The Political Economy of Poverty Alleviation: The Case of PROGRESA in Mexico

TAKAHASHI Yuriko*

Introduction

There has been much scholarly debate about the political consequences of neoliberal reforms that have swept across many developing countries since the 1980s. Have these neoliberal economic reforms diminished the political manipulation of social spending in less developed countries where patronage-driven politics has traditionally prevailed? Earlier work suggested that neoliberalism would leave little room for political manipulation of public resources because fiscal stringency, privatization, and deregulation severely limited both political opportunities and financial resources for patronage distribution (Heredia 1997, 26). Despite such optimistic predictions, there is evidence that political manipulation of social spending allocations continues.[1] Recent studies demonstrate that targeted poverty alleviation programs, which were introduced to fit within neoliberal budgetary restraints, are highly susceptible to electoral manipulation (Bruhn 1996; Graham 1992; Magaloni, Diaz-Cayeros, and Estévez 2003; Molinar and Weldon 1994; Rocha Menocal 2001; Schady 2000).[2] Given these contrasting evaluations, two questions remain. Does politics still matter? And if it does, what form does political manipulation take under the constraints of neoliberal policies?

＊Associate Professor, Graduate School of International Cooperation Studies, Kobe University.
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To address these questions, this study attempts to conduct a two-stage analysis to explore the logic behind the plausible neoliberal politicization of poverty alleviation program. First, I scrutinize whether governments that have introduced neoliberal economic reforms have really eliminated politicized social programming in favor of more technocratic policymaking as they have officially claimed to do. Then, with a highly disaggregated analysis, I examine *how* neoliberal politicization occurs. Especially for this second stage of analysis, I argue that the assumption that two-party competition underlies the existing theoretical models is untenable for many cases of less developed countries, because party systems are not consolidated, and the number of parties competing is usually larger than two. By modifying this assumption, I propose an econometric model to estimate the distinctive strategies of the geographic allocation of the expenditures that are contingent on the nature of party competition.

For this purpose, I focus on the case of the Program of Education, Health, and Nutrition (*Programa de Educación, Salud, y Alimentación,* PROGRESA), which was launched in 1997 in Mexico at the initiative of President Ernesto Zedillo (1994-2000). Specifically, I use data on electoral outcomes, distribution of PROGRESA spending, and socioeconomic attributes at the municipal level. Using count data of PROGRESA beneficiary households as a measure of distribution levels, I run a negative binomial regression to estimate the effect of covariates on the distribution of PROGRESA. PROGRESA provides an ideal case to address the questions of this analysis for two reasons.

First, PROGRESA is the "least likely" case to illuminate the electoral maneuvering of resources. President Zedillo undertook an initiative to consolidate neoliberal economic restructuring and introduced a strictly technocratic criterion into policy making. In 1997, Zedillo launched PROGRESA in an explicit effort to undermine the politicization of the antipoverty program to fully achieve its stated objective to alleviate poverty (Escobar Latapí 2002, 220; Pardinas 2004, 67). More specifically, Zedillo introduced a strict means-tested measure based on a marginality index to select program beneficiaries. Zedillo's explicit effort was supposed to have removed any possibilities for political intervention into the process of selecting program recipients. Thus, any evidence of this would

corroborate the persistence of the political use of social spending in Mexican politics despite neoliberal constraints. Second, during the period of PROGRESA, the number of competing parties varied across municipalities, ranging largely from one to four. This permits the comprehensive analysis of how different competitive pressures would lead to correspondingly distinctive spending strategies in the case of two-, three-, or four-party competitions.

The study is organized as follows. In the next section, I briefly describe the neoliberal context in which PROGRESA was designed and then examine *whether* politics still matters in spending allocation with descriptive statistics. In the third section, for the purpose of exploring the second question as to *how* politics matters, I examine theories of distributive politics and draw testable hypotheses. In the fourth section, I estimate the determinants of the distribution of PROGRESA expenditures in the federal election year of 2000. The final section concludes with a future research agenda.

Ⅰ. Neoliberalism and the Politicization of Poverty Alleviation: PROGRESA in Mexico

Poverty alleviation is a policy issue with high priority for governments in less developed countries because widespread poverty has plagued a large part of the population. Many less developed countries faced the dilemma of eradicating poverty within the strict budgetary constraints imposed by neoliberal economic reforms (Geddes 1994). Targeting antipoverty programs has been extensively introduced as a viable solution to effectively deliver scarce resources to the poorest by employing rigorous statistical methods to select eligible beneficiaries (Laurell 2003, 343). With this in mind, President Zedillo, a former technocrat, took the initiative of consolidating neoliberal economic restructuring in Mexico by establishing PROGRESA in 1997. The former president, Carlos Salinas (1998-1994), had implemented a demand-driven antipoverty program, the National Solidarity Program (*Programa Nacional de Solidaridad,* PRONASOL), which was widely criticized for its use of politics to halt the declining hegemony of the Institutional Revolutionary Party (PRI).[3] To depoliticize the program, President Zedillo and the Ministry of Social Development (*Secretaria de Desarrollo Social,*

SEDESOL) made an explicit effort to design a new program that would undermine the politicization and thus maximize its stated objective to alleviate poverty (Escobar Latapí 2002, 220; Pardinas 2004, 67).

First, a strict means-test for the selection of eligible beneficiaries was introduced to eliminate the "institutional space for intermediation between government and organized social actors," which is a major inducement for the politicization of resource allocation (Laurell 2003, 343). More specifically, PROGRESA first identified poor communities by using a marginality index developed from census data.[4] The marginality index was divided into five categories based on the level of marginality, such as very high, high, medium, low, and very low. PROGRESA first incorporated the population into the very high level group, and then the high level. Second, within those selected communities, the beneficiary households were chosen, based on a household survey that examined their socioeconomic status and eligibility for assistance. Third, the assembly within those communities made the final decision as to whether the selected beneficiary households were really eligible or not. (Skoufias, Davis, and De La Vega 2001, 1769;1771). Unlike discretionary selection criteria, such as a technocratic selection method, PROGRESA was *expected* to leave no room for political calculation to intervene in the process of selecting the program recipients.

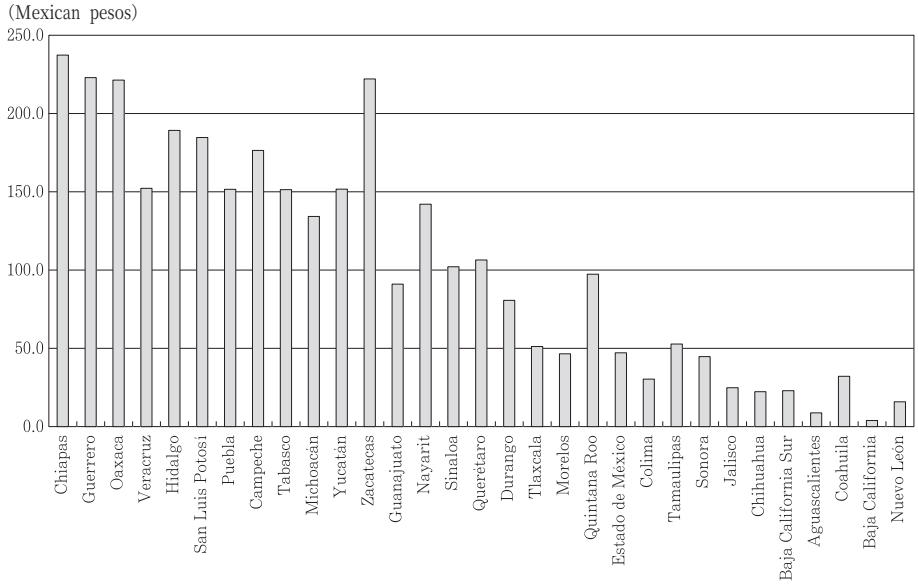
But, there are some reasons to expect that PROGRESA, or the antipoverty program in general, are still amenable to political manipulation. First, the targeting formula, which distributes resources to specific individuals, might serve as a more viable vote-mobilizing strategy in the era of neoliberalism. More specifically, neoliberal economic restructuring has eroded the state-corporatist mode of interest representation that benefited *organized* societal interests, such as labor unions. Alternatively, patron-clientelism and populism characterized by an "unmediated leader-mass relationship" have become predominant modes of articulating atomized societal interests and shaping political competition (Roberts 2002). The targeting programs serve to preserve such individualized political relationships by inducing an exchange between the provision of selective rewards and political support (Roberts 1995). Furthermore, in the past two decades in Latin America, the process of neoliberal economic reforms has gone hand-in-hand with political

democratization. This means that heightened electoral pressure has given politicians a greater incentive to manipulate the targeting of social programs for the survival of political careers.

Second, given the high number of poor, broad coverage of the antipoverty program is politically appealing because the poor are more likely to be susceptible to vote buying. As formal analyses concur, the richer they become, the smaller the marginal utility that arises from particularistic benefits (Brusco, Nazareno, and Stokes 2004; Calvo and Murillo 2004; Magaloni, Diaz-Cayeros, and Estévez 2003; Robinson and Verdier 2002; Medina and Stokes 2002; Stokes 2005). The PROGRESA coverage encompassed as many as 2,000 out of 2,438 municipalities in Mexico in 1999,[5] implying a great potential to buy support from those poor beneficiaries.

Third, the outcomes of neoliberal economic reforms were uneven across the country, leaving the possibility that the discretionary selection of program beneficiaries still continues at the subnational level (Fox 1994; Snyder 2001). In some places, school directors participating in the education component of PROGRESA reported that those conducting the household survey to determine beneficiaries eligible for PROGRESA lacked knowledge about the community. Consequently, they went more often to those localities proposed by the municipal governments, through which local political pressure could potentially influence the selection of beneficiaries (Adato, Coady, and Ruel 2000, 33). This kind of technical constraint in the beneficiary selection procedure might result in the politicization of PROGRESA in some regions.

To verify whether the PROGRESA allocation follows or diverges from the poverty criteria, Figures 1 and 2 show the relationship between the geographic distribution of PROGRESA and the poverty index at both the state and municipal levels. If the PROGRESA distribution diverges from the original stated objective of poverty alleviation, this would be strong evidence of continued political motivation behind the government social program. Figure 1 presents the geographic distribution of PROGRES funds per capita in 2000, calculated for each state. The states are lined up according to the aforementioned marginality index (the poorest on the left and the most affluent on the right). Since, theoretically,

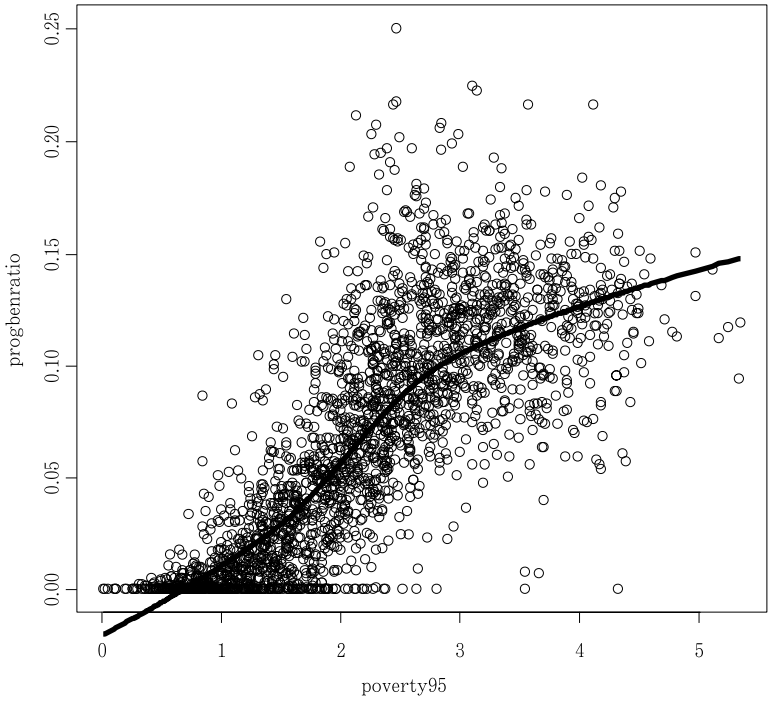


Source: Zedillo Ponce de Leon. 2000. *Sexto Informe de Gobierno*.

Figure 1. Distribution of PROGRESA by State (per capita, 2000)

the poverty alleviation program is allocated according to the level of poverty the distribution level is expected to be higher in the poorer states and lower in the less poor states. Figure 1 shows that PROGRESA is distributed more favorably to the poorer states. This finding suggests that PROGRESA allocation follows the program objective of targeting the poor rather than being based on political calculation.

Nevertheless, given the heterogeneous composition of state populations, it is premature to conclude that PROGRESA is free from political calculation based on a state- level analysis. In other words, because most states include both wealthy and poor municipalities, it is hard to know how the funds are really being distributed with data aggregated at the state level. Thus, further disaggregated analysis is needed to show a more precise relationship between spending and poverty. Figure 2 shows the association between PROGRESA distribution in 2000 and poverty at the municipal level. Because data for expenditures at this level were not available, the ratio of PROGRESA beneficiaries to total municipal population is plotted against the marginality index, ranging from 0 - the least poor, to 5 - the poorest. The nonparametric regression line drawn in the



Y: The ratio of Progresa beneficiaries to total population by municipality (2000)
X: Poverty level measured by marginality index (1=less poor, 5=poorer) (1995)
Excluding an outlier (Pitiquito, Sonora)

Figure 2. PROGRESA Distribution and Poverty by Municipality (N=2387)

scatter plot shows the relationship between the level of PROGRESA benefit and poverty.[6]

Recall that the marginality index was calculated by methods of principal components, using seven variables representing the "share" of population under specific unfavorable living conditions (Skoufias, Davis, and De La Vega 2001, 1771; CONAPO 1995). Following this formula, the poorest municipality, indexed as 5, represents a municipality with the highest percentage of poor population. If PROGRESA targets the poor and puts the highest priority on extreme poverty, the curve should be upward, and the ratio of PROGRESA beneficiaries to total municipal population is supposed to increase in proportion to the poverty level. In practice, however, the nonparametric curve suggests that the benefit level does increase upward to the medium poverty level, but once it exceeds that level, the marginal rate of increase decreases, implying an unnatural process of incorporating the beneficiary households above the medium level of poverty.

In sum, it would be reasonable to claim that PROGRESA was undoubtedly pro-poor by targeting funds more favorably to the poor population, but the benefit level is not strictly proportionate to the level of poverty. These findings suggest a possibility that political calculations might have intervened in the process of beneficiary selection of PROGRESA. To the extent that politics matters, what kind of politics can be discerned? The next section presents theoretical arguments to draw testable hypotheses about plausible political logics behind the allocation of PROGRESA expenditures.

Ⅱ. How Does Politics Matter? The Logic of Neoliberal Politicization

As briefly mentioned in the previous section, heightened electoral pressure, which has coincided with the period of neoliberal economic restructuring, might motivate ambitious politicians to persistently manipulate social spending for political gain. To date, work on antipoverty programs has focused on three distinctive aspects of electoral politics to determine the effect of electoral competition on the allocation of social expenditures: geographic voting patterns, specific conditions of party competition, and municipal partisanship. The debate in previous work has largely revolved around the first approach. The problem inherent in this approach is that it implicitly assumes two-party competition, which does not hold true for new democracies in which the number of parties competing is generally larger than two. For an accurate estimation of the determinants of PROGRESA distribution, I argue that empirical analysis should jointly test propositions taken from the first approach with the conditional effect of varying partisan configurations, which is the central claim of the second approach.

Before proposing my empirical model, I discuss competing hypotheses about the determinants of the politicization of spending. Making inferences from past electoral results, the first approach has debated the relationship between the geographic allocation of spending and voting patterns. This line of research is motivated by the predictions drawn from theoretical models of distributive politics, namely, the core and swing-voter hypotheses (Case 2001; Magaloni, Diaz-Cayeros, and Estévez 2003; Schady 2001). Assuming that parties are risk averse, Cox and McCubbins (1986) claim that facing uncertainty, they have a great

incentive to invest more favorably in core supporters because they are supposed to bring a higher rate of return than opposition or swing voters (*corevoter hypothesis*). On the other hand, swing-voter models imply that parties spend more in close races because a small number of swing voters can be decisive in the electoral outcome. Spending more on close races, thus, is more cost-effective because parties have little incentive to divert scarce resource to races where they know they will win or lose with certainty (Lindbeck and Weibull 1987; Dixit and Londregan 1996) (*closeness hypothesis*). In addition to such a *level* of political support, politicians may also care about a recent change in voting patterns. More specifically, candidates may try to "buy back" traditional supporters who recently voted for opposition candidates (Bruhn 1996; Schady 2000) (*buy back hypothesis*).[7] Alternatively, the candidates might also make an explicit effort to consolidate new supporters who voted for the party for the first time in the previous election (*cultivation hypothesis*) (ibid.).

Empirical studies that promote this approach test these competing hypotheses, but their findings may be based on inaccurate estimations because they implicitly follow the assumption that two-party competition underlies the theoretical models. More specifically, this assumption, based on the experiences of the United States, is not tenable for many cases of less developed countries because party systems are not consolidated, and the number of parties competing is usually larger than two. In these varying partisan configurations, an incumbent's strategies to manipulate resources are supposed to be contingent on whether he or she faces one, two, or more serious challengers, because, as the number of parties increases, the degree of uncertainty becomes greater.[8] Suppose that there are three parties P_1, P_2, P_3 in district i. Yet, note that none of them is a trivial party, but that all three are assumed to be serious contenders. In this case, the electoral outcome, that is, whether P_1, P_2, or P_3 will win, is less certain than in a two-party race. If four parties competed for one seat, the outcome would be even less predictable.

Figure 3 provides evidence that the distribution of PROGRESA may have varied, depending on the nature of partisan configuration. It disaggregates Figure 2 by types of party competition measured by the effective number of parties

(ENP hereafter). The ENP is defined as "the number of hypothetical *equal*-sized parties that would have the same total *effect* on fractionalization of the system as have the actual parties of *unequal* size" (Laakso and Taagepera 1979, 4, emphasis in original). What matters here is not the overall number of parties, including very small ones, but the relative size of parties that are really influential and credible threats to the incumbent (Laakso and Taagepera 1979, 3). Using the Laakso-Taagepera index, I classify the municipalities in Mexico by the effective number of parties competing in the 1997 election. Municipalities where the ENP is less than 1.5 are categorized as hegemonic party competition; where the

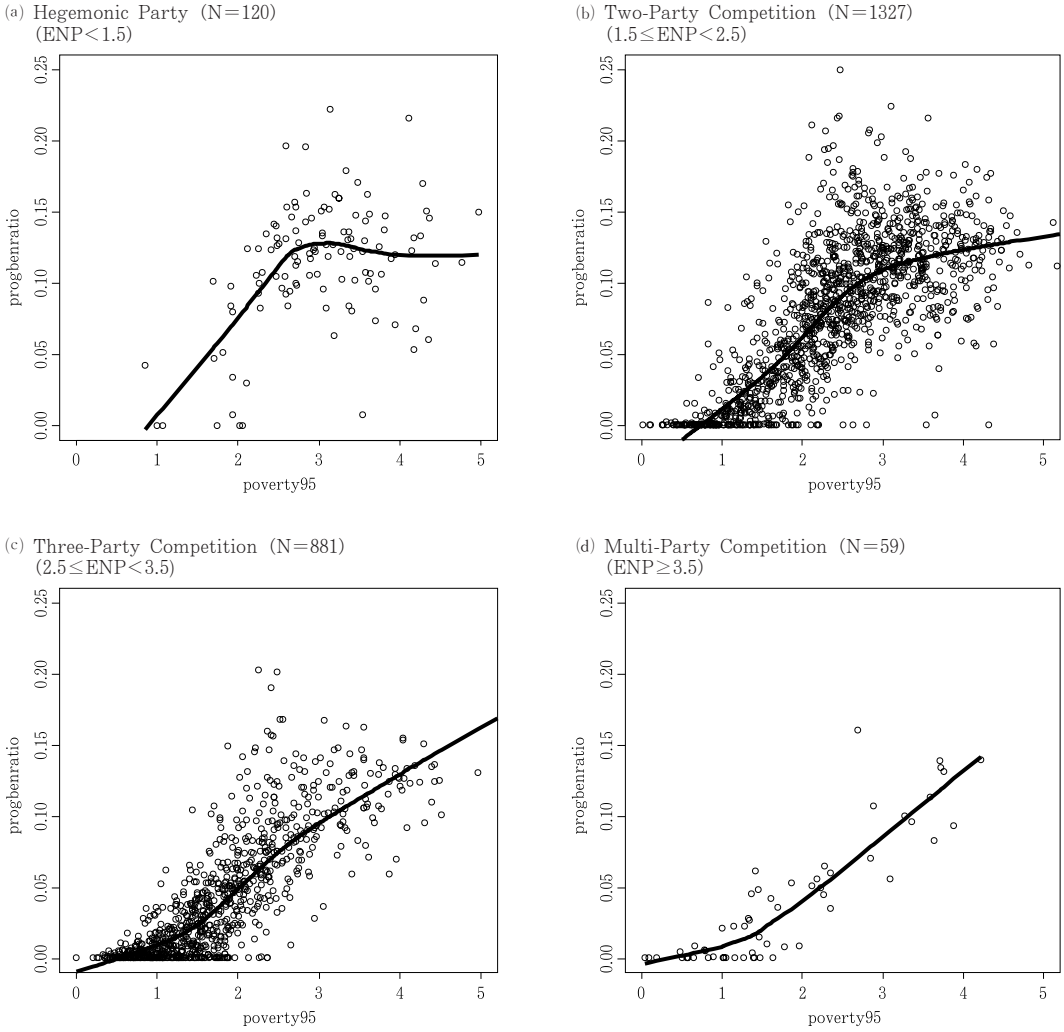


Figure 3. PROGRESA Distribution and Poverty by Party Competition

ENP is more than 1.5 but less than 2.5, as two-party competition; where the ENP is more than 2.5 but less than 3.5, as three-party competition; and where the ENP is more than 3.5, as multiparty competition.[9] A comparison of the relationships between the level of poverty and the level of PROGRESA benefits, which is represented in a nonparametric curve, suggests that the Institutional Revolutionary Party distributed PROGRESA benefits differently, depending on partisan configuration.[10]

The second approach shows that the specific configuration of party competition differentiates distribution strategies (Hiskey 2003; Magaloni, Diaz-Cayeros, and Estévez 2003). Nevertheless, the empirical analysis in previous work needs further elaboration. More specifically, Magaloni, Diaz-Cayeros, and Estevez (2003) find that the Institutional Revolutionary Party (*Partido Revolucionario Institucional,* PRI) in Mexico diversified the investment strategies of the PRONASOL, depending on whether the municipality was characterized by no electoral competition, a hegemonic party, or multiparty competition as classified by the ENP, and that the PRI invested more private goods to core supporters when there were less competitive pressures. These novel findings are not completely convincing because they are drawn not from statistical analysis but from a figure showing different relationships between the level of private goods provision and the effects of poverty level by distinguishing between not competitive, hegemonic, and competitive municipalities (Magaloni, et al. 2003, 29). To systematically estimate the effect of partisan configuration on distribution strategies, I propose an econometric model to test the abovementioned competing hypotheses with these distinctive competitive pressures incorporated. I believe that this model will more accurately estimate the political logic behind the neoliberal manipulation of social spending. Based on this modification, the core, closeness, buy back, and consolidation hypotheses tested in this analysis are reformulated as follows.

Core Voter Hypothesis: Greater support for the incumbent will be associated with greater transfers. This prediction would be more strongly supported as the number of serious contenders increased, because the incumbent becomes more risk averse.

Closeness Hypothesis: Closer race would attract more resources. As the number of competing parties increases, the incentive to invest in close races is greater.

Cultivation Hypothesis: A greater increase in vote share will lead to greater transfers. The incumbent becomes more responsive to a change in the vote share when the number of contenders in a race is larger.

Buy-Back Hypothesis: A greater decrease in vote share will lead to greater transfers. The incumbent becomes more responsive to a change in the vote share when the number of contenders in a race is larger.

As discussed thus far, the first and second approaches assume that the central government can infer an individual's vote choice by observing geographic patterns in past elections and directly deliver benefits to specific voters. In contrast, the third approach supposes that incumbents see local leaders as their partisan clients who might serve as brokers to deliver services from the central government to beneficiaries and facilitate the exchange between votes and material benefits (Calvo and Murillo 2004; Valenzuela 1977).[11] The federal government needs to successfully manipulate the targeting policy. To effectively target specific voters, the central government should know who supports the incumbents or who are marginal voters, but it is implausible to monitor the party preference of a large number of individuals. The local leader's control over the party's network would help solve this dilemma because he could screen the party's loyalists and opponents and secure electoral victory even with a secret ballot (Stokes 2005).

Officially, PROGRESA is designed as a highly centralized program. Yet it seems possible that mayors can manipulate the distribution of the program by intervening in the final stage of beneficiary selection at the local level, as noted earlier. Therefore, the partisanship of lower level governments would determine the distribution of spending. Although an examination of how mayors actually distribute transfers within municipalities requires detailed case studies, it can at least be predicted that municipalities whose mayors belong to the incumbent's

party will receive more generous transfers. This effect should also be tested by classifying the conditions of local electoral environments, which represent distinctive degrees of uncertainty. I anticipate that when the race is more competitive and uncertain, the incumbent will have a greater incentive to turn to partisan clients to secure the expected outcome of the manipulation. Therefore, the clientelism hypothesis is formulated as follows.

> *Clientelism Hypothesis*: Municipalities governed by the incumbent's party receive larger transfers. Under a greater degree of uncertainty attached to races with a larger number of candidates, the incumbents have a greater incentive to manipulate the spending allocation through those mayors serving as brokers.

To test these five hypotheses, the next section presents an empirical analysis to estimate the effects of political competition on the distribution of PROGRESA benefits in 2000 when federal elections were held, and thus the motivation to politicize social programs might have been greater.

Ⅲ. Geographic Distribution of PROGRESA

Research Design and Model Specification

To test the above hypotheses, this study uses cross-sectional data on PROGRESA spending in 2000. It also uses data on electoral results and poverty at the municipal level to examine the effects of political motivation behind the geographic distribution of PROGRESA benefits. Federal elections were conducted in 2000 in Mexico. To examine the politicization of the distribution of the expenditures, the spending data for the electoral year are ideal to show how politicians attempted to politicize the social programs during the electoral campaign *prior to* the election. The unit of analysis is municipality because individual data on the voting behavior of PROGRESA beneficiaries do not exist. Using the data on geographic voting patterns at the municipal level, the voters' preferences are approximated. This analysis includes observations for 2,383 out of 2,436 total municipalities for which the data were available.[12] The data set does not include

Mexico City because the PROGRESA expenditures were not allocated to the capital before 2000. Nevertheless, this data set includes a larger number of observations than the state-level analyses of previous studies, thereby representing a large cross-section within the country.[13] This permits a more accurate estimation of political effects on PROGRESA expenditures.

To determine the effect of party competition on the allocation of PROGRESA, the data on geographic distribution of the expenditures at the municipal level are ideal. However, the spending data disaggregated into such a small unit are not available. Alternatively, the number of households receiving PROGRESA by municipality is available, and I use it for this analysis. Since the dependent variable is a count of the number of beneficiary households that are nonnegative integers, this analysis develops an empirical model of count data regression to analyze the relationship between party competition and PROGRESA-provision level. The Poisson distribution is commonly used for count data regression with an assumption of equality of the conditional variance and mean, which is defined as equidispersion.[14] However, the data used in this analysis are highly likely to be overdispersed because processes of producing the number of PROGRESA beneficiary households in each municipality may substantially differ across municipalities: some municipalities have more impoverished people than others. More specifically, data are overdispersed "whenever the choice probabilities vary across the individuals in each observational unit, but clusters of individuals within each unit have similar probabilities" (Mebane and Sekhon 2004, 394).[15] An overdispersion test resulted in the rejection of the null hypothesis of equidispersion.[16] Thus, instead of using the Poisson regression model, a negative binomial regression model is estimated using a maximum likelihood estimator.[17]

In what follows, I first estimate an unconditional model and then a conditional model in which I examine the effects of independent variables conditional on the nature of partisan configurations. The unconditional negative binomial model takes the following form:

$$E(y_i \mid x_i) = \mu_i = \exp(X\beta) = \exp(\sum_{k=1}^{n} X_k\beta_k + \gamma_j + \varepsilon_i),$$

and the variance function is,[18]

$$V(y_i \mid x_i) = \omega_i = \mu_i + \alpha\mu_i^2,$$

where $E(y_i \mid x_i)$ is the expected value of the dependent variable; X is a vector of independent variables; β is a vector of estimated parameters; i and j refer to the cross-sectional units; k is the number of independent variables; γ_j refers to state dummy variables that control for region specific effects for each of 31 states in Mexico; and ε_i is an error term.

In the conditional model, the independent variables are interacted with dummy variables for hegemonic party, two-party competition, three-party competition, and multiparty competition in a single equation.[19] As discussed in the previous section, I use the Laakso-Taagepera index to classify the municipalities in Mexico by the ENP into these distinctive conditions of party competition. The setup of the interaction model is presented as follows:

$$\begin{aligned} E(y_i \mid x_i) = \mu_i = \exp(X\beta) = \exp\Big(& \sum_{k=1}^{n} X_{k1}\beta_{k1}\text{*Hegemonic} \\ & + \sum_{k=1}^{n} X_{k2}\beta_{k2}\text{*Two-party} + \sum_{k=1}^{n} X_{k3}\beta_{k3}\text{*Three-party} \\ & + \sum_{k=1}^{n} X_{k4}\beta_{k4}\text{*Multi-party} + \gamma_j + \varepsilon_i\Big), \end{aligned}$$

where all variable notations are the same as the unconditional model.

By comparing the coefficients estimated for the same independent variables across types of party competition, it is expected that the PRI spends differently, depending on the number of parties competing. The detailed variable description is presented below.

Dependent Variable: The Number of PROGRESA Beneficiary Households

The number of PROGRESA beneficiary households by municipality is calculated as follows. The data on PROGRESA recipients in 2000 in about 52,000 localities are aggregated by municipality (N=2,436). One of the distinguishing features of PROGRESA is its integrated approach. In other words, it aims to

eradicate the "root causes" of extreme poverty by focusing on human capital development. To achieve this goal, the benefits cover nutrition, health, and education altogether, and these combined benefits go to the beneficiaries. Specifically, the cash benefits directly target the households as beneficiary units on the condition that they send their children to school and regularly visit health centers (Skoufias, Davis, and De La Vega 2001, 1769). As a result, the benefits received by each eligible household are supposed to be homogeneous, i.e., the number of recipients is interpreted as the level of benefits in municipalities. Thus, the count data can serve as a measure for the level of PROGRESA expenditures that is allocated to each municipality.

Independent Variables

To examine the plausible politicization of the expenditures, the level of poverty should be controlled for because, according to the original purpose of the program, the antipoverty program is supposed to target the poorer regions. For the *Poverty* variable, I use a marginality index calculated by the CONAPO (*Consejo Nacional de Población*). This marginality index is constructed by the method of principal components based on seven variables. They are the share of (1) illiterate population aged 15 or more, (2) dwellings without running water, (3) household dwellings without drainage, (4) household dwellings without electricity, (5) dwellings with earth floor, (6) the average number of occupants per room, and (7) the percentage of labor force working in the agricultural sector (Skoufias, Davis, and De La Vega 2001, 1771; CONAPO 1995). To control for other socioeconomic effects, I first included variables for GDP per capita, urbanization, and indigenous population ratio at the municipal level. However, all of these variables are strongly correlated with the marginality index at a statistically significant level. For this reason, I decided to remove them and use the marginality index exclusively as a measure of poverty level. The positive sign of the coefficient means that the PROGRESA expenditures are targeted to the poor. In addition, the logarithm of population in municipalities and a quadratic term (*Povsq*) and the third order polynomial (*Pov3*) of the *Poverty* variable are included as control variables.[20]

This analysis uses three political variables to test five competing hypotheses: the *Core Voter, Closeness, Cultivation, Buy-Back,* and *Clientelism* hypotheses. Initially, I attempt to create two variables to test the *Core Voter* and *Closeness* hypotheses. Yet it turns out that these two variables are strongly and negatively correlated at a statistically significant level ($r = -0.8386$, $p < 0.05$). More specifically, for the *Core Voter* hypothesis, I create the *PRI vote share* variable to represent the strength of the incumbent, PRI, measured by PRI vote share in the 1997 mid-term election. The *Closeness* variable is calculated by subtracting the difference in vote share between the two largest parties in the 1997 mid-term election from 1; a higher score means a closer race.[21] The negative correlation between these variables means that one is an inverse of the other. I then tentatively estimate two models separately, one with the *PRI vote share* variable and the other with the *Closeness* variable, both of which include the same control variables. In fact, the signs of the coefficients for the *PRI vote share* and *Closeness* are opposite, whereas other variables show similar effects. This indicates that these two variables are interchangeable. For the sake of simplicity, I decide to use only the *PRI vote share* variable to test both the *Core Voter* and *Closeness* hypotheses. If the coefficient is significant with a positive sign, this supports the *Core Voter* hypothesis. Conversely, if the coefficient is significant with a negative

<Summary of Variables>

Variable	Obs	Mean	Std. Dev.	Min	Max
Population	2388	34,342	99,854	121	1,633,216
Poverty95	2388	2.1874	0.9937	0	5.3458
ENP	2386	2.3937	0.5487	1.002	4.975
Closeness	2388	0.7279	0.2087	0.002	1
PRI vote share	2386	0.5358	0.1467	0.178	0.999
PRI vote share change	2386	-0.0649	0.1262	-0.494	0.737

Table 1. Variables and the Expected Signs

Variable	Hypotheses				
	Core	***Closeness***	***Cultivation***	***Buy Back***	***Clientelism***
PRI vote share	+	−			
PRI vote share change			+	−	
PRI mayor					+

sign, the *Closeness* hypothesis is confirmed

To test the *Cultivation* and *Buy-Back* hypotheses, the *PRI vote share change* variable is employed to stand for a change in the vote share for the PRI in the 1997 and 1994 federal elections.[22] This variable is created by subtracting the PRI vote share in the 1994 election from the share in the 1997 election. Finally, the *PRI mayor* variable is a dummy variable for municipalities governed by a PRI mayor, coded as 1, and for municipalities by opposition parties, coded as 0. The variables and their expected signs are summarized in Table 1. In the conditional model, these independent variables interacted with dummy variables for hegemonic party, two-party competition, three-party competition, and multiparty competition. If the results in the unconditional and conditional models diverge, that will be strong evidence that the logic of politicization is indeed conditional on the nature of party competition.

Results and Discussion

I first report the results of the unconditional model and then the results of the conditional model, incorporating the effects of distinctive partisan configura-

Table 2. Negative Binomial Regression Results: The Unconditional Model

Variable	*Coefficients* (*S.E.*)	*P-values*
Poverty (1995)	5.29948	<0.000
	(0.25734)	
Povsq	-1.30359	<0.000
	(0.11129)	
Pov 3	0.10546	0.000
	(0.01473)	
Log (population)	0.98236	<0.000
	(0.02100)	
PRI vote share	0.49651	0.010
	(0.19380)	
PRI vote share change	0.06234	0.767
	(0.19288)	
PRI mayor (dummy)	-0.02124	0.693
	(0.05382)	
Intercept	-8.08004	<0.000
	(0.36753)	

N=2383 2×Log-likelihood=-33921.5580

Note: State dummy variables for 31 states were included in the model, but the coefficients are not reported here.

tions. Table 2 presents the results of the unconditional negative binomial regression. It shows that the poverty level is an important determinant of the distribution of PROGRESA in that the coefficients of the linear, quadratic, and the third polynomial terms are statistically significant. At the same time, the *PRI vote share* also has a significant effect on the level of PROGRESA beneficiaries, meaning that the PRI spend more favorably in municipalities where it has stronger support. On the other hand, the coefficients for *PRI vote share change* and *PRI mayor* are not significant. Taken together, in the unconditional model, the *Core Voter hypothesis* is supported. These results are important because they present strong evidence that PROGRESA *does* benefit the poor and that it follows its stated objective to alleviate poverty, but is nonetheless susceptible to political manipulation by targeting PRI loyal supporters. To explore how the politicization strategies differ, depending on distinct competitive pressures, the conditional model further disentangles the logic of politicization.

Table 3 reports the results of the conditional model. The first column shows the estimation results for competition under PRI hegemony; the second shows results in a two-party competition; the third in a three-party competition; and the fourth in a multiparty competition. What is consistent with the unconditional model is that the poverty level is an important determinant of PROGRESA

Table 3. Negative Binomial Regression Results: The Unconditional Model

Variable	Hegemonic (ENP < 1.5)		Two Party (1.5 ≤ ENP < 2.5)		Three Party (2.5 ≤ ENP < 3.5)		Multi Party (3.5 ≤ ENP)	
	Coefficients (*S.E.*)	*P-values*	*Coefficients* (*S.E.*)	*P-values*	*Coefficients* (*S.E.*)	*P-values*	*Coefficients* (*S.E.*)	*P-values*
Poverty (1995)	7.58660	0.000	5.76558	< 0.000	4.76797	< 0.000	4.28292	0.001
	(1.60381)		(0.33529)		(0.35897)		(1.25042)	
Povsq	-2.10730	0.000	-1.47502	< 0.000	-1.11233	0.000	-0.75510	0.329
	(0.59248)		(0.14180)		(0.17020)		(0.77474)	
Pov 3	0.19393	0.006	0.12443	0.000	0.08634	0.000	0.02166	0.871
	(0.07083)		(0.01854)		(0.02409)		(0.13379)	
Log (population)	0.92443	< 0.000	0.98397	< 0.000	0.99261	< 0.000	0.95581	< 0.000
	(0.08475)		(0.02511)		(0.02479)		(0.07215)	
PRI vote share	-0.88611	0.558	0.47251	0.078	1.28946	0.008	1.48547	0.563
	(1.51437)		(0.26783)		(0.48875)		(2.56778)	
PRI vote share change	-0.12343	0.873	0.14024	0.554	0.06119	0.847	-1.65750	0.119
	(0.77606)		(0.23735)		(0.31735)		(1.06387)	
PRI mayor (dummy)	-0.27147	0.452	-0.19081	0.014	0.14633	0.059	0.38032	0.249
	(0.45253)		(0.07733)		(0.07751)		(0.33029)	

N = 2383 2 × Log-likelihood = -33895.82

Note: State dummy variables for 31 states were included in the model, but the coefficients are not reported here.

allocation in that the coefficients of the linear, quadratic, and the third polynomial terms are statistically significant, except in the subset of multiparty competition. Nevertheless, since the number of observations for the multiparty competition is very small (59 out of 2,383), the results may not be robust. It should be noted that the size of the coefficients for the *Poverty* variable does not vary considerably across types of party competition. This means that the poverty level is consistently an important determinant of PROGRESA expenditures, regardless of the configurations of party competition.

On the other hand, Table 3 also shows that politics does matter, but those political determinants of PROGRESA allocation differ, depending on the nature of partisan configurations. This corroborates the discussion that the PRI's strategies of manipulating resources are contingent on whether it faces one, two, or more serious challengers because, as the number of competing parties increases, the degree of uncertainty becomes greater. In view of the findings reported in Table 3, some of the results presented in Table 2 appear inaccurate, as discussed below.

Testing the *Core Voter* (and *Closeness*) hypothesis shows that the *PRI vote share* has a significant effect on the level of PROGRESA beneficiaries in a three-party competition. This indicates that PRI spends more in municipalities where PRI has stronger support when the competitive pressure is greater. Comparing the coefficients across types of party competition makes it clear that the magnitude increases as the race becomes more competitive, as expected. This calls for a test for equality of those four coefficients.[23] The test resulted in rejecting a null hypothesis that the coefficients of the four subsets are equal, confirming that the distribution strategies do differ across levels of party competition. These findings support the *Core Voter* hypothesis that greater support for the incumbent will be associated with greater transfers, and that this prediction would be more strongly supported as the number of serious contenders increases because the incumbent becomes more risk averse. At the same time, it means that the findings reject the *Closeness* hypothesis that a closer race induces greater politicization of the spending.

In contrast to such a strong support for the *Core Voter* hypothesis in both

the unconditional and conditional models, the test of the *Clientelism* hypothesis identifies findings quite different from those presented in Table 2. The results of the unconditional model in Table 2 show no significant effect of the *PRI mayor* variable. In contrast, the results of the conditional model reported in Table 3 indicate that the coefficient for the *PRI mayor* is negative at the statistically significant level in a two-party competition, but positive and almost reaches a significant level in a three-party competition. How do we interpret these opposite signs of the coefficients? It is plausible that the PRI may have a greater incentive to transfer more to municipalities that are governed by PRI mayors when it faces the greater degree of uncertainty derived from a three-party competition. In contrast, the PRI may have a negative incentive to invest in PRI municipalities in a two-party competition because, with less competitive pressure, it might believe that central-level manipulation was sufficient to survive an electoral race. These findings support the *Clientelism* hypothesis that predicts that with a greater degree of uncertainty, the PRI has a greater incentive to manipulate spending allocations through PRI mayors who serve as brokers.

For the *PRI vote share change* variable, no significant effect is observed in any of partisan configurations. Neither the *Cultivation* nor *Buy-Back* hypotheses are confirmed in this empirical analysis. Taken together, the PRI attempts to manipulate the PROGRESA allocations by favorably targeting the municipalities that have strong support for PRI and by delivering more generous resources to the municipalities that are governed by PRI mayors when it faces a greater degree of uncertainty in a three-party competition.

To further explore at which level of poverty the manipulation is more likely to occur, Table 4 presents predicted values of the number of beneficiaries by types of party competition and poverty level. The standard errors are in parenthesis in each cell entry. For the hegemonic party and multiparty competitions, the standard errors are so large that the results are not informative. Observing cell entries for two-party and three-party competitions shows that the number of beneficiaries increases in proportion to the poverty level up to a medium level of poverty, but the benefit level flattens out at a higher level of poverty. In the case of a three-party competition, the benefits increase from poverty level 1 (580) to

Table 4. Predicted Values by Party Competition and Poverty Level

	The Number of Parties Competing in Municipality i			
Marginality Index	Hegemonic (N<1.5)	Two-party (1.5≤N<2.5)	Three party (2.5≤N<3.5)	Multi-party (N≥3.5)
Very High	23,919	16,991	12,644	1,904
(Level 5)	(19,613)	(4,740)	(5,286)	(6,056)
High	15,238	15,680	12,351	6,268
(Level 4)	(7,792)	(2,650)	(2,457)	(5,093)
Medium	15,071	15,002	1,0357	7,667
(Level 3)	(7,776)	(2,371)	(1,774)	(3,166)
Low	7,228	7,054	4,442	3,059
(Level 2)	(4,021)	(1,054)	(671)	(978)
Very Low	525	773	580	349.48
(Level 1)	(383)	(121)	(86)	(119)

level 3 (10,357), but once the level exceeds 3, the benefit level no longer goes up (12,351 for level 4, 12,644 for level 5). If the PROGRESA distribution follows the stated objective of focusing on the extremely poor, the number of beneficiaries is expected to increase consistently up to the highest level of poverty (level 5). This observation poses two possibilities of political maneuvering of resource allocation. The PRI may manipulate the PROGRESA distribution by providing benefits to the middle-level poor beyond the expected level or to the high-level poor below the expected level. A detailed case study is needed to verify which logic is more prevalent.

In summary, the empirical analysis shows that poverty level is certainly an important determinant of the expenditures, regardless of the number of parties competing. Nevertheless, politics also matters. The PRI allocates disproportionately larger amounts of resources to municipalities where political support for PRI is greater. This manipulation is more likely to occur in a three-party competition in particular because the degree of uncertainty attached to an electoral outcome is greater, and thus the PRI tends to be more risk averse. Furthermore, the PRI also attempts to manipulate the distribution of PROGRESA through municipal governments when it faces a three-party competition. Such support for both the *Core Voter* and *Clientelism* hypotheses may imply the possibility of a multicollinearity problem: the municipalities where support for PRI is stronger are governed by a PRI mayor. However, the correlation between these two

variable is weak ($y = 0.361$). This suggests that two distinctive logics are working behind the manipulation of PROGRESA allocation. By examining the case of PROGRESA in Mexico, this study demonstrates that political pressure coming from heightened electoral competition has become an increasingly important factor to explain the politicization of social spending in the neoliberal era.

Conclusion

This study aims to address two questions regarding the logic of politicization of social spending, specifically, poverty alleviation programs, under neoliberal economic restructuring. Does politics still matter? To the extent it does, what is the logic that drives the neoliberal manipulation of social spending? Using the case of a program targeted to alleviate poverty in Mexico —— PROGRESA (1997-2000) —— this study shows that PROGRESA does benefit the poor and that it follows its stated objective to alleviate poverty. However, it still tainted by the political manipulation that has plagued many less developed countries. Furthermore, I argue that the core assumption of two-party competition underlying theoretical models of redistribution is not tenable in many of the new democracies, because party systems are still unconsolidated, and thus the number of parties competing is usually larger than two. The degree of uncertainty derived from the specific conditions related to partisan configurations illuminates the more precise rationale for a party's incentive to manipulate spending allocations An econometric model that incorporates the effect of such partisan configurations shows that the PRI is more responsive to a three-party competition in which the uncertainty is greater by more favorably allocating benefits to municipalities where PRI support is concentrated and by spending more favorably in such PRI municipalities. By demonstrating these findings, this analysis provides strong evidence that politicization of social spending occurs continuously in the neoliberal era when there is greater electoral pressure.

Nevertheless, further analyses are required to fully explain the logic behind such persistent politicization of social programs. First, this study found evidence to show that PRI cares about municipal partisanship in deciding where to spend. However, it does not explain how the mayors intervene in the process of (a)

receiving transfers from the federal government and (b) delivering the resources to the recipients *inside* the municipalities. It only suggests the possibility that the PROGRESA benefits are distributed through patron-client networks mediated by the PRI mayors. To investigate this, this quantitative analysis should be complemented by a qualitative case study to examine how the PROGRESA benefits flow to the recipients through such a clientelist network across levels of governments. This would provide strong evidence that neoliberalism promotes technocratic policymaking at the central government level whereas traditional political practices occur at the local level (Fox 1994; Snyder 2001).

This study draws inferences from a large cross-section data set from one year of observations. To generalize the findings and confirm hypotheses in a more rigorous way, it would be beneficial to incorporate variations over time using further yearly data. A comparison over time is particularly important because, although this study shows that manipulation still occurs, it should be noted that the frequency and degree of politicized spending have significantly lessened when compared with the previous antipoverty program, PRONASOL. Furthermore, under the Fox administration initiated in 2001, the new poverty alleviation program, *Oportunidades,* which is virtually a continuation of PROGRESA, seems to have become even more depoliticized.[24] A comparison of how these three programs are distributed would help to understand what explains the logic of plausible depoliticization over time.[25]

Finally, this analysis sheds light exclusively on the case of PROGRESA in Mexico to explain the logic of neoliberal politicization of social spending. In recent years, other countries in Latin America and the Caribbean have introduced programs to target conditional cash-transfer programs in a context that is similar to the one in Mexico, that is, the simultaneous process of political democratization and economic liberalization: the *Bolsa Escola* program in Brazil, the *Familias en Acción* program in Colombia, the *Asignación Familiar* program in Honduras, the *Red de Protección* program in Nicaragua, the Program of Advancement through Health and Education in Jamaica, and many others (Rawlings 2004). An analysis of the determinants of those programs and a comparison of the findings would provide a more systematic explanation of the

political logic behind the targeting social policies that have become increasingly popular in the region.

Despite these limitations, by using a highly disaggregated analysis and carefully elaborated econometric model, this study is one of few attempts to unravel the logic that drives neoliberal politicization of social spending. As a result, these findings will be an important contribution to deepen our understanding of electoral competition and the persistent manipulation of social spending in the neoliberal era.

Notes

1 Barbara Geddes provides a general explanation of how political constraints impede broadly supported reforms in less developed countries (Geddes 1994).

2 Such a political use of targeted programs under neoliberalism is analyzed in association with the rise of "neo"-populism, which is distinguishable from the "classical" populism that characterizes the politics of the early 20th century in Latin America. Recent studies identify this inherently paradoxical coexistence of populism and neoliberalism as an "unexpected amalgam" (Roberts 1995) or "unexpected affinities" (Weyland 1996). However, this important argument is beyond the scope of this study.

3 Many studies have analyzed the political motivation behind the PRONASOL distribution (Bruhn 1996; Hiskey 2003; Magaloni and her associates 2003; Molinar and Weldan 1994).

4 The National Population Council (*Consejo Nacional de Población,* CONAPO) created a marginality index (*indices de marginación*) for localities in Mexico, using seven variables. They include: (1) the share of illiterate population aged 15 or more, (2) the share of dwellings without running water, (3) the share of household dwellings without drainage, (4) the share of household dwellings without electricity, (5) the average number of occupants per room, (6) the share of dwellings with a dirt floor, and (7) the percentage of labor force working in the agricultural sector (Skoufias, Davis, and De La Vega 2001, 1771; CONAPO 1995).

5 These basic statistics of PROGRESA draw on the program report published by the International Food Research Institute (IFPRI) available at http://www.ifpri.org/theme/progresa.htm (accessed on 10/25/04).

6 A nonparametric regression does not impose assumptions about functional forms. This less restricted formula allows for presenting a more accurate relationship between the variables than the ordinary least squares (OLS) (Schady 2000, 296).

7 To my knowledge, Schady made the first attempt to explicitly classify those voting patterns into *change* and *level* and to incorporate the dynamic aspects into an empirical model (Schady 2000, 290).

8 For instance, many studies of the determinants of the National Solidarity Program (*Programa Nacional de Solidaridad,* PRONASOL) in Mexico assume that electoral races are contested between two parties, that is, either PRI vs. PAN or PRI vs. PRD. They thus overlook the plausible cases where these three major parties are competing against each other (Bruhn 1996; Rocha Menocal 2000; Molinar and Weldon 1994).

9 Magaloni and her associates (2003) distinguish between municipalities with no electoral competition (the PRI obtained 100% of the vote), hegemonic municipalities where "there was some opposition presence, but the effective number of parties....was less than 1.7," and competitive municipalities where the effective number of parties is more than 1.7. However, in the 1997 elections, which coincided with the implementation phase of PROGRESA, there was no municipality in which the

PRI receive 100% of the vote. For this reason, the categorization in this study does not include "no electoral competition."

10 Apparently, the larger the number of parties competing, the stronger the correlation between the benefit and poverty levels, but this should be statistically tested by controlling for the effect of other relevant factors.

11 In addition to partisanship, Calvo and Murillo (2004) emphasize the institutional effects on a party's access to fiscal resources, which the geographic distribution of votes generates.

12 It should be mentioned that this analysis focuses on how PRI reacts to competitive pressure in the context of its declining hegemony. This assumes that PRI is the first candidate in the electoral race. In fact, however, this is the case for only 1,898 out of 2,383 municipalities. I compared the model restricted to these cases with the model with a full sample to see if I should run the regression only for the cases in which PRI is the first candidate. This test resulted in no significant difference between the two models. To include the total information in the analysis, I decided to use the full sample for this analysis.

13 To my knowledge, Rocha Menocal made the first attempt to analyze the determinants of PROGRESA distribution (Rocha Menocal 2001). However, the findings drawn from her state-level analysis might be misleading because of a high heterogeneity of socioeconomic and political configurations *within* each state in Mexico.

14 The violation of the Poisson assumption of equidispersion is equivalent to the failure of the homoskedasticity assumption in the linear regression model (Cameron and Trivedi 1998, 77).

15 How such clustering phenomena create a negative binomial distribution is more technically explained in McCullagh and Nelder (1989, 198-199) and Mebane and Sekhon (2004, 394).

16 The Poisson regression model with overdispersion produces "spuriously small estimated standard errors," which accordingly leads to spuriously large z-values (Cameron and Trivedi 1986, 31).

17 These estimates were computed by using the glm.nb function of *R* (R Development Core Team 2004).

18 The negative binomial model loosens the restrictive assumption of equidispersion. There are two possibilities of variance function: $\omega_i = (1+\alpha)\mu_i$ and $\omega_i = \mu_i + \alpha\mu_i^2$. The overdispersion test confirms that the variance is quadratic in the mean (Cameron and Trivedi 1998, 63). Thus, the variance function is defined as $\omega_i = \mu_i + \alpha\mu_i^2$ in this analysis.

19 According to Hanushek and Jackson, if the hypothesis that the residual variances can be pooled is correct, this measure produces more efficient parameter estimates than running regressions separately for the subsets of data because it draws on the total information from the entire pooled sample (Hanushek and Jackson 1977, 128). For instance, this kind of interaction model is used by Rueda and Pontusson (2000).

20 The quadratic and the third-order polynomial terms capture the non-linear relationship between the response variable and the covariates represented by the non-parametric regression curve in Figures 2 and 3. A likelihood ratio test confirmed the statistically significant effect of these terms to explain the behavior of the response. Note that Figures 2 and 3 plot the ratio of the number of PROGRESA beneficiaries to municipal population against the poverty level to control the population size. In contrast, the regression model uses the raw number of recipients by municipality for the dependent variable with the log of population included in the right-hand side of the equation as a control. The estimated coefficients on the log of population (Tables 2 and 3) are very close to one. Thus, the predicted curve derived from the regression would not significantly diverge from the nonparametric curve in Figures 2 and 3.

21 Some might argue that in a three-party competition, PRI should also care about the vote share of the third-ranked candidate. They would thus conclude that my closeness measure, derived from only the two largest parties, was not relevant. For the following reason, however, the difference in the vote share between two largest parties can still capture the closeness of a race between three or more parties. Note that to classify the types of party competition I use the ENP, not the raw number of parties. This means that in a three-party competition, PRI faces two challengers whose relative size and strength are almost equal, implying that these two challengers got a similar level

of vote shares in the past election. This means that the vote share difference between the first and second parties is not different from the one between the first and third parties. Thus, the difference in the vote share between the first and second candidates can be an appropriate measure of closeness, not only in a two-party competition but also in three-party or a multiparty competition.

22 Some studies use a change of the absolute vote number instead of the share. However, in the inter-electoral period, the total population of eligible voters increased in most of the municipalities. To count this effect, I decide to employ a change of vote share.

23 The test to examine whether the coefficients estimated for subsets of data are the same is the so-called Chow test.

24 Prior to the 2006 federal elections, an independent organization conducted large-scale research on the political use of government programs in collaboration with SEDESOL. It reports that at the local level, politicians and/or their allies still manipulate the process of beneficiary selection and/or provision for electoral purposes in some regions, but *Oportunidades* is less amenable to these political maneuvers than other antipoverty programs (FUNDAR 2006). This may be explained by SEDESOL's explicit effort to launch a nation-wide campaign that the benefits of *Oportunidades* are not conditional on one's voting choice (SEDESOL 2001; 2005).

25 One of the plausible factors is the active engagement of civil society actors in monitoring the political use of social programs for elections. It should be noted that the activity of *Alianza Cívica,* a Mexican NGO, has been to organize electoral observations since 1994. It has disseminated information about electoral irregularities and educated voters not to acquiesce to vote buying.

References

Adato, Michelle, David Coady, and Marie Ruel. 2000. *Final Report: An Operations Evaluation of PROGRESA from the Perspective of Beneficiaries, Promotoras, School Directors, and Health Staff.* Washington, D.C.: International Food Policy Research Institute.

Bruhn, Kathleen. 1996. "Social Spending and Political Support: The 'Lessons' of the National Solidarity Program in Mexico." *Comparative Politics* 28 (2):151-77.

Brusco, Valeria, Marcelo Nazareno, and Susan C. Stokes. 2004. "Vote Buying in Argentina." *Latin American Research Review* 39 (2):66-88.

Calvo, Ernesto, and Maria Victoria Murillo. 2004. "Who Delivers? Partisan Clients in the Argentine Electoral Market." *American Journal of Political Science* 48 (4):742.

Cameron, A. Colin, and Pravin K. Trivedi. 1986. "Econometric Models Based on Count Data: Comparisons and Applications of Some Estimators and Tests." *Journal of Applied Econometrics* 1 (1):29-53.

————. 1998. *Regression Analysis of Count Data.* New York: Cambridge University Press.

Case, Anne. 2001. "Election Goals and Income Redistribution: Recent Evidence from Albania." *European Economic Review* 45 (3):405-23.

Consejo Nacional de Población (CONAPO). 1995. *Indices de Marginación.* Mexico City: CONAPO.

Cox, Gary W., and Mathew D. McCubbins. 1986. "Electoral Politics as a Redistributive Game." *Journal of Politics* 48 (2):370-89.

Dixit, Avinash, and John Londregan. 1996. "The Determinants of Success of Special Interests in Redistributive Politics." *Journal of Politics* 58 (4):1132-55.

Escobar Latapí, Agustín. 2002. "The PROGRESA Programme and Social Change in Rural Mexico." In *Social Policy Reform and Market Governance in Latin America,* edited by Louise Haagh and Camilla T. Helo. Basingstoke and New York: Palgrave Macmillan.

Fox, J. (1994). "The Difficult Transition from Clientelism to Citizenship." *World Politics* 46(2): 151-84.

FUNDAR Centro de Análisis e Investigación. 2006. *Monitoreo de Programas Sociales en Contextos Electorales.* Mexico City: FUNDAR.

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

Graham, Carol. 1992. "The Politics of Protecting the Poor during Adjustment: Bolivia's Emergency Social Fund." *World Development* 20 (9):1233-51.

Hanushek, Eric A., and John E. Jackson. 1977. *Statistical Methods for Social Scientists*. New York: Academic Press.

Heredia, Blanca. 1997. "Clientelism in Flux: Democratization and Interest Intermediation in Contemporary Mexico." Paper presented at The 20th International Conference of the Latin American Studies Association, April 17-19, at Guadalajara, Mexico.

Hiskey, Jonathan T. 2003. "Demand-Based Development and Local Electoral Environment in Mexico." *Comparative Politics* 36 (1):41-59.

Laakso, Markku, and Rein Taagepera. 1979. "'Effective Number of Parties: A Measure with Application to West Europe." *Comparative Political Studies* 12 (1):3-27.

Laurell, Asa Cristina. 2003. "The Transformation of Social Policy in Mexico." In *Confronting Development: Assessing Mexico's Economic and Social Policy Challenges,* edited by Kevin J. Middlebrook and Eduardo Zepeda. Stanford: Stanford University Press.

Lindbeck, Assar, and Jörgen Weibull. 1987. "Balanced-Budget Redistribution as the Outcome of Political Competition." *Public Choice* 52:272-97.

Magaloni, Beatriz, Alberto Diaz-Cayeros, and Federico Estévez. 2003. "The Erosion of Party Hegemony, Clientelism and Portfolio Diversification: The Program Nacional de Solidarida (Pronasol) in Mexico." Working paper. http://www.stanford.edu/~albertod/ClientelismEstevezMagaloniDiaz April16.pdf (accessed on December 15, 2004).

McCullagh, Peter, and John A. Nelder. 1989. *Generalized Linear Models*. New York: Chapman and Hall.

Mebane, Walter R. Jr., and Jasjeet S. Sekhon. 2004. "Robust Estimation and Outlier Detection for Overdispersed Multinomial Models of Count Data." *American Journal of Political Science* 48 (2):392-411.

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

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

Pardinas, Juan. 2004. "Fighting Poverty in Mexico: Policy Challenges." In *Mexico under Fox,* edited by Luis Rubio and Susan Purcell Kaufman. Boulder: Lynne Reinner Publishers.

R Development Core Team. 2004. *R: A Language and Environment for Statistical Computing*. Version 1.9.1. Vienna, Austria: R Foundation for Statistical Computing.

Rawlings, Laura. 2004. "A New Approach to Social Assistance: Latin America's Experience with Conditional Cash Transfer Programs." *Social Protection Discussion Paper Series* No.416. Washington, D.C.: World Bank.

Roberts, Kenneth M. 1995. "Neoliberalism and the Transformation of Populism in Latin America: The Peruvian Case." *World Politics* 48 (October):82-116.

————. 2002. "Social Inequalities without Class Cleavages in Latin America's Neoliberal Era." *Studies in Comparative International Development* 36 (4):3-33.

Robinson, James A., and Thierry Verdier. 2003. "The Political Economy of Clientelism." Working Paper 3205, Public Policy. Center for Economic Policy Research.

Rocha Menocal, Alina. 2001. "Do Old Habits Die Hard? A Statistical Exploration of the Politisation of Progresa, Mexico's Latest Federal Poverty-Alleviation Programme, under the Zedillo Administration." *Journal of Latin American Studies* 33:513-38.

Rueda, David, and Jonas Pontusson. 2000. "Wage Inequality and Varieties of Capitalism." *World Politics* 52 (3):350-83.

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.

Secretaría de Desarrollo Social. 2001. *Guía para la Titular Beneficiaria: Lo Que Necesita Saber del Programa de Educación, Salud, y Alimentación*. Mexico City: Secretaría de Desarrollo Social.

Secretaría de Desarrollo Social. 2005. *El Blindaje Electoral del Programa Oportunidades*. Mexico City: Secretaria de Desarrollo Social.

Shadlen, Kenneth C. 2000. "Neoliberalism, Corporatism, and Small Business Political Activism in Contemporary Mexico." *Latin American Research Review* 35 (2):73-106.

Skoufias, Emmanuel, Benjamin Davis, and Sergio De La Vega. 2001. "Targeting the Poor in Mexico: An Evaluation of the Selection of Households into PROGRESA." *World Development* 29 (10):1769-84.

Snyder, Richard. 2001. *Politics after Neoliberalism: Reregulation in Mexico*. Cambridge: Cambridge University Press.

Stokes, Susan C. 2005. "Perverse Accountability: A Formal Model of Machine Politics with Evidence from Argentina." *American Political Science Review* 99 (3):315-25.

Valenzuela, Arturo. 1977. *Political Brokers in Chile: Local Government in a Centralized Polity*. Durham: Duke University Press.

Weyland, Kurt. 1996. "Neopopulism and Neoliberalism in Latin America: Unexpected Affinities." *Studies in Comparative International Development* 33 (3):3-31.

Zedillo Ponce de León, Ernesto. 2000. *Sexto Informe de Gobierno*. Mexico City: Presidencia de la República.