 2. Available budget under the shutdown threat. If redistribution passes, the dominant firm ℓ commits to the shutdown threat, $q_{\ell t}^r = 0$, and the fringe produces at capacity $\underline{q}$ whenever profitable. Hence the equilibrium wage under the threat is

$$\underline{w}_t^r \;=\; \frac{A}{m_t} N \underline{q},$$

and total *before-collection* profits under r are

$$\Pi_t^r \;=\; (p - \underline{w}_t^r)(N\underline{q}) \;=\; p\,N\underline{q} - \frac{A}{m_t}(N\underline{q})^2.$$

Therefore the *redistributive budget* available to the party is

$$\text{Budget}(\tau_t; N\underline{q}) \;=\; \delta_t\,\tau_t\,\Pi_t^r \;=\; \delta_t\,\tau_t\left(p\,N\underline{q} - \frac{A}{m_t}(N\underline{q})^2\right). \tag{B.44}$$

Note that $\text{Budget}(\tau_t; N\underline{q}) = O(N\underline{q})$ as $N\underline{q} \downarrow 0$.

Step 3. Concentration prevents victory for small $N\underline{q}$. Fix $\tau_t \in (0, 1]$ and parameters so that the dominant firm can choose (on the no-redistribution path) a concession production level $q_{\ell t}^{nr} \in (0, \bar{q}]$ that makes the no-redistribution wage satisfy

$$w_t^{nr} \;=\; \frac{A}{m_t}(N\underline{q} + q_{\ell t}^{nr}) \;\geq\; \frac{A}{2} + \varepsilon$$

for some $\varepsilon \in (0, A/2]$.[7]

By (B.43), the *minimum* transfer needed to secure a majority under the optimal schedule is bounded below by a positive constant that depends only on ε:

$$\text{Cost}_{\min} \;\geq\; \frac{m_t}{A} \cdot \frac{\varepsilon^2}{2} \;\equiv\; K(\varepsilon) \;>\; 0.$$

At the same time, by (B.44), the available budget under r satisfies

$$\text{Budget}(\tau_t; N\underline{q}) \;=\; \delta_t\,\tau_t\left(p\,N\underline{q} - \frac{A}{m_t}(N\underline{q})^2\right) \;\xrightarrow[N\underline{q}\downarrow 0]{}\; 0.$$

Therefore, there exists $\bar{n} > 0$ such that for all $N\underline{q} \in (0, \bar{n})$,

$$\text{Budget}(\tau_t; N\underline{q}) \;<\; K(\varepsilon) \;\leq\; \text{Cost}_{\min}.$$

In words: when the fringe sector is sufficiently small (high concentration), the collection under the shutdown threat is too small to finance the minimum transfers required to secure a majority, even under the *optimal* targeting rule $\mathcal{R}^\star$. Hence the pro-redistribution candidate cannot win the election.

[7] This is without loss whenever the firm's capacity $\bar{q}$ allows $A(m_t)^{-1}(N\underline{q} + \bar{q}) \geq A/2 + \varepsilon$. Intuitively, the larger is $\bar{q}$ (or the smaller is m_t), the easier for ℓ to raise w_t^{nr} above the median.

Online Appendix

Table of Contents

C Manipulating beliefs **IA – 2**

D Commitment microfoundations **IA – 2**

D.1 Commitment via Managerial Incentives . . . . . IA – 2

D.2 Commitment via Reputation . . . . . IA – 4

D.3 Commitment via Partisan Beliefs . . . . . IA – 6

C Manipulating beliefs

D Commitment microfoundations

D.1 Commitment via Managerial Incentives

In this section, we describe how ℓ can make its production contingent on the voting outcome through the design of managerial incentives, even though it cannot directly commit to a production menu based on whether the policy passes the vote.

We consider a variation of the model where, at the beginning of each period, ℓ's shareholders (through the board of directors) hire a manager to run the firm, publicly signing a compensation contract that is in place throughout the period. In this version of the model, voters cast their vote on the policy before firms make their production choices. Yet, they understand how the manager chooses the firm's production to maximize its pay, so they can correctly anticipate how its production choices will depend on the voting outcome.

If the manager accepts the contract, it observes the voting outcome $\mathcal{P}_t$ and chooses $q_{\ell t}$ to maximize its pay, ϕ_t, which is a function of the firm's after-tax profits

$$\pi_{\ell t}^{after-tax} = (1 - \tau_t \mathbb{1}_{\mathcal{P}_t})\pi_{\ell t}, \tag{D.1}$$

where $\mathbb{1}_{\mathcal{P}_t}$ is one if redistribution passes the vote, and 0 otherwise, and its outside option is $\overline{u}$.

In what follows, we describe how ℓ's shareholders can design the function $\phi_t(\pi_{\ell t}^{after-tax})$ at the beginning of the game in a way that, for a given $\mathcal{P}_t$, the manager makes the same production choices as in the main model.

First, suppose the shareholders want the manager to produce like in the benchmark model. In this case, they offer a simple contract

$$\phi_t = \alpha * \pi_{\ell t}^{after-tax}, \tag{D.2}$$

where α is such that $\alpha * (1 - \tau_t)\pi_{\ell t}^* = \overline{u}$.

Under the contract in Eqn. (D.2), the manager's pay is linear in the firm's after-tax profit. So,

the manager chooses $q_{\ell t}$ to maximize $\pi_{\ell t}$ regardless of the voting outcome, just like the firm does in the benchmark of the main model. So, the manager's production choice is $q^*_{\ell t}$ for both $\mathcal{P}_t = r$ and $\mathcal{P}_t = r$, which means that equilibrium wages do not depend on the policy regime and, thus, all voters vote in favor of redistribution. The policy then always passes in equilibrium, and the manager's pay is $\alpha * (1 - \tau_t)\pi^*_{\ell t}$.

Now, suppose the shareholders want to influence voting, so they have to design ϕ_t so that the manager wants to replicate the equilibrium menu in the main model (Proposition 1). To ensure the manager always chooses $q_{\ell t} = 0$ when redistribution passes, and $q_{\ell t} = q^{nr}_{\ell t}$ when it does not, they offer the following contract

$$\phi_t = \begin{cases} \overline{u} & \text{if} \quad \pi^{after-tax}_{\ell t} \geq \pi_{\ell t}(q^{nr}_{\ell t}); \\ 0 & \text{otherwise.} \end{cases} \tag{D.3}$$

Under the contract in Eqn. (D.3), the manager is paid its reservation value if the firm generates an after-tax profit weakly larger than $q^{nr}_{\ell t}$, and nothing otherwise. Since shareholders only want to influence voting when $\pi_{\ell t}(q^{nr}_{\ell t}) > (1 - \tau_t)\pi^*_{\ell t}$, the manager is never paid if the policy passes the vote, because the largest after-tax profit in that case would not cross the threshold to get paid. So, conditional on $\mathcal{P}_t = r$, the manager chooses $q_{\ell t} = 0$.

Conditional on $\mathcal{P}_t = nr$, the manager can get paid if it chooses $q_{\ell t} = q^{nr}_{\ell t}$, since in that case the firm is not taxed and $\pi^{after-tax}_{\ell t} = \pi_{\ell t}(q^{nr}_{\ell t})$. So, conditional on $\mathcal{P}_t = nr$, the manager chooses $q_{\ell t} = q^{nr}_{\ell t}$.

Notice that the manager always receives $\overline{u}$ in equilibrium, so having to pay the manager does not change the shareholder preferences on when to influence voting or not. It follows that shareholders can implement the same equilibrium outcomes as in the main model by offering the contract in Eqn. (D.2) when influencing voting is either not feasible or not profitable, and the contract in Eqn. (D.3) otherwise.

D.2 Commitment via Reputation

In this section, we describe how ℓ can make its production contingent on the voting outcome through its reputation for influencing elections, even though it cannot directly commit to a production menu based on whether the policy passes the vote.

We consider a variation of the model where, with some probability $\beta \in (0, 1)$, the firm continues to live also in the next period, and make choices based on the discounted value of its current and future profits in each period. We model reputation via trigger strategies: In an equilibrium with electoral influence, the agents expect the firm to influence voting in each period it is alive. If the firm deviates from the equilibrium strategy in a certain period, the agents *punish* the firm by playing like in the benchmark model in all consecutive periods.

Notice that, in this version of the model, the firm cannot be short-lived, so it would take into consideration how its choices will affect the parameters in the next periods (δ_t and m_t). For simplicity, we assume that the parameters are constant in each period. Considering the dynamics of δ_t in Eqn. (9) would *reinforce* the firm's incentives to influence the elections, as the firm internalizes the weakening of institutions we describe in Proposition 4. Considering the dynamics of m_t in Eqn. (10) would *weaken* the firm's incentives to influence the elections, as the firm internalizes the declines in labor supply we describe in Proposition 5. Agents can still be short-lived, or choose only based on their current utility, as the way they play in the equilibrium is still a best-response to their conjecture about how the firm will behave within the period.

Since the parameters stay constant, if it is profitable to influence voting at time t, it is also profitable to do it at time $t + 1$, and so on and so forth. So, the firm chooses based on the discounted value of its future payoffs.

More formally, on the equilibrium path, the firm influences the election in every period and earns profits $\pi_\ell(q^{nr})$ each period (where q^{nr} is the quantity chosen when the firm successfully influences the vote and there is no redistribution). The firm's equilibrium value under perpetual influence is:

$$V^{\text{inf}} = \frac{\pi_\ell(q^{nr})}{1-\beta}.$$

If the firm deviates and voters vote against the firm and therefore the firms produce as in the benchmark without making the promised concessions—agents revert to playing the benchmark in all future periods. The firm gains $\pi_\ell(q^*)$ immediately (where q^* is the benchmark production level without influence), but thereafter earns only

$$V^{\text{punish}} = \frac{\beta}{1-\beta}(1-\tau)\pi_\ell(q^*),$$

where $(1-\tau)\pi_\ell(q^*)$ is the firm's profit under redistribution.

Thus, the condition for the firm to sustain the influence equilibrium via reputation is:

$$\frac{\pi_\ell(q^{nr})}{1-\beta} \geq \pi_\ell(q^*) + \frac{\beta}{1-\beta}(1-\tau)\pi_\ell(q^*).$$

Rearranging:

$$\pi_\ell(q^{nr}) \geq (1-\beta)\pi_\ell(q^*) + \beta(1-\tau)\pi_\ell(q^*),$$

or equivalently,

$$\pi_\ell(q^{nr}) \geq \pi_\ell(q^*) - \beta\tau\pi_\ell(q^*).$$

This inequality shows that the firm's willingness to influence depends on how profitable the influence strategy is relative to the benchmark, adjusted for the firm's patience β and the firm's disutility of redistribution τ.

Proposition 8 (Reputational equilibrium) *If $\pi_\ell(q^{nr}) > (1-\tau)\pi_\ell(q^*)$ and influencing voting is feasible, then there exists $\bar{\beta} \in (0,1)$ such that for all $\beta \geq \bar{\beta}$, the firm can maintain electoral influence through reputation.*

This condition indicates that the more patient the firm (higher β), the easier it is to maintain influence via reputation, since future punishment carries more weight. Similarly, the stronger the redistributive policy (higher τ), the greater the firm's gain from influencing the vote, and thus the stronger the reputational equilibrium.

D.3 Commitment via Partisan Beliefs