

The politics of public spending. Part I – The logic of vote buying

Alberto Diaz-Cayeros and Beatriz Magaloni¹

April 25, 2003

ABSTRACT

When do politicians have an incentive to improve public service delivery to the poor? A substantial literature in political science, and among economists in the political economy field, has addressed the political incentives behind the provision of “pork” (i.e. divisible public spending projects) and “clientelism” (i.e. the provision of private rewards to clients by a patron). This paper provides a general framework to understand diverse concepts such as patronage, spoils, clientelism, pork or particularistic spending. It argues that the propensity for politicians to deliver clientelism instead of public services to the poor is eroded as the process of modernization reduces its demand by poor citizens, and political competition, credibility, centralization and public service reform reduces its

¹ Prepared as a Background Paper for the World Bank World Development Report 2004. Both authors are Assistant Professors at Stanford University and Adjunct Professors at the Instituto Tecnológico Autónomo de México. Contact e-mail: albertod@stanford.edu. The paper draws from research undertaken with Federico Estévez. We thank Joel Hellman, Phil Keefer and Shekhar Shah for insightful comments and suggestions. Of course all errors and interpretations are our own.

supply by vote seeking politicians. A companion paper reports on our research on clientelism and the politics of public good provision in Mexico.

I. Introduction.

When do politicians have an incentive to improve public service delivery to the poor? A substantial literature in political science, and among economists in the political economy field, has attempted to address the problem of political incentives for diverse forms of public spending. The provision of “pork” (i.e. divisible public spending projects) has received much attention in the case of the United States; while in developing countries the most prominent concern has been with “clientelism” (i.e. the provision of private rewards to clients by a patron). The purpose of this paper is to provide an understanding of diverse concepts such as patronage, spoils, clientelism, pork or particularistic spending.

In our theoretical discussion we wish to highlight contributions and debates that have explicitly attempted to link political incentives to the provision of public services, which is the central question we address. Hence, we will not survey substantial research on money in politics, as reflected in campaign spending; work on decentralization and the politics of public transfers; or the huge literature on the politics of structural adjustment and the way in which budgetary cutbacks have affected social welfare or poverty alleviation programs around the world. In an empirical companion paper we discuss the case of the Programa Nacional de Solidaridad, a poverty relief program implemented in Mexico from 1989 to 1994.

Our discussion starts in the next section examining the choice politicians face, in the context of formal voting models, on whether to spend resources on core supporters or to allocate selectively to swing voters who might be decisive in a democratic election. We discuss, within the context of median voter result models, the tension between

providing universal public goods benefiting all voters or selectively targeting excludable private transfers. An intermediate category of public goods, local projects that only benefit voters within a jurisdiction, is introduced together with a discussion of the role of systems of representation and decentralization. We also address briefly how the insights from these literatures might have to be modified in the context of autocratic regimes. The distinction between universal and local public goods, and private transfers allows us then to discuss in greater detail clientelism and pork barrel politics. The third section sums up by advocating a demand and supply side understanding of the incentives for public services provision. We argue that clientelism coexists with public good provision because it is often preferred by both voters and politicians. Finally, we conclude with a discussion of the factors that can lead to the erosion of clientelism as a political strategy used by governments to stay in power.

The companion paper provides an empirical grounding to our theoretical discussion. It measures the social impact of Pronasol in the provision of local public services, which constituted the most important components of the program. We find that the social impact of Pronasol spending was fairly limited. We then address political explanations that account for such limited impact, including a discussion of clientelism and pork barrel politics in Mexico. We report on our research studying the political determinants in the allocation of pronasol funding, both for total resources and private good provision (clientelism). The final section in that paper discusses some policy recommendations arising from the theoretical and empirical discussions.

2. Vote buying: core vs. swing voters

Perhaps one of the earliest contributions directly assessing the political effects of government spending is the seminal article by Wright (1974) on New Deal spending in the United States. Wright suggested that politicians seeking to maximize their chances of reelection would allocate spending proportionally to a “political productivity” index and a “vote responsiveness” parameter. The political productivity index was based on the idea that the aggregate vote for an incumbent party in a given state was a function,

$$V_i = V_{i0} + bY_i .$$

Where V_{i0} is an initial vote share, Y_i is per capita spending and b is the aggregate responsiveness of voters to transfers. Incumbent politicians would seek to distribute funds so that, in expected value terms, the allocation of funds marginally changed the probability of winning around the 0.5 neighborhood of the distribution in those states that were crucial to get reelected.² This distributive choice is shrouded in uncertainty, because even though politicians might know many things about the electorate, they are really making their best guess in the allocation of money, seeking to tilt a probability of winning state i , which in a two-party race is:

$$P_i(V_i > 0.5) = f(V_{i0}, b, Y_i).$$

Solving the probabilistic problem is not trivial, even assuming simple distributions such as the normal (as discussed by Wright) or the binomial (addressed by Ward and John, 1999). Rather than solving the formal problem, Wright provides an empirical test where he shows that almost 80 percent of the variance in New Deal spending could be explained by a “political” model including the weight of a state in the electoral college, the variability of vote shares since 1896 as a proxy of voter

² With the institutional rules of the US electoral college, all the votes of a state are captured by obtaining a plurality in the state, but each state is weighted differently.

responsiveness, and the closeness of a state race, measured as the difference between the trend in democrat vote and the 0.5 threshold. An alternative specification included what Wright called the vote “productivity” of spending, which measured the marginal voter density at the 0.50 cutoff of a normal distribution. In both cases Wright found, and subsequent studies confirmed, that the variability of vote shares (as measured by the variance) had a positive effect on the allocation of funds. The debate that ensued from Wright’s initial findings was mostly centered in the empirical primacy of economic as opposed to political variables to explain New Deal spending.

Anderson and Tollison argued that the political mechanism in Wright was misspecified, in that the relevant variables to explain New Deal spending were to be found in congressional influence. Specifically they argued that length of tenure in office for representatives, as well as their influence, as reflected in the internal committee structure and leadership positions of individual legislators, explained higher allocations of spending. Wallis (1984 and 1987) argued that controls for excluded variables, such as state expenditure in public services and the inverse of population, made most of the political effects wash away. Fleck (1999a and 1999b) provided evidence for political effects related to turnout and a distinction between core supporters and swing voters (see below). Couch and Shughart (1998) and Wallis (1998) have systematically assessed the various competing explanations. At a lower level of aggregation, using county level data, Stromberg (2001) analyzed the impact of the expansion of the radio on the allocation of funds, while controlling for the political effects posited by Wright; while Fleck (2000) assessed the impact of both intra-party and inter-party competition in the distribution of funds, also at the county level.

Though the debate on the relevance of politics for the allocation of funds during the New Deal is by no means settled, this rich empirical literature suggests that new programs are indeed manipulated by politicians in order to allocate resources to places where the density of voters is such, that their response to money might tilt the outcome of an election. The primary thrust in this literature has been empirical, while a parallel development concentrated on the formalization of models that understand the allocation of public spending as an electoral investment.

Such models rely fundamentally on understanding the reaction of different types of voters to the allocation of funds to them. If voters are heterogeneous, the parameter b from the previous discussion, for each individual voter i , and a party j that is making an allocation promise, can be conceived as a function of individual income, partisan preferences and the ideological position adopted by parties over an issue dimension:

$$b_{ij}=f(D_{ik}-D_{ij}, \alpha_{ij}, y_i).$$

Where D is the ideological distance between the voter and party j , which must be compared to the closest or next closest party k , α is a “adherence” dimension, which measures the bias the individual might have in favor of candidate j ; and y is income. The specific relationship between D , α and y determines the prediction that models can generate about which voters are likely to be favored in targeting. In most models there is no commitment problem, so electoral promises are fulfilled when candidates reach office.

Cox and McCubbins (1986) argued that politicians will favor those voter blocs which promise higher rates of return on their policy investment and that these higher rates are invariably associated with core supporters, easily identified from previous voting behavior. Their model is driven by the assumption that politicians are risk-averse and

that core constituencies are favored investments because they are closer to the politicians on the “adherence” dimension (α). Cox, McCubbins and Sullivan (1984: 240) posit that core constituencies are the “best electoral investments available ... because those groups are in the lowest risk class”. The least risky investments are also presumed to provide the highest electoral yields, so core voters are essential for sustaining a pre-existing and secure majority. The empirical realm these authors have in mind relates mostly to the provision of public employment (Cox, personal communication).

Lindbeck and Weibull (1987) countered that the expected electoral return of any given transfer is maximized when outlays are directed at swing voters. Transfers to loyal supporters or to committed opposition voters cannot be expected to affect voting choices. Within a Downsian framework, “centrist” or “independent” voters are pivotal and, for that reason, likely to be courted by incumbents through largesse in the allocation of resources. Lindbeck and Weibull, underscore the crucial role played by the degree of competition in the expected electoral outcome. Policy choice, in their model, is determined by the size-distribution of preferences. Where preferences are packed in favor of one party, policy benefits will favor core constituencies; where preferences are more evenly divided, swing voters should be the focus of the incumbent’s attention.

In an attempt to reconcile these views, Dixit and Londregan (1996) propose that the choice of voter groups to benefit from “tactical redistribution” depends on the technology of fiscal politics. Where politicians can pigeonhole benefit and tax shares, they will favor loyal supporters with benefits, and punish opponents with taxes. Where they cannot, given the presence, say, of a professional civil service, they will look to

attract unattached swing voter groups with group-specific policy benefits.³ The underlying assumption in their model, when elections are highly competitive, is that the variation in the preference profiles of targeted swing voters is not large. Such model can produce mixed solutions of spending public monies on both core supporters and swing voters, hinging crucially on the efficiency in targeting.

Empirical evidence has been provided by various studies testing the importance of core and swing voters. The studies on the New Deal in the US previously discussed lend support to a model that relies on swing voters, although such result could be generated by the idiosyncratic features of the US electoral college. In the case of Israel, Rozevith and Weiss (1991) showed that transfers from the central government to municipalities depended on whether the mayor belonged to the same party controlling the majority of the Knesset, which supports a model of core voters. In many studies of fiscal transfers a similar pattern emerges, in that local incumbents sharing the partisan affiliation of the national government seem to be rewarded with larger transfers (see Khemani (2003) for India; Porto and Sanguinetti (2001) for Argentina; or Levitt and Snyder (1995) for the U.S.). Ward and John (1999) provide an empirical test of a swing voter model for the case of English municipal governments, finding evidence that supports it.

Dahlberg and Johansson (2002) directly test the competing hypotheses of core vs. swing voters, for the case of Swedish municipalities. They calculate, using survey information, the voter density functions at the cutoff point where victory is decided (for the swing hypothesis), and the social democratic representation in municipal councils and

³ Dixit and Londregan also propose that groups differ in their willingness to compromise on ideological commitments in exchange for particularistic benefits (the tradeoff between D and α). Less ideologically oriented groups should expect to receive greater rewards from incumbents. They argue that politicians will favor groups that respond with less variance to similar outlays only insofar as they promise the same rate of electoral return as other groups.

its vote share (for the core hypothesis). They find strong support for the swing voter models, and contradictory support for the core vote, since more funds go to municipalities where their measured core support is low. Finally, Stromberg (2002) has provided evidence suggesting that civilian employment in the US between 1948 and 1996 was affected by the joint probability of a state being pivotal in the electoral college, and having a close state race.

Testing these models has not been limited to developed countries. In the context of the Peruvian Social Fund (Foncodes) Schady (1996) finds that, controlling for poverty, core Fujimori supporters received disproportionate funding. His results on swing voters are more tentative, since they only turn out to be significant when there is no poverty control, but rather within a provincial fixed effects model. The political effects, nevertheless, seem to be strong, particularly for core supporters. Shady also finds that FONCODES funds were disproportionately allocated to Fujimori opponents after 1991, arguing that this phenomenon is explained by an effort to buy back support from opponents. In the case of Mexico, Weldon & Molinar (1994) provide some state level evidence suggesting that the PRI targeted its core supporters. Magaloni, Estévez and Díaz-Cayeros (2000) show, also in the case of Mexico, that core municipalities and places where the margin of victory was close both received disproportionate allocations of funds. Finally, Khemani (2002) has tested whether the core or swing strategies prevailed in the central transfer of statutory, plan and discretionary funds to Indian states. The study finds that plan grants are disproportionately allocated to states governed by the same party as the one in control of the federal government, but more resources are allocated when the party controls less legislative seats. This finding suggests a strategy of

attempting to maximize seats in the federal legislature, rather than concentrating in core states, more akin to a swing strategy.

Swing voter models highlight the importance of understanding how groups of voters might differ in their heterogeneity, and that this feature could motivate denser groups being more attractive targets for redistribution. As discussed by Polo (1998), there is a link between voter heterogeneity and calculating the marginal density function of voter support at the cutoff of the median in any symmetric distribution such as the normal (the way Wright did): as the distribution of z becomes more dispersed, the function is flatter at $z=0$. Hence, if H is the density function, the derivative $H'(0)$ is negatively linked to the variance of the distribution. More heterogeneity means less mass at the cutoff point. Catering to core or swing voters might depend crucially on the degree of heterogeneity that characterizes each of these groups, and the possibility for political arrangements to differentiate or categorize blocks of voters into specific groups⁴.

The verdict as to whether incumbents allocate money to swing or core constituencies is still in the air, although the answer might actually depend on the electoral institutions in place. A more recent vintage of formal models, including Persson and Tabellini (2000), Lizzeri and Persico (2001), Milesi-Ferreti, Rostagno and Perotti (2001), which build upon the probabilistic voting models of Lindbeck and Weibull (1987) and Dixit and Londregan (1996), have explicitly introduced institutional differences in models that allow for both combining the provision of universalistic public

⁴ Some empirical studies have attempted to control for a simultaneity biases generated by the fact that electoral results might be caused by the money spent by parties prior to the election, rather than the other way around. This is particularly problematic when the incumbent has been in office for a long time (as in Sweden or Mexico). The problem, which statistically speaking is an omitted variable bias, can be dealt with through instrumental variables, as in Cox and Thies (2000) for Japan; Levitt and Snyder (1996) for the US; and Magaloni, Estévez and Díaz-Cayeros (2000) for Mexico.

goods and targeted transfers. Conflicts in these models are usually of three types: between voters, concerning the degree of redistribution implicit by the public goods that are chosen and the transfers that some groups might receive while others do not; between politicians, because the public policy platform is offered in order to win in a contested election; and between politicians and voters, over the amount of rents that politicians keep, once they pay for the public goods and the transfers provided.

In these models, the probability of winning an election (P) depends on a best response in the strategic allocation of funds, with respect to the other party competing in the election. In a reduced form, which does not capture the nuance of these models, one can think of that probability as a function:

$$P=f(Y_J, G, J, \alpha_J, \phi_J)$$

Where a party offers a policy package combining public goods (G) provided to all citizens together with private transfers (Y_J) given out to specific groups of voters. Groups of voters are separated by political institutions into districts (J) and each of those groups is characterized by its adherence (α_J) and heterogeneity (ϕ_J). The specific form of this function depends on details generated by political institutions, which are at the core of the modeling strategy, and the endogenous determination of political rents and tax rates.

Such models are driven by uncertainty about voters preferences, which allows for positive rents even under competition. A party does not know if it will win due to the platform it offers, or by virtue of some bias in its favor: it can win even with positive rents when there is a bias generated by the adherence dimension. A party could lose, even without proposing a platform with positive rents, when the bias in the adherence dimension is against it. This asymmetry generates positive rents in equilibrium (Persson

and Tabellini, 2000). In these models political competition has the virtuous effect of reducing rents.

The presence of rents, which are a residually kept by politicians once they pay for public goods and transfers, brings to the fore one of the central issues in political economics, namely the imperfect accountability of politicians in the face of uncertainty. As shown by Barro (1973) and Ferejohn (1986), so long as incumbents have some degree of discretion, even with vigorous electoral competition incumbents can exploit voters, keeping rents, while holding on to power. Besley and Case (1995) provide some evidence suggesting that when incumbents have short time horizons, as in the case of term limits in the United States, they will behave with less fiscal prudence.

These models generate important insights regarding the role of political institutions. Electoral systems can be broadly divided into majoritarian and proportional ones. Majoritarian systems have single member districts in which elections are won by majority rule, and the winner takes full control of office. Proportional systems have districts where multiple legislators are elected according to the shares of votes they received. National level elections might be won with a majority of the single districts, distinct from national elections won with a majority of votes in a single national district (for a model see Seabright, 1996). Political regimes might also differ according to the division of powers, as in presidential and parliamentary systems which differ markedly in terms of procedural rules for budget allocation (see Persson, Roland and Tabellini, 1997).

Majoritarian systems concentrate competition in the marginal districts, so that targeted redistribution goes to the key marginal districts; while in proportional systems the tendencies for particularism are attenuated, although the size of government is

predicted to be larger overall. The models in Persson and Tabellini (2000) also suggest that parliamentary regimes should provide more public goods. A combination of both institutional features underlies empirical tests provided by Persson and Tabellini (2002).

A final issue raised in these models is the problem of overspending as a collective dilemma generated by systems of representation. The law of $1/n$, as discussed by Weingast, Shepsle and Johnsen (1981) highlights the aggregate problems in budgeting generated by the political incentives of particularistic politics. In the presence of single member districts, as the number of legislators increases, inefficiently excessive spending is generated by a universalistic legislative process. Baron (1991) has shown that the incentive for overspending is mitigated, although does not disappear, when the legislature is guided by the formation of minimal winning coalitions. This principle is mostly supposed to apply to local public goods for which individual legislators can claim credit.

Crain and Bradbury (2001) have provided an international empirical test, which suggests that government consumption increases as the number of members of the lower chamber increases. Díaz-Cayeros *et. al.* (2002) cast doubt on this finding, suggesting that the overriding motivation of excessive spending in public works projects is the existence of single member districts and a mismatch between expenditure and tax decentralization. Seddon *et. al.* (2001) provide an index of particularism, through which different electoral systems can be compared in terms of the incentives they provide for politicians to seek resources to be targeted locally, without internalizing the full cost of their budgetary decisions. Although the results in much of this literature are still quite tentative, they suggest powerful effects of political institutions on the prevalence of various forms of redistributive spending.

An important issue that emerges from the democratic assumption in which all these models are embedded is whether their results can be meaningful in autocratic contexts. Bueno de Mesquita *et. al.* (2002) have provided a coalitional model, which does not depend on the particular characteristics of majority rule, to account for the way in which political leaders use public resources in order to stay in office. Their model involves the provision of public goods to all citizens, and private goods or transfers to a group called the selectorate.

Coalition building processes consist of sending goods to individuals with the highest affinity value towards the incumbent, progressively incorporating more individuals, as it becomes necessary. In democratic politics the selectorate is composed of all the citizens. The more authoritarian a political regime, the smaller the selectorate is. Smaller selectorates are likely to bring larger security in tenure to politicians because authoritarian rulers can target large private goods only to a minimal winning coalition within that group. When selectorates are very large, the minimal winning coalition is also very large, so the private goods that can be provided are not as attractive, given a budget, as compared to public goods. Hence, in democracies there is a greater emphasis on public good provision, although small targeted private allocations might not disappear altogether. In terms of empirical evidence, Lake and Baum (2001) have shown that democracies are more likely than autocracies to exhibit improvements in public health and education indicators. Although they effectively establish that democracies improve well-being, they do not really show whether this happens through the channel of public expenditure and public service and goods delivery, though.

The literature on distributive politics has not been very careful in distinguishing the types of goods that politicians provide in order to obtain electoral support. Various types of goods might represent different strategies for vote buying, and might have very different effects in both their capacity to change the outcome of an election, as well as the positive or negative influence public spending might have in economic development.

One can think of a spectrum which divides the types of goods and services delivered by politicians according to the degree of “publicness” of the goods delivered. Politicians can provide three ideal types of goods. The first type, which is closely related to targeting and divisible benefits, would be “private” and “club” goods that are delivered to individuals and specific groups which can exclude others from the consumption of such goods. Those private goods are typically provided to core supporters, but they might also be benefits that swing groups receive as special interests. There are, at the other end of the spectrum universal public goods that are delivered to all citizens, with no rivalry or excludability. Those goods are typically comprised in the concepts of national defense, law and order, universal welfare state benefits, or universal education, for example. We call these extensive public goods. Finally, there is an intermediate category, which is not as closely targeted to individuals, but is not as universal as extensive public goods, because the delivery is circumscribed to local jurisdictions. We call these local public goods, and they comprise most of the projects we have in mind when thinking about “pork” or particularistic spending.

Universal or extensive public good provision corresponds relatively closely with what Kitschelt (2000) would call programmatic linkages between voters and politicians. They also correspond more or less with what Scott (1972b) calls inducements for

occupational or class oriented loyalties. “Universal” goods such as, for example, accident, medical and unemployment insurance within the welfare state, are often not really universal, but rather extend to broad classes or groups defined beyond a locality or an individual. What makes them universal is that access to those goods depend solely on being a member of the relevant class or group. Scott (1972b) discusses a fourth type of good provision, analogous to Kitschelt’s (2000) charismatic linkage in politics, which benefits all voters and is related to the essential features of states, namely, the provision of national identity, sovereignty and the protection of the national territory. While such tie might be important in relatively traditional societies, democracies where parties actively mobilize voters seem to make less use of such charismatic loyalties.

3. The supply and demand of local public goods and clientelism

Politicians attempt to allocate public spending in ways that can improve their chances of winning elections, or in non-democratic settings, of keeping a coalition that is invulnerable to challengers. In order to do so, they use public funds in three different ways: they can provide universal public goods that can improve everyone (extensive public goods), or they can target either to localities (local public goods) or individuals and specific groups (clientelism). The choice between local public goods and private ones is highly consequential for economic development, because clientelism does not bring the social benefits that local public goods, even if politically manipulated in their allocations, can. From a normative perspective, the poor (or a segment of them) are better off when clientelism is offered than when it is not. However, they would probably be better served with extensive or local public goods. A vast literature, however, has discussed machine

politics and “pork barrel” distribution with overly negative connotations (see Scott, 1972b).

The distribution of public works projects with political motivation has been considered a central feature of legislative politics in the US. The seminal study by Ferejohn (1974) analyzed in detail the processes through which “Rivers and Harbors” appropriations were decided in the US Congress. Much of the literature has been devoted to understanding the conditions under which legislative logrolling takes place, so that politicians vote for an inefficiently large provision of public goods in a norm of deference to each other. Although this deference probably falls short of “universalism”, in which every legislator obtains a project (Weingast, 1984, Baron, 1991), pork barrel politics in the US has been analyzed as a distinctive feature of the internal organization of the assembly (committee structures and the procedural rules to debate and amend bills) and the incentives generated by single member districts.

Pork barrel politics is distinctively geographic in its scope, since the redistribution a politician seeks requires some degree of credit claiming. Not surprisingly, this type of local public good provision has been extensively studied in contexts where legislators have geographically narrow constituencies induced by the combination of a single member district electoral system and federalism, such as the US. Brazil, a developing country characterized by single member districts and a large degree of decentralization, is perhaps the other place where pork barrel politics has received most substantial attention (Ames, 1995; Samuels, 2002; Geddes, 1994).

Why might pork be bad for economic development? To the extent that projects are being selected on the merit of their political, and not social or economic payoffs, pork

involves a misallocation of resources, and probably the prevalence of excessive public investment. Moreover, to the extent that public works offer opportunities for corruption or the selective granting of contracts to specific individuals or firms, they might involve losses in social welfare. Moreover, the territorial distribution of public works might respond to the political landscape, not the actual social needs in different regions.

However, the satisfaction of local demands for public goods might be an indication that politicians are being held accountable by citizens in their jurisdictions. It is also quite likely that the social benefit of public goods, even if allocated in less than perfectly efficient manners, is much higher and less unequal from a distributional perspective, than the allocation of private transfers to some privileged groups in the form of clientelism.

Clientelism is distinct from pork barrel politics in the literature because it is characterized by dyadic personal relationships that are asymmetrical but reciprocal: the patron delivers desired material benefits to its clients in exchange for services and loyalty to the patron (Scott, 1972a; Lemarchand, 1972). While in our discussion thus far we have emphasized the type of goods involved in the supply of clientelism, the literature tends to rather stress the exchange involved. In electoral politics, the clientelistic linkage translates into a direct exchange of *private* benefits and favors for votes (Kitschelt, 2000, emphasis added).

James Scott argues that patron-client links are based on inequality, which arises from the fact that “the patron is in a position to supply *unilaterally* goods and services which the potential client and his family *need for their survival* and well being” (Scott, 1972a:125, emphasis added). As a monopolist for critical resources such as protection, access to arable land, fertilizers, water and irrigation, or education, the patron is in a

position to exploit his market power and demand compliance from those who wish a share of those goods (Díaz-Cayeros, Magaloni and Weingast, 2001). However, if the client did not need these goods so badly, if she had savings and alternative sources of income to finance his needs, or if she could incur in the costs of exiting to another jurisdiction to secure the needed services, the client would not succumb to the patron's domination.

The relationship in patron-client links is asymmetrical because there is normally one patron and a multiplicity of clients, but reciprocal in that the politicians must deliver in order to sustain the support of their clientele. Consonant with the model of Díaz-Cayeros, Magaloni and Weingast (2001), clientelism prevails in monopolistic political markets because it allows politicians to deter exit. By delivering private as opposed to public goods, politicians can screen between supporters and opponents, excluding from the stream of benefits those who throw their support to another patron. Incumbents can thus deter voters from exiting to the opposition. To deter exit, political monopolists must rely on the provision of excludable material benefits that allow screening. The easier it is to target voters with excludable benefits, and the more closely a party can monitor the voters' choices, the more the deterrence logic applies.

To see why clientelism serves to maintain a political monopoly, imagine a voter who faces the following option: support the incumbent party and receive transfers in the form of jobs, income supplements, credit and the like, or opt for the opposition and receive none of these desirable benefits. Unless the voter possesses alternative high sources of income and is indifferent to these benefits, her rational strategy is to support the incumbent, even if reluctantly. If most voters reason likewise, the political monopolist

remains in power. The dilemma voters face is that of coordination: if all could agree simultaneously to vote against the incumbent, they could defeat it. But if voters can't coordinate, each one will fear to be the first one to defect and face punishment in the form of lack of access to vital resources (see Díaz-Cayeros, Magaloni and Weingast, 2001)

What is the difference between clientelism and other forms of democratic exchange where politicians trade policies for votes? As in Medina and Stokes (2002), we believe that the main difference lies in that clientelism implies a credible threat of being excluded from a transfer or stream of benefits if the voter chooses to vote for the opposition. It is for this reason that we tend to correlate clientelism with the trade of excludable benefits for political support. Public goods that are not divisible imply that a voter can support whichever politician he chooses and still benefit from such policies.

Robinson and Verdier (2002) provide a model where clientelism represents a solution to a commitment problem. "By its very nature, since the law cannot be used to enforce [clientelistic] political exchanges, they must be self-enforcing. The problem of credibility is two-sided. Citizen/voters must indeed deliver their support, and politicians, once in power, must pay for their support with the policies they promised" (p. 1) In their model, the solution to the commitment problem is given by trading employment in the public sector for political support.⁵ We agree with Robinson and Verdier (2002) in that

⁵ "We argue that the appeals of offers of employment in the bureaucracy is precisely that a job is a credible, excludable and reversible method of redistribution which ties the continuation utility of a voter to the political success of a particular politician" (Robinson and Verdier, 2002, p. 2). The commitment problem runs both ways: voters prefer employment offers because politicians can't credibly commit to deliver other policies once in office. In their model employment is a credible offer because politicians have incentives to expand the public sector even while taxing the private sector is too costly. And politicians prefer to offer jobs as opposed to other public policies because they can tie the continuation of employment to their political success, creating incentives for bureaucrats to continue to support them.

the commitment problem is central for understanding clientelistic ties. We believe, however, that public jobs – i.e. patronage – are only one of the possible instruments that politicians can use to deal with this problem.

Keefer (2003) also approaches clientelism from a commitment perspective, although he embeds his discussion in a model with transfers and public good provision. Parties with clientelistic ties can solve commitment problems of fulfilling campaign promises much better than parties without them. Thus, weak democracies in his framework are characterized by clientelism, because it is the only mechanism available for citizens to make politicians keep their promises. In a related argument Fearon (2002) suggest that the reason why redistributive politics and ethnic divisions seem to go together is that since politicians can renege from their promises, in ethnically divided societies the only political promises that are credible are clientelistic ones. In these frameworks parties cannot compete on ideological grounds because programmatic platforms have no particular meaning.

One of the implications of the Keefer (2003) model is that public projects in developing countries often remain incomplete, in spite of their net positive social value, because challengers have different clients from those of incumbents, and see no political benefit in promising to finish projects started by their predecessors. This result would hold beyond cases of negative social value constituting “white elephants”, such as those discussed by Robinson and Torvik (2002).

There is a huge literature describing clientelism in all sorts of political contexts. Recent studies have moved away from a notion underlying many of the older studies, suggesting that clientelism is characteristic of traditional societies. The essays contained

in Piattoni (2001), for example, have analyzed clientelism from a comparative historical perspective in various European countries. An important finding from those studies is that clientelism is not incompatible with “civic society”, and that clientelistic exchanges remain common, even after countries have undergone processes of fast economic modernization.

Watchenkon (2002) has provided an experimental design to explain the logic of clientelism in the case of Benin. He shows that clientelistic offers by politicians can only motivate voting choices when they come from an incumbent who controls resources. Hence, incumbents are more likely to make clientelistic promises than challengers. Consonant with Keefer (2003) and Fearon (2002), his evidence shows that ethnic perspectives mediate clientelism, because promises to “out” groups are simply not credible.

The choice of clientelistic strategies is driven by both demand and supply factors. The most important demand factor stressed by the literature is the economic status of citizens, which might make them more or less willing to accept this type of exchange. If voters have an income elasticity for public goods larger than one, they will prefer to have less clientelism delivered by governments as they become richer.⁶ Other factors on the demand side might be highly correlated with economic status: cognitive capabilities depend on literacy rates; while organizational capabilities depend on membership in voluntary and independent associations, which might be highly correlated with income levels. Thus, a socioeconomic account of clientelism is primarily a demand based one.

⁶ We thank Robert Bates for this simple formulation. This is consonant with the standard Dixit and Londregan (1996) framework.

A supply based account stresses “circumstances that may induce party leaders to adopt clientelism or patronage as a strategy for attracting voters, supporters, and activists to their side” (Piattoni, 2001:17). The literature stresses the lack of an independent bureaucracy and motivations that historically led politicians or parties to mobilize voters through clientelist inducements. In formal models of clientelism, the supply side is determined by monopoly over the control of a valuable resource, such as a riskless job or a technology (Robinson and Verdier, 2002 and Medina and Stokes, 2002).

Political arrangements and institutions mediate the demands for public service delivery through various channels, including decentralization, single member districts, presidentialism, etc. The previous section has mostly emphasized the way in which the supply of public goods and services might be distorted by issues of weak accountability and imperfect electoral competition, even before one introduces questions of bureaucratic efficiency, monitoring, corruption, etc. This discussion is relevant for both the provision of geographically located public goods as well as private transfers. Political imperatives, not a benevolent planning perspective, drive the choice of public spending.

The poor might prefer to have private rather than public goods delivered to them. However, much more empirical research is needed before providing conclusive evidence of whether this is in fact the case.⁷ Public goods might be income elastic, so their demand would not be very high at low income levels. However, such elasticity of demand might be induced by larger features of the political system. Consonant with the clientelism

⁷ Brusco, Nazareno and Stokes (2002) analyze with an ecological inference model the voting choices of the poor in Argentina. They address both the supply and the demand sides of clientelism. Their findings suggest that while efforts from politicians to buy off political support from the poor are part of the post-transition to democracy landscape, they are probably not as effective as is commonly believed. In particular, it turns out that the poor are just as likely as the rich to respond with caution to electoral promises, giving out their vote to the party with an overall better perceived performance.

literature, the poor might prefer private to public goods only because such preference is induced by being trapped in a monopolistic exchange with their patrons: patrons might have rents they are sharing with their clients, but in a world of no rents, citizens might actually prefer public good provision.

Moreover, clientelism might be used by politicians in order to deter voters from abandoning their support, as in the model of party hegemony developed by Díaz-Cayeros, Magaloni and Weingast (2001). The “tragic brilliance” of a system like the one established by the PRI in Mexico consisted in the fact that voters played an active role in sustaining a regime they disagreed with. The strategic dilemma, from the point of view of voters, was that they would rather vote for an opposition party to govern in a given locality. However, they knew that, given the centralized control of financial resources, the center would punish any locality that voted against the PRI by withdrawing funds. Hence, voters strategically decided to keep a party they disliked, but retain enough funds to pay for essential public services in the locality, rather than voting for their preferred choice with no funds.

This strategic dilemma was compounded because decentralization presented a coordination dilemma: even if a majority of the localities wanted to end the national control of office by the PRI, they did not know what other localities planned to do, so they ended up, in equilibrium, supporting the PRI to avoid strategic miscoordination and the withdrawal of funds. Hence, in this logic, clientelism is crucial for sustaining hegemonic parties because it allows for clear targeting, at the individual level, of loyal voters. Voters know that if they stop sustaining the party in office they will lose access to valuable resources.

The literature on distributive politics predicts that excludable transfers should either be allocated to core constituencies or swing voters. The discussion of the clientelism literature should suggest that such dichotomy is too blunt. It is probably correct that the highest returns to public transfers are among swing voters. However, politicians seldom devote *all* of their budgets attempting to buy swing voters: a fraction of discretionary expenditures is usually devoted to core supporters. The importance of delivering transfers to the core might depend on factors at odds with some of the simplifications made by swing voter models.

There are at least three reasons why politicians will not devote all of their resources to swing voters. First, if an incumbent political party invested all of its transfers into swing voters, it would face a hard time sustaining the loyalty of its core voters. In a repeated play, core supporters would strategically learn that opposition backers, not themselves, are the voter group most likely to be benefited by the incumbent (i.e. core voters might vote strategically, not sincerely). Moreover, political parties can't thrive by systematically representing the interests of voter groups other than their core because their turnout can't be taken for granted. Third, there is a commitment problem on the part of swing voters, making them risky bets.

Private goods in the form of clientelism are hence employed in order to lock-in a political clientele, namely to prevent potential defectors from defecting. The less ideologically oriented the core base, the more a party will need to employ private transfers to prevent exit. In the extreme, there might be systems in which "loyalty" to an incumbent is totally contingent on receiving a transfer, which is another way of saying that less ideologically oriented core electorates must be continuously bought-off with

clientelistic transfers (see Díaz-Cayeros, Magaloni and Weingast, 2001; and Keefer, 2003). If core voters did not receive transfers, they would simply not turn out the day of the election.

In the quest to ensure some vote shares, while at the same time preventing the core base from eroding, politicians might be diversifying their portfolio of transfers among public and private goods. Incumbents attempt to buy-off the critical swing voter with public good transfers, from which their own supporters can't be excluded. The value of the public good transfer can match the valuation at which the critical swing voter (e.g., the median voter) slightly prefers the incumbent to the opposition. Thus, all voters located to the left of such voter, obviously including core supporters, are satisfied with the transfer.

Yet, public goods are uncertain bets, and so is the support of swing voters due to a commitment problem. Suppose that the incumbent attempts to get reelected by delivering a public good which value makes the critical swing voter to slightly prefer the incumbent to the opposition. The commitment problem exists because the voter receives the transfer regardless of her vote, and nothing prevents her from reneging the implicit contract ex post by voting according to ideology or other considerations. Hence transfers to core voters would be kept as a form of risk hedging (see Estévez, Magaloni and Díaz-Cayeros, 2002).

4. Public service delivery to the poor and the demise of clientelism.

Clientelism is a very difficult equilibrium to break, even in the context of democratic politics. On the demand side, citizens/clients might prefer clientelism to public service delivery if they are very poor, or if credibility of politician's promises is

lacking. If the income elasticity of demand for public goods is high, at low levels of income households might prefer to receive private transfers of grain, fertilizers or some other material benefit, rather than public goods that may improve their well-being in the long run. If politicians cannot credibly commit to deliver their campaign promises because bureaucracies are unprofessionalized, clientelist networks might be the only way to enforce their compliance. On the supply side, politicians/policymakers might prefer to provide clientelism rather than public goods, even when private good provision is expensive relative to public service provision, if a deterrence logic is driving their strategic public spending choice. Since private benefits are excludable, while public services are not, politicians can reward supporters and threaten to punish defectors. Such deterrence strategy would never work if politicians were solely concerned with winning the support of the marginal swing constituents, because then party loyalty would disappear.

The mechanisms underpinning the prevalence of clientelism as a political equilibrium, even in democratic settings, might be undermined, however, by five exogenous processes: 1) modernization and economic growth might gradually increase the incomes of the poor; 2) electoral competition can make the deterrence logic ineffective; 3) clientelistic ties might be rendered less credible due to the presence of a free and independent media that allows for the flow of information concerning the positive effects of public service delivery elsewhere, or the perception that clientelism is ultimately a form of corruption; 4) centralization of poverty alleviation programs might break the hold of local patrons; and 5) civil service reform could make providers less captured by local bosses. Let us examine each of them.

1. *Modernization and economic growth.* The anthropological literature on clientelism viewed the relationship between patrons and clients as a cultural feature, characteristic of traditional societies. Banfield (1956), from a political science perspective, understood Southern Italian underdevelopment as a cultural trait generated by “amoral familism”, which led to corruption, disregard for law and a general apathy towards civic engagement. Amoral familism, which in more contemporary usage would be translated into a condition where communities lack trust and social capital, could change, however, if land relations, family structures and death rates would change, through the reduction of poverty.

In terms of clientelism, Banfield observed that the Christian Democratic party’s hold in office depended on the distribution of “small packages of pasta, sugar and clothing to voters” (p.26). Such vote, however, could well be swayed by any other party delivering such goods. Hence, it was poverty, rather than a particular allegiance to party or patrons, that kept political support. This is consonant with the idea that partisan affiliations do not mean much in many political contexts, while observed party loyalty can be quite strong, because it is kept through specific inducements.

Presumably, as modernization proceeds, poverty can be reduced, and the ties that bind poor voters to patrons can become eroded. Modern societies, according to this view, allow clients exit options, so they no longer need to sell their political support. In a demand driven account of clientelism, the tradeoff between private and public good provision is much greater for the poor than for the rich. This would imply that as capital accumulates and incomes rise, citizens will demand more public goods and are less prone to clientelism.

The historical record on this account is rather mixed: clientelism remains in place even as development proceeds (Eisenstadt and Roninger, 1980: p. 46). There is little systematic evidence about a relationship between clientelism and development within a country, largely because the process of economic growth also changes various social and political structures that have been the primary focus of explanations for clientelism. The discussion on Mexico in the companion paper does attempt to separate the economic modernization effects from the political ones.

The rich case histories suggest, however, that as modernization and urbanization proceed, clientelism becomes typical of a vast rural periphery or the backward areas in a polity (like the Mezzogiorno in Italy or Chiapas in Mexico). That is, clientelism does not disappear, but it becomes geographically circumscribed to the poorer and isolated areas of a country. The link between clientelism and development might be non-linear, but rather shaped as an inverted U. In very poor settings in which electoral mobilization is not necessary, because electoral outcomes are controlled through fraud or other mechanisms of social control, there is less likelihood to observe clientelism. As poverty becomes moderate, it might be that traditional mechanisms of social control break down, and hence the exchange of clientelism becomes the way through which political support is maintained. As rural and urban dwellers become richer they might have exit options from the dependence on transfers and a higher propensity to demand public goods.

This inverted U shape between clientelism and political modernization seems to be supported by case studies. For example, in the case of Turkey, Ozbudun (1981) suggests that clientelism is, in fact, a particularly typical feature of countries in the midst of rapid socioeconomic change. Under very poor environments, traditional patterns of

authority might be the norm, so that it is not necessary to provide material incentives to obtain political support. At the other extreme, when bureaucracies become modern and rationalized, and social security institutions are extended, clientelism would not be an acceptable form of political exchange. The degree to which clientelism is considered an acceptable practice, however, depends crucially on the evolution of party system.

Clientelism might become eroded as modernization proceeds, provided that political parties are mobilizing voters on grounds other than the provision of particularistic goods. How much this occurs seems to depend critically on the prevailing patterns of electoral competition, a supply side consideration.

2. *Political competition.* Political monopoly, or at least reduced political contestation at the local level, seems to be an important element that leads to clientelism. Medina and Stokes (2002) suggest that patrons control valuable resources, and they can share the rents of those resources with their clients, in order to obtain political support. The fact that incumbents have control over those resources suggests that challengers are not being able to compete on the grounds of reducing those rents, or changing the way in which those resources are controlled, in order to increase general social welfare. Moreover, in the Díaz-Cayeros, Magaloni and Weingast (2001) framework, clientelism is used to prevent monopoly from breaking down, by threatening to punish any defector with the withdrawal of funds. In contrast to clientelism, public service delivery as a strategy for garnering vote support has a risky electoral return. In this sense, places with low electoral volatility, in which voters are tied to some politicians rather than others, seem to be the precisely the most clientelist.

However, if there is no political contestation whatsoever, there is no reason for clientelism to occur at all. While absent democratic politics there might be some feudal or patrimonial clientelism in the traditional anthropological sense (Lemarchand, 1972), where landowners as patrons might control the political behavior of their clients, the most pervasive form of clientelism in the world today is mediated by political parties in elections that are somewhat contested, even if imperfectly so. This form of party clientelism will not exist under authoritarianism. Guasti (1981) suggests, for the case of Peru, that clientelism became eroded with the arrival of military government. The mechanisms for such decline, however, primarily worked through the reduction of resources available for redistribution, and the construction of a more rationalized national bureaucracy. Paradoxically, Guasti notes that authoritarianism might have made the poor worse off, once clientelism became less prevalent, given “reduced access to public resources, reduced ability to fulfill communal needs” and less capacity to advance agricultural activities through social and economic infrastructure (Guasti, 1981:232)

On the other hand, vigorous political competition can undermine, although not necessarily eliminate, clientelism. Piattoni (1999) provides a suggestive example along these lines. The Abruzzo region in Southern Italy was the first region in the 1990s to “graduate” out of the European structural development funds. Its economic performance was due, according to Piattoni, to the new role of political intermediation adopted by local politicians, away from clientelism, and into the provision of local public goods. In particular, the local patrons took a risky political strategy of supporting the provision of

public goods that did not exclude opposition members.⁸ The provision by the local boss, Remo Gaspari, of “favors also to highly visible supporters of opposition parties suggested the goal of transmitting an image of equanimity and the construction of a reputation of ‘patron of the whole Abruzzo’” (p.144). Such reputation was meant to give an electoral payoff in the context of rising electoral competition. Clientelism did not disappear, though. Selective goods were still provided to supporters, particularly in the form of postal jobs when Gaspari was the Minister of Post and Telecommunications.

3. *Credibility and information* – A third factor that might erode clientelism is an enhanced credibility for politicians to deliver public services or universalistic public goods. Credibility issues seem to be central to the link between clientelism and ethnicity (Fearon, 2002; Keefer, 2003; and Watchenkon, 2002). If democracies are relatively unstable, and there is little institutional capacity in the bureaucracies to fulfill campaign promises, the only commitments politicians can make with some degree of credibility are those linked to clientelism. However, even clientelism might not be fulfilled if politicians are able to withhold information concerning the provision of differential benefits among various recipients. Part of what makes clientelism work, however, is that patrons need to keep a reputation for fulfilling their side of the bargain. Hence, mechanisms that enhance credibility might make patrons who wish to survive politically give up clientelism and devote their efforts to more extensive distribution of public goods.

The deterrence logic also suggests that clientelism implies a different form of credibility, namely the fulfillment of a promise to withdraw resources from clients who do not keep their end of the bargain, failing to sustain political support. This means that,

⁸ Such as the construction of exits in the Roma – Pescara highway that benefited the industrial agglomeration of the Aquila region, or the promotion of electronics research and a focus on engineering degrees in the local university.

on the one hand, politicians are trying to reward people they have identified as likely to vote for them, and social networks and patron reputations make such contracts enforceable; on the other hand, when political monopolies are under threat, they control the punishment regime, so they can demonstrate that it pays to be with the government, and it does not go unpunished to be against it. Clientelism in the deterrence logic might be extended beyond the group of voters where an exchange is cemented by credibility, but also by fear of punishment through the withdrawal of resources.

Deterrence works best if localities cannot coordinate effectively to dislodge the incumbent who controls the central allocation of resources to the localities. Information can increase the costs of exclusion, and better monitoring through an independent media might encourage coordination against incompetent or corrupt national governments.

In Mexico, for example, during the 1990s opposition parties demanded from the federal government that transfers to states and municipalities should be formula driven, and that information should be available concerning the elements used for the application of those formulas. These demands were consonant with the overall thrust for more independent media, the establishment of mechanisms to eliminate electoral fraud and reforming campaign finance, and a general criticism of corruption and the lack of transparency in government activity. When the ruling PRI lost control of the Federal Congress in 1997, transparency in the distribution of resources for states and municipalities was a critical issue in all budgetary debates. Mexico transited, in a very brief period of time, from a highly discretionary and politically manipulated allocation of funds for local public works characterizing Pronasol during the 1989-1994 period (discussed in the companion paper), to a formula driven system of resource allocation,

where municipalities and states not only know the amount of funds they will receive, but also their calendars for disbursement and clear rules for the application of those resources, under federal monitoring. The Mexican example suggests that there might be important ways in which decentralization can either enhance or reduce the attractiveness and credibility of clientelism.

4. *Centralization.* Scott (1972b) has suggested that decentralization is a necessary condition for clientelism to take place. If politicians do not have incentives to cater to their loyal supporters in a locality they might be better off providing universal or more broadly distributed public goods. The formal rules organizing representation might be critical in determining whether politicians can claim credit for local government activity. Single member district systems, for example, might be more prone to clientelism than closed list proportional representation, to the extent that local politicians in the former case can individually benefit from projects located in their districts, while in the later parties are collectively blamed or praised for their performance in the whole country (or the relevant proportional representation districts).

Paradoxically, notwithstanding the benefits that decentralization might bring in accountability gains of creating governments that are closer to the preferences of localities, decentralization might enhance the incentives for clientelism. Decentralized systems in developing countries might be characterized by a lower degree of contestability in the local electoral marketplace than that prevailing at the national one. For example, although Colombia is often regarded as a country with vigorous bipartisan competition, at the local level clientelist ties made competition fairly limited. The same could be true of the US South during the solid Democrat hegemony, and the classic

machine politics era of cities, for example, when the Tammany machine in New York would buy coal for the poor or channeled subsidies through Irish immigrant charities (see Shefter, 1994:160).

The most obvious example in which centralization undermines clientelism is perhaps the establishment of national welfare state institutions. Since risks within localities might be highly correlated, welfare states are usually established at the national level.

Another possible avenue through which centralization might erode clientelism is the establishment of independent bodies, at the central level, that oversee and control the way in which public funds are spent. In the case of France, for example, Warner (2001) notes that, notwithstanding clientelist temptations, the *Inspection des Finances* established in 1816 provided a professionalized body of administrators that checked expenditure by the departments. The body was relatively apolitical. During the Fourth Republic, funds for infrastructure improvement in municipalities were subject to the oversight of an independent court, the Court of Budgetary Discipline and Finance (p.134). This example suggests the crucial importance of civil service reform and the creation of bureaucratic bodies that can act independently from political pressures.

5. *Civil service reform.* The creation of a rational bureaucracy in the Weberian sense seems to be central for the historical disappearance of clientelism, or at least of patronage (i.e. the political use of public employment). Shefter (1994) suggests that the relative timing of democratization and bureaucratization determine the prevalence of patronage: when political parties could not resort to private divisible benefits because the bureaucracy was professionalized before the expansion of the franchise, they would have

to appeal to voters through programmatic universalistic appeals. Papakostas (2001) provides historical evidence concerning the way in which Swedish bureaucracies were originally insulated from partisan pressures, staffed predominantly by the nobility and the upper bourgeoisie. In contrast, he shows that in Greece mass politics preceded the creation of an independent bureaucracy, so patronage became ingrained because it was the prime source of mobility for bureaucrats.

Such historical accounts, however, beg the question of whether bureaucratic reform can reduce clientelism once it exists as a form of political exchange. The English historical experience suggests that a condition for voters to expect professionalized bureaucracies that provide universalistic services, rather than private benefits, is that clientelism must be perceived to be a corrupt practice (O’Gorman, 2001). How this comes about depends on the political establishment, and whether parties and their leaders have incentives to mobilize such an issue as part of their electoral strategy. One should be wary of the prospects for bureaucratic reform on the grounds of efficiency: Geddes (1994), for example, has shown quite persuasively that the incapacity to reform civil service does not stem from poorly implemented “good” designs, but rather from the lack of political compromises between competing elites about the costs and benefits of having a turnaround in bureaucratic posts every time there is a switch in government.

REFERENCES

- Ames, Barry (1987) *Political Survival: Politicians and Public Policy in Latin America* Berkeley: University of California Press.
- Ames, Barry (1995) "Electoral Rules, Constituency Pressures and Pork Barrel: Bases of Voting in the Brazilian Congress" *Journal of Politics* 57(2):324-43.
- Anderson, G.M. and Tollison, R.D. (1991) "Congressional Influence and Patterns of New Deal Spending, 1933-1939" *Journal of Law and Economics* 34:161-175.
- Archer, Ronald (1990) "The Transition from Traditional to Broker Clientelism in Colombia: Political Stability and Social Unrest" Kellogg Institute for International Studies, Working Paper # 140.
- Bailey, John (1994) "Centralism and Political Change in Mexico: The Case of National Solidarity" in Cornelius, Wayne, Craig, Ann & Fox, Jonathan (eds.) *Transforming State-Society Relations in Mexico: The National Solidarity Strategy* La Jolla: Center for U.S.-Mexican Studies, UCSD.
- Baron, David P. (1991) "Majoritarian Incentives, Pork Barrel Programs, and Procedural Control," *American Journal of Political Science* 35 (1):57-90.
- Behrman, J., Sengupta, P. and Todd, P. (2000) "The Achievement of Progresá in achievement test Scores in the First Year" Washington: IFPRI.
- Bennedsen, Morten (1998) "Vote Buying Through Resource Allocation in a Government Controlled Sector" (typescript)
- Bradbury, John, and Mark Crain, (2001). " Legislative Organization and Government Spending, Cross-Country Evidence," *Journal of Public Economics* 82: 309-325
- Bruhn, Kathleen (1996) "Social Spending and Political Support: The 'Lessons' of the National Solidarity Program in Mexico" *Comparative Politics* 26(January):151-177.
- Brusco, Valeria, Nazareno, Marcelo and Stokes, Susan "Clientelism and Democracy. An Analysis of Ecological Data for Argentina"
- Bueno de Mesquita, Bruce, *et. al.* (2002) "The Logic of Political Survival" Typescript, Stanford University.
- Consejo Nacional de Población (1993) *Indicadores Socioeconómicos e Índice de Marginación Municipal, 1990* Mexico: CONAPO-CNA

Cornelius, Wayne, Craig, Ann & Fox, Jonathan (1994) (eds.) *Transforming State-Society Relations in Mexico: The National Solidarity Strategy* La Jolla: Center for U.S.-Mexican Studies, UCSD.

Couch, Jim F. and Shughart, William F. (1998) *The Political Economy of the New Deal* Cheltenham (UK): Edward Elgar.

Cox, Gary, McCubbins, Matthew D. and Sullivan, Terry (1984) "Policy Choice as an Electoral Investment" *Social Choice and Welfare* 1:231-242.

Cox, Gary & McCubbins, Matthew D. (1986) "Electoral Politics as a Redistributive Game" *Journal of Politics* 48(May):370-89.

Cox, Gary and Thies, Michael (2000) "How Much Does Money Matter? 'Buying' Vote in Japan, 1967-1990" *Comparative Political Studies* 33(1):37-57.

Dahlberg, Matz and Johansson, Eva (2002) "On the Vote-Purchasing Behavior of Incumbent Governments" *American Political Science Review* 96(1).

Alberto Diaz-Cayeros (2001) "The Geography of Electoral Risk: A Portfolio Diversification Model of Fiscal Transfers" (typescript, UCLA).

Diaz-Cayeros, Alberto, Kenneth M. McElwain, Vidal Romero and Konrad A. Siewierski (2003) Fiscal decentralization, legislative institutions and particularistic spending

Dixit, Avinash & Londregan, John (1996) "The Determinants of Success of Special Interests in Redistributive Politics" *Journal of Politics* 58(November):1132-55.

Dresser, Denise (1991) *Neopopulist Solutions to Neoliberal Problems: Mexico's National Solidarity Program*. Current Issue Brief Series, no.3. La Jolla: Center for U.S.-Mexican Studies, University of California, San Diego.

Dresser, Denise (1994) "Bringing the Poor Back In: National Solidarity as a Strategy of Regime Legitimation" in Cornelius, Wayne, Craig, Ann & Fox, Jonathan (eds.) *Transforming State-Society Relations in Mexico: The National Solidarity Strategy* La Jolla: Center for U.S.-Mexican Studies, UCSD.

Eisenstadt, S. N. and Lemarchand, René, eds. (1981) *Political clientelism, patronage and development*. Sage Studies in Contemporary Political Sociology v.3.

Estevez, Federico, Magaloni, Beatriz and Diaz-Cayeros, Alberto (2002) "A Portfolio Diversification Model of Electoral Investment" (typescript, Stanford University)

Fearon, James (2002) "Why Ethnic Politics and Pork Tend to Go Together" (typescript)

Ferejohn, John (1974) *Pork Barrel Politics* Stanford: Stanford University Press.

Fleck, Robert K. (2001) "Population, Land, Economic Conditions, and the Allocation of New Deal Spending" *Explorations in Economic History* 38:396-304.

Fleck, Robert K. (1999) "The Value of the Vote: A Model and Test of the Effects of Turnout on Distributive Policy" *Economic Inquiry* 37(4):609-623.

Fleck, Robert K. (2001) "Inter-Party competition, Intra-Party competition, and distributive policy: A model and test using New Deal Data" *Public Choice* 108:77-100.

Fox, Jonathan (1994) "The Difficult Transition From Clientelism to Citizenship: Lessons from Mexico" *World Politics* 46(2)

Geddes, Barbara (1994) *Politician's Dilemma: Building State Capacity in Latin America* Berkeley: University of California Press.

Golden, Miriam (2000) "Political Patronage, Bureaucracy and Corruption in Postwar Italy" Russell Sage Foundation Working Paper #162.

Gómez López Marcela & Pineda Antúnez, Sandra (1999) *El Reparto Municipal del Pronasol: Criterios de Asignación en Aguascalientes y Michoacán* B.A. Thesis, ITAM, Mexico.

Guasti, Laura (1981) "Clientelism in Decline: A Peruvian Regional Study" in Eisenstadt, S. N. and Lemarchand, René (eds) *Political clientelism, patronage and development*. Sage Studies in Contemporary Political Sociology v.3.

Hiskey, Jonathan (2000). "Does Democracy Matter? Electoral Competition and Local Development in Mexico", paper presented at the 2000 Latin American Studies Association Meeting

Kaufman, Robert R & Trejo, Guillermo (1996) "Regionalismo, Transformación del Régimen y Pronasol: la Política del Programa Nacional de Solidaridad en Cuatro Estados Mexicanos" *Política y Gobierno* 3(2):245-280.

Keefer, Phillip (2003) "Clientelism, Development and Democracy" (Typescript: World Bank).

Khemani, Stuti (2003) "Partisan Politics and Intergovernmental Transfers in India" (Typescript: World Bank).

Kitschelt, Herbert (2000) "Linkages between Citizens and Politicians in Democratic Politics" *Comparative Political Studies* 33(6/7).

Lemarchand, Rene and Legg, Keith (1972) "Political Clientelism and Development: A Preliminary Analysis" *Comparative Politics* 4(2).

Lemarchand, Rene (1972) "Political Clientelism and Ethnicity in Tropical Africa: Competing Solidarities in Nation Building" *American Political Science Review* 66(1).

Levitt, Steven and James Snyder (1995) "Political Parties and the Distribution of Federal Outlays" *American Journal of Political Science* 39(4):958-980.

Lindbeck, Assar & Weibull, Jorgen (1987) "Balanced Budget Redistribution as the Outcome of Political Competition" *Public Choice* 52(3):273-97.

Lizzeri, Alessandro and Persico, Nicola (2001) "The provision of public goods under alternative electoral incentives" *American Economic Review* 91(1):225-39

Magaloni, Beatriz, Estévez, Federico and Diaz-Cayeros, Alberto (2000) "Federalism, Redistributive Politics and Poverty Relief Spending: The Programa Nacional de Solidaridad in Mexico (1989-1994)" Paper delivered at the 2000 Annual Meeting of the American Political Science Association, Washington, D.C.

Milesi-Feretti, G-M, R. Perotti, and M. Rostagno (2001) Electoral Systems and Public Spending. In *IMF Working Paper WP/01/22*. New York.

Medina, Luis Fernando and Stokes, Susan (2002) "Clientelism as Political Monopoly." Paper prepared delivered at the 2002 Annual Meeting of the American Political Science Association, Boston, August 29-September 1.

Magaloni, Beatriz, Estévez, Federico and Diaz-Cayeros, Alberto (2000) "Federalism, Redistributive Politics and Poverty Relief Spending: The Programa Nacional de Solidaridad in Mexico (1989-1994)" Paper delivered at the 2000 Annual Meeting of the American Political Science Association, Washington, D.C.

Molinar, Juan & Weldon, Jeffrey (1994) "Electoral Determinants and Consequences of National Solidarity" in Cornelius, Wayne, Craig, Ann & Fox, Jonathan (eds.) *Transforming State-Society Relations in Mexico: The National Solidarity Strategy* La Jolla: Center for U.S.-Mexican Studies, UCSD.

Myerson, Roger (1993) "Incentives to Cultivate Favored Minorities Under Alternative Electoral Systems" *American Political Science Review* 87(4):856-869

Ozbudun, Ergun (1981) "Turkey: The Politics of Clientelism" in Eisenstadt, S. N. and Lemarchand, René (eds.) *Political clientelism, patronage and development*. Sage Studies in Contemporary Political Sociology v.3.

Persson, Torsten, Gerard Roland, and Guido Tabellini (2000) "Comparative Politics and Public Finance," *Journal of Political Economy* 108 (61):1121-1161.

Persson, Torsten and Tabellini, Guido (2001) *Economic Politics* Cambridge: MIT Press.

- Piattoni, Simona (2001) *Clientelism, Interests and Democratic Representation* Cambridge: Cambridge University Press.
- Polo, Michele (1998) "Electoral competition and Political Rents" Milan: IGIER and Bocconi University (typescript).
- Robinson, James and Verdier, Thierry (2002) "The Political Economy of Clientelism" Paper presented at the Conference The Political Economy of Clientelism, Stanford University (May).
- Robinson, James and Torvik, Ragnar (2002) "White Elephants" *CEPR Discussion Paper* No. 3459 (July).
- Rojas, Carlos (1994) *El Programa Nacional de Solidaridad México: Fondo de Cultura Económica*.
- Rozevitch, Simon and Weiss Avi (1993) "Beneficiaries from Federal Transfers to Municipalities: The Case of Israel" *Public Choice*
- Salinas, Carlos (1982) *Political participation, public investment, and support for the system : a comparative study of rural communities in Mexico* La Jolla: Center for U.S.-Mexican Studies, University of California, San Diego.
- Samuels, David J. (2002) "Pork Barreling Is Not Credit Claiming or Advertising: Campaign Finance and the Sources of the Personal Vote in Brazil" *Journal of Politics* 64(3):845-63.
- Schady, Norbert R. (2000) "The Political Economy of Expenditures by the Peruvian Social Fund (FONCODES), 1991-95" *American Political Science Review* 94(2):289-304.
- Schmidt, S.W. et al. (1977) *Friends, Followers and Factions: A Reader in Political Clientelism* Berkeley: University of California Press.
- Scott, James (1972a) "Patron-Client politics and Political Change in Southeast Asia" *American Political Science Review* 66(1)
- Scott, James (1972b) *Comparative Political Corruption* Englewood Cliffs: Prentice Hall.
- Secretaría de Desarrollo Social (1994) *Hechos en Solidaridad* CD-ROM.
- Seddon Wallack, J., A. Gaviria, U. Panizza, and E. Stein. 2000. "Political Particularism Around the World," Mimeo, IADB and Stanford University
- Shefter, Martin (1994) *Political Parties and the State: The American Historical Experience* Princeton: Princeton University Press

Skoufias, E. (2001) "PROGRESA and its Impacts on the Human Capital and Welfare of Households in Rural Mexico: A Synthesis of the Results and and Evaluation by IFPRI" Washington: IFPRI

Snyder, James M. (1989) "Election Goals and the Allocation of Campaign Resources" *Econometrica* 57(3):637-660.

Stratmann, Thomas and Baur, Martin (2002) "Plurality Rule, Proportional Representation, and the German Bundestag: How Incentives to Pork-Barrel Differ Across Electoral Systems" *American Journal of Political Science* 46(3):506-14.

Strömberg, David (2001) "Radio's Impact on Public Spending" Stockholm: Institute for International Economic Studies.

Strömberg, David (2002) "Optimal Campaigning in Presidential Elections: The Probability of Being Florida" Stockholm: Institute for International Economic Studies.

Szekeli, Miguel (1998) *The Economics of Poverty, Inequality and Wealth Accumulation in Mexico* New York: St. Martin's Press.

Wallis, John Joseph (1984) "The Birth of the Old Federalism: Financing the New Deal" *Journal of Economic History* 44-139-159

Wallis, John Joseph (1987) "Employment, Politics and Economic Recovery During the Great Depression" *The Review of Economics and Statistics* 59:516-520.

Wallis, John Joseph (1998) "The Political Economy of New Deal Spending Revisited, Again: With and without Nevada" *Explorations in Economic History* 35:140-170.

Wantchekon, Leonard (2002) "Market for Votes: Evidence From a Field Experiment in Benin"

Ward, Hugh and John, Peter (1999) "Targeting Benefits for Electoral Gain: Constituency Marginality and the Distribution of Grants to English Local Authorities" *Political Studies* 47(1):32-52.

Warner, Carolyn (2001) "Mass Parties and Clientelism in France and Italy" in Piattoni, Simona (ed.) *Clientelism, Interests and Democratic Representation* Cambridge: Cambridge University Press

Weingast, Barry R., Kenneth A. Shepsle, and Christopher Johnsen (1981) "The Political Economy of Benefits and Costs: A Neoclassical Approach to Distributive Politics," *Journal of Political Economy* 89 (4):642-664.

Wodon, Quentin (1999) "Government Programs and Poverty in Mexico" Report No. 19214-ME, Washington: World Bank.

Wodon, Quentin (2001) "Government Programs and Poverty" in Marcelo Giugale, Olivier Lafourcade and Vinh Nguyen (eds.) *Mexico. A comprehensive development agenda for the New Era*, Washington: World Bank.

Wright, Gavin (1974) "The Political Economy of New Deal Spending: An Econometric Analysis" *The Review of Economics and Statistics* 56(1):30-38.