

Buying-off the Poor:
Effects of Targeted Benefits
in the 2006 Presidential Race

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The goal of this paper is to analyze the effects of social assistance programs, campaign handouts and canvassing on Felipe Calderón's razor-thin victory in the 2006 elections. Many interpret the close contest as the outcome of an ideological battle between two radically different visions that divided left from right, rich from poor and north from south. From this perspective, the 2006 election was a prospective exercise, with a clear choice between right-wing continuity and left-wing populism. In our view, however, the PAN's triumph would not have materialized without the support of ample sectors of the urban poor that voted for the right as a result of two highly effective programs aimed at them, Oportunidades and Seguro Popular. The PAN also resorted to intense canvassing and distributed some gifts to voters prior to elections. In contrast to the powerful effects of welfare benefits, these had marginal effects on the vote at best.

Vote-buying and credit-claiming are complementary facets of democratic politics. Of course, their scope is quite wide, ranging from programmatic compliance to clientelist manipulation (Kitschelt and Wilkinson, 2005). Accusations were repeatedly leveled at the Fox government regarding the manipulation of Oportunidades throughout campaign season. For example, *Alianza Cívica* (2006) charged that voters were coerced by agents of the governing party which threatened to withdraw their benefits unless they supported the PAN's candidates. No doubt any social welfare program can be manipulated at the margin. However, both of the programs studied here employ selection criteria based on poverty indicators and differ dramatically from the discretionary policies of social transfers prevailing in the past.¹ This feature alone places the two programs closer to the programmatic end of the vote-buying spectrum.

¹ For example, the hallmark poverty relief program of the Salinas government (1988-1994), Pronasol, was extremely discretionary, resulting in deficient allocation according to poverty criteria, highly partisan skews in

Our exploration of *Oportunidades* and *Seguro Popular* applies propensity score matching to *Reforma*'s exit poll of the July 2006 election in order to uncover the political logics of these programs and to isolate their partisan and electoral impacts on beneficiaries. Lastly, our analysis distinguishes these social welfare programs from attempts to buy-off electoral support through more opportunistic transfers like campaign handouts. Using the 2006 Mexico Panel, we analyze the political effects of campaign canvassing and handouts, which in contrast to the social assistance programs had no major impact on voting decisions. One broadly comparative implication of our results is that in contrast to opportunistic transfers, welfare-enhancing social policies can and do generate significant longer-term dividends by cementing partisan loyalties among the poor.

This paper proceeds as follows. In the first section we present an overview of the transformation of social policy under Fox. The second section presents a methodological discussion justifying our modeling choices. The sections after that present our empirical analyses of the effects of *Oportunidades*, *Seguro Popular* and campaign targeting.

1. Social Policy Under the PAN

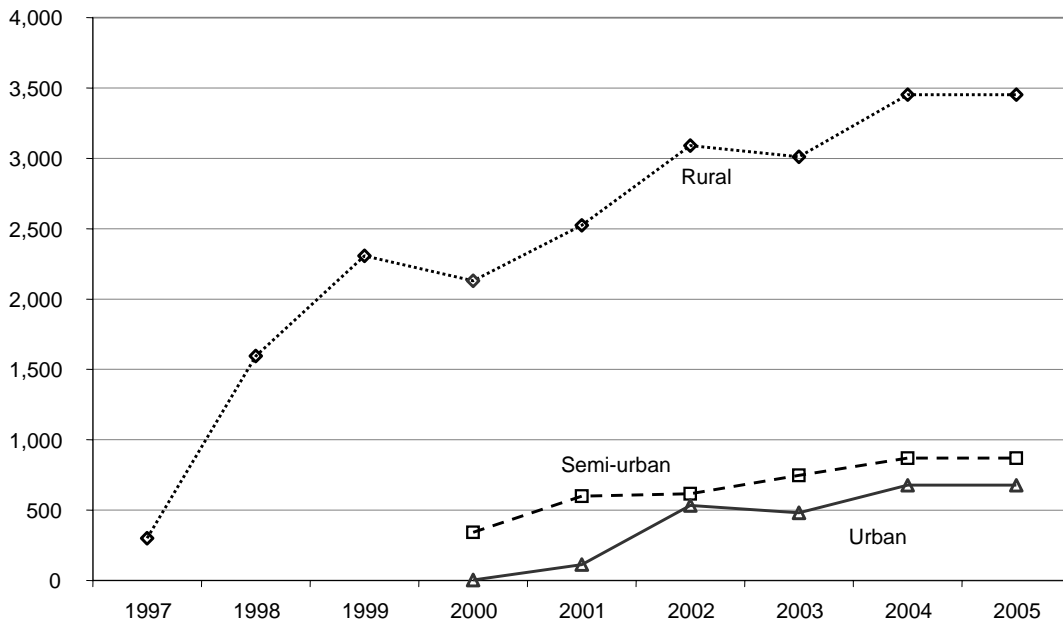
During the autocratic era in Mexico major social programs were designed to grant ample discretion to the government which as a rule used social transfers to reward partisan supporters and mobilize voters in elections. In a country with more than 50% of the population under the poverty line, the ruling party which monopolized access to these programs and other state resources enjoyed tremendous advantages against its putative opposition. The establishment in 1997 of *Progresa*, the precursor of *Oportunidades*, represents a watershed in the design of social policy in Mexico (Levy, 2006; Levy and Rodríguez, 2004),

benefit flows, and transient welfare improvements for benefited localities (Díaz-Cayeros, Estévez and Magaloni, 2006).

because it reduced the government's discretion in the *selection of beneficiaries*, which is now made on the basis of poverty criteria rather than political loyalties, and in the *irreversibility of benefits*, which can be withdrawn only when beneficiaries no longer meet the income-related or behavioral requisites for retention in the program. With *Progresa* Mexico witnessed the advent of social entitlements for its poorest sectors.

After numerous international policy evaluations supporting the effectiveness of *Progresa* in reducing extreme poverty, the Fox administration opted to continue with the program, but re-baptized it with a new name, *Oportunidades*, and greatly expanded its rural coverage program while extending it to the cities as well. Figure 1 shows the number of beneficiary households incorporated into this conditional cash transfer program since its creation. Coverage is impressive. At the end of 1999 *Progresa* reached approximately 2.6 million families or about 40% of all rural households. By the end of 2005, coverage under *Oportunidades* had doubled to almost 5 million families, two thirds of which are rural households, with the remainder comprising urban and semi-urban ones. Today, more than half of all families living under the poverty line are recipients of these transfers.

Figure 1: Number of beneficiary families in *Oportunidades* (in thousands)



Source: IBRD/World Bank, 2006

In addition, the Fox administration introduced a new social insurance program to remedy the truncated nature of health care delivery in the country, which grants access only to those working in the formal sector of the economy. According to the 2000 census, some 58 percent of the population was not covered by the social security system. Thus, *Seguro Popular* is an ambitious program created to extend health coverage to the uninsured. The program began in five states in 2001 and by 2005 it had been implemented in all 31 states and the Federal District, covering almost 3 million families. In contrast to *Oportunidades*, which is centrally administered by the federal government, *Seguro Popular* is decentralized. However, coverage and spending still vary widely among states. Moreover, issues remain concerning the targeting efficiency in affiliation. Despite these shortcomings, Scott (2006) calculates the incidence of benefit distribution and concludes that affiliation in the new

insurance program is more pro-poor than any other health care service except for *Oportunidades* and IMSS-*Oportunidades*. He further argues that the piggy-backing of *Seguro Popular* onto the poverty relief program, allowing for automatic affiliation of families already registered in *Oportunidades*, can only improve its targeting efficiency for the poor.

The innovations in welfare policy engineered by the Fox government clearly involve an important extension of tangible and needed benefits to the poor. We turn now to the question whether those benefits turned into votes for the PAN in the 2006 elections.

2. Electoral Effects of *Oportunidades* and *Seguro Popular* in 2006

Our central claim in this paper is that support for the PAN among beneficiaries of *Oportunidades* and *Seguro Popular*, concentrated within the poorest half of the electorate, was a striking component of Calderón's victory against the left. Since its founding, the cornerstone of the PAN's programmatic reputation has been democratic reform, complemented in the era of *hiper-presidencialismo* under the PRI with an enduring distrust of central government and its highly discretionary, and thus corruption-laden, fiscal management. Anti-centralism with a strong dose of anti-tax militancy is hardly conducive to building a reputation for redistributive policy.² Thus, the notion that the PAN might appeal to poorer sectors of the electorate on the basis of its social development policies and the delivery of benefits through targeted, formula-based and means-tested programs, is something of an oxymoron. However, when the PAN became the governing party in 2000, it was compelled to design social policies that would attend the poorest sectors of the electorate without increasing the tax burden on its traditional middle-class constituencies. The effectiveness of these social

² Elite- and mass-based survey evidence for the PAN's rightist stance on fiscal and redistributive issues in the late 1990s can be found in Magaloni (2006) and Estévez and Magaloni (2000).

transfers, we argue, produced critical electoral support for the PAN among sectors of the electorate that might otherwise have voted for the left.

Simple descriptive statistics of the political differences between the beneficiaries and non-beneficiaries of both programs can be found in Table 1. These are frequencies and averages taken from the national exit poll fielded by *Reforma* on July 7, with a sample of 5807 voters from 137 precincts around the country. Among respondents, 19 percent declare themselves to be registered in *Oportunidades*, and 15 percent in *Seguro Popular* (with about 8 percent reporting dual registration).

Table 1: Descriptive Statistics for Selected Political Variables, by Status in Social Development Programs (*Reforma* Exit Poll, July 2006)

	Range	<i>Oportunidades</i>		<i>Seguro Popular</i>		Dual Beneficiary
		<u>Beneficiary</u>	<u>Non-Benef.</u>	<u>Beneficiary</u>	<u>Non-Benef.</u>	
Vote for Calderón	0/1	37.2%	32.3%	40.6%	31.9%	42.4%
Vote for AMLO	0/1	25.9%	31.7%	22.9%	31.9%	21.7%
Vote for Madrazo	0/1	23.1%	17.9%	22.3%	18.4%	23.9%
Thermometer Diff.:						
Calderón/AMLO	-9/9	0.864	0.464	1.317	0.400	1.321
Calderón/Madrazo	-9/9	1.435	1.129	1.529	1.120	1.663
Party ID: PAN	0/1	31.2%	23.9%	33.7%	23.8%	37.7%
Party ID: PRD	0/1	18.3%	17.5%	14.5%	18.2%	13.4%
Party ID: PRI	0/1	23.5%	20.3%	23.4%	20.4%	23.9%
Independent	0/1	26.9%	37.9%	28.4%	37.1%	25.1%
PID Scale: PAN	-2/2	-0.171	-0.229	-0.057	-0.248	0.025
President'l Approval	1/4	3.156	2.769	3.166	2.779	3.265
Pocketbook Eval.	1/5	3.483	3.112	3.417	3.142	3.560
N		1117	4690	864	4943	486

If one were to view only the average vote shares for the three main presidential candidates among non-beneficiaries of either program, a fierce tie between Calderón and López Obrador emerges, with Madrazo in a distant third place overall. Among beneficiaries of the programs, however, Calderón outpaces López Obrador by double digits (reaching the

maximum of a twenty-point lead among dual beneficiaries). Any one of these spreads is enough to tilt the national election in Calderón's direction. At the same time, the PRI's candidate performs better, although less so than Calderón, among beneficiaries of either program than among non-beneficiaries. These bare levels of differentiated voting support are buttressed by additional information in the same table. The recipients of social policy benefits, on average, consistently reward Calderón with higher thermometer differentials over his two rivals, report higher levels of partisanship and *panismo*, and have more positive retrospective evaluations in general, than non-recipients. To the extent that pocketbook evaluations undergird poor voters' assessments of government performance and their partisan attachments and that these retrospective elements, in turn, influence candidate preference, the raw data from the exit poll would appear to indicate an important cushion of support for the PAN from poor voters directly benefited by social development and poverty alleviation programs.

To explore the systematic effects of these social policies on voting behavior requires, however, addressing key methodological issues that stem from the fact that individuals are not selected into the program randomly, but on the basis of certain socio-demographic characteristics that are in turn causally related to voting decisions. Thus, assessing the impact of Oportunidades and Seguro Popular on voting behavior is challenging because there is a strong problem of endogeneity. Both programs are targeted to the poor, who generally have not supported the right-wing PAN but leaned toward the other two alternatives, the former ruling party and the left-wing PRD.³ The following section justifies

³ In a similar vein, inferring the effects of other social programs such as *Progres*a on support for the former ruling party by simply employing respondents' reported benefits as an independent variable could lead to erroneous conclusions because of strong endogeneity, given the fact that the rural poor selected into the program already disproportionately supported the PRI. For a full discussion of this problem and an analysis

our choice of the propensity score matching method for the non-biased estimation of the effects of social programs on voting choices.

3. Propensity Score Matching and quasi-experiments

Propensity score matching (Rosenbaum and Rubin, 1983; Rubin, 2006) is a statistical technique that counters the difficulty of finding relevant counterfactuals to infer the effect of social programs and campaign strategies on voting choices. The problem with conventional parametric estimations, in which dummy variables for being a beneficiary of a social program or receiving visits or gifts from a political party are used as independent variables, is that there is a natural non-random selection of observations into those variables. The selection bias would render inferences drawn from conventional parametric estimations unsound.⁴

The inferential issue of interest is to know, for example, what an individual that receives benefits from *Oportunidades* would have done with her vote choice if she had not been included in the program. Since the selection of individuals into *Oportunidades* is not random, but depends on a set of very carefully established criteria related to poverty, strictly speaking, there is no observed individual who can be used as a control for the comparison.⁵ Some of the socio-economic determinants for selection into *Oportunidades* are the same variables that might influence voting in favor of a particular party. Thus, even if a correlation exists between program enrolment and vote choice exists, this correlation does not constitute evidence of an electoral effect generated by program benefits.

of the effects of Pronasol and Progresá on voting behavior that correct for endogeneity see Diaz-Cayeros, Estévez and Magaloni (2006).

⁴ This is a classic problem of selection bias which is not generated by the research design, but rather by the observational as opposed to experimental nature of the data under study.

⁵ The literature on *Oportunidades* is vast. On the criteria for selection into *Oportunidades*, see Levy (2006) and the references therein.

This potential for bias is not limited to the selection of individuals into targeted social programs, but can also be found in lesser interventions during the campaign. For example, political parties might choose to canvas or reward some voters over others precisely because they have some characteristics which render them susceptible to switching their vote choice. Canvassing and campaign gifts are not randomly assigned to voters, but depend on characteristics that are plausibly correlated with their voting choices. Any correlation between, say, canvassing and voting choice might only reflect the underlying socioeconomic or partisan characteristics that led party operatives to target certain voters rather than the direct effect of the attention given to them.

Propensity score matching provides a quasi-experimental setting in which one seeks to assess the effect of a treatment, namely, receiving benefits from social programs or attention from party operatives, on the dependent variable, for example, the voting choice. This non-parametric test has several advantages, including that the estimation does not depend on the specific assumptions of linearity or other aspects of model dependence (see Ho *et al.*, 2006). The main difficulty in its employment is that the method is predicated on the estimation of individual propensity scores, meant to summarize on a one-dimensional scale the variation among covariates of the treatment in question. Hence, we select two groups of observations, that will be matched and compared in their political behavior: one that received benefits or attention during the campaign (the treated group); and another that did not (the control group).

Calculating a propensity score is straightforward. One estimates a probit or logit of the determinants for the treatment. Following the advice in Ho *et al.* (2006), we chose covariates for the propensity score in the most parsimonious specification that, while satisfying the balancing property (see below), included all the control variables expected to

influence the treatment; and that excluded variables which were not good predictors of the treatment, in order to retain efficiency in the estimation. The covariates for this propensity score calculation include individual-level indicators related to the socio-demographic characteristics of respondents, geographic variables related to the physical environment they inhabit; and aggregate characteristics of the municipality.

Table 2 shows the propensity scores calculated for *Oportunidades* and *Seguro Popular*. We use a rather exhaustive specification for predicting beneficiaries. In particular, we use a set of individual-level demographic characteristics -- age, education, income, and selected occupational categories. We also employ a set of geographic determinants that we obtain from a variety of sources fully discussed in Diaz-Cayeros, Estévez and Magaloni (2006). These geographic variables include latitude (measured as northing kilometers from the southernmost point in the country), average yearly rainfall, distance to railroad tracks and the territorial size of the municipality.⁶ We also employ aggregate municipal-level data that measure poverty and development levels, which we know determined the selection of beneficiaries. These variables include the Human Development Index (from the UNDP), adult literacy rates, the share of Indian inhabitants and the share of wage earners obtaining less than one minimum wage. We also include the categorization from the IFE of whether precincts are rural or urban, the partisan identity of sitting governors, and the coverage of social programs.⁷ We follow the best-practice of only including variables that are statistically significant predictors of selection..

⁶ Geographical determinism is currently in vogue among developmental economists as a structural explanation of deep-rooted and persistent poverty (Sachs, 2004)

⁷ All the individual-level information comes from the *Reforma* 2006 exit poll; the geographic and municipal-level data are calculated from INEGI sources (for details see Diaz-Cayeros, Estévez and Magaloni, 2006); and *Oportunidades* coverage comes from SEDESOL.

It can be seen from both estimations, that the benefits of Oportunidades and Seguro Popular are effectively being targeted to poorer individuals, although there are noteworthy differences between the programs. Coverage of Oportunidades is greater in rural places, whereas that of Seguro Popular is more urban. There is evidence indicating greater incidence of Seguro Popular, but not Oportunidades, in states governed by the PAN. This finding may support the charge that Seguro Popular is less well targeted to the poor and subject to partisan influence.

Table 2: Predicting the Beneficiaries of Social Development Programs

<i>Oportunidades</i>		<i>Individual-level Predictors:</i>	<i>Seguro Popular</i>	
-.049	(.010)***	Age	-.042	(.010)***
-.172	(.025)***	Education	-.106	(.027)***
-.038	(.011)***	Income	-.059	(.011)***
.070	(.044)*	Female/Housewife	-.107	(.057)*
-.136	(.060)**	White-Collar Worker	-.112	(.065)*
		Peasant Farmer	.209	(.085)**
		<i>Geographic Determinants:</i>		
-.0002	(.0001)*	Northing		
.0003	(.0001)***	Avg. Yearly Rainfall		
.003	(.001)***	Distance to Railroad		
		Municipal Size (km. ²)	.0001	.0000***
		<i>Aggregate Municipal Data:</i>		
		Human Development Index	-2.454	(1.369)*
		Adult Illiteracy Rate	1.260	(.717)*
.443	(.135)***	Indian Population Share		
		Low Income Share (1ms)	.730	(.326)**
.537	(.051)***	Rural Precinct (IFE)	-.265	(.059)***
		PAN-governed State	.217	(.057)***
.210	(.057)***	PRD-governed State	-.204	(.065)***
		<i>Policy-related Factors:</i>		
1.235	(.052)***	<i>Seguro Popular</i> Beneficiary		
		<i>Oportunidades</i> Beneficiary	1.210	(.052)***
.656	(.099)***	<i>Oportun</i> 'des Coverage 2006	-.488	(.190)***
		<i>Constant</i>	1.527	(1.167)
N	5671		N	5654

LR	1372.60		LR	932.78
Pr>chi ²	0.0000		Pr>chi ²	0.0000
Ps. R ²	0.2463		Ps. R ²	.1962

One of the more attractive features of this method is that it creates something akin to a quasi-experiment, in which both treated and control observations are as similar as possible to each other, except for the treatment itself. Propensity score matching produces a dataset in which observations falling under a common support (i.e., observations with similar probabilities of being treated, but with some in the treatment group and others not) should satisfy what is known as the “balancing property”. If a matched dataset is balanced, there should be minimal differences in the distributions of the covariates that are used to calculate propensity scores between the treated and control groups (Ho et al., 2006). In the estimations we have checked for balancing by testing whether the means of the covariates are the same across various blocks of observations (Becker and Ichino, 2002). In all estimations the balancing property was satisfied.

To highlight the issue of balance in the dataset, a common practice is to produce a histogram of the distribution of values of the matched dataset as compared to the unmatched original data. Figures 2 and 3 make those comparisons by showing the kernel density graphs of the distribution of propensity scores for both social programs. On the left side of each pair of graphs one can see that the propensity score of the untreated group is highly unbalanced, since there are very low probabilities predicted for the treatment; while the propensity score of the treated observations tends to be dispersed along the whole range of the propensity score. The panels on the right show the matched observations. Although their kernel densities are not perfectly identical, it is visually clear that the control observations used for matching are quite similar to the distribution of the treated

Figure 2a

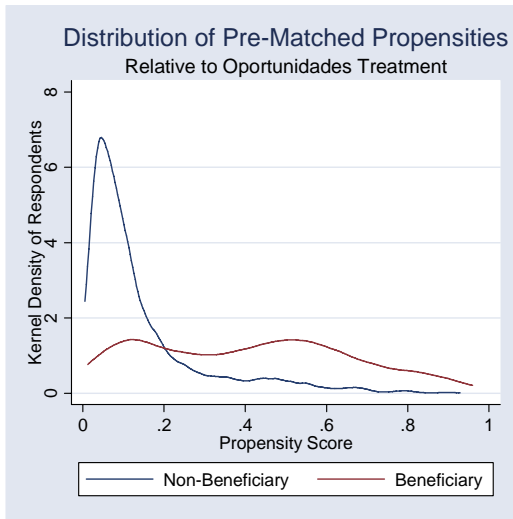


Figure 2b

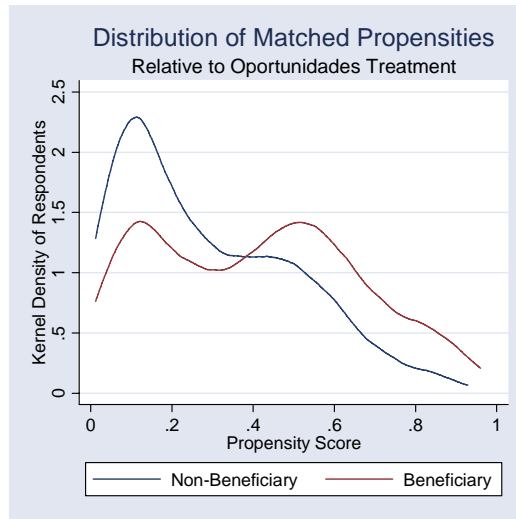


Figure 3a

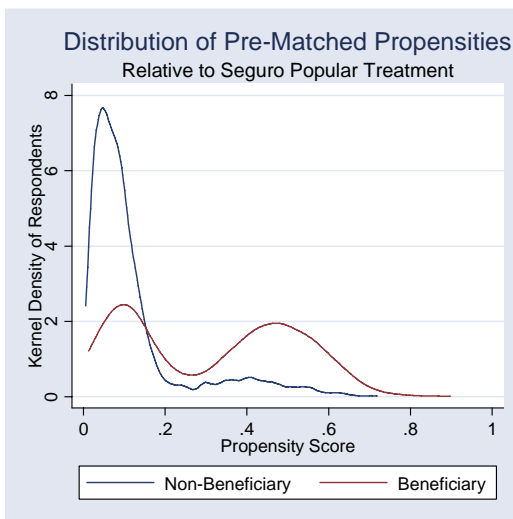
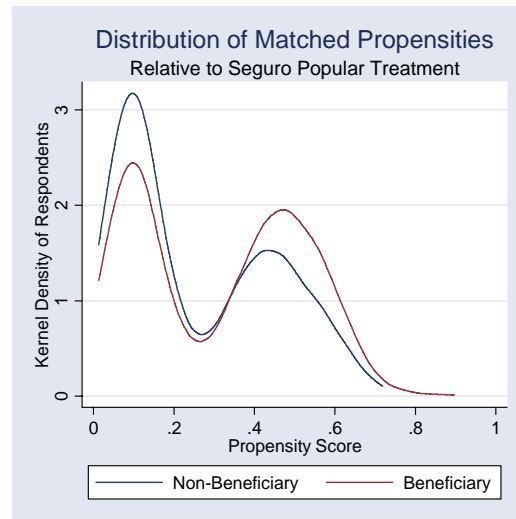


Figure 3b



ones.⁸ These suggest that the technique will allow us to infer the electoral behavior of two individuals who are identical with respect to the criteria for program selection but who differ

⁸ As discussed by Ho *et al.* (2006), the multidimensional nature of the covariates means that these graphs does not ensure that balancing is fulfilled, but at least it provides an indication of situations in which the datasets are clearly not balanced. A definitive test of the balancing property does not exist, at least in the current state of the literature. However, the various ways in which we have explored the dataset all suggest that the data are comparable. In addition to propensity score matching, we performed exact matching complemented with the nearest neighbor technique, which generates very similar results.

with respect to selection itself. We turn to exploring the political effects of these social assistance programs below.

5. The Electoral Impact of *Oportunidades*

To assess the electoral impact of these social assistance programs, simple difference-of-means tests compare the propensities for different political attitudes and behaviors between individuals “matched” on multiple traits but who differ in having received benefits.

In Table 3 we present differences-of-means tests between treated and untreated respondents, differentiated by calculated propensity scores for inclusion in one of the two social programs. The table also presents simple means tests obtained from the raw data. Pre-matched means tests from the raw data, however, are plagued with the problem of endogeneity discussed above. Thus, a comparison between pre-matched and post-matched means tests reveals the inferential virtues of the propensity score matching technique. Without controlling for selection into the two programs or matching individuals on traits that enter into that selection, the risk is run of finding practically all political variables significantly associated with inclusion in the social programs under consideration (see the columns labeled “Pre-Matching” in Table 3).

Table 3: The Virtues of Discrimination: Before and After Matching Propensity Scores (national sample)

	<i>Oportunidades</i>		<i>Seguro Popular</i>	
	<u>Pre-Matching</u>	<u>Post-Matching</u>	<u>Pre-Matching</u>	<u>Post-Matching</u>
Vote for Calderón	.048 (.016)***	.110 (.028)***	.088 (.017)***	.071 (.030)**
Vote for AMLO	-.058 (.015)***	-.069 (.022)***	-.090 (.017)***	-.037 (.023)
Vote for Madrazo	.052 (.013)***	.002 (.021)	.039 (.014)***	-.002 (.024)
Thermometer Differentials:				
Calderón/AMLO	.400 (.168)***	.631 (.299)**	.917 (.184)***	.586 (.310)*
Calderón/Madrazo	.306 (.133)**	.589 (.249)**	.409 (.146)***	.275 (.237)

Party ID: PAN	.079 (.015)***	.105 (.029)***	.110 (.017)***	.076 (.024)***
Party ID: PRD	.011 (.013)	-.039 (.024)	-.036 (.015)**	-.022 (.023)
Party ID: PRI	.040 (.014)***	-.027 (.030)	.036 (.016)***	-.020 (.027)
Independent	-.110 (.016)***	-.052 (.023)**	-.088 (.018)***	-.026 (.024)
PID Scale: PAN (5-pt.)	.058 (.041)	.260 (.064)***	.191 (.046)***	.209 (.066)***
Presidential Approval	.391 (.034)***	.402 (.045)***	.387 (.037)***	.184 (.062)***
Pocketbook Appraisal	.370 (.032)***	.403 (.059)***	.276 (.036)***	.147 (.054)***

Once propensities are matched in the case of *Oportunidades*, beneficiaries were 11 percent more likely to vote for Calderón than non-beneficiaries with very similar propensity scores – that is, individuals with the same socio-demographic and community-level characteristics. Program beneficiaries were, at the same time, 7 percent less likely to vote for López Obrador and were indistinguishable from non-beneficiaries in support levels for Madrazo. These leanings among beneficiaries are reinforced by marked increases in thermometer differentials between Calderón and both López Obrador and Madrazo, stronger attachments to the PAN at the expense of other partisan ties and (especially) non-partisan status, and more positive evaluations of government performance and personal well-being. Thus, there is strong support in the data for our claim that *Oportunidades* gave a crucial boost to Calderón at the polls among poor voters who might otherwise have supported López Obrador. The impact of *Seguro Popular* is similar in increasing the propensity of an individual to vote for Calderón (by 7 percent). Coverage by *Seguro Popular* also lends itself to greater identification with the PAN and to better evaluations of government performance and personal finances, although the magnitudes of all these effects are smaller than for the poverty alleviation program.

These patterns of preference beg the question of credit-claiming for *Oportunidades*, since it is an outgrowth of the poverty alleviation program known as *Progresá*, introduced by the Zedillo government in 1997 and credibly claimed by the PRI as its own. Of course, the

inherited program was almost entirely rural in its community coverage in 2000 and more narrowly distributed. The program's expansion after that date has proceeded in two waves. The first occurred in rural municipalities between 2001 and 2004, by incorporating households living in extreme poverty but not meeting other selection criteria for inclusion and by the program's extension to semi-urban localities in the countryside. The second wave began in 2002, in a rapid extension of the program to urban contexts with modified selection procedures (including self-selection by potential beneficiaries with agency review of their applications).

The relative impact of these program expansions is revealed in the first two columns of Table 4 which separate rural from urban voters when matching propensity scores for voters in and out of the program. In the rural electorate, *Oportunidades* spurs higher levels of presidential approval and stronger pocketbook evaluations (which clearly dovetail those registered among urban beneficiaries). However, there is no evidence that these retrospective evaluations translate into higher levels of support for the PAN and its presidential candidate among rural beneficiaries. Their urban counterparts behave quite differently. From urban beneficiaries, Calderón garners much higher voting support, in line with wider differentials in thermometer scores against his rivals. Similarly, against the baseline of non-recipients in the cities, urban voters receiving benefits from the program are more likely to declare partisanship (or alternately, 8 percent less likely to be independents) and more likely to identify with the PAN. In sum, the urban expansion of the country's key poverty alleviation program generated important gains in the PAN's electoral support among the urban poor. This is a rather old-fashioned strategy for party-building centered on the targeted (but not discretionary) delivery of policy benefits to available and needy constituencies.

Table 4: Dissecting the Electoral Impact of *Oportunidades*

	Rural Voter	Urban Voter	PAN State	PRI State	PRD State
Vote for Calderón	.026 (.052)	.125 (.038)***	.158 (.06)***	.060 (.030)**	.042 (.038)
Vote for AMLO	-.035 (.046)	-.014 (.035)	-.101 (.054)*	-.056 (.034)*	-.001 (.043)
Vote for Madrazo	.007 (.056)	-.025 (.026)	-.006 (.047)	-.044 (.038)	.025 (.055)
Thermometer Diff.:					
Calderón/AMLO	.272 (.493)	.747(.346)***	.879 (.376)**	.948 (.430)**	-.796 (.601)
Calderón/Madrazo	.414 (.438)	.802(.286)***	.849 (.438)*	.557 (.296)*	-.537 (.573)
Party ID: PAN	.046 (.048)	.101 (.032)***	.075 (.056)	.077 (.035)**	-.047 (.052)
Party ID: PRD	-.058 (.041)	-.030 (.027)	-.053 (.050)	-.032 (.032)	.052 (.057)
Party ID: PRI	-.009 (.062)	.015 (.029)	-.003 (.056)	-.009 (.035)	.068 (.046)
Independent	.021 (.043)	-.078 (.035)**	-.031 (.052)	-.017 (.035)	-.102 (.051)**
PID Scale: PAN	.181 (.168)	.190 (.080)**	.243 (.151)	.251 (.124)**	-.298 (.144)**
President'l Approval	.271 (.082)***	.263 (.072)***	.330 (.11)***	.300 (.09)***	.197 (.093)*
Pocketbk. Appraisal	.363 (.074)***	.395 (.080)***	.254 (.119)**	.381 (.08)***	.229 (.099)**

From a different perspective, these same results might be taken as evidence of vote-buying, with some potential for the exercise of political coercion by governmental agents and PAN office-holders. While selection into the benefit flows of *Oportunidades* is unrelated to partisan allegiance and behavior, inclusion in the program into the future could conceivably be premised on compliance in clientelistic fashion with the demands of political patrons. The evidence from Table 4 makes this an implausible claim. That rural beneficiaries should exhibit no significant differences in vote choice, candidate evaluation or partisan attachments than their un-benefited fellows is hard to square with the clientelism or machine politics thesis. Moreover, given the post-*Progresa* extension of benefits to a larger share of rural households, the lack of any benefit-based partisan divide in the rural electorate is simply a negation of the presumably predatory vote-buying logic of welfare transfers to the rural poor.

For the question about vote-buying across the country as a whole, a more nuanced response is necessary. To answer that question, we turn to the last three columns of Table 4, which segment the country according to its state-level political geography, looking for the partisan bias that sitting governors might induce among *Oportunidades* recipients. States governed by the PAN or the PRI show similar differences (but with varying magnitudes) between program beneficiaries and non-beneficiaries. In general, beneficiaries in these states reward Calderón at the expense of López Obrador (but not of Madrazo) and are more likely to declare allegiance to the PAN. Program beneficiaries in PRD-governed states offer a sharp contrast in behavior. It bears noting that such states were shown to be strong predictors of selection into the program (see Table 1). While few coefficients are statistically significant for PRD-governed states, the signs on several political variables are revealing. Candidate differentials show negative signs for Calderón against both of his rivals; retrospective evaluations are the lowest of the series; identification with the PAN also returns a negative sign, notwithstanding reduced non-partisanship among beneficiaries; and, most importantly, Calderón registers no vote gains among voters benefited by the program. In other words, PRD incumbency trumps credit-claiming for *Oportunidades* by the PAN (but, curiously, not that by the PRI). Possibly local benefit programs override SEDESOL's poverty alleviation program (the survey instrument makes no inquiry into these matters) or perhaps PRD office-holders are better at counteracting party-building efforts by its rivals (and the PRD in its strongholds tends to enjoys high quotas of municipal power). In any event, the electoral impact of *Oportunidades* among its beneficiaries varies widely according to local partisan configurations and reflects standing decisions by local electorates in their choice of governing parties. Again, as a result, the potential for vote-buying and coercion through the implementation of a federal welfare program is greatly reduced.

While the electoral bonus of redistribution through *Oportunidades* favors the PAN, it is notable that the party responsible for the program's creation and early administration, the PRI, is left unscathed by the dynamics of program influence on voting decisions. Neither in support for its presidential candidate nor in the level of partisan attachments to the PRI is this party systematically hurt by six years of accumulated change in the program's operation under the charge of the rival party that ejected it from control of the federal government. That is especially true for the rural electorate which monopolized *Progresa* transfers until 2000. Thus, the campaign announcements by Madrazo and other *priista* figures which claimed authorship of the original program and committed the party to its continuation. It is equally true, however, that the PRI receives no reward from the program's current recipients. It is entirely possible that the rural expansion under Fox neutralized what was a strong electoral premium for the PRI from rural beneficiaries of *Progresa* in the 2000 presidential contest (Diaz-Cayeros *et al.*, 2006). The debate over the extent to which there was an implementation bonus for the PAN in the midterm elections in 2003 (De la O, 2004; Cantu, 2005) is unresolved by the new evidence from the 2006 exit poll. However, the segmentation of effects among rural and urban beneficiaries would appear to favor the argument that program expansion is now properly credited to the PAN by the urban poor.

6. The Electoral Impact of *Seguro Popular*

The second major initiative of the Fox administration was the design and implementation of a health insurance scheme for the uninsured, known as *Seguro Popular*. Given the unequal nature of access to health services in both the public and private sectors of primary health care, this program is intended to provide access for households without the resources to pay for medical care, especially for emergency provision and protracted

ailments. Registration is voluntary, conditional to means-testing for free insurance and requiring subsidized contributions from households above the poverty line, but the program is piggy-backed on *Oportunidades*, allowing for much lower transaction costs for individual affiliation. Scott (2006) notes that legal loopholes exist in the selection process permitting organization-level incorporation of the uninsured, perhaps in disregard of means-testing requirements and conducive to particularistic politics and rent-seeking. However, federal outlays for subsidizing the insurance program require formal inter-governmental agreements with matching funds from state governments. By late 2005 all lower-level governments had entered the program, but some imposed different priorities or restrictions on its implementation. For example, López Obrador in the Federal District agreed to the program's deployment in only two of the capital's sixteen boroughs, where demand had far outstripped the local government's public health system. Notwithstanding such obstacles, the federal government mounted effective registration campaigns throughout the country, state by state, and by election day almost three million households were covered by *Seguro Popular*. The program's rapid expansion and its emergence as a campaign issue in the spring (when López Obrador advised against voluntary enrolment) raise the obvious question of how effective, in electoral terms, it was for the governing party.

Returning to the full-sample effects of Table 3, *Seguro Popular* was only slightly less effective than *Oportunidades* in raising voting support for Calderon and identification with the PAN, but weaker in generating positive assessments of government performance and candidate attributes. Despite considerable overlap between the beneficiaries of both programs, *Seguro Popular* is much more urban than the poverty relief program and its political geography is distinct (see the electoral and partisan predictors of Table 2). These differences

are reflected in the segmented patterns of program influence shown in Table 5, which vary somewhat from those encountered with *Oportunidades*.

Table 5: Dissecting the Electoral Impact of *Seguro Popular*

	Rural Voter	Urban Voter	Urban Voter Dual Benef.	PRD State	PRD State Dual Benef
Vote for Calderon	.056 (.051)	.109 (.04)***	.098(.059)*	.097 (.061)	.156 (.068)**
Vote for AMLO	-.049 (.043)	-.047 (.032)	-.027 (.046)	-.110 (.06)*	-.093 (.051)*
Vote for Madrazo	.045 (.050)	-.037 (.029)	-.004 (.038)	-.041 (.055)	-.040 (.060)
Thermometer Diff.:					
Calderon/AMLO	.775 (.430)*	.599 (.337)*	.952 (.48)**	1.131 (.58)*	1.928 (.73)**
Calderon/Madrazo	.363 (.527)	.311 (.286)	.487 (.504)	.772 (.550)	1.071 (.59)*
Party ID: PAN	.065 (.055)	.096 (.038)**	.121 (.068)*	.089 (.058)	.186 (.06)***
Party ID: PRD	-.104 (.04)***	.006 (.027)	-.005 (.039)	-.069 (.067)	-.071 (.054)
Party ID: PRI	.048 (.048)	-.070 (.033)**	-.051 (.048)	-.020 (.064)	-.050 (.070)
Independent	.019 (.047)	-.018 (.031)	-.035 (.051)	.017 (.058)	-.047 (.069)
PID Scale: PAN	.233 (.130)*	.301 (.09)***	.269 (.15)*	.342 (.196)	.549 (.19)***
President'l Approval	.325 (.130)**	.229 (.061)***	.166 (.094)*	.58 (.13)***	.316 (.13)***
Pocketbook Eval.	.042 (.086)	.178 (.070)**	.069 (.121)	.40 (.15)***	.478 (.13)***

In the rural electorate, vote gains for the PAN and PRI among beneficiaries were exiguous, but a marked decrease in PRD attachments (in favor of all other partisan categories) is apparent. In urban and semi-urban contexts, the gains for the PAN mirror those obtained through *Oportunidades*, with one exception. Shifts in partisan allegiance toward the PAN appear to come mainly at the expense of the PRI. Urban beneficiaries also report more positive perceptions of pocketbook improvement and government performance, but only half as much as urban beneficiaries of the other social program.

A fuller measure of electoral advantages accruing to the PAN from the operation of its key social programs can be appreciated in the third column which segments dual beneficiaries in the cities (around 8 percent of the full national sample) from all other urban

voters.⁹ This special status of dual beneficiary is characterized by a ten percent greater likelihood of voting for Calderon, higher thermometer differentials in his favor, greater identification with the PAN, but more middling retrospectives, than the rest of the urban electorate.

With respect to the political geography of *Seguro Popular*, beneficiaries in states held by the PAN are much more strongly aligned with the PAN and its presidential candidate than are non-beneficiaries, while in PRI-governed states a greater likelihood of voting for Calderon--about 8 percent more—is starkly unsupported by any other evidence of alignment due to the health insurance program (statistical evidence not shown in the table). The findings for *panista* states are only to be expected, while that for PRI domains is commensurate with the popular hypothesis of strategic voting by many *priísta* voters.

More interesting, from our perspective, are the findings for PRD-held states, in the fourth and fifth columns of Table 5. In contrast to the PRD's capacity to counteract beneficiaries' electoral rewards for the PAN in the case of *Oportunidades*, the health insurance program proves more resistant to neutralization from the left. More voting support and allegiance for the PAN, in line with more positive retrospective evaluations, are clearly generated by *Seguro Popular* in the PRD's strongholds, at the direct expense of López Obrador. The special case of dual beneficiaries in PRD states is even more compelling, with the widest candidate differentials in this study in favor of Calderon. No wonder López Obrador criticized the program on the campaign trail and exhorted uninsured citizens to reject the opportunity of registering for its benefits.

⁹ The coefficients from the third and fifth columns of Table 5 are not directly comparable to the others nor to those of Table 4, since we have not created new propensity scores for selection into both treatments. However, given that this segmentation drops urban beneficiaries of a single program into the ranks of the uninsured and unalleviated, these coefficients for dual beneficiaries probably understate electoral effects viz-a-vis non-dual-beneficiaries.

7. Canvassing and Campaign Handouts

Calderón's slim victory, we have shown, can be plausibly accredited to the social policies implemented by the Fox administration which allowed his party to build political loyalties among the urban poor, a group that otherwise could have been expected to support the PRD candidate. Many of those receiving benefits from these programs approached the elections feeling more satisfied with their personal well-being, credited the president and the PAN for this, and gave their votes to Calderón as a result. In effect, the PAN did manage to buy-off segments of the urban poor through its social assistance programs. That is not at all the same, however, as opportunism or clientelism.

Campaign handouts are a different story from these well-institutionalized welfare benefits. These are opportunistic gifts –money, foodstuffs, t-shirts, livestock– given in election season in an attempt to influence voting decisions that have limited effects on voters' welfare. This final section of the paper explores the effects of canvassing and campaign handouts in the 2006 elections. We ask two basic questions. To which voter types did the PAN direct its canvassing efforts and deliver its handouts? And did either of these affect voting decisions?

To explore these questions, we make use of the 2006 Mexican panel, which allows us to track changes in voting decisions and opinions during the course of the campaign. Table 6 reports basic descriptive statistics about the extent to which canvassing and handouts were employed during the election campaign. Data are for the national sample of individual responses to the three panel waves. With respect to canvassing, the panel reveals considerable door-to-door campaigning for each of the parties or candidates, with a slight edge for the PAN and the PRI over the PRD. It is noteworthy that both the PAN and the

PRD did considerably more canvassing in the cities than in rural localities, whereas the PRI appears to canvass as intensively in smaller rural communities as well as in cities. Campaign handouts were infrequent, at least as revealed by respondents. Whereas 24 percent of the sample was contacted by at least one of the parties, only 8 percent reports having received gifts, money, food baskets, or some kind of “help” from a party during the course of the campaign. Unsurprisingly, the survey reveals that the PRI was more prone to resort to opportunism or clientelistic practices than its rivals.

Table 6: Canvassing and Campaign Handouts

	<i>National Sample</i>	<i>Urban Subsample</i>	<i>Rural Subsample</i>
Canvassing			
PAN / Calderón	14.2	16.2	9.4
PRD / López Obrador	11.0	12.7	8.2
PRI / Madrazo	14.4	16.3	14.1
Any of the above	24.3	28.0	28.0
Handouts			
PAN / Calderón	2.7	3.1	1.1
PRD / López Obrador	1.5	1.7	0.7
PRI / Madrazo	4.9	5.2	3.5
Any of the above	7.9	8.4	5.7

To uncover the logic of canvassing and handouts, we follow a similar approach to previous sections. We first model the probability that the PAN contacts an individual or gives her a campaign handout. We then use propensity score matching to analyze the effects of these treatments on voter attitudes and behavior. Table 7 reports the models predicting canvassing and handouts, which concentrate exclusively on the incumbent party.

The canvassing model suggests that the PAN contacted its own core supporters, those who in October 2005 reported *identifying strongly* with that party. There is also evidence that the PAN canvassed more intensively in states governed by *panistas*, although the

coefficient for PAN-held states is not statistically significant in the handout model. The PAN concentrated contacts among lower income groups, but not among beneficiaries of Oportunidades. This suggests an urban focus for the party's canvassing in line with its core constituencies.

The handout model suggests that the PAN attempted to buy-off the support of weakly opposing voters, those who reported weak partisan identifications to the PRD or the PRI in the first wave of the panel. This pattern reflects the expectations for swing-voter opportunism in Dixit and Londregan(1995) and Stokes(2005). The model also suggests a bidding equilibrium, in which parties target gifts to voters already targeted by other parties. Indeed, the coefficients for handouts by the PRI and the PRD are both positive and statistically significant. The handout model includes dummies for ownership of items and services (in lieu of income) which presumably differentiate the lower middle class from poorer strata. While not statistically significant, their positive signs suggest that campaign handouts from the PAN were not aimed at the poorest voters.

Table 7: Predicting Canvassing and Handouts

	CANVASSING			HANDOUTS	
	Coeff.	S.E		Coeff.	S.E.
<i>Social Programs</i>			<i>Rival Party Handouts</i>		
Oportunidades beneficiary	-0.40**	0.18	PRI	1.16***	0.32
Seguro Popular beneficiary	0.23	0.16	PRD	2.12***	0.45
<i>Individual-Level Data</i>			<i>Individual-Level Data</i>		
Strong PAN ID	0.48***	0.18	Weakly Opposed ID	0.75***	0.27
Education	0.045	0.03	Independent	0.39	0.28
Income	-0.07**	0.03	Cable TV, Telephone & Car	0.15	0.10
Age	-0.005	0.004	Stove	0.49	0.35
<i>Municipal/Locality Level</i>			<i>Municipal/Locality Level</i>		
PAN-held State	0.28**	0.13	PAN-held State	0.32	0.23
Low Income Share (1 ms)	-1.96**	0.93	Low Income Share (1 ms)	3.18*	1.75
Ln. Population Size	-0.21***	0.06	Human Developmt. Index	-6.98**	2.85
Rugged Terrain (pct.)	38.57**	15.33	Rugged Terrain (pct.)	1.85**	0.35

Not Landlocked	-38.65**	15.97	State Capital	0.83**	0.36
Constant	0.03	0.54	Constant	1.94	2.08
	N	900		N	928
	LR	72.00		LR	51.84
	Adj. R2	.110		Adj. R2	.249

To assess the impacts of canvassing and handouts, we proceed as before by looking at means-differences between treated and untreated respondents. Since the number of positive observations for the handout model is rather small, we are unable here to segment effects between the urban and rural electorates. The first three columns of Table 8 refer to the effects of canvassing. The first thing to note is that canvassing has no favorable effect for Calderón. In fact, canvassing affects his candidacy negatively among rural voters, who support López Obrador more when the PAN approaches them. Canvassing does not affect turnout, although it increases political interest among rural voters. However, certain changes in partisanship are directly affected by canvassing. Canvassing increases the probability that a voter will convert to the PAN by more than 10 percentage points—that is, that she will switch her voting intention either from López Obrador, Madrazo or another candidate, to Calderón. Again, this is not the case for rural voters, who do not convert to the PAN even when canvassed. Door-to-door canvassing also decreases the probability that a voter will abandon Calderón during the campaign for any other candidate, although the size of this effect is moderate. Canvassing has a marginal effect in increasing partisan loyalties over the course of the campaign in favor of the PAN, but only in the cities. By contrast, rural voters canvassed by the PAN did not switch partisan loyalties toward the PAN but toward the PRD. Finally, canvassing did increase thermometer differentials between the first and third waves of the panel in favor of Calderón and against López Obrador among rural voters.

Table 8: Tracking the Electoral Effects of Canvassing and Campaign Handouts

	<i>Canvassing</i>			<i>Handouts</i>
Vote	National	Urban	Rural	National
Vote for Calderón	-.002 (.070)	.073 (.071)	-.171* (.102)	-.135 (.116)
Vote for AMLO	.056 (.067)	.004 (.077)	0.321** (0.132)	.050 (.115)
Vote for Madrazo	-.025 (.051)	.024 (.051)	-.112 (.144)	.128 (.085)
Political Mobilization				
Political Interest	-.102 (.121)	-.149 (.136)	.456* (.246)	-.141 (.262)
Turnout	.026 (.044)	.011 (.049)	.032 (.043)	-.134* (.083)
Changes during Campaign (1st-3rd wave)				
<i>Change in Vote Choice</i>				
Converted to PAN	0.106*** (.041)	.141*** (0.44)	-.129* (.0811)	-.056 (.074)
Converted to PRD	0.002 (.028)	-.008 (.030)	0.065 (.917)	-.020 (.047)
Converted to PRI	-0.039* (0.020)	-0.045* (0.023)	-.152** (.054)	-.024 (.021)
Abandoned PAN	-.040** (.019)	-.017 (.020)	-.038 (.038)	-.001 (.017)
Abandoned PRD	.035 (.029)	.042 (.033)	-.025 (.072)	.004 (.049)
Abandoned PRI	-.144*** (.0044)	-.102** (.048)	-.062 (.065)	-.105 (.084)
<i>Change in Party ID</i>				
In favor of PAN	.060 (.040)	.069* (.037)	.118 (.095)	-0.28** (.079)
In favor of PRD	.034 (.038)	.010 (.043)	.166* (.087)	0.13* (.078)
In favor of PRI	-.051* (.031)	.042 (.034)	-.122* (.075)	0.13* (.068)
<i>Change in Thermometers</i>				
Diff. Calderón-AMLO	-.19 (.645)	-.342 (.671)	2.47** (1.063)	-2.88*** (.94)
Diff Calderón-Madrazo	-.372 (.451)	-.100 (.500)	-.129 (.735)	-3.12*** (.95)

With respect to campaign handouts from the PAN (column 4 in Table 8), what impact there is from opportunistic targeting of independents and weakly opposed voters, is generally negative. Via handouts, voting support is not increased, partisan sympathies are

not generated, and candidate image is not strengthened. Indeed, it only appears to be engendered by the vote-buying efforts of other parties in campaign season. Possibly such opportunism cuts against the grain of party reputation, as with the *Radicales* in Argentina (Calvo and Murillo, 2004).

Conclusion

The delivery of welfare-enhancing benefits through targeted social programs and sustained policy innovation matters for a governing party's electoral prospects. In 2006 the urban beneficiaries of the Fox government's two major social policy initiatives rewarded the PAN with crucial votes that represented the margin of triumph at the national level.

The influence on voting decisions exerted by *Oportunidades* and *Seguro Popular*, singly and in combined form, is logically tied to a retrospective calculation that partially neutralized prospective ones in 2006. What is ironic in 2006 is the partisan identity of the two sides of vote-buying, with the right delivering policies unassociated with its historical reputation against the left credibly promising changes in distributive policies in the future. In the end, the average beneficiary reasoned in line with the saying, "Better a bird in the hand than two in the bush". The Spanish version exaggerates the discount rate of the future: *Más vale pájaro en mano que cien volando*. Effective vote-buying, in line with this folk wisdom, is usually based on tangible exchanges from the past rather than welcome promises to the future.

Credit-claiming on the basis of social policy benefits is not always effective and can be counteracted by rival claims of benefit delivery. Thus, *Oportunidades* and *Seguro Popular* in the countryside had virtually no discernible effect in favor of the PAN, despite inducing positive retrospective evaluations that commonly prop voting decisions. Universalist or formula-based programs with a successful record of benefit delivery which is not contingent

upon partisan attachments or voting behavior do not tie beneficiaries to political patrons. While electoral clientelism and vote coercion cannot be ruled out in the campaigns of 2006, the evidence presented here makes it highly implausible that its presence was systematically tied to the operation of social development policies. Favorable beneficiary reaction to the incumbent party, where it occurred, may indicate successful vote-buying by the party in power, but it is likely to be vote-buying of the good sort.

Further, party-building through the patient expansion of social benefits is conducive to building a programmatic reputation among constituencies which historically have been distant from a party like the PAN—in this case, the urban poor. Without the innovations in its social policy, the PAN would have been unable to build partisan loyalties in a crucial sector of the electorate that otherwise might have preferred the left. In contrast to the effects of these welfare enhancing programs—Oportunidades and Seguro Popular—the PAN's campaign handouts had no impact on voting decisions. Our results thus demonstrate that Mexican voters were able to distinguish the two types of benefits—welfare-enhancing and opportunistic—and rewarded the PAN only for the former.