

**Towards a Model of Budgetary Allocation and Revenue-sharing in Mexico's Local  
Governments <sup>1</sup>**

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## 1. Introduction

Over the last decade, the landscape of local government in Mexico has changed dramatically. In the past, a municipal government not belonging to the dominant *Partido Revolucionario Institucional* (PRI) was exceptional. Today more than 450 out of the 2,413 municipalities are controlled by opposition parties.<sup>2</sup> Four out of 31 governorships are held by the opposition *Partido Acción Nacional* (PAN). Advances of opposition parties are likely to continue in the coming years. As alternation in office and divided government have become more common, interactions between levels of government from different partisan affiliations have become complex, and governance more contingent on local performance.

Before the 1980s, most accounts stressed that politics at the local level in Mexico was relatively simple. Municipalities were characterized by strict political control through entrenched local bosses (*caciques*) who would sometimes use outright repression to keep their power. Their authority went unchallenged as long as they could deliver political support to the PRI in their strongholds. In exchange, the federal bureaucracies provided financial resources for local patronage, which usually took the form of public employment, direct grants of land, subsidized credit, housing, money or other private goods delivered to specific individuals or organizations. When the power of local bosses was challenged, occasional outbursts of violence and post-electoral conflicts ensued (See Martínez Assad, 1985); but such conflicts rarely changed the fundamental clientelistic nature of local politics. Conflicts at the local level were not channeled or mediated by the party system or settled by appealing to compromises between local politicians, but instead solved through

the intervention of other levels of government, usually state governors or federal bureaucrats, all of them members of the ruling PRI.

Although traces of this recent past can still be recognized in some states and municipalities, in an increasingly large number of states opposition government has become a normal aspect of political interaction, conflicts are settled through local resolution processes, and bad governments are punished through the ballot box.<sup>3</sup> This has created a new sense of accountability in local governments which should presumably be reflected in better local governance; the provision of public goods and services with high social returns, as opposed to individual patronage; and a more effective use of municipal financial resources.

This paper explores whether local governments in Mexico have changed their financial behavior on the grounds of the greater accountability that the competitive party system could induce in them. Even though politicians in Mexican municipal governments lack the incentives of reelection local politicians have in other countries, and despite the limited time frame of their terms, we believe that the introduction of competition can produce tangible results in their financial priorities and behavior. Maybe municipal governments in Mexico have become aware of the importance of keeping a balance between revenue and expenditure. Maybe local politicians have found a new role for the provision of developmental public goods and sound local finances, which would imply a better local performance, and also enhance their chances of political survival.

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<sup>2</sup> It should be noted that 410 municipal governments in Oaxaca, which have predominantly indigenous population, are chosen by *usos y costumbres*.

<sup>3</sup> For examples and a discussion of this issues see the essays in Rodriguez & Ward, 1995.

The paper proposes a theoretical framework where scarce resources must be allocated to multiple uses, but where local politicians possess substantive preferences over these allocations. Some politicians might prefer to have a larger share of their budgets spent on administrative and current expenditure, while others might prefer to give a higher priority to public works or developmental public goods. Some might want to spend much more than others. These preferences are induced by incentives in the political system. We do not fully spell out those incentives, but suggest that traditional entrenched PRI politicians will give a higher priority to the provision of private goods in the form of traditional patronage, while politicians from any party facing competitive pressures will prefer the provision of public goods with developmental consequences for the community at large.<sup>4</sup>

The model further assumes that local politicians want to be popular. The quest for popularity could be induced by a variety of reasons ranging from making it easier to maintain office, as a way to further future careers (absent the incentive of reelection), as a service to the party they belong to (in order to secure a nomination for higher office), or for the sheer personal pleasure of being liked by the people. Hence, local resources are scarce not only because local politicians only have a limited capacity to influence transfers from other levels of government, but because attempts to improve their revenue collection through higher taxes render their governments unpopular.

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<sup>4</sup> This would enable us to assess whether municipal governments have started deciding their budgetary allocations according to developmental priorities constrained by the financial resources they can make available, or whether their allocations are an almost accidental result of fragile administrations, where priorities are set by personal whim and political constraints from the outside environment. Conventional wisdom maintains that municipal governments spend with very little foresight. According to the well documented study by Fagen & Tuohi (1972), Mexican local government “decisions are made and resources are allocated ... more as political and personal forces dictate than as developmental or social

Economists, public administrators (and sometimes even political scientists) tend to reduce problems of resource allocation to questions of whether political or technical criteria are followed in budgetary decisions. The decision to allocate resources to particular uses is always political, in the sense that priorities are constructed through the challenges a local government faces when in office. The possibility of modifying the amount of financial resources is also always political because the flexibility to improve revenue collection, or obtain conditional or unconditional transfers from other levels of government, depends on local politics. Whatever the “first best” technical solution to a public finance allocation problem, it will always be politically constrained.

The paper is organized as follows. The next section presents the problem of budgetary allocation by Mexican municipal governments, emphasizing the largely heterogeneous patterns that characterize local finances. Section 3 provides a formal model of resource allocation where politicians must preserve electoral support and use budgetary allocations to optimize their chances of staying in office besides fulfilling objectives of their own. Section 4 summarizes the implications drawn from the model and provides tentative empirical evidence supporting them. The final section concludes by suggesting directions for future research.

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criteria would demand” (p.26). However, in the context of increasingly contested multiparty elections, local politicians might be concerned with the developmental performance of their administrations.

## **2. The problem of municipal resource allocation.**

Municipal governments in Mexico must decide where and how to allocate limited resources in the relatively short time frame of their three-year period in office. The prime objective of municipal executives can be viewed in terms of their political survival (Ames, 1987) in a broad sense: local politicians want to retain power, and since they cannot be reelected in their post, they might want to do a “good” job during their term in office that would enable them to advance into higher office during the next term (i.e. a job in the state or federal bureaucracy, a local representative post, or even a federal one). Of course there are different notions of what entails “good” performance in local government. If municipal politics is characterized by the dominance of a PRI local boss, who uses different means (sometimes violent), such performance would primarily mean delivering “private goods” to a privileged clientele in the form of traditional patronage, ensuring at the same time sustained dominance of the *cacique* in local politics.

With multiparty competition the conception of “good” performance becomes more complex, involving the incumbent, the challengers faced, and the relationship between local, state and national politics. Since parties are long lived organizations with reputations to construct and maintain, local politicians might become more forward looking and responsive to local developmental interests. This could be reflected in a higher priority being given to the supply of “public goods” rather than patronage delivered to the community at large. For example, if an ambitious PRI politician is in power, and she perceives a real threat to her party of losing power in the next election, good performance could entail delivering public works and services effectively. The capacity of such local politician to counteract growing opposition could enable her to become a

serious candidate for party nomination in a higher office in the future. If the municipality in question is a prominent city governed by an opposition party, the incumbent would need to deliver not only “public goods” to his jurisdiction, but also a “public good” for his party in demonstrating that he is capable of governing effectively. However, if there is little relationship between a local politician and her party, the municipality has a limited national or regional prominence, or elections are not very competitive in that locality, it is quite reasonable to expect that even opposition politicians in power would emphasize delivering “private goods” in a way not altogether different from the *cacique* pattern.

Municipal presidents must hence make an optimal use of resources to fulfill survival and career objectives. This decision is taken in a short time frame, and there might be a slow learning process in the first year in office. The Mexican institutional features discourage multi-annual budgetary allocations at the local level. More often than not, local politicians need to deal with precarious administrative apparatuses where civil servants are characterized by *compadrazgo* links with the previous incumbent, rather than any particular expertise. Moreover, municipal governments in Mexico face a chronic shortage of financial resources and the time-periods for receiving them are highly uncertain and often not formally defined. In fact, the potential benefit of increasing local taxation to improve the financial standing of a municipality is offset by the loss of popularity that higher taxes can carry with them.

Financial resources available to Mexican municipalities come primarily from their own revenue collection efforts (mainly from the property tax or *predial*) and state and federal revenue transfers in the form of *participaciones*. These resources might be supplemented with conditional or unconditional transfers coming from federal budgetary

appropriations such as what used to be the *Solidaridad* program funds, and in some increasingly more common cases, local debt. Although we are aware debt finance is a crucial problem in large urban municipalities, our discussion will abstract from this issue in order to keep modeling simple within a single time period.

In the last years, bitter debates on local finances have concerned the question of “excessive” municipal indebtedness opposition parties create -or inherit, depending on who’s opinion is quoted- when they attain office; the dependence of local governments on federal and state transfers (*participaciones*) through revenue sharing agreements, which curiously enough is an almost universal complaint notwithstanding partisanship; the incapacity or unwillingness of local governments to increase their own tax revenue collection through broadening of the base, the introduction of new local taxes or user charges, or the improvement of the land registry (*catastro*); the dependence of local public works projects on federal funds coming from federal budgetary item 26, the *Fondo de Desarrollo Social Municipal* (FDSM) -heir of the politically charged *Solidaridad* program-; and the excessive share of administrative expenditures in local budgets. Some, though not necessarily all, of these debates can be meaningfully addressed by the model presented below.

The composition of local funding varies widely across municipal governments. Table 1 provides some evidence of this rather large variation, drawing information from a database of 300 municipalities for which financial indicators are readily available, ordering them by levels of welfare according to INEGI’s widely-used 7 point scale. 66% of level 1 municipalities, which are the poorest, depend highly on federal and state revenue transfers (*participaciones*) which constitute 80% or more of their resources. This percentage drops

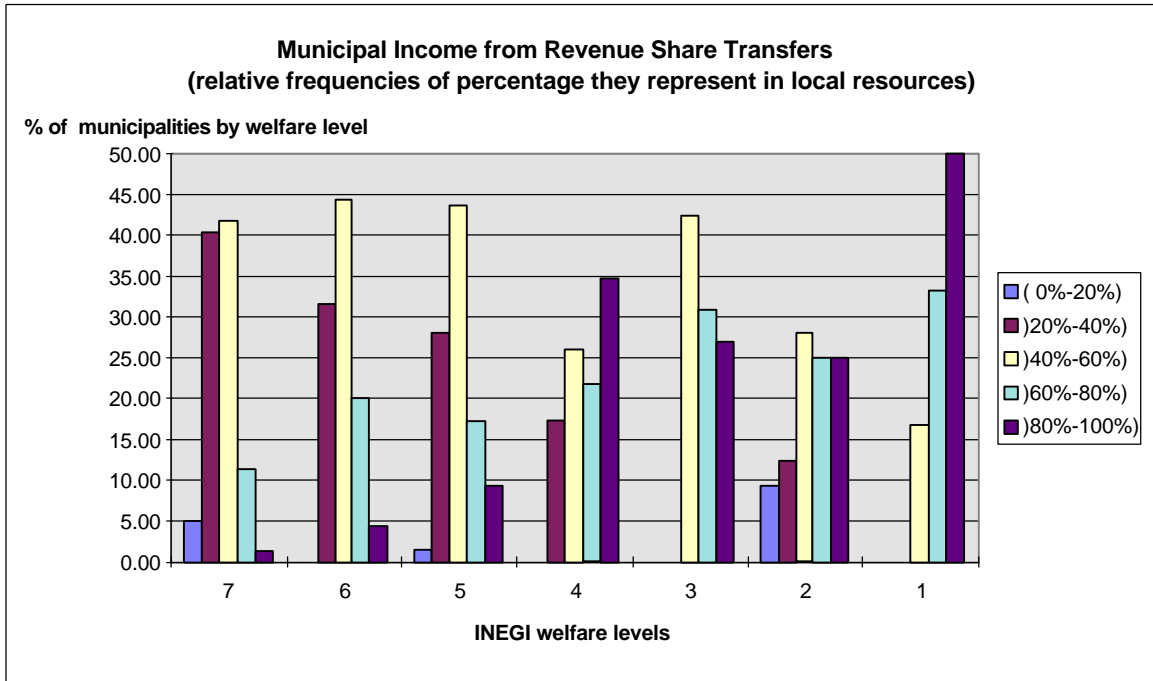


to between 20 and 50% for the majority (68%) of level 7 municipalities. Although still a large share, it is clear that wealthier municipalities can rely a bit better on their own resources to finance their expenditure. Debt does not constitute a significant source of funds for a large majority of municipal governments, so the rest of the resources are mainly own revenue coming from the land tax (*predial*).<sup>5</sup>

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<sup>5</sup> The results of our ongoing research tell us that even if public debt is not significant as an income for most municipalities, there are two things that can be said about public debt at this level of government. (1) For more than 50% of the municipalities with the higher welfare levels (5, 6 and 7) public debt represents around 20% of their income. Although they are few municipalities in number, they concentrate a very important share of the population living under municipal governments. (2) Public debt represents more a deficit indicator at this level of government, since municipalities with the lower welfare levels concentrate the larger debt as a percentage of their total income, even if they are relatively few in number.

**Figure 1.**



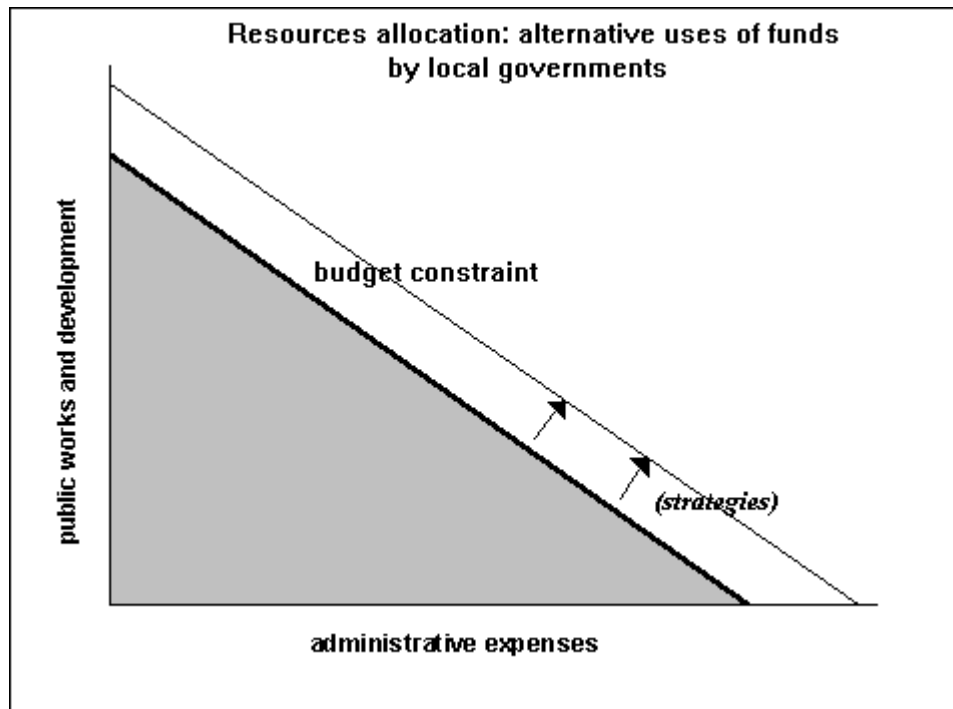
SOURCE: Calculated by CIDAC with data from INEGI, 1995.

Broadly speaking, local governments have two alternative uses for funds which roughly correspond to delivering “private” or “public goods”: they can either devote resources to pay for “administrative expenses”, namely, payroll and purchases that are useful sources of traditional patronage delivered to individuals to pay for political favors or reward loyal supporters; or they may allocate resources to “public works and development”, which might also entail a high degree of political discretion (contracts anywhere in the world are prized rewards), but they also have direct consequences for the welfare of the community as a whole.

The problem for the municipal administration can hence be viewed as one of allocating resources among two objectives, administrative or public work expenses, given

a budgetary restriction made up of revenue transfers and own revenue.<sup>6</sup> Figure 2 depicts such setting.

**Figure 2.**



The horizontal axis represents quantity of administrative goods provided; while the vertical axis represents public works projects. Hence, any point in the graph represents a unique combination of a quantity of public works and quantity of administration units. The expenditure in each of them is given by the multiplication of the quantity by their unitary price. The diagonal represents the budget constraint, which is the total amount of money available to pay for such expenditure. Any outward shift of the constraint means that more money is available, making more combinations of (x, y) available. The allocations on the line itself represent all the possible (x, y) combinations which are feasible using up all

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<sup>6</sup> If one views it as a production problem, this situation can be represented as an isocost line, and the expenses are viewed as inputs into the production of government performance. Whichever interpretation

resources; combinations under the budget constraint represent allocations where not all resources are spent; and combinations over it represent allocations which entail local deficits, since more is spent than the available resources.

The budgetary restriction can be influenced by municipal administrations through various strategies, including, for example, improving the collection of the municipal property tax, or lobbying the state government or its finance secretary, in order to obtain a larger share of tax transfers (*participaciones*). These strategies would shift the budgetary constraint in a parallel manner as shown in figure 1. These strategies, however, entail some costs for municipal administrations, since extracting resources is always difficult. Some strategies, in fact, might be unavailable to some governments. For example, in the case of divided governments (i.e. governor belonging to one party, local legislature majority belonging to another and perhaps even the municipal authorities to still another), strategies that improve own revenue collection are more likely to be successful than the ones that rely on transfers. Thus, the partisan affiliation of the local government is crucial to determine available strategies.

The slope of the budget constraint represents the relative price of administration expenses relative to public works. Changes in the relative price of each of those goods, keeping the same total resources available, are represented by shifts in the slope of the constraint. Supplementary federal transfers such as budgetary item 26 (what used to be the Solidaridad funds) cannot be used to pay for administrative expenses. Therefore, matching funds arrangements or transfers for specific projects should not be viewed as increasing the municipal budgetary restriction, but can be understood instead as changing the relative

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one takes (viewing local governments as consumers or producers), it is meaningful to view the problem of

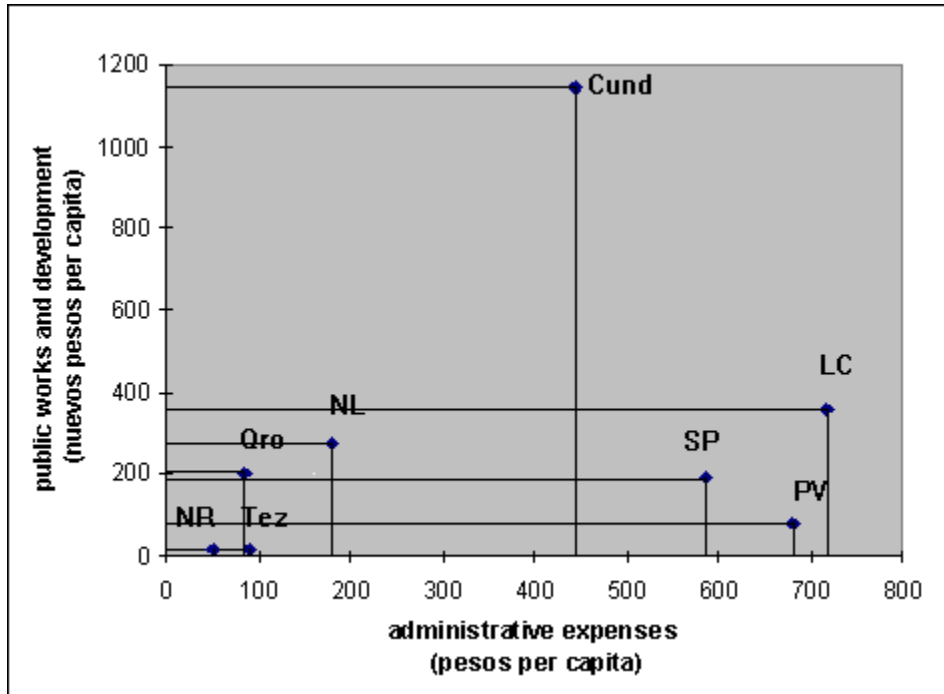
price of public works (generally, if the grants are conditional, projects that are attractive from the federal or state-government point of view are the ones carried out, because they become cheaper than the alternatives) vis-a-vis administrative expenses. This does not mean that local governments have no choice when they receive earmarked transfers: they do, but the incentives are such that the best use they can make of their limited resources entails doing what the level of government that is providing the transfer wants.

Resource allocations vary widely across municipalities. Figure 3 reports some selected cases as illustrations, within a diagram similar to the budgetary space just discussed.

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resource allocation as a constrained decision as shown in figure 2.

**Figure 3. Resource allocation: some municipal examples**



Key: NR=Nicolás Romero (Edo. de México), Tez=Teziutlán (Puebla), Qro=Querétaro (Querétaro), NL=Nuevo Laredo (Tamaulipas), Cund=Cunduacán (Tabasco); SP=San Pedro Garza García (Nuevo León), LC=Los Cabos (Baja California), PV=Puerto Vallarta (Jalisco).  
 SOURCE: Constructed with data from INEGI, 1995.

The graph shows selected municipal government allocations of resources according to the per capita amounts in pesos in the year of 1992. Allocations are all over the space, which reveals the large variation there is in municipal budgets. Clearly the budget constraint of some states is much more stringent than in others, since even in per capita terms, some municipalities like Cunduacán or Los Cabos have far more resources available. The slope of the budgetary restriction of this figure is a 45 degree line running along the allocation each of the municipal governments decided. Thus, municipalities like Puerto Vallarta and San Pedro Garza García have similar budgetary constraints, but different budgetary allocations, with the former giving almost exclusive importance to administrative expenses. It is important to note that the space in this figure is not identical

to figure 2, because the unitary price of public works and administrative units is abstracted here, only providing overall expenditure, while the axis in figure 2 showed units allocated at whichever price.

To find an optimal allocation of resources given a budget constraint, some behavioral assumption must be made about the preferences of the decision maker. In the conventional microeconomics story, the assumptions are rather simple: the decision maker can order all the alternatives with an increasing function, where it prefers to have more, rather than less; and prefers to have a combination of goods rather a single one of them (i.e. no corner solutions due to concavity in the utility or production functions). This ensures that the allocation will lie on the budget constraint (and thus will be efficient, since no resources would be wasted). Political preferences need not behave in the way assumed by economic theory.

Politicians are more likely to have specific satiation points, which would represent a combination of  $(x, y)$  they prefer, and might not want to be too far from it. That is, politicians would not necessarily want more over less, but they might care more about the specific combination that is being allocated, in order to balance contending interests that back them. Moreover, they might not particularly care if some resources are wasted lying in points inside the budget constraint (especially if they have some authority over the allocation of the surplus). In fact, they might not even care too much about the budget constraint at all, if they have ways to shift their deficits to other actors in the political system. In short, the behavioral assumption on the preference of politicians should reflect their political priorities, not a purely economic logic. The standard assumption in spatial models in political science is to propose Euclidean preference functions, which imply a

single peaked profile with a maximum at an ideal point representing a specific combination of goods (Ordeshook, 1992).

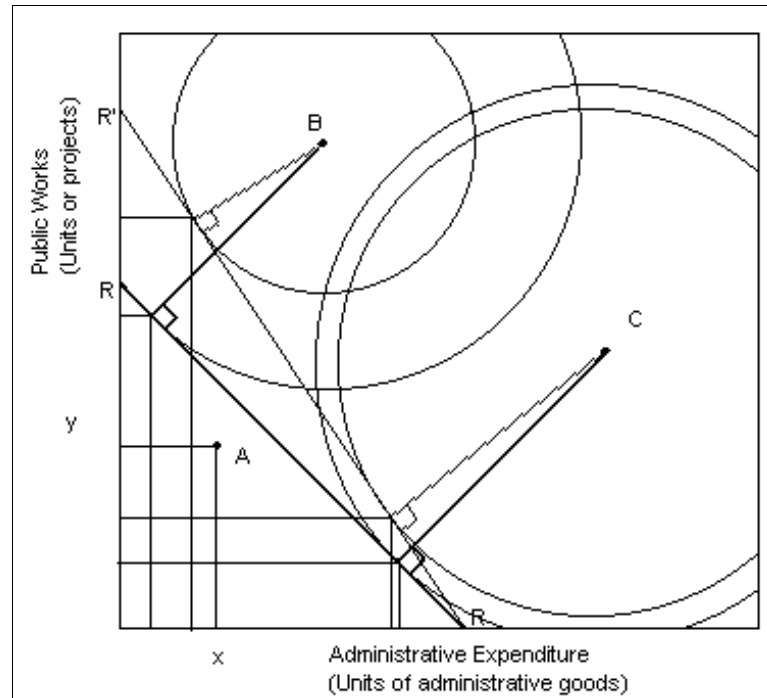
Figure 4 presents three examples of different politicians' ideal points, and the indifference contours that correspond to decreasing utility levels as the circles are farther away from the ideal point. Those indifference contours entail an Euclidean distance function with no difference attached to the nature of administrative and public works expenditure. That is, in the circular contours there is a one-to-one tradeoff between the different (x, y) dimensions of choice, although this needs not be the case in a general setting. It should be noted that these indifference contours, although two-dimensional, yield a unique allocation of resources that would place each politician at the point closest to its ideal point. For politician A, such point is precisely his ideal point, which is in fact inside the budgetary restriction RR; for politicians B and C it is the (orthogonal) projection of their ideal point in the budget constraint. Hence, if politician B is elected, he would allocate more resources to public works than to administration, while if C is in office, she would prefer a larger proportion of administrative expenses. A, B and C can be interpreted as alternative positions for a local politician, which show unambiguously that, the more x or y they prefer in their ideal point, the more they will allocate on the projection of their ideal points over the budget constraint.

As it was discussed before, the budgetary restriction could also change for two reasons: if there is a change in the resources available, the whole line would shift inwards or outwards; if there is a change in relative prices, the slope would change. In the case of a change in the resources available, there would not be a shift in the composition of resources devoted to each good. Figure 4 shows, on the other hand, that if the change



occurring is a drop in the relative price of, say, public works, more public work projects can be purchased yielding a more than proportionate increase in the allocation of resources to public works (for those politicians who are beyond the budget constraint) as shown by  $RR'$ .

**Figure 4. Optimal allocation choices for different politicians**



Hence local governments decide a unique allocation that minimizes the distance from their ideal point but that is also contained within the constraint of resources available to them (assuming they have no debt financing available, so their budgets must balance). At this point, it is important to bear in mind the structural problem involved in the grant of loans to local governments. State governments as well as municipalities have no real liability for their debt, because future federal revenue shares are used as collateral for any loans they secure. More often than not, the debt is written off or assumed by the federal

government. In this sense, debt does not represent a real income source, but it behaves more like a conditional federal transfer.

The next section develops a simple formal model of the insights of this graphical depiction. For the less mathematically inclined it can be skipped to section 4 which provides the main implications and empirical evidence of resource allocation among Mexican municipal governments.

### **3. A formal model of optimal resource allocation.**

The problem of the local government optimal allocation can be stated in formal terms, borrowing from the framework in Bates & Lien (1987) in the following way. Local politicians pursue their own political survival, which means that they want to stay in office and advance to a better office on the next round. Their probability of advancing to better offices will be proportional to the satisfaction they give to their constituency or interest group that backs them; and the probability of retaining office depends on the popular support they enjoy during their term. Politicians must then decide on an allocation of resources  $(x, y)$  that benefits the political interest groups that back them. Such priority is summarized by induced ideal points  $(x^*, y^*)$ , describing a policy position in the allocation space given by combinations of administrative  $(x)$  and public works  $(y)$  expenditures. It is important to note that  $x$  and  $y$  are quantities of goods, not total resources spent. This allocation is bounded because interest groups do not want a government to have an infinitely large budget. Hence the induced policy objective of local politicians is to produce an allocation such that it minimizes the (separable) weighted Euclidean distance (squared) in the allocation space between  $(x, y)$  and  $(x^*, y^*)$ , according to:

$$D = a(x-x^*)^2 + b(y-y^*)^2. \quad (1)$$

Parameters  $a$  and  $b$  represent the degree to which a certain dimension of the allocation space can be sacrificed in favor of the other. To the extent that, for example,  $a$  is high, it means the distance is more weighted on the administrative expense dimension, so the politician making a decision is not willing to forsake, say, some administrative staff, in favor of another public work project. Only if there are many public work projects would the tradeoff be accepted.

Besides taking care about enacting policies close to their ideal points, local politicians also need to have enough popular support  $S$  to stay in office. Support is assumed to be a negative quadratic function of the tax rate: the higher the tax rate  $t$ , the less support, and this diminishes more the higher that tax rate is. This means that,

$$S = -ct^2, \quad (2)$$

where  $c$  is a constant. This assumes, of course, that the tax base is rather broad, in the sense that everyone is taxed. The dilemma lies in deciding on a tax rate that is enough to cover the expenses that will make the interest group backing a politician happy, while at the same time remaining in office without too much popular dissatisfaction due to the level of taxation. The utility function of local politicians is hence given by:

$$U = -D + S. \quad (3)$$

The budget constraint is given by resources available, and the uses they can be put to. If it is binding, it can be represented by

$$R + T = X + Y, \quad (4)$$

where R is the revenue collected by the local government in its jurisdiction, which is obviously affected by the tax rate, T is the unconditional transfer received by the local government from other levels of government, X is the total budget allocated to x administrative expenses, and Y is the budget allocated to y public works. If the unitary price of administrative expenses is  $p_x$ , and public works is  $p_y$ , and B is the broad local tax base to generate local revenue, the budget constraint is:

$$tB + T = p_x x + p_y y. \quad (5)$$

The solution to this problem yields the following first order conditions:

$$a(x-x^*)/b(y-y^*) = p_x/p_y \quad (6)$$

$$x = x^* - (c_{p_x} t / aB) \quad (7)$$

$$y = y^* - (c_{p_y} t / bB) \quad (8)$$

Condition 6 is simply an allocative efficiency condition, which states that the relation of the marginal utility of the two goods must be equal to the relative price between the two goods (public works and administration), so that if there is an increase in the price of  $x$  more resources should be devoted to  $y$  and less to  $x$ . How much reallocation would be necessary depends on the ratio  $a/b$  which indicates the relative weights given to administrative and public expenses by the local politician.

Conditions 7 and 8 are the truly interesting ones, since they relate allocations to the tax rate and base that the state can influence. Notice that the allocation decision is not influenced by transfers  $T$ . That is, if the local government receives more transfers it will just increase the consumption of both  $x$  and  $y$ . This is different from the effect of a conditional transfer for, for example sewage systems, that would influence the budgetary problem by reducing the unitary price of public works.

*Ceteris paribus*, an increase in the tax base ( $B$ ) yields a larger expense on  $x$  and  $y$ ; an increase in the tax rate ( $t$ ) has an unambiguous effect of decreasing  $x$  and  $y$ ; an increase in the prices of each good yields, also unambiguously, a decrease in their allocation; an increase in the cost in popular support from taxation ( $c$ ) yields a decrease in both  $x$  and  $y$ ; and a shift in the ideal point ( $x^*$ ,  $y^*$ ) yields shifts in the same directions for the optimal allocations. Only an increase in  $b$  and  $a$ , the shape of the indifference contours, or more intuitively, the tradeoff between administration and public works, have an ambiguous effect. On allocation grounds, an increase in  $a$  or  $b$  yields a decrease in  $x$  or  $y$  respectively, in order to keep the marginal utility equality; but on the ground of tax revenues, if there is larger tradeoff, for example, in favor of administrative expenses (larger  $b$  with constant  $a$ ), an effort will be made to reallocate resources more to public works. Which effect

dominates, is an empirical question. Finally, given fixed relative prices, the proportion of total revenue allocated to  $x$  and  $y$  given by  $X/Y$  depends in a non-linear way on the relationship  $b/a$  and  $y^*/x^*$ .

#### **4. Implications and empirical findings.**

Directly testing a model like this is problematic since crucial variables are unknown. What are the salience indicators of local politicians? How tolerant are citizens to increases in tax rates? In fact, what are the effective tax rates and the true tax bases in each municipality? How can we find the ideal points of  $x$  and  $y$  if there is no legislative roll call voting or some other mechanism that might induce those points through the revelation of political preferences? How do we calculate the unitary prices of public works or administrative expenses? Clearly none of these variables are known in Mexico, or in almost any other case. The point of the modeling exercise, however, is to draw some specific implications, which might be empirically testable, in order to understand the dynamics of budgetary choice. Some testable hypotheses can be drawn from the relationships posited by the model:

H1: Public expenditure in both administration and public works will be *proportional to budgetary constraints*, as reflected by the available resources either through own tax collection or the reception of transfers.

H2: The more a politician's base of support comes from old-clientelistic practices, (e.g., public employment, credits, personal financial transfers) the more resources will be devoted to administrative expenses (i.e. the ideal policy of that politician would entail a large  $x^*$ ). In terms specific to Mexico, this would imply that those municipalities where

the PRI has *large margins of victory* or faces *little competitiveness* will purchase more administrative services.

H3: The more “political mobilization” the more a politician’s base of support requires delivering public goods to his jurisdiction, so more resources will be devoted to public works. This is because higher political participation would be reflected in a stronger tradeoff as represented by  $b/a$  in the sense that public works are more salient to citizens who care about the developmental prospects of their locality. Specifically, the *more electoral competitiveness* there is, the *smaller the margins of victory*, and the higher *voter turnout*, the more public works will be purchased.

H4: The more federal or state resources are given through conditional transfers, hence changing the relative price of public works, the more public works projects will be carried out from own municipal budgets.<sup>7</sup> Concretely for the Mexican case, *the more conditional transfers* are allocated to a municipality through *Solidaridad* funds, the more it will spend on public works.

H5: An increase in resources given through transfers shifting the budget constraint outwards will increase both administrative and public works expenses, but it will have no effect on the composition of expenditure. Thus, *higher dependence on unconditional transfers* such as *participaciones* will have no effect on the composition of administrative vs. public work expenses.

H6: As the saliency of public works increases, politicians will devote more resources to them. This is likely to happen to the extent that *electoral challengers pose a real threat*, as when *alternation* in office is more common.

What follows is an exploratory exercise that attempts to show the plausibility of these hypotheses. The empirical tests are made with data coming from 300 municipalities for which INEGI has collected information on local finance, coupled with political information and census variables collected in a municipal database part of a larger project at CIDAC.<sup>8</sup> All monetary variables are measured in per capita terms, in order to ensure comparability across municipalities with widely different sizes, and to avoid problems of heteroscedasticity in the OLS econometric estimates. The dependent variables are three: the per capita expenditure in municipal administration (A pc); the per capita expenditure in public works (PW pc); and the share of public works in overall expenditure (PW x). No tests are carried out with the share of administrative spending since its complement is the share of public works.

To provide the evidence, we test the hypotheses simultaneously. However, we proceed in stages: first we provide some controls for level of development which provide a baseline estimate; second, we incorporate budget constraints and observe the effect of available resources on municipal expenditure allocations; third we test for the political determinants of allocations; fourth we provide evidence of the effect of all these variables on the relative composition of expenditure; and finally we provide some qualitative evidence of the effect of conditional transfers.

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<sup>7</sup> If the price elasticity of public works is not too large, total expenditure in public works will thus also increase

<sup>8</sup> CIDAC has created a database on the 300 municipalities for which INEGI has published financial information, to which we have added social and political variables. This database cannot be considered as a statistically representative sample. Nevertheless, it is significant because it includes about 85% of municipal gross income and about 62% of the Mexican population under municipal governments. The greatest limitation of the database is that poor municipalities are underrepresented, but we must take into account that often these municipalities do not even have accounting procedures.



To establish a baseline, it is convenient to start by testing a naive economic development hypothesis, which entails that government expenditure would be determined by the level of development attained by each municipality. Per capita expenditure on both administration and public works would be predicted by indicators such as the level of wealth or income, the percentage of literate population, or the degree of urbanization. The development controls used in the estimates are the INEGI welfare index (WELFARE) as the closest indicator available to something measuring municipal wealth or income; an indicator of female illiteracy (ILLITERACY), which represents a more precise indicator than illiteracy for the population at large, in order to measure both poverty and the indigenous component of municipalities (female illiteracy is highest in more indigenous municipalities); and size of the municipality as measured by population, where the units are 10,000 inhabitants (SIZE). The expected signs for the relationship of these variables with administrative and public works expenditure would be positive for WELFARE and SIZE, and negative for ILLITERACY. These variables are kept as controls for the effects of development throughout the estimates.

**Table 1. OLS estimates of determinants of per capita expenditure**

Dependent Variable	(1)	(2)	(3)	(4)	(5)	(6)
	A pc	A pc	A pc	PW pc	PW pc	PW pc
C	107.4*** (24.1)	6.165 (18.656)	58.656 (34.279)	94.8*** (16.7)	4.941 (9.908)	-10.742 (18.288)
WELFARE	9.273** (4.263)	9.035*** (3.166)	11.148*** (3.227)	-6.952** (2.954)	-1.708 (1.681)	-0.809 (1.722)
ILLITERACY %	-2.015*** (0.730)	-0.457 (0.037)	-0.508 (0.535)	-0.697 (506)	0.349 (0.284)	0.408 (0.285)
SIZE (10,000)	-0.559* (0.337)	-0.437* (0.243)	-0.300 (0.246)	0.143 (0.233)	0.243* (0.129)	0.2653** (0.1315)
OWNREV pc		0.468*** (0.041)	0.467*** (0.041)		0.148*** (0.022)	0.145*** (0.022)
REVSHARE pc		0.216*** (0.020)	0.207*** (0.020)		0.266*** (0.011)	0.264*** (0.011)
DEBT pc		0.471** (0.236)	0.402* (0.235)		0.141 (0.125)	0.117 (0.126)
ALTERNATION			-7.626 (11.586)			-12.100** (6.181)
TURNOUT			0.060 (0.362)			0.375** (0.193)
HMOLIN			-31.746*** (11.585)			-1.802 (6.181)
Adj R2	.047	.503	.513	.010	.679	.700

standard errors in parenthesis

\* significant at the 90% confidence level, two tailed test

\*\* significant at the 95% confidence level, two tailed test

\*\*\* significant at the 99% confidence level, two tailed test

As can be seen in estimates 1 and 4 reported in table 1, the level of development can only provide a weak explanation for expenditure in administration, and it fails to provide a reasonable account for public works. In the case of public works, in fact, the

signs of ILLITERACY and WELFARE are contrary to the expectations, although not statistically significant in the case of illiteracy

From the model developed in the previous section it is clear that one of the most important determinants of expenditure will be the budgetary constraint given by the resources available to local governments. Thus, estimates 2 and 5 in table 1 provide controls for the budget constraint, including the possibility of incurring in debt. The estimates explain half and two thirds of the variance, which entails that allocations are clearly decided taking into account budgetary constraints, although they are not the only considerations, since a good part of the variance is left unexplained. The results are highly illustrative of what budget constraints mean for municipal governments in Mexico.

The estimates can be interpreted in the following way: in per capita terms, controlling for the level of development, a municipality will allocate to administrative expenses 47 cents out of each peso collected through own revenue; 22 cents out of each peso received as a revenue share; and 47 cents from each peso of debt finance. In the case of public works, it will allocate 15 cents out of each peso of own revenue, and 27 cents from each peso coming from revenue share transfers. Since the debt variable is not statistically significant in estimate 5, this means that public works allocations are not decided according to the availability of debt financing.

The results mean that municipalities basically use own revenue collection and debt to cover current administrative expenses. Public works show an inverse pattern, in that twice as many funds come from revenue transfers as from local taxation. If one expects municipalities to promote a developmental strategy, the use of debt to cover administration expenses is completely misplaced. That public works are primarily paid by

*participaciones* probably reflects that many projects are being decided according to transferred resources, conditioned to specific uses and priorities dictated by other levels of government, so that financial resources that were supposedly unconditional transfers end up following a logic of dependence, because after all they are not so unconditional. This is quite likely considering the large degree of discretion state governments have in the allocation of revenue shares. At the time, some states even lacked formulas to decide the local distribution of *participaciones*. Unfortunately data is not yet available at the municipal level in order to test whether public works allocations are determined by resources available through the *Solidaridad* program, but these initial findings, and the discussion at the end of this section, strongly suggest that they are.

Some comment must be made on the significance and effect of levels of development once the budgetary constraints are taken into account. In the case of public works, it is clear that the negative relationship with welfare and illiteracy was spurious. However, the SIZE variable as measured by population has a positive sign and is statistically significant. The coefficient should be interpreted as showing that for every 10,000 more inhabitants in the municipality 25 more cents are allocated to public works. This result could be simply a consequence of urbanization, since in cities public works might be more necessary than in rural settings. In the case of administrative expenses SIZE exhibits a negative effect with 44 less cents being spent for every 10,000 inhabitants. The welfare variable retains significance, entailing that richer municipalities spend more on administration, 9 pesos in level 1 municipalities, in contrast with 56 pesos in level 7 ones. Illiteracy is not significant anymore.

The next set of estimates incorporates political variables that are most closely related with the hypothesis stated at the beginning of this section. A matrix of correlations of political variables measuring electoral competitiveness is reported in table 2. The effective number of parties as measured by the H Molinar index (Molinar, 1991) is highly correlated with all other measures of electoral competitiveness. There are consistently more parties where the PRI is weaker both at the federal and the local levels, when the margin of victory is small, and in non-hegemonic municipalities (hegemony being defined as more than 70% PRI vote or a margin of victory of more than 40%). It is important to note that federal and local elections increasingly show dynamics of their own, as can be seen in the positive, but not so strong correlation between federal and local PRI vote. In order to avoid problems of multicollineality, the Molinar index is used in the analysis as the best measure of electoral competitiveness at the local level.

**Table 2. Correlation between competitiveness measures**

	HMOLIN	FEDPRI	LOCPRI	HEGEM
FEDPRI	-0.544			
LOCPRI	-0.738	0.492		
HEGEM	-0.613	0.446	0.737	
MARGIN	-0.705	0.434	0.856	0.831

Some other political variables that have meaningful interpretations in terms of the model are the level of turnout which represents the degree of “political mobilization”, a dummy variable for opposition parties being in office, and a dummy variable for whether the municipality has lived through alternation, even if they were governed by the PRI at

the time. The two dummy variables are highly correlated, so alternation will be used since it covers a wider scope than only opposition governments. The turnout variable is uncorrelated with any of the other political variables, and although alternation is correlated with some measures of electoral competitiveness the Pearson coefficient for the Molinar H is not high.

**Table 3. Correlation between other political variables**

	HMOLIN	MARGIN	FEDPRI	LOCPRI	HEGEM	TURNOUT	OPOS
TURNOUT	-.077	-.180	.134	-.145	-.168		
OPOS	.206	-.458	-.213	-.565	-.367	.201	
ALTERN	.270	-.531	-.238	-.575	-.465	.251	.698

Thus, estimates 3 and 6 in table 1 incorporate the modernization controls, the budgetary constraints, and the political variables of the Molinar index of effective number of parties (HMOLINAR), the level of “political mobilization” as represented by TURNOUT, and the presence of ALTERNATION in local office. All the previous results hold, with very slight differences in the size of the effects. Electoral competitiveness determines expenditure in public administration, but it is irrelevant for public works. The opposite is true for alternation and turnout: they have an effect on public works, but no effect on administration expenses.

The effects when they are significant, can be rather powerful. An increase in the effective number of parties from complete PRI hegemony to a two party system yields a decrease of 31 pesos allocated to administrative expenses. That is, to the extent that the PRI is not hegemonic, less resources are spent on administration. This effect can also be

interpreted to indicate that in the most competitive municipalities with effective three party configurations 66 less pesos will be allocated, per capita to administration, probably reflecting that the municipal government does not have too much leeway to provide too much patronage. The Molinar index has no effect on the allocation to public works, but there is an effect of both turnout and alternation.

That political mobilization as measured by turnout determines expenditure in public works is hardly surprising. Those municipalities where population is more active and aware of the political processes are precisely those where we should expect that politicians would be most pressed to provide public goods that benefit the population at large. The effect is extremely strong, almost as powerful as the combined effect of both sources of funds, own revenue and revenue transfers. For each percentage point of turnout in local elections, 37 additional cents are spent on public works. On the other hand, the TURNOUT variable has no effect on administrative expenditure because a politically active population does not demand more current government expenditure. The patrimonial style of old patronage in the form of public employment and direct handouts to private individuals is more characteristic of politically inactive environments.

Alternation in power has a statistically significant negative effect on the provision of public works. The sign for administration expenditure is also negative, although not significant. These are surprising findings. One would expect that given that the data available are from some years ago, when alternation in local office was not so frequent as today, maybe the estimates would not have produced a statistically significant result, simply due to lack of observations. Instead, we find that alternation predicts a decrease of 12 pesos in the per capita amount that will be spent in public works, by no means a small

effect. This result is in fact rather robust to different specifications, so we are quite confident that it reflects some fundamental pattern of local finance in Mexico.

The peculiar negative relationship between alternation and public works might be accounted for by the following factors. First, it has already been shown that revenue transfers in the form of *participaciones* are the primary source from which public works are financed. Second, as shown by Martinez Uriarte (forthcoming) there is a statistically significant positive relationship between *participaciones* and PRI vote at the municipal level. Therefore, to the extent that PRI vote is much smaller in those municipalities where alternation in power has happened, or that are governed by an opposition party, the state governments allocate less *participaciones*, and hence less public works are carried out. Hence, decisions at the state level are conditioning this counterintuitive relationship.

Hence, it is relevant to reflect on what party competition means for the finance of public works. In the past, when there was little party competition at this level of government, it did not really matter what source of local income was used to finance public works. Since all politicians belonged to the same hegemonic party, and funds were fungible, all that matter was the total amount of resources available. Now that there is electoral competition, the political value of public works at the local level has increased. It is no longer irrelevant whether the municipal, federal or state governments finance the projects; it is highly significant whether the governor or the municipal president inaugurates public works projects; in short, levels of governments are more clearly distinguished than in the past. Therefore to reap the political benefits of public works, local governments must pursue strategies that allow them to finance those projects with more autonomous resources. This even opens the space for the increasingly more common



strategy of privatizing public service provision at the municipal level, which leads to a smaller amounts spent on public works, since private firms are financing them. The challenge for municipal governments is one of political expediency; but for opposition governments it is also matter of public administration: how can revenue transfers finance administrative expenses while own resources can be used to finance public works, and how can local governments find ways to provide such services through private mechanisms. This topic requires further future research.

In what regards the composition of budgetary allocations, table 4 provides an estimate of the determinants of the share in public works as a percentage. The independent variables are the level of development controls, the per capita total budgetary resources available (TOTRES pc); the same political variables as in the previous estimates, and the share of revenue shares (*participaciones*) in total available resources (REVSHARE x). Only a small part of the variance is accounted by these variables, as can be seen in the low adjusted R squared.

**Table 4. Determinants of share of public works**

C	33.00*** (7.871)
ILLITERACY	0.130 (0.100)
WELFARE	-1.625*** (0.624)
TOTRES pc	-0.0066** (0.003)
HMOLIN	-3.061 2.175
SIZE	0.112*** (0.046)
TURNOUT	0.180*** (0.067)
ALTERN	-4.725** (2.140)
REVSHARE x	-0.041 (0.048)
Adj. R2	0.079

standard errors in parenthesis

\*\* significant at the 95% confidence level, two tailed test

\*\*\* significant at the 99% confidence level, two tailed test

The estimate produced, however, the expected results, except for the ALTER variable, which might be explained by the previous discussion. The share of public works in the budget, as predicted by the model, is not determined by the level of dependence on transfers from other levels of government, as represented by the share of *participaciones* in total resources. That means that an increase in the overall level of transfers will not change the allocation decision, but will increase both administrative and public works expenses. However, a greater availability of resources as represented by the variable INTOT pc will have a negative effect on the share of public works. That is, municipalities with more resources will spend a larger proportion on administrative expenses. The effect

is, however, extremely small: an additional hundred pesos of total resources in per capita terms, will yield a reduction in less than a percentage point (0.66) of the share of public works. To illustrate how small this effect is, going back to the examples of figure 3, that means that if Lázaro Cárdenas had the same amount of per capita resources as Cunduacán it would reduce the share of public works by a meager 3.3 percentage points.

As to what regards the level of development indicators, WELFARE has a negative effect, which means that richer municipalities spend a smaller share in public works; but the effect is positive for larger municipalities as indicated by the coefficient of SIZE. The magnitudes are comparable, in that a municipality with a million inhabitants will allocate 10 percentage points more in public works than one with only 10,000 inhabitants; but this would be offset by the INEGI level of development indicator, since a level 7 municipality will spend 10 more percentage points in public works than a level 1 one.

Finally, TURNOUT and ALTERNATION both exhibit powerful effects, while the Molinar index is not statistically significant. The more political mobilization, the greater the share of public works; and the effect is strong: a 10 percent increase in turnout yields almost two more percentage points of public works. Alternation in office produces a reduction in public works expenses of almost 5 percentage points, consonant with the previous results.

So far all hypothesis have been empirically analyzed, with the exception of hypothesis H4. For the purposes of this paper, we have not been able to carry out a systematic and exhaustive analysis, due to the difficulties it poses in terms of time and data processing. This is why we will try to develop a more qualitative and descriptive approach with the objective of establishing and clarifying if the more conditional transfers are

allocated to a municipality through *Solidaridad* (Federal Budgetary Item 26), the more it will spend on public works.

It is already known that municipal resources are not sufficient for the municipal administration to satisfy its obligation to provide public services. Taking into account (1) that state transfers (*participaciones*) could grow and reach a better revenue-sharing distribution between the different levels of government, but it will be always less favorable than the desirable situation; (2) that municipal administrations do not have decision power on the allocation of an important part of their resources (conditional grants), and (3) that the amount of this type of conditional grant has increased considerably in the last years, the possibility of municipalities administrating in an autonomous way the resources channeled as conditional grants has become recently a hotly debated issue.

In this sense, it is worth remembering that on March 31, 1997, the Mexican Supreme Court ruled unanimously in the constitutional controversy 6/95 initiated by the PAN-dominated municipal government of Tijuana, that the federal government has the right to define programs and allocate the resources of federal budgetary item 26 (*Ramo XXVI*). So, the resources assigned to the fight against poverty and to regional development will continue to be conditioned under the ongoing programs planned by the Federal Government. In this context, it becomes very important to find out to what extent conditional grants are used for public-works purposes and to what extent they contribute to development.

First of all, it is important to find out how conditional transfers are spent. Table 5 shows the allocation of resources of Pronasol program *Fondos Municipales de Solidaridad* by seven municipalities belonging to different welfare levels during 1992. This

program has been chosen among the different Pronasol programs, because it takes into account the direct participation of the municipal institution.<sup>9</sup>

**Table 5: Municipal funds in Solidaridad program, 1992 (percentage of total amount allocated)**

Municipality	Welfare Level	Urban Infrastructure	Hydraulic System	Street Lighting	Schools and Libraries	Community Centers and Social Welfare	Sport Facilities	Agricultural Infrastructure
Tijuana	7	45.94	2.82	0.39	3.67	32.75	14.43	
Durango	6	34.52		18.15	33.05			14.26
San Juan de los Lagos	5	62.19	21.91	15.91				
Compostela	4	56.00	34.07	7.99			1.94	
San Juan Bautista	3	50.13		11.82	24.30	12.61	1.15	
Tuxtepec	2	78.73	9.34		7.01	4.91		
Valparaiso	1	68.04	19.99		2.96		9.01	

SOURCE: Own calculation based on data from INEGI, 1992

It is clearly shown that all the municipalities considered, regardless of their welfare level, assigned 50% or more of this funding source to public works such as urban infrastructure, hydraulic systems or street lighting. Urban infrastructure includes particularly the construction, remodeling, rehabilitation and maintenance of public roads, buildings and spaces. Resources allocated to the construction, remodeling and maintenance of public schools, libraries and community centers are also significant in the majority of these municipalities. This category could be included in the column of urban infrastructure, but we keep it separate because it refers to a very specific use of such resources.

<sup>9</sup> For studies of Pronasol in general see Dresser, 1991 and for evidence of political determinants of allocations at the state level see Molinar & Weldon, 1994.

Another important concept for some municipalities is the one labeled as "community centers and social welfare", which includes the construction, remodeling and maintenance of community and welfare centers such as public child-caring institutions ("guarderías") but also funds allocated through contests (award to the best "barrio") or organizations such as the boys scouts or money used in emergency situations.

It is interesting to notice that municipalities belonging to the extreme points in the welfare-level scale, sport facilities represent a significant percentage of the resources allocated through this Pronasol program, and within this percentage, a considerable amount of funds are spent in the construction of basketball courts. So, for example, in 1992, the municipality of Ocosingo (Chiapas) allocated around 10% of the "Fondos Municipales de Solidaridad" to the construction of nine basketball courts in different localities. The municipal government in the border town of Tijuana (Baja California) used a similar percentage for the construction of 31 courts in the same year. However, both instances are different in that the price range for the basketball courts in Ocosingo varies between 12,760 and 16,396 new pesos, while in Tijuana it oscillates between 10,900 and 195,100 new pesos, but the majority of the courts cost between 60,000 and 80,000 new pesos. Of course, part of the price difference might be attributed to the in-kind participation of the community in the provision of the courts.<sup>10</sup>

Finally, it should also be noted that in only one of seven municipalities were funds invested under the concept of agricultural infrastructure. The municipality of Durango (Durango) specifically assigned 72,000 new pesos to the leveling of agricultural soils. By

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<sup>10</sup> It is more likely that in Chiapas the population provided labor and maybe even paid for a large share of the cost of this projects since basketball courts play an important role in the local economies: they are used to spread out and dry coffee with the sun.

way of conclusion, it would be interesting to try to establish some relation between the use of conditional grants and other variables, such as the revenue sources of these municipalities and the degree of political competition. See Table 6:

**Table 6: Political and financial variables of seven municipalities, 1992**

Municipality	Federal Revenue Shares	Local Sources	Conditional Grants (a)	PRI Vote	H	Hegemony	Opposition
	(nuevos pesos per capita)	(nuevos pesos per capita)	(nuevos pesos per capita)	(%)	Molinar	PRI	Party
Tijuana	141.97	211.97	27.28	45.51	2.28	0	1
Durango	56.81	108.6	1.22	31.71	3.04	0	1
San Juan de los Lagos	68.2	60.76	18.4	57.76	1.96	0	0
Compostela	60.3	58.1	12.05	78.5	1.55	1	0
San Juan Bautista Tuxtepec	59.7	45.89	9.94	84.58	1.39	1	0
Valparaiso	77.79	97.17	18.35	73.47	1.75	1	0
Ocosingo	47.36	2.38	12.59	84.47	1.38	1	0

SOURCE: Own calculations based on data from INEGI 1992, INEGI 1995 y Consejos Electorales Estatales. The methodology applied for establishing hegemony in this municipalities is the same used by de Remes (1993).

Table 6 shows significant differences of per-capita amounts of conditional grants in comparison with federal revenue shares and local revenue sources, whose allocation by municipal governments is more autonomous. There seems to be no relationship between the per-capita amount of conditional grants and the degree of political competitiveness (H Molinar), the percentage of votes obtained by the PRI and/or its degree of hegemony. Our preliminary conclusions would be the following:

First, the largest part of conditional grants is effectively assigned to public works purposes. At first sight, this would represent a contribution to development. However, we have to ask ourselves what sort of development is this? It is interesting to note that the

underlying concept of development emphasizes urban infrastructure in general, regardless of the social and economic environment and of the welfare level of the municipality. This can be partly explained by the fact that the Federal government sets the priorities. A question for future research to analyze would be if this sort of development concept is economically and socially efficient for the enormous diversity of municipalities, and/or if there are costs associated with an apparent disregard of local demands.

Second, money for public infrastructure works seems to have always a political side to it, as an instrument of political influence and mechanism for distribution, regardless of the governing party. So for example in the cases of Ocosingo (PRI) and Tijuana (PAN). The intensive construction of basketball courts in both municipalities tells us that it is easier and politically more productive to invest money to offer an alternative for the time of idle persons (either because the municipality is poor, as in Ocosingo, or because of its high migration rate, as in Tijuana) than using the money for creating real economic opportunities.<sup>11</sup> In this sense, the control exerted by the Federal government assumes a lesser prominence as long as local governments profit in political terms from the money received.

## **5. Final remarks.**

Several conclusions can be drawn from the model and the discussion of our empirical findings. Some of the most important are the following. First, municipal finance

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<sup>11</sup> This contrasts with Putnam's (1993) observations concerning the importance of soccer clubs in Italy. While in that country they are a reflection of the underlying strength of social capital and civic community, in Mexico, we argue, these sport facilities, since they are provided by the government authorities rather detached from the communities, are more a reflection of dependence and control than of citizen virtues.



should not be studied in isolation from the political and institutional context where it occurs. This includes becoming aware of the political constraints local politicians perceive during their tenure in office, the priorities possessed by politicians at other levels of government, and an understanding of the links of financial dependence that characterize municipal finances and the provision of public goods in localities.

Second, one should stress that from the perspective of local governments, the theoretical link between resources and uses of funds goes from the former to the latter. That is, budgetary restrictions determine allocations, rather than the other way around. Partisan effects from other levels of government condition that very often resources are not allocated to the governments that require them. Since the transfer of *participaciones* depends on the partisan affiliation of who holds local office, higher levels of government can effectively put constraints in the resources available, and that leads to different allocations between public works and administrative expenses. Even when the allocation decision is fully made at the local level, the available transfers give a large influence on those allocations to other levels of government.

Third, to the extent that there is more political competition, the importance of public works as political capital becomes more prominent. Public works are political capital for local politicians, but the problem is that their financing is often linked and dependent on those resources transferred from other levels of government, and therefore that political capital cannot be used in an autonomous way. Taking this into account, and if parties want to stay competitive, they must promote two changes: (1) seek that municipal independent sources of revenue become the main source of funding for public works and (2) increase this sources of local revenue.

Fourth, larger municipalities are more likely to provide the public goods that their inhabitants require. This means that the isolated and poor areas, which are often the ones that require the most basic public goods urgently, are the ones less likely to provide them. This provides the rationale for the crucial role of both the federal and state levels of government as providers of basic infrastructure for health, education, nutrition and other basic needs, besides some essential public works in a compensatory fashion, precisely where local resources are most limited. Federal financial resources such as the *Pronasol* funds should provide for this subsidiary compensation with clear redistributive criteria.

Finally, a major effort must be made to improve the coverage and quality of political, administrative and financial information of local governments in Mexico. Although recent studies have generated new information both statistical and based on case studies, much remains to be done to improve coverage, particularly of the less developed municipalities.

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