

# Evaluation of Local Government Performance and Presidential Approval in Mexico

## Evaluación del desempeño del gobierno local y aprobación presidencial en México

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### ABSTRACT

Does presidential approval benefit from government performance at the subnational level? This article argues that in multilevel systems, in which clarity of responsibility for policy is low, presidential approval ratings are affected by citizens' evaluation of subnational government performance. This paper explores the spillover effects of citizens' evaluation of subnational government performance on presidential approval in Mexico, based on data from the 2012 Americas Barometer study. The results from ordinal logistic regressions and seemingly unrelated regressions indicate that citizen satisfaction with services provided by local governments is positively associated with presidential approval ratings.

*Keywords:* 1. presidential approval, 2. multilevel systems, 3. clarity of responsibility, 4. government performance, 5. Mexico.

### RESUMEN

¿Se benefician los presidentes del buen desempeño de los gobiernos locales? Este artículo argumenta que, en sistemas multinivel donde la claridad de responsabilidades es baja, la aprobación presidencial es afectada por la evaluación ciudadana del desempeño de los gobiernos subnacionales. Este trabajo explora los efectos secundarios del desempeño subnacional en la aprobación presidencial en México, apoyado en datos del estudio del Barómetro de las Américas efectuado en 2012. Los resultados de las regresiones logísticas ordinales y regresiones aparentemente no relacionadas indican que la satisfacción con los servicios prestados por los gobiernos locales se asocia positivamente con la aprobación presidencial.

*Palabras clave:* 1. aprobación presidencial, 2. sistemas multinivel, 3. claridad de responsabilidad, 4. desempeño del gobierno, 5. México.

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## INTRODUCTION

Do incumbents at a given level of government benefit from the positive performance of politicians at a different level? Is presidential approval related to government performance at the subnational level? Presidential approval is indeed linked to government performance. According to the classic retrospective vote model, voters reward incumbents who have performed well and oust those who have performed poorly. Accountability takes place because voters retrospectively judge whether governments have acted in their best interests, and reward or sanction them accordingly (Fiorina, 1981). A substantial body of work has investigated the impact of policy performance on incumbent politicians' approval. This research has focused mainly on the impact of policy performance at one level of government on approval at the same level of government. Significantly less research has been conducted to look at the impact that policy performance at one level of government might have on public attitudes regarding another level of government.

The core assumption in the accountability model is that citizens cognitively make distinctions based on who does what, and link those distinctions to their voting behavior in a rational way. Yet in multilevel systems, overlapping policy jurisdictions lead to unclear lines of responsibility and make it costly for citizens to acquire the information needed to correctly assign credit and blame for policy decisions. This article argues that in multilevel systems, due to low levels of clarity of responsibility, credit for policy benefits delivered by a given level of government can spill over to a different level. More specifically, citizens' evaluation of subnational government performance might be positively related to presidential approval ratings.

This proposition is assessed using responses from national surveys conducted in the Americas Barometer 2012 study in Mexico, which has a federal system with three layers of government in which the provision of basic services is decentralized and clarity of responsibility is low. The dependent variable, *presidential approval*, is widely considered to be an important component of democratic politics, given that higher approval ratings can yield political power and influence (Bond, Fleisher, and Wood, 2003; Canes-Wrone and Marchi, 2002; Lee, 2014). It is well established that economic and social policy performance are important predictors of presidential approval. What has not been explored is the spillover effects of policy performance at subnational levels of government on approval ratings for public officials at higher levels. The results in the current study confirm the expectation that in a multilevel system with low clarity of responsibility, there

are bottom-up spillovers and public officials at higher levels of government can benefit from positive performance at lower tiers. More specifically, in Mexico, citizens' evaluation of services provided by local governments are positively related to presidential approval.

This article is organized in the following manner. The next section presents a theory of bottom-up spillover effects from evaluations of policy performance at the subnational level on government approval at the national level. Next, the case of Mexico is presented, and in the subsequent section, the data, measures and methods used in the analyses are introduced. The research claims are tested using ordered logistic and seemingly unrelated regressions. The paper concludes by summarizing the findings and discussing the study's implications for the strategic behavior of politicians in multilevel democracies.

### *SPILOVER EFFECTS OF SUBNATIONAL GOVERNMENT PERFORMANCE ON APPROVAL IN MULTILEVEL SYSTEMS*

According to the classic retrospective model, voters reward incumbents who have performed well and oust those who have performed poorly, and hence, electoral accountability occurs because voters retrospectively judge whether governments have acted in their best interests, and reward or sanction them accordingly (Fiorina, 1981).

Government approval is a function of performance. One of the most influential determinants of presidential popularity is economic performance. Studies focused on both the developed and developing world have shown that citizens look at economic performance to evaluate the government and eventually cast a vote for incumbent politicians at election time (Lewis-Beck and Stegmaier, 2007). Government approval has also been linked to evaluations of performance in more restricted policy domains. For example, in developed nations, government transfers have a positive effect on the vote for incumbent politicians (Levitt and Snyder, 1997). And in developing nations, social policies targeting the poor have been linked to high popularity rates and electoral rewards (De la O, 2013; Manacorda, Miguel, and Vigorito, 2011; Zucco, 2008; 2013).

The process of approving or sanctioning an incumbent based on past performance relies on the assumption that voters can assign responsibility for outcomes. Since Powell and Whitten's (1993) seminal article on the moderating effects from clarity of responsibility on the link between performance and voting, scholars

have highlighted that responsibility for policymaking is not always as clear as the accountability model assumes. On the contrary, policy responsibility is most often shared by competing political actors due to a divided government, coalition government or the coexistence of multiple levels of government. As a result, studies in political economy have started to examine in more detail how political contexts vary in the level of clarity of responsibility and how this variation shapes the way citizens assign credit and blame to governments for macroeconomic performance and policy benefits.

In multilevel systems, in which different levels of government provide policy benefits to the same constituencies, the attribution of responsibility and citizens' evaluation of governmental performance depend on the level of clarity of responsibility. Multilevel governance can be a source for the dispersion of power and potential diffusion of responsibility. In such systems, there are multiple levels of government, often with different parties (or combinations of parties) in office, sharing constituencies that overlap. Policy responsibilities are shared to different degrees, and the reward-punish model becomes much more complex.

Clarity of responsibility is not equally blurred in all multilevel systems. The extant literature has identified two types of distribution of policy responsibilities across levels of government. In the first type, the so-called layer-cake model, each level of government pursues its own programs in a clearly demarcated sphere of competence, so that the origin of policy decisions resides in single tiers. In Hooghe and Marks' metaphor, "... every citizen is located in a Russian Doll set of nested jurisdictions, where there is one and only one relevant jurisdiction at any particular territorial scale" (Hooghe and Marks, 2003:236). In such systems, in which powers and authority for different policy areas are concentrated at specific levels of government, in the so-called layer-cake model, citizens can clearly distinguish policy responsibilities for each level of government. In the second type, on the contrary, responsibilities are shared across levels of government, and thus policy decisions are made by more than one tier. Under this institutional framework, the marble-cake model, policy decisions over expenditures and revenues are highly intertwined, and consequently the clarity of responsibility is hampered and citizens' ability to reward or punish incumbents may be undermined (Anderson, 2006; Johns, 2011; León, 2011).

Institutional clarity of responsibility conditions how easily citizens will make correct responsibility attributions among levels of government; which shape the link between performance and approval. Where responsibility for policy is clear,

we could expect citizens to correctly assign credit and blame among levels of government more easily, and expect approval for each level of government to be related to its performance in the policies for which it is responsible. Some studies in the context of the U.S. federal system provide evidence that voters can distinguish between political actors and levels of government when attributing responsibility for policy outcomes, and thus approval is linked to government performance in the policy areas for which they are responsible. For example, it has been shown that the public rewards and punishes governors depending on their performance in policy areas under their jurisdiction (Arceneaux and Stein, 2006; Atkeson and Partin, 1998). For example, voters recognize the limitations of state governments in affecting the state economy, and they judge their governors based on the state's unemployment situation relative to the unemployment situation of the national economy (Cohen and King, 2004). Voting behavior in gubernatorial elections is dependent on the performance of the state economy and the state's tax rates, the control of which is a state responsibility (Niemi, Stanley, and Vogel, 1995).

Given that the clarity of responsibility is low in multilevel systems, voters are uncertain about which level of government bears primary responsibility for a given policy area (Anderson, 2006; Cutler, 2008; Johns, 2011). In such a context, how do citizens assign credit and blame to incumbent politicians across levels of government? We find that voters' attribution of credit and blame depends on individual and contextual factors.

The main individual factors shaping attribution of responsibility are perceived power, partisanship and political sophistication. The simplest shortcut that citizens can use to attribute responsibility in contexts of low clarity is perceived power. This shortcut consists of applying the rule: "... if a given authority is seen as more powerful overall, it is a reasonable guess that it bears responsibility for that issue" (Johns, 2011:7).

When citizens assign credit for policy biased by the distribution of power among levels of government, spillover effects take place. Thus, satisfaction with performance in policy areas at one level of government can shape approval of politicians at different levels (Arceneaux, 2006). These spillover effects may be either top-down or bottom-up. In other words, citizens' evaluations of policy performance by higher levels of government may have top-down spillover effects on the approval of lower levels of government, and citizens' evaluations of performance in policy areas implemented by lower levels of government may lead to bottom-up spillover effects shaping the approval of government at higher levels. The scarce

studies on electoral spillover effects have looked at elections in mixed electoral systems (Hainmueller and Kern, 2008), political cycles (Sapir and Sekkat, 2002), and electoral mobilization (McCann et al., 1996).

Top-down spillover effects take place when citizens assign credit and blame to incumbents at lower levels of government for policies carried out by politicians at higher levels of government. Studies in the context of the U.S. federal system provide support for these top-down spillover effects. For example, citizens' evaluations of performance in policy areas that constitute primarily a responsibility of the federal government seem to have effects on the approval ratings of senators, governors and other politicians (Piereson, 1975). Voting in Senate elections responds to voters' evaluations of national economic conditions (Carsey and Wright, 1998), and even state elections are vulnerable to swings in national economic conditions (Chubb, 1988). Bottom-up spillover effects take place when citizens assign responsibility for success and failure to higher levels of government for policies implemented by subnational governments. In such a context, approval of public officials at higher levels of government can be shaped by policy performance in services provided by subnational governments. This leads to the following prediction: positive evaluations of policy performance by subnational governments could lead to credit spillover effects at higher levels of government. Positive evaluations of policy benefits delivered by local governments may cause citizens to give the president a higher approval rating. Looking at the impact that performance at the subnational level might have on approval of the president, we would expect that "evaluations of services provided by local governments will be positively related to presidential approval ratings". This hypothesis is subjected to empirical testing in the following sections.

#### *MULTILEVEL GOVERNMENT AND SHARED RESPONSIBILITIES FOR POLICY BENEFITS IN MEXICO*

This article tests the bottom-up spillover effects hypothesis at the individual level in Mexico. By looking at individual variations in a single country case, we hold constant the contextual factors that condition attribution of responsibility, namely clarity of responsibility. Mexico is a suitable case for exploring spillover effects across levels of government. It is a federation with three tiers of government—federal, state and municipality—that share the responsibility for the provision of basic social services in a decentralized marble-cake model with low

clarity of responsibility. Mexico is a presidential, federal regime comprising thirty-one states and the Federal District, with approximately 2 400 municipalities. Up until the last two decades of the 20<sup>th</sup> century, the Mexican political system constituted an electoral authoritarian regime, in which elections took place regularly, but in an overwhelming majority of cases, resulted in victories for the hegemonic party, the Partido Revolucionario Institucional, or PRI (Schedler, 2013). In addition to this political centralization, the federal government had paramount decision-making power over revenue collection and the allocation of the federal budget, in which most public expenditures were concentrated (Amieva-Huerta, 1997; Diaz-Cayeros, 2006). Over the past 30 years, Mexico has made a transition from a hegemonic party system to a multi-party system with three main organizations: the former hegemonic Partido Revolucionario Institucional (PRI), the right-leaning Partido Acción Nacional (PAN), and the left-leaning Partido de la Revolución Democrática (PRD). It has also transitioned from a highly centralized to a fairly decentralized federation. In the early 1980s, competitive elections began to take place in municipal contests. As a result of these elections, the opposition began to head local governments, specifically the right-leaning PAN in some of the northern states such as Chihuahua and Baja California, and the left-leaning COCEI in Juchitán, a municipality in the southern state of Oaxaca (Cleary and Stokes, 2009; Foweraker and Craig, 1990). This eventually led to alternation in the presidency, with Vicente Fox winning the 2000 presidential election. Simultaneously, the federal government initiated a process of fiscal decentralization that transferred important expenditure responsibilities to state and municipal governments, with resources for the provision of local public goods such as drinking water, electrification, housing, education, health care and social infrastructure (Rodríguez, 1997; Willis, Garman, and Haggard, 1999).

As a result of this decentralization process, between the mid-1990s and 2012, the provision of basic social services became a responsibility shared among the three levels of government with low levels of clarity of responsibility. Table 1 depicts the distribution of responsibilities for the provision of basic social services among the three levels of government. The Mexican decentralized system for the provision of basic social services responds to the so-called marble-cake model, in which responsibilities are shared among levels of government and policy decisions are made by public officials at more than one level. The provision of services such as housing programs, water, electricity, basic education and health, as well as road infrastructure, is shared among the three levels of government, specifically the federal

government, states and municipalities. The federal government is mainly responsible for budgeting and evaluating these social and infrastructure policies, and state and municipal governments for implementing programs and delivering services.

TABLE 1. Responsibilities for the Provision of Basic Social Services, by Level of Government, Mexico

<i>Policy area</i>	<i>Function</i>	<i>Mexico</i>
Housing	Budget	F, I
	Implementation	I, F
	Evaluation	F
Water and sewerage	Budget	F, I, L
	Implementation	I, F, L
	Evaluation	F
Electricity	Budget	F
	Implementation	F, I, L
	Evaluation	F
Basic education	Budget	I, F
	Implementation	I
	Evaluation	F
Public health	Budget	F, I
	Implementation	I
	Evaluation	F
Hospitals	Budget	F, I
	Implementation	I, F
	Evaluation	F
Roads	Budget	F, I
	Implementation	I, F
	Evaluation	F
Urban highways	Budget	I, F, L
	Implementation	I, L
	Evaluation	I, L

F = Federal government, I = Intermediate level (states), L = Local governments (municipalities).

Sources: IADB (1997) and Hernández, Díaz-Cayeros, and Gamboa (2002).

State governments are responsible for the provision of two crucial social services, specifically basic education and public health, in addition to roads and highways. Local governments are responsible—along with the other two levels



of government—for delivering local public services such as water and sewerage, street lighting, local roads and urban infrastructure (Hernández, Díaz-Cayeros, and Gamboa, 2002; IADB, 1997). In spite of the wide variation across municipalities in terms of bureaucratic capacities and economic resources, and although the poorest localities face striking financial difficulties (Hernández and Jarillo, 2007), local governments are the direct providers of these basic social services in more than two thirds of the 2 429 Mexican municipalities. For example, according to the 2002 *Encuesta Nacional a Presidentes Municipales sobre Desarrollo Social* (National Survey of Mayors on Social Development), drinking water is provided directly by 70 percent of the municipalities, sewerage by 64 percent, and public electrification by more than 80 percent of local governments. This survey was conducted in 2002 and collected data from the 2 429 municipalities established in Mexico at that time (BDSocial, 2002).

In summary, Mexico is a suitable case for exploring the bottom-up credit spillover hypothesis because it is a multilevel system, in which subnational governments deliver basic local public goods, and shared responsibilities among levels of government give rise to low levels of clarity of responsibility. In such a context, it is plausible that approval of public officials at higher tiers may be tainted by citizens' experience with education or health services, or their perception of the state of roads and highways in their localities. If that were the case, the spillover effect would cause presidential approval to be shaped by satisfaction with services delivered by subnational governments.

#### *DATA, VARIABLES AND METHODS*

This article examines the impact of satisfaction with services provided by subnational governments on the popularity of national political actors, and more specifically on presidential approval. Data for the empirical analysis was drawn from the 2012 Americas Barometer study in Mexico. This survey is administered by the Latin American Public Opinion Project (LAPOP) at Vanderbilt University. The LAPOP surveys are constructed very carefully so as to maximize their representativeness. For the purposes of this article, the 2012 wave was chosen due to two reasons. Questions regarding satisfaction with social services and infrastructure delivered by subnational governments were asked for the first time in 2012, and the 2012 wave of the LAPOP study is the most recent before recentralizing reforms were sponsored by President Peña Nieto at the end of that year.

### *Dependent Variables*

In the first set of statistical analyses the study looks at “presidential approval” by using a standard measure with the following question: M1. Speaking in general of the current government, would you rate the job performance of President Felipe Calderón as 1) very good, 2) good, 3) neither good nor bad (fair), 4) bad, and 5) very bad. The scale in this question was reversed so that 4) indicates a very good evaluation.

In a second set of models, the dependent variables are “trust in the president” and “trust in the municipality,” based on the following questions: B21a. “To what extent do you trust the President?” and B32. “To what extent do you trust the municipality?” Responses were given based on a 1–7 scale, where 1 indicates “not at all” and 7 indicates “a lot.” The first dependent variable (presidential approval) has less measurement error because it deals with actual evaluations of the president. However, this question is only asked for the national executive, which precludes controlling for the effect of satisfaction with local services on approval of subnational governments. In order to overcome this limitation, these analyses use trust as proxies for approval. We can be confident that these items are grasping some kind of approval of these two levels of government. As noted by Carreras and Irepoglu (2013), we can expect it to be more challenging for respondents to answer questions about trust in relation to more abstract concepts such as “political institutions.” In contrast, trust in the president and the municipality refer to offices clearly identifiable, even if in some cases respondents do not know the identity of the individual who holds each position.

### *Independent Variables*

In order to explore the bottom-up spillover effects of subnational government performance, the analyses assess the impact of citizens' evaluations of policies for which subnational governments are responsible, controlling for citizens' evaluation of policies for which the president is more clearly responsible. The main independent variables in these analyses are two measures of satisfaction with local services: the first taps citizens' evaluation of services provided by municipalities and the second, those delivered by state governments. “Satisfaction with municipal services” was constructed on the basis of the following question: “Would you say that the services provided to the people by the municipal government are ...?” 1) very good, 2) good, 3) neither good nor bad (fair), 4) bad, and 5) very bad. To assess “satisfaction with performance of state governments,” an additive index

has been used to measure satisfaction with the quality of three local public goods: roads, schools and health services. Specifically, the questions are:

- 1) SD2NEW2. And thinking about this city/area where you live, are you very satisfied, satisfied, dissatisfied, or very dissatisfied with the condition of the streets, roads, and highways?
- 2) SD3NEW2. And the quality of public schools?
- 3) SD6NEW2. And the quality of public medical and health services?

For a more straightforward interpretation, the scales in both measures of citizens' evaluation of performance were rescaled to a 0–100 scale and reversed so that higher scores point to higher levels of “satisfaction with services provided by municipal” and “state governments.”

The models control for one alternative shortcut for attribution of responsibility: partisan bias. Partisanship shapes attitudes toward incumbent politicians and the attribution of responsibility for policy success and failure. Party identifiers will claim credit for success and avoid blame for failure, and therefore will attribute responsibility to those levels of government in which their party has achieved success or an opponent has presided over failure (Rudolph, 2003; Malhotra and Kuo, 2008). Party identifiers are more likely to attribute responsibility for policy success to those levels of government controlled by their party, and failure to those controlled by their political opponents (Rudolph, 2003). To control for this influence, this study used respondents' self-report of whether they “voted for the incumbent” in the past election, which accounts for electoral supporters of the current executive. The models include responses to the following question: VB3. “Who did you vote for in the last presidential elections of [2006]?” This question captures those who both weakly and more strongly identify with the party of the incumbent.<sup>1</sup>

Presidential approval is shaped by political knowledge. Citizens who are less politically sophisticated tend to simplify policy responsibility, and for example, are more likely to assume that the national economy is entirely in the President's hands, while more sophisticated voters have a more complex understanding of policy outcomes and are more likely to realize that they are affected by many

<sup>1</sup> The number of missing values in this variable is as high as 731, however, values were not imputed in this study.

actors (Gomez and Wilson, 2001; 2008). In order to control for this factor, models include a “political knowledge index,” an indicator variable based on the correct responses to the following two questions: GI1, what is the name of the current president of the United States of America? and GI4, how long is the President's term of office in Mexico?

Two measures of evaluation of economic performance were included to address the most powerful predictor of presidential approval, according to the extant research. Specifically, there are two perspectives on economic voting: pocketbook and sociotropic voting. The theory of pocketbook voting argues that when personal or household financial situations experience a decline, voters punish the incumbent. Whereas, when personal financial conditions improve, voters reward the incumbent. Most studies, nonetheless, have found evidence in support of the sociotropic voting hypothesis: that voters are much more likely to consider the national economic situation when casting their vote (Kinder and Kiewiet, 1981). The models control for sociotropic evaluations of the economy through the following question: SOCT1. How would you describe the country's economic situation? Would you say that it is very good, good, neither good nor bad, bad or very bad? Egotropic evaluations—pocketbook concerns—of personal economic situations are measured through this question: IDIO1. How would you describe your overall economic situation? Would you say that it is very good, good, neither good nor bad, bad or very bad? Perceptions of the “national economy” and the “personal economy” across the sample are on average moderately low to neutral (39.6 units and 47.8 units, respectively).

To control for concerns regarding corruption the models include a question that gauges the degree to which respondents think corruption is prevalent: EXC7. Taking into account your own experience or what you have heard, corruption among public officials is: 1) very common, 2) common, 3) uncommon, or 4) very uncommon? The original 1 to 4 measure was rescaled to run from 0 to 100, where 1 indicates the highest perceptions of corruption. The average perception of corruption in 2012 is 76.84, which indicates that on average individuals in Mexico think corruption is widespread.

Finally, as socioeconomic and demographic controls, the models include the respondent's household income, age, an indicator variable for the sex of the respondent (coded 1 if male, 0 if female), the individual's years of education, and whether he/she resides in an urban (vs. rural) area. Table 2 presents descriptive statistics for all the variables.

TABLE 2. Summary Statistics

	<i>N</i>	<i>Mean</i>	<i>Standard deviation</i>	<i>Minimum</i>	<i>Maximum</i>
Presidential approval	1 546	58.0207	22.44076	0	4
Trust in the president	1 548	4.369509	1.878095	1	7
Trust in municipal government	1 550	4.367742	1.726336	1	7
Satisfaction municipal services	1 521	52.13675	21.39164	0	100
Satisfaction state services	1 465	65.32423	13.77454	25	100
Voted for incumbent president	829	0.5572979	0.4970059	0	1
Political knowledge	1 222	1.805237	0.4751365	0	2
Evaluation of national economy	1 549	39.55778	23.28375	0	100
Evaluation of personal economy	1 557	47.80026	19.66691	0	100
Perception of corruption	1 510	76.84008	24.33687	0	100
Income	1 286	7.237947	3.529221	0	16
Gender (male)	1 560	0.5358974	0.4988696	0	1
Age	1 547	40.05042	15.67577	18	93
Education	1 554	8.759974	4.223281	0	18
Urban resident	1 560	0.7538462	0.4309074	0	1

Source: Author's calculations based on data from the Latin American Public Opinion Project (2015).

### *Methods*

The study specifies two sets of regression models in order to assess the relationships between satisfaction with services delivered by subnational governments and presidential approval, while simultaneously accounting for citizens' evaluations of economic performance and other individual characteristics that may be correlated with both, satisfaction with services and government approval. Given that the dependent variable in the first set of models is ordinal, the data are analyzed using ordered logistic regressions. In the second set of models the dependent variables are the levels of trust in two levels of government, the president and municipalities. These models are specified using Seemingly Unrelated Regression (SUR), which allows to separately, yet simultaneously, model trust in the president and trust in local governments. In this study, SUR estimates a system of two equations, one for each level of government, and allows the errors in different equations to be correlated. Given that the two measures of trust are regressed on the same set of explanatory variables, the coefficients and standard errors produced by SUR are identical to those produced by any ordinary least squares regression. By using

SUR, we look simultaneously at measures of approval for two levels of government, and with separate equations, the independent variables are not constrained to having the same impact on trust for the two levels of government, which we do not expect. We expect satisfaction with local services to have a stronger direct effect on local government approval and an indirect spillover effect on presidential approval.

## *RESULTS*

Table 3 reports the results of two separate regressions for the dependent variable “presidential approval”. In the first two regression models, the main independent variable is satisfaction with services provided by municipal governments. However, the other two regression models include measures of satisfaction with services provided by both subnational governments: municipalities and states. Models 1 and 3 test the hypothesis of bottom-up spillover effects by looking at the impact of satisfaction with local services on presidential approval with socio-demographic controls. As expected, a higher satisfaction with services provided by subnational governments is positively and significantly related to presidential approval. These results are robust to model specifications that control for citizens' evaluation of national economic performance and personal economic situation, as well as partisanship (models 3 and 4). In all model specifications, satisfaction with subnational government performance is positively and significantly related to presidential approval. Citizens' evaluation of the national economy and their personal economic situation are both positively related to presidential approval, in line with the conventional wisdom. Again, as expected by previous research, partisanship has a strong positive impact on presidential approval. Having voted for the sitting president has a statistically significant effect on presidential approval ratings. And the perception of corruption has a negative impact on presidential approval, but the coefficients do not reach conventional levels of statistical significance.

Table 4 presents two Seemingly Unrelated Regression estimates for the effects of satisfaction with services provided by subnational governments on trust in government, in relation to the president and municipalities. Ideally, the models should have three dependent variables measuring trust, one for each level of government: president, governor, and municipality. Unfortunately, LAPOP only asks about trust in the president and trust in municipalities, and it does not offer a proxy for approval or trust in governors. In model 1, the main independent variable of the SUR estimate is satisfaction with services provided by local governments, and in

model 2 the main independent variables are satisfactions with services provided by both subnational governments, municipalities and states. The results of the two models strongly support the hypothesis that satisfaction with services provided by subnational governments has positive effects on approval of public officials

TABLE 3. Satisfaction with Services Provided by Subnational Governments and Presidential Approval. LAPOP Mexico, 2012

	<i>Model</i>			
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Satisfaction municipal services	0.024**** (0.0027)	0.016**** (0.004)	0.017**** (0.0028)	0.009** (0.003)
Satisfaction state services			0.0439**** (0.004)	0.036**** (0.006)
Voted for the incumbent president		10.232**** (0.176)		10.05**** (0.181)
Political knowledge		-0.738**** (0.207)		-0.676*** (0.213)
National economy		0.016**** (0.0041)		0.014**** (0.0038)
Personal economic situation		0.005 (0.004)		0.005 (0.004)
Corruption		-0.0026 (0.0034)		-0.0005 (0.003)
Income	0.0346** (0.016)	0.036 (0.028)	0.0310* (0.0172)	0.0025 (0.028)
Gender (male)	-0.2113** (0.108)	-0.332** (0.170)	-0.0871 (0.112)	-0.20** (0.17)
Age	0.009** (0.0038)	0.0032 (0.0065)	0.0080** (0.004)	0.0018 (0.0067)
Education	0.0099 (0.0153)	-0.0015 (0.025)	0.0134 (0.0159)	-0.013 (0.026)
Urban resident	-0.5457**** (0.1252)	-0.426** (0.219)	-0.584**** (0.130)	-0.44** (0.22)
<i>N</i>	1 246	684	1 185	650

Ordered logistic regression.

\*\*\*\*  $p < 0.001$ , \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.10$  (two-tailed).

Standard Errors in parentheses.

All models include the standard Americas Barometer probability weights at the individual level.

Source: Author's estimation based on data from the Latin American Public Opinion Project (2015).

TABLE 4. Satisfaction with Services Provided by Subnational Governments and Trust in the President and Municipal Governments. LAPOP Mexico, 2012

	<i>Model 1</i>		<i>Model 2</i>	
	<i>Trust in the president</i>	<i>Trust in municipal government</i>	<i>Trust in the president</i>	<i>Trust in municipal government</i>
Satisfaction municipal services	0.013 <sup>****</sup> (0.003)	0.024 <sup>****</sup> (0.003)	0.012 <sup>****</sup> (0.003)	0.0205 <sup>****</sup> (0.003)
Satisfaction state services (schools, hospitals, roads)			0.015 <sup>***</sup> (0.005)	0.022 <sup>****</sup> (0.005)
Voted for the incumbent president	0.821 <sup>***</sup> (0.144)	0.262 <sup>**</sup> (0.137)	0.015 <sup>****</sup> (0.148)	0.138 (0.139)
Political knowledge	-0.352 <sup>**</sup> (0.160)	-0.194 (0.153)	-0.2973 <sup>*</sup> (0.163)	-0.166 (0.153)
National economy	0.012 <sup>***</sup> (0.003)	0.001 (0.003)	0.011 (0.003)	0.0001 (0.003)
Personal economic situation	0.002 (0.004)	0.006 (0.003)	0.001 (0.004)	0.005 (0.003)
Corruption	-0.003 (0.0028)	-0.006 <sup>**</sup> (0.002)	-0.003 (0.0028)	-0.004 <sup>*</sup> (0.002)
Income	0.006 (0.023)	0.006 (0.022)	-0.0035 (0.024)	-0.011 (0.022)
Gender (male)	-0.0379 <sup>***</sup> (0.140)	-0.302 <sup>**</sup> (0.134)	-0.355 <sup>***</sup> (0.143)	-0.237 <sup>*</sup> (0.134)
Age	0.011 <sup>**</sup> (0.005)	0.001 (0.005)	0.0121 <sup>**</sup> (0.005)	0.001 (0.005)
Education	-0.041 <sup>**</sup> (0.021)	0.037 <sup>*</sup> (0.020)	-0.0370 <sup>*</sup> (0.021)	-0.026 (0.020)
Urban resident	-0.332 <sup>*</sup> (0.183)	0.3087 <sup>*</sup> (0.174)	-0.248 (0.186)	0.305 <sup>*</sup> (0.174)
Constant	4.041 (0.5397)	3.637 (0.5141)	3.085 (0.637)	2.3725 (0.599)
<i>N</i>	549	549	522	522
<i>R</i> <sup>2</sup>	0.2208	0.1843	0.2270	0.2036
RMSE	1.599873	1.524051	1.586501	1.491618

Seemingly Unrelated Regressions.

\*\*\*\*  $p < 0.001$ , \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.10$  (two-tailed).

Standard Errors in parentheses.

Source: Author's estimation based on data from the Latin American Public Opinion Project (2015).



at higher levels of government, specifically the president, as well as for the level of government that actually delivered the services. Both satisfaction with services provided by municipalities, and satisfaction with policies provided by state governments, have a positive and significant effect on trust in the president, and also on trust in municipal governments. Citizens' evaluation of the national economy and their personal economic situation are positively related to trust in the president, in line with the conventional wisdom. Against the possibility of top-down spillover effects, evaluation of the national economic performance does not have significant effects on trust in municipal governments. Top-down spillover effects of performance on approval have been reported in studies on the positive effect of national economic performance on gubernatorial approval in the United States (Chubb, 1988). The absence of a similar result on municipal governments can be interpreted as citizens' capacity to discern the lack of responsibility of mayors vis-à-vis national economic policies. Partisanship has a positive effect on trust in the president. Experience with corruption has negative impact on trust in the president and municipal governments, but the results are not statistically significant.

### *CONCLUSIONS*

Does a president's popularity benefit from good performance at lower levels of government? Previous research has identified a clear impact of economic and policy performance on presidential approval. The propositions of the retrospective vote model rely on the assumption that citizens know who is responsible for which policies and reward or punish politicians or parties accordingly. This assumption does not always hold. Drawing on the literature on clarity of responsibility, this paper argued that in multilevel systems, we should expect to find spillover effects of credit for policy across levels of government. In political systems in which responsibilities for policy are shared among different levels of government and where citizens experience difficulties in correctly assigning credit and blame, approval ratings of politicians at given levels of government are affected by policy performance at other levels.

This article subjects this proposition to empirical testing by analyzing satisfaction with services delivered by subnational governments and presidential approval in Mexico in 2012. Mexico is a suitable case for exploring the plausibility of bottom-up spillover effects on presidential approval because it is a federation with three levels of government and it has low levels of clarity of responsibility in

the provision of several decentralized services. The analysis was based on responses from national surveys of the Americas Barometer 2012 study in Mexico. Ordered logistic and seemingly unrelated regression models were implemented. The empirical analyses revealed the presence of bottom-up spillovers effects of satisfaction with policy performance by subnational governments on presidential approval. In Mexico, citizens' evaluation of services provided by local governments is positively related to presidential approval.

These results provide preliminary support for the hypothesis regarding bottom-up spillover effects of credit in multilevel systems. It would be interesting to study whether the two mechanisms of responsibility attribution, partisanship and political sophistication, moderate the spillover effects of policy evaluations on presidential approval. We should expect that partisanship intensifies spillover effects, that is, citizens who supported the president should be expected to be more inclined to credit the president for subnational governments' policy success. On the contrary, political sophistication should moderate the spillover effects. Among citizens more knowledgeable about politics in general and about the distribution of policy responsibilities across levels of government, the spillover effects of satisfaction with local services into presidential approval should be smaller. A second path for further research could extend this analysis to other countries in Latin America that have a multilevel organization of government and that vary in the level of clarity of responsibility, in order to explore the effects of varying levels of clarity of responsibility on spillover effects and the interaction between variation in contextual level of clarity of responsibility and the individual level factors that account for responsibility attribution, partisanship and political sophistication.

These results have some important implications for the strategic behavior of political elites in multilevel systems. The fact that, in multilevel systems, citizens find it more difficult to correctly assign credit and blame for policy might make politicians less accountable for their decisions. And furthermore, due to spillover effects, politicians might find incentives to keep voters confused as a means to attract credit for policies whose costs were born by politicians at other levels of government. Yet, on the other hand, these same spillover effects might also have positive outcomes. Given that national politicians' destinies are tied to those of subnational officials in both good and bad times, it is in the interest of the former to cooperate with the latter during hard times if they want to avoid being blamed for poor outcomes.

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