A Theory of Clientelistic Politics versus Programmatic Politics\textsuperscript{1}

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Abstract

We present a theory of clientelistic politics and its contrast with programmatic politics. In the latter two opportunistic candidates in a Downsian electoral contest commit to public goods and promised transfers to specified voter groups. Clientelism arises when some voters occupy an informal sector with insecure entitlements to transfers. Delivery of these transfers can be conditioned by elected officials on expression of political support. ‘Programmatic’ equilibria involve policy convergence and close elections if candidates are equally popular ex ante. If the informal sector is large enough, these equilibria are locally unstable, and multiple asymmetric ‘clientelistic’ locally stable equilibria exist. Clientelistic equilibria generate policy divergence, lower supply of public goods by both parties, higher inequality in vote shares and political hysteresis. Comparative statics and welfare properties of the two classes of equilibria are derived, and related to existing empirical evidence.

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1 Introduction

The pervasiveness of vote-buying and clientelistic ‘machine’ politics in traditional societies has been extensively documented in various case-studies and political ethnographies. Besides studies from 19th and 20th century USA, UK and Italy (Stanton (2003), Kitchelt-Wilkinson (2007), Chubb (1982), Golden (2000)), they include contemporary practices in many middle and low income countries, such as vote buying in Argentina (Stokes (2005)), practices followed by PRI operatives in Mexico (Rizzo (2015)) or political brokers in a Mumbai municipal ward election (Bjorkman (2013)). While clientelism has sometimes been hailed for its redistributive impact and filling in gaps in social services provided by the state, many writers believe the broader systemic consequences to undermine democracy and development in a variety of ways: raising private transfers at the expense of lowering public goods, accountability of elected officials and reducing political competition (e.g., see Stokes (2007)). This paper seeks to develop a simple theory which formalizes these heuristic arguments.

A systematic analysis requires a precise definition of clientilism that highlights its distinctive features, allowing derivation of analytical propositions that can be empirically tested and allow inferences concerning its normative consequences. Clientelism refers to discretionary provision of private or local public goods or privileges by government officials and political parties to particular groups of citizens, in exchange for their votes. As Hicken (2011) argues, the key element is the contingent and reciprocal nature of the exchange, wherein state benefits are delivered selectively by elected officials to those citizens it believes supported them in the recent past. We shall focus on this definition, rather than vote-buying via upfront or pre-election unconditional transfers.

Our principal focus is in understanding how clientelistic politics differs from programmatic politics (where delivery of public services to citizens is not conditioned on their political support). This distinction has often been blurred in the literature. Policy platforms in programmatic politics may be designed by political contestants to influence (future) political support from specific constituencies via pork-barrel programs. The line that divides pork-barrel politics from the wider definition of clientelism therefore seems rather thin. In the theory we develop, we adopt a narrower definition of clientelism:

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4See Hicken (2011) for an extensive survey of these studies.
the key issue is whether the receipt of benefits by individual citizens is at the discretion of elected officials. The hallmark of clientelism is the discretionary and informal nature of the decision made by a political agent to deliver a benefit to any given citizen. This enables political agents to incentivize citizens to provide them political support. By contrast, programmatic politics involves policies such as social security with clearly defined eligibility rules based on publicly observable characteristics such as location, age, gender, occupation, asset ownership, or citizenship. This entitlement is not subject to discretion exercised by any political agent, elected official or their representatives. Political competition within programmatic politics takes the form of rival contestants presenting policy platforms represented by rules defining citizen entitlements. In clientelism, formal entitlements even if they exist may not be honored by elected officials with respect to citizens they believed did not support them politically. As our model demonstrates, this distinction can have profound consequences for the outcomes of political competition.

Existing theoretical models of political economy have mostly focused on distortions that can result within programmatic politics. The list includes populism (a la Downs, such as Alesina-Rodrik (1994)), limited commitment (Besley-Coate (1997), Dixit-Londregan (1995)), non-issue-based loyalties and swing voters (Dixit-Londregan (1996)), capture by elites or special interest groups (Acemoglu-Robinson (2008), Grossman-Helpman (1995)), unevenness of political turnout or awareness (Benabou (2000)) or voter coordination problems (Myerson (1993))). There are relatively few formal models of clientelistic politics in the literature. Similar to the papers cited above, our model is static, and thereby does not address important questions concerning the dynamics of clientelism.

This paper develops a Downsian model of probabilistic voting and electoral competition between two parties, which embeds the Dixit-Londregan (1996) theory of programmatic pork-barrel politics and previous theories of clientelism (Bardhan-Mookherjee (2012), Sarkar (2014)) as special cases. It shows that clientelism generates greater resource allocation biases in favor of private transfers and against public goods (or governance effort of incumbents). It illustrates the role of the informal sector, and a number of unique consequences of clientelism, such as non-convergence of policy platforms across ex ante identical parties, ‘contagion’ in the form of multiple asymmetric equilibria with lop-sided electoral competition, incumbency advantages and perverse incentives for incumbents to prevent the growth of the formal sector or living standards of citizens.
The paper is structured as follows. Section 2 describes the range of mechanisms used by political operatives to monitor how specific voters vote in order to target clientelistic benefits. Section 3 presents the model and main results, while Section 4 concludes by discussing related literature.

2 Institutional Setting: Enforcement Mechanisms

Any description of political clientelism has to explain how votes can be bought in democracies with secret ballots. In the narrower definition of clientelism, benefits are delivered conditional on their voting behavior; hence party operatives need to verify how a client voted. The broader definition includes vote buying via unconditional pre-election transfers: how do these affect incentives of recipients to vote subsequently? The literature has provided a number of answers to this question.

In many contexts, the secret ballot is not properly enforced: party operatives can monitor votes cast by various means. Stokes (2006) describes how (marked) ballots can be handed out by party operatives; this is still legal in Argentina, Uruguay and Panama. Modern technology can sometimes be harnessed creatively: there are informal accounts from southern Italy how voters are required to take a picture of their cast ballot on their cell phones and show these to party operatives in order to claim clientelistic benefits.

More sophisticated mechanisms rely on public signals of political support to their patrons by individual voters (e.g., in the form of participation in election rallies), as elaborated by Sarkar (2014) and incorporated in the model in Section 3. Each citizen is required to choose at one party or candidate to declare public support for. In turn parties would restrict benefit delivery among those expressing it support. Citizens would then have a private incentive to vote for their chosen patrons, thereby obviating the need for any monitoring of their vote by the parties.

Various accounts of clientelism assign a key role to intermediaries that act as brokers for the political transaction, in a hierarchical arrangement between political parties, brokers and voter groups. Parties deliver a given stock of benefits to brokers in exchange for delivery of votes from a specific group of voters. The broker distributes these benefits within the group on the basis of fine-tuned long-term relationships with individual voters, which enables
them to establish their credibility and identify specific needs and preferences of individual citizens. In-depth interviews with political operatives and citizens by Bjorkman (2013) in the context of an Indian city and Rizzo (2015) in the context of Mexican elections reveal how brokers develop bonds of reciprocity with citizens and a reputation for providing them help and access to government services. As Rizzo argues, “brokers are not only instrumental in helping parties win elections, but in helping governments govern”. Empirical evidence consistent with these accounts of political brokerage is provided by Larraguy, Marshall and Querebin (2015), who argue that politicians need to monitor performance of brokers in delivering promised votes by examining vote outcomes in the most closely matched constituency. They provide detailed evidence from Mexico that the PRI achieved greater political support in rural communal land areas with a better match between the jurisdictions of the communal areas controlled by brokers and electoral constituencies. Our model abstracts from the role of brokers for the sake of simplicity; see Marcolongo (2017) for a theory of brokers mediating clientelistic transactions.

3 The Model

There are a number of voter groups \( i = 1, \ldots, I \) with positive demographic weights \( \alpha_i \) that sum to one. The number of citizens is large, so that strategic considerations associated with the likelihood of any single citizen’s vote being pivotal will be negligible; we shall assume voters assign zero probability to this event. Nevertheless we will restrict attention to equilibria involving weakly undominated strategies (where the state space includes zero probability events), which insures that formal sector citizens will vote sincerely.\(^5\) Specifically, given that voters in the formal sector do not expect their vote to count in determining the election outcome at all, their expected utility does not depend on how they cast their vote. However, in the (zero probability) event that they are pivotal, they would be better off voting for the party that they prefer, which is what they decide to do. For voters in the informal sector, it will turn out that their expected utility will depend on how they

\(^5\)See Besley and Coate (1997) for a theory with a finite number of voters, based on equilibria with undominated strategies. The corresponding equilibrium concept in the game with a ‘large’ number of voters can be rationalized as the set of limit points of the corresponding set of equilibria in undominated strategies of a sequence of games with finite number of voters which tends to infinity.
vote, so they will vote strategically.

Each citizen group is defined by verifiable characteristics such as location, occupation, education and citizenship status which affect incomes and can be used as a basis of differentiation in delivering public benefits. All citizens in group \( i \) have the same pre-tax income \( y_i \). They receive private transfer \( t_i \) from the government, and additionally derive utility from a public good \( g \), resulting in utility \( u(y_i + t_i) + v(g) \), where \( u \) and \( v \) are smooth, strictly increasing, strictly concave functions satisfying Inada conditions that ensure interior allocations.

There are two competing parties or candidates \( k = L, R \). Citizens within any group also exhibit heterogenous non-policy-based loyalty \( \epsilon_i \) to party \( L \), relative to party \( R \), which is uniformly distributed with bias \( b_i \) and constant density \( s_i \) which represents the swing propensity of group \( i \). We assume \( s_i \) is small enough for each group that vote share expressions given below will be well-defined for the relevant range of policies chosen by the parties.

In Downsian fashion, we assume that prior to the election each party \( k \) selects a policy platform defined by private transfers \( \{t^k_i, i = 1, \ldots, I\} \) and public good \( g^k \) which has to respect the budget constraint \( \sum_i \alpha_i t^k_i (1 + \lambda_i) + cg^k \leq B \), where \( B \) denotes an exogenous expenditure limit, \( \lambda_i \) is a leakage rate in delivering private benefits to group \( i \), and \( c \) is the cost of supplying the public good. Each party is purely opportunistic, and selects an electoral platform to maximize the probability of winning. Note that delivery leakage rates do not vary across parties. As pointed out by Dixit and Londregan, an extension where the leakage rate varies parties would induce policy non-convergence in the context of programmatic politics. We abstract from such sources of policy divergence, so as to focus on the role of clientelism.

An exogenous fraction \( \theta \) of every voter group belongs to the formal sector, officially identified as citizens of group \( i \) (on the basis of legal documents that they own), who are thereby entitled to receiving public benefits earmarked for group \( i \) citizens. Party \( k \) is thereby committed to delivering \( t^k_i \) to group \( i \) citizens in the formal sector. The remaining citizens who constitute the informal sector have no such entitlement. Delivery of benefits to citizens in the informal sector is entirely at the discretion of the party in power. In practice \( \theta \) is likely to vary across citizen groups. This can be easily be added to the model, at the cost of complicating it without altering any of the essential results.

This model reduces to the Dixit-Londregan model of pork-barrel politics when \( \theta = 1 \), i.e., all citizens are in the formal sector. When \( \theta < 1 \), there is
scope for clientelistic politics to play a role. Hence the distance of $\theta$ from 1 is a measure of the relative importance of clientelism vis-a-vis programmatic politics.

When $\theta < 1$ clientelism operates as follows. Prior to the election, each party holds a rally. Each citizen decides whether to attend the rally of any given party at zero cost. Attendance is observable by both parties, who can condition delivery of benefits to citizens in the informal sector on that basis. Specifically, party $k$ if elected will deliver $t^k_i$ only to those informal sector group $i$ citizens that attend its pre-election rally and do not at the same time attend the rally of the competing party.

The timing of moves is as follows. First, each party announces its policy platform. Next, each party organizes a rally; each citizen decides which of these to attend. At the third stage, citizens cast a vote for one of the two parties. Finally, votes are counted. Party $L$ wins the election with probability $\phi(V^L)$, where $V^L$ denotes the vote share of party $L$, and $\phi$ is a strictly increasing and smooth function taking values in an interval $[p, \bar{p}]$ where $1 > \bar{p} > p > 0$. This function includes the effect of random shocks to vote turnout or counting errors. The election is not intrinsically biased in favor of either party, so $1 - \phi(V^L) = \phi(1 - V^L)$ for every $V^L$, which in particular implies $\phi(\frac{1}{2}) = \frac{1}{2}$.

We restrict attention to weak Perfect Bayesian equilibria of this game, where players restrict attention to undominated strategies. This implies that at the third stage, formal sector citizens in group $i$ will vote sincerely, i.e., they will vote for party $L$ if their loyalty $\epsilon_i$ to the party is large enough:

$$u(y_i + t^L_i) + v(g^L) + \epsilon_i > u(y_i + t^R_i) + v(g^R)$$

(1)

implying that the vote share of this party from the formal sector equals

$$\frac{1}{2} + \sum \alpha^i s^i b^i + \sum \alpha^i s^i \{u(y_i + t^L_i) + v(g^L) - u(y_i + t^R_i) - v(g^R)\}$$

(2)

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6 We abstract here from the cost of attending or organizing rallies. In practice, these costs can be substantial, thereby adding to the welfare costs of clientelism.

7 These delivery promises are assumed to be credible, being mediated through local brokers with credibility among citizens and who monitor attendance at rallies. The implications of imperfect credibility will be considered later. Given credibility of threats or promises to condition benefits on rally attendance, it is in the interest of each party to threaten to deny benefits to voters that do not attend its own rally or attend the rival’s rally, since such voters would not be subsequently as motivated to vote for them.
As these citizens are entitled to the announced benefits, their rally attendance decisions are irrelevant.

Citizens in the informal sector decide at the second stage of the game which political rally to attend. A citizen attends the rally of party $L$ (resp. $R$) expects to receive $t^L_i$ (resp. $t^R_i$) if $L$ (resp. $R$) wins the election, and no transfers if $R$ (resp, $L$) wins instead. Given the restriction to undominated strategies, each citizen has an incentive to vote for the party whose rally they attended at stage three. This obviates any need for parties to monitor how citizens vote. The size of the informal sector drives attendance in pre-election rallies; relative attendance in the rallies of the two parties are good predictors of their subsequent vote shares.

Here clientelism is self-enforcing despite the static nature of the model. Alternative enforcement mechanisms would require means for party operatives to monitor votes of specific citizens and condition delivery of benefits on this, as in the repeated game model of Stokes (2005). In such a setting, the quid pro quo between parties and citizens, in which the party delivers benefits to its (perceived) supporters and citizens vote for the party they perceive as their patrons is sustained via punishment threats of withdrawal of support following any observable breach by either side. Such repeated game strategies can obviously be sustained only for recurring benefits. In the absence of any internalized reciprocity norms, they cannot be sustained via delivery of one-time benefits.

An informal sector citizen in group $i$ will decide to support party $L$ if
\[ p^L[u(y_i+t^L_i)+v(g^L)]+(1-p^L)[u(y_i)+v(g^R)]+\epsilon_i > p^L[u(y_i)+v(g^L)]+(1-p^L)[u(y_i+t^R_i)+v(g^R)] \] (3)

where $p^L$ denotes the citizen’s prior probability that $L$ will win. This implies that the share of informal sector citizens that will vote for $L$ is
\[ \frac{1}{2} + \sum_i \alpha_i s_i b_i + \sum_i \alpha_i s_i \{p^L[u(y_i+t^L_i)-u(y_i)] - (1-p^L)[u(y_i+t^R_i)-u(y_i)]\} \] (4)

For these citizens, not attending any rally, or attending both rallies is dominated by attending one of the two rallies.

They do however need to monitor voting turnout, otherwise voters will have no positive incentive to go to vote. In practice, party operatives do monitor, and often provide explicit incentives to their supporters to turn out to vote, while discouraging supporters of their political rivals from voting.

Some theories of political rallies are based on their role in signaling respective popularity to one another and undecided voters. We abstract from such signaling motives, and focus on the role of clientelism instead.
Note that this expression is independent of public goods promised by either party! This is in stark contrast to vote shares in the formal sector. The reason is that decisions by informal sector citizens regarding which party to support (i.e., attend the rally, and then vote) has a direct instrumental consequence for their own welfare, conditional on any given election outcome. For instance, they would lose access to services provided by the state if the party they supported lost the election, unlike formal sector residents. Informal sector residents, particularly those who are poor and heavily reliant on state services, then face a high stake choice regarding which party to support: they would want to back the eventual winner. This requires them to guess how other voters will vote. The instrumental consequences for their own private transfers would outweigh the non-existent likelihood that their vote would be pivotal; for this reason informal sector vote shares do not depend on public good components of the electoral platforms. Formal sector residents by contrast are protected against the risk of losing access to state services, hence they vote sincerely — whence public goods promised by the parties do play a role.

The dependence of vote shares in the informal sector on voter beliefs regarding the eventual winner of the election, is a feature of clientelism that differentiates it qualitatively from a model of programmatic politics. The effectiveness of private transfers promised in generating votes for any given party will depend on voter beliefs: a party in a stronger competitive position will be able to extract more votes from a given increase in these transfers to any group. In equilibrium, voter beliefs will be self-fulfilling. As we show below, this gives rise to the possibility of multiple ‘sunspots’ equilibria if the informal sector is large enough.

Aggregating across the formal and informal sectors, the vote share of party $L$ will be

\[
V^L(\pi^L, \pi^R; p^L) = \frac{1}{2} + \sum_i \alpha_i s_i b_i + \sum_i \alpha_i s_i \{\theta[u(y_i + t^L_i) + v(g^L)] + (1 - \theta)p^L[u(y_i + t^L_i) - u(y_i)] - \theta[u(y_i + t^R_i) + v(g^R)] - (1 - \theta)(1 - p^L)[u(y_i + t^R_i) - u(y_i)]\}
\]

where $\pi^k \equiv \{t^k_i, g^k\}$ denotes the platform of party $k$, and $p^L$ the voters expectation concerning party L’s winning probability.

Since each party seeks to maximize its vote share, party $k = L, R$ will

\footnote{This is similar to the ‘contagious voting’ phenomenon in Sarkar (2014).}
select its policy platform to maximize
\[
\sum_i \alpha_is_i\{\theta[u(y_i + t^k_i) + v(g^L)] + (1 - \theta)p^k[u(y_i + t^k_i) - u(y_i)]\}
\] (5)
subject to the budget constraint \(\sum_i \alpha_i(1 + \lambda_i)t^k_i + cg^k \leq B\), where \(p^R \equiv 1 - p^L\). In this exercise, each party takes voter assessments of their respective electoral prospects \(p^L, 1 - p^L\) as given. Let the best response of each party to voter expectation \(p^L\) be denoted \(\pi^k(p^L)\).

An equilibrium is defined by the condition that
\[
p^L = \psi(p^L) \equiv \phi(V^L(\pi^L(p^L), \pi^R(p^L); p^L))
\] (6)
It is easy to verify that \(\psi(.)\) is strictly increasing and continuous. Hence an equilibrium always exists. Properties of equilibria are characterized in the next result.

**Proposition 1** In an equilibrium in which \(L\) wins with probability \(p^L\), the platform \((\{t^k_i\}, g^k)\) of party \(k\) will be chosen to maximize
\[
\sum_i \alpha_is_i\{[1 + p^k(1 - \theta)]u(y_i + t_i) + v(g)\}
\] (7)
subject to the government budget constraint, where \(p^R \equiv 1 - p^L\).

This shows that the implicit welfare weight assigned by party \(k\) to private transfers to group \(i\) voters relative to the public good depends on three terms: \(s_i\), the swing propensity of this group, \(p^k\) the odds of party \(k\) winning, and \((1 - \theta)/(\theta)\), which is decreasing in the relative size of the formal sector. In the case of zero clientelism with \(\theta = 1\), only the swing propensity matters, as in the Dixit-Londregan model. In the presence of clientelism, both parties assign a higher weight to private transfers relative to the public good. The extent of this bias increases with the relative size of the informal sector. It is also greater for the party that has a higher likelihood of winning. The magnitude of the bias becomes infinitely large as \(\theta\) approaches zero, whence the supply of the public good approaches zero.

Proposition 1 characterizes equilibrium policies conditional on given beliefs of voters regarding which party will win. The next result describes equilibrium beliefs \(p^L\) which are fixed points of the map \(\psi(p^L)\) on \([0, 1]\). For
simplicity we focus on a symmetric contest, where both parties are equally popular \textit{ex ante}. We also focus on equilibria that are locally stable, satisfying $\psi'(p^L) \leq \frac{1}{2}$. If this inequality is reversed, a small exogenous perturbation of voter beliefs from the equilibrium will cause parties to select new policies that will reinforce the initial asymmetry in vote shares, leading further away from the initial equilibrium. Local stability pertains to dynamic properties of the discrete dynamical system $p^L_{t+1} = \psi(p^L_t)$, i.e., where parties and voters form expectations based on outcomes at the previous period.\footnote{The proof is straightforward: here is an outline. Part (a) follows since $p^L = \frac{1}{2}$ implies (given Proposition 1) that both parties will select the same policies, which in turn implies that they will earn equal vote shares since $b = 0$. Parts (b) and (c) follows upon calculating the slope of $\psi(p^L)$, where Proposition 1 allows the Envelope Theorem to be applied to ignore the effects of changes in $p^L$ on equilibrium policies.}

**Proposition 2** Suppose the two parties are equally popular \textit{ex ante}, i.e., $b_i = 0$ for all $i$.

(a) There is an equilibrium with $p^L = \frac{1}{2}$ and policy convergence.

(b) This equilibrium is locally unstable if

$$\phi'(\frac{1}{2}) > \phi^* \equiv \frac{1}{2(1 - \theta) \sum_i \alpha_i s_i [u(y_i + t_i^*) - u(y_i)]}$$

and locally stable if the direction of the inequality is reversed (where $t_i^*$ denotes the common policy resulting in the symmetric equilibrium, i.e., the solution to (7) with $p^L = \frac{1}{2}$).

(c) If

$$\phi'(\frac{1}{2}) > \frac{1}{2 \sum_i \alpha_i s_i [u(y_i + t_i^*) - u(y_i)]}$$

there exists $\theta^* \in (0, 1)$ such that the symmetric equilibrium is locally unstable. The condition $\theta < \theta^*$ is necessary and sufficient for existence of an asymmetric locally stable equilibrium with $p^L = \gamma$ and another with $p^L = 1 - \gamma$, where $\gamma \neq \frac{1}{2}$.

While there always exists a symmetric equilibrium involving intense competition ($p^L = \frac{1}{2}$) and convergent policies, this equilibrium is locally stable if the formal sector is large enough. But if (9) holds and the formal sector
is small enough, the symmetric equilibrium is unstable. When clientelism is dominant in this sense, the only stable equilibria involve lop-sided competition, and lack of policy convergence. These can be referred to as ‘clientilistic equilibria’. The favored winner will exhibit a larger bias in favor of private transfers against the public good, compared both to the outcome of the symmetric equilibrium, and to the policy chosen by its competitor. And there will be multiple asymmetric equilibria with self-fulfilling expectations — a ‘contagion’ property.

By contrast, when \( \theta \) approaches one and programmatic politics dominates, voter expectations play a shrinking role, and policies of both parties in every equilibrium converge to the common Downsian-Dixit-Londregan platform \( \{t^*_i\}, g^* \) which maximizes

\[
\sum_i \alpha_i s_i [u(y_i + t_i) + v(g)]
\]

subject to the budget constraint. This equilibrium — which may be called the ‘programmatic equilibrium’ — features policy convergence, higher public goods and intense political competition compared to clientilistic equilibria.

In dynamic extensions of the model along the lines of Kandori, Mailath and Rob (1993) where players are subject to inertia, myopia and small random mutations in behavior, clientelistic equilibria can be shown to exhibit greater hysteresis and lower political turnover: incumbents will not be unseated by random shocks in turnout or popularity, provided these are not too large. However a sufficiently large shock which crosses a tipping point will shift the system into the basin of attraction of a different stable equilibrium where the other party wins the election by a large margin, following which the latter will continue to remain in power for a long time. Clientelism exhibits ‘pro-incumbency’ bias in this sense. In contrast the programmatic equilibrium exhibit less persistence: when the two parties are equally popular ex ante, there will be more frequent alternation between contesting parties, driven by small shocks to turnout or popularity.

Other interesting results concerning differences in comparative statics and welfare properties of the two classes of equilibria:

(a) Redistribution and Welfare Comparisons: If utility of the private good exhibits constant elasticity \( u(y) = y^{1-\sigma} \) with \( \sigma > 0, \neq 1 \), equilibrium policy platforms of either party \( k \) in clientelistic and programmatic
equilibria generate similar distributions of post-transfer incomes:

\[ \frac{y_i + t_i^k}{y_j + t_j^k} = k_{ij} \equiv \left[ \frac{\delta_i}{\delta_j} \right]^\frac{1}{2} \tag{11} \]

where \( \delta_i \equiv \frac{s_i}{1 + \lambda_i} \) denotes the distributional characteristic of group \( i \), representing the bias imparted to the welfare of group \( i \) owing to its swing propensity and the leakage involved in transferring resources to this group.\(^{13}\) Transfers of the private good can exhibit either a progressive or regressive bias, depending on how distributional characteristics correlate with pre-transfer incomes. If they are negatively correlated, or are uncorrelated with income, we say that transfers exhibit a progressive bias; otherwise the bias is regressive. Transfers are progressive if all groups share the same distributional characteristic (e.g., are equally prone to swing and leakages), since post-transfer consumptions are equalized across all groups. However, if poorer groups are less prone to swing and/or transfers to the poor exhibit more leakages (as is often the case), this progressive bias is moderated and can even be reversed.

The key point to note is that the pattern of distribution of the private transfers does not differ across parties, or type of equilibria. However, clientelistic equilibria involve larger private transfers to all groups (with less spending allocated to private goods). Hence in the presence of progressive bias in private transfers, clientelistic equilibria exhibit higher (absolute amounts of) redistributive private transfers. A more comprehensive measure of redistribution however would be based on utility rather than private good consumption alone. Since the public good generates the same utility to all groups, it follows that (with progressive bias) a total-utility-based measure would generate greater pro-poor redistribution in a clientelistic equilibrium. Utilitarian welfare comparisons between clientelistic and programmatic equilibria are ambiguous in general (even with progressive bias) since the former are associated with greater redistribution and lower supply of public goods. However if public goods matter enough in utility relative to private transfers, clientelism will be associated with lower welfare.

(b) Effects of Increasing Size of the Formal Sector: One measure of institutional development is \( \theta \), the size of the formal sector. Starting from a

\(^{13}\)This result follows straightforwardly from Proposition 1.
clientelistic equilibrium, political competition will become more intense (differences in electoral platforms and vote shares will narrow); both parties will provide more public goods and less private transfers.

(c) **Effects of Asymmetric Popularity:** An increase in bias $b_i$ of voters in favor of party $L$ will tilt the election in favor of party $L$, under either type of equilibrium. The programmatic equilibrium will continue to exhibit policy convergence, and the convergent policy platform will be unaffected, while party $L$ will be elected with higher probability.\(^{14}\) In contrast, equilibrium policies in clientelism will be affected: if the ‘incumbent’ party becomes more popular for exogenous reasons, this party will alter its policy in favor of larger private transfers and lower public goods, while the challenger’s policy will move in the opposite direction. These changes in policies will compound the effects of the exogenous change in popularity, and further skew the electoral advantage in favor of the incumbent. Hence lower political competition adversely affects the supply of public goods under clientelism, unlike the case of programmatic politics.

### 4 Related Literature

The main feature distinguishing this paper from other theoretical papers on clientelism and vote-buying is our focus on when clientelism arises instead of programmatic politics, and the features that distinguish them. Dal-Bo (2007) studies the effect of buying of votes of committee members (in the form of bribes contingent on voting patterns) by an external interested party. Dekel, Jackson and Wolinsky (2008) examine the differences between upfront unconditional payments made by rival political candidates to voters, and payments conditional on the candidate winning. Another contrast is that both these papers examine contexts of direct democracies (where policy outcomes are determined entirely by votes cast) rather than indirect democracies (where voters elect politicians and delegate policy decisions to them).

For indirect democracies, Stokes (2005) provides a model of repeated interaction between voters and a single party ‘machine’ facing a single passive

\(^{14}\)Conditions (8) and (9) for local instability of the convergent equilibrium will be modified slightly, with the left-hand-side being evaluated at the equilibrium probability of winning instead of $\frac{1}{2}$.
challenger. The party machine offers upfront payments to voters, in exchange for promises by the latter to vote for them. Actual votes are monitored with some probability by party operatives: a voter reneging on a promise to vote for the incumbent will be punished by being denied benefits forever thereafter. Her theory predicts votes of ‘swing’ voters would be more likely to be purchased rather than core supporters of the incumbent or the challenger; poor voters in low population, remote communities with strong social networks are more likely to be targeted. These predictions are tested empirically using data from an Argentinian province. Robinson and Verdier (2013) also present a model where an incumbent (facing a passive challenger) offers benefits selectively to voters in exchange for their votes, conditional on winning the election. Their model focuses on problems of credibility of these promises on the part of the incumbent; they argue this explains why clientelistic benefits take the form of (temporary) employment in public sector enterprises, rather than cash payments. Keefer (2007) and Keefer and Vlaicu (2008) also focus on credibility of politician promises, more acute in young democracies and poor countries where politicians are yet to develop nation-wide reputations. Vote buying mediated by brokers emerges as an alternative to program politics based on pre-election promises, the latter being more common in mature democracies.

Closer to the theory in this paper are those studied in our earlier paper (Bardhan and Mookherjee (2012)), and in Sarkar (2014), which abstract from credibility of politician promises. Our earlier paper contrasts effects of clientelism with elite capture in a similar two-party Downsian model of electoral competition. Sarkar (2014) examines implications of clientelism in an incumbent-challenger setting. Neither paper focuses on the contrast between clientelistic and non-clientelistic regimes.

While there is a sizeable empirical literature on clientelism in developing countries, those most directly relevant to this paper are the following. Household survey evidence in Khemani (2015) from a sample of 60 villages in rural Philippines indicates widespread vote-buying (with 38% reporting being aware of offers being made by party operatives). Across villages, the incidence of vote-buying was negatively correlated with measures of health service provision (staff in local government health clinics) and child health measures (proportion of children with normal weight), after controlling for village poverty, population, location, road quality, electoral competition, municipal fiscal capacity and remoteness. This is consistent with the prediction that clientelism lowers supply of public goods. De Janvry et al (2014) and
Dower and Pfutze (2015) show that Procede a land titling program in Mexico in the 1990s lowered vote shares of PRI the incumbent party owing to a resulting decline in clientelism as local party officials could no longer allocate land use rights on a discretionary basis. Fried (2012) confirms that Bolsa Familia a conditional cash transfer program was implemented in a non-discretionary manner in Brazil as there is no evidence of political manipulation. Hence it represented an expansion in the scope of program politics. Frey (2015) shows using a sophisticated identification strategy that the expansion of Bolsa Familia reduced incumbency advantages of local mayors, increased political competition, and increased health care and education spending shares. Bardhan et al (2017) use plausibly exogenous determinants of political competition and program budgets for various benefits disbursed by local village governments in West Bengal as instruments to estimate the effects of political competition on voter responses to receipt of different kinds of private benefits and local public goods. Consistent with the predictions of the model in this paper, voters were more responsive to benefits received from an incumbent that was considered more likely to win the next election. Leight, Pande and Ralston (2016) conduct laboratory experiments in the US and Kenya, and find that vote buying reduces voters’ willingness to punish politicians for corrupt rent-seeking; politicians respond by appropriating more rents. Hence there is considerable evidence consistent with the predictions of our theory.

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