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# Reciprocity and Willingness to Pay Taxes: Evidence from a Survey Experiment in Latin America

**ABSTRACT** Are citizens more willing to pay taxes when the government's performance improves? We review the tax morale literature, disentangling its different components, and provide empirical evidence exploiting a novel survey conducted in seventeen Latin American cities and an experimental attempt at measuring reciprocity in tax collection in developing countries. The evidence suggests that governments interested in increasing tax revenues should not focus solely on escalating the coercive power of the state (that is, more audits and fines). Rather, providing better public services to society can be an effective (albeit limited) tool to raise revenues.

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*Keywords:* Taxes, Evasion, Tax morale, Reciprocity

**W**hy do people pay taxes? One obvious answer is that there are enforcement mechanisms (such as fines, penalties, and even imprisonment) that coerce them to do so. This deterrence approach to tax compliance is formally analyzed by Allingham and Sandmo, who apply the canonical rational choice model of expected utility maximization to study this issue.<sup>1</sup> Their findings suggest that tax evasion is negatively associated with the probability of detection and the severity of punishment.

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1. Allingham and Sandmo (1972).

This view has been criticized by various authors, however, because deterrence alone cannot explain the level of tax compliance actually observed in many countries.<sup>2</sup> In other words, the levels of observed detection probabilities and fines are too low to explain the rather low levels of tax evasion observed in developed economies.<sup>3</sup> This has given rise to a growing literature that analyzes the importance of behavioral and cultural aspects in explaining taxpayer behavior.<sup>4</sup> These other nondeterrence arguments have been grouped under the broad concept of tax morale.<sup>5</sup> This concept encompasses moral rules and sentiments that make citizens fulfill their tax obligations, social norms that make cheating on taxes an undesirable action when the rest of the population is complying, and a sort of reciprocity response by the individual in relation to the state, in the sense that citizens will comply with their tax obligation when they see that the government also performs its commitments in terms of delivering services and other public goods.

Torgler provides evidence that some of these different determinants associated with tax morale positively affect tax compliance.<sup>6</sup> In a study of Switzerland, he finds that if people believe that others are honest, then their willingness to pay taxes increases. Barone and Mocetti indicate that the attitude toward paying taxes in Italy is better in municipalities where resources are spent more efficiently; Hallsworth and others show that including messages on social norms and public goods in standard tax payment reminder letters considerably enhances tax compliance in the United Kingdom; and Dwenger and others demonstrate that tax-morale-driven determinants like duty-to-comply preferences have an important role in Germany.<sup>7</sup> But others find that these noneconomic reasons are irrelevant. For example, Fellner, Sausgruber, and Traxler, who conduct a field experiment in Austria, show that neither appealing to morals nor imparting information about others' behavior enhances compliance on aggregate.<sup>8</sup> Similarly, Kleven and others find that in Denmark, proxies of social and cultural factors (namely, gender, age, marital status, church membership, and place of residence) have a very modest effect on

2. Graetz, Reinganum, and Wilde (1986); Alm, McClelland, and Schulze (1992).

3. Andreoni, Erard, and Feinstein (1998).

4. Alm, McClelland, and Schulze (1992); Alm, Jackson, and McKee (1993); Pommerehne, Hart, and Frey (1994); Frey (2003); Dell'Anno (2009).

5. Another line of research hypothesizes that individual perceptions of being discovered are much higher than the objective probabilities of detection (Bernasconi, 1998). For a recent review of behavioral explanations of tax evasion, see Hashimzade, Myles, and Tran-Nam (2013).

6. Torgler (2001).

7. Barone and Mocetti (2011); Hallsworth and others (2014); Dwenger and others (2014).

8. Fellner, Sausgruber, and Traxler (2013).

tax behavior.<sup>9</sup> Finally, Slemrod, Blumenthal, and Christian and Blumenthal, Christian, and Slemrod report that normative appeals to social norms and equity have no effect on tax compliance in Minnesota.<sup>10</sup>

Recent field experiments in Latin America have also produced mixed results. Del Caprio finds that a group of taxpayers that received information about the average rate of compliance was more likely to comply with the property tax in Peru than the control group, but the enforcement letter did not have any significant effect.<sup>11</sup> In contrast, Castro and Scartascini find that, in Argentina, deterrence was the most effective message, while the fairness and equity messages did not have any effect, on average.<sup>12</sup>

As Luttmer and Singhal point out, one possible interpretation of the null findings is that such interventions are often not powerful enough to affect tax morale: “A few lines of text in a mailed letter may just not be sufficient to cause taxpayers to update their beliefs.”<sup>13</sup> Because most papers only look at the effect of the intervention on tax evasion, the authors cannot identify whether the null finding is due to a lack of an effect of beliefs on tax evasion or a lack of effect of the intervention on beliefs.

The purpose of this paper is to provide new evidence on the relationship between tax morale and tax compliance, explicitly exploring how information letters affect beliefs. Within the various channels affecting tax morale, we emphasize the interaction between the individual and the state or government. In particular, we analyze the potential reciprocal relationship that could develop between good government performance (in terms of provision of social services and public goods) and citizens’ willingness to pay taxes. We analyze the importance of reciprocity in Latin American countries, a region where tax evasion is significantly higher than in the United States or western Europe. This fact, which already signals poor government performance, could make the empirical investigation of the reciprocity hypothesis

9. Kleven and others (2011). Instead, the authors argue that low tax evasion rates in developed countries are due to third-party reporting mechanisms. In contrast, Carrillo, Pomeranz, and Singhal (2014) find that in Ecuador, the effectiveness of third-party information is limited when taxpayers can make offsetting adjustments on less verifiable margins.

10. Slemrod, Blumenthal, and Christian (2001); Blumenthal, Christian, and Slemrod (2001).

11. Del Caprio (2013).

12. Castro and Scartascini (2013). Pomeranz (2015) explores the effect of enforcement messages on compliance with the value added tax in Chile, but does not test the effects of tax morale. Gingerich and others (2015) find that in Costa Rica, people who receive an information flyer depicting an increase in corruption are more likely to be willing to pay a bribe to a police officer than the control group.

13. Luttmer and Singhal (2014, p. 158).

more interesting compared to countries where taxation and governmental institutions work reasonably well, as is the case of developed economies.

We use microdata from a household survey on access to, quality of, and satisfaction with public services in Latin America, carried out in seventeen cities in Latin America by the Development Bank of Latin America (CAF).<sup>14</sup> Our empirical methods include the analysis of conditional questions where the connection between government performance and willingness to pay taxes is made explicit; ordinary least squares (OLS) regressions between perceptions of service delivery and attitudes toward taxation; and experimental exercises in which we correlate the randomized assignment of one information letter on the government's performance with individuals' intention to pay taxes. We follow this strategy because each method has strengths and limitations. The OLS estimates and the conditional questions, on the one hand, provide correlations that are representative of the population, but are likely to suffer from endogeneity and social desirability bias. The experimental evidence, on the other hand, provides a causal effect, but exclusively for those respondents that changed their perception about government performance with one information letter. The variation in the empirical methods, therefore, allows us to gauge the robustness of the results and, when we use the experimental data, to evaluate a causal relationship going from changes in perceptions of government performance to willingness to pay taxes.

An important limitation of the CAF household survey is that it only allows us to construct measures of willingness to pay taxes or willingness to be part of a tax evasion maneuver (namely, whether the respondent would buy something at a discount price in exchange for not receiving a receipt), but not on actual behavior, an issue that we discuss in more detail below. Beyond a purely academic interest, the topic is informative for policymakers. Finding that taxpayers behave in a reciprocal manner suggests that governments interested in increasing tax revenues should focus not only on escalating the coercive power of the state (that is, more audits and fines), but also on providing better services to society.

The paper is organized as follows. The next section offers a short conceptual discussion of the determinants of tax morale and how the concept is related to the reciprocity hypothesis. The following two sections describe the data and test for the presence of reciprocity using conditional questions wherein respondents express their willingness to pay more (or fewer) taxes if the government improves its performance. We explore whether Latin Americans are

14. CAF (2011)

more likely to respond in a reciprocal manner to improvements in institutional aspects (such as more transparency and less corruption) or in the provision of services (such as health and education). The paper then presents our OLS estimates of the relation between an overall measure of government performance and four different measures of willingness to pay taxes (or pass over easy opportunities for tax evasion). A subsequent section exploits an exogenous change in the perception of government performance and computes instrumental variable estimates of the effect of changes in these perceptions on willingness to pay. Finally, we conclude.

## **Tax Morale and Reciprocity**

Tax morale usually means the citizen's self-reported perception that paying taxes is the right thing to do. In this section, we distinguish two concepts that are usually bundled under the broad concept of tax morale: reciprocity toward the government and conditional cooperation.

People's perception that paying taxes is the right thing to do is related to the idea that the state has some social value, so it is a citizen's obligation to contribute to its financing. In the case of a tyrannical state that exploits its citizens without providing any services whatsoever, the notion of tax morale would lose its ethical and political meaning. From this perspective, the concept of tax morale is then closely related to the idea of reciprocal behavior from the individual toward the state. That is, according to the hypothesis of reciprocity toward the government, people are more likely to pay taxes when they perceive that the government is doing a better job. Reciprocity implies a deviation from purely self-interested behavior: it "means that in response to friendly actions, people are frequently much nicer and much more cooperative than predicted by the self-interested model."<sup>15</sup> In the case of taxes, one could say that individuals would be willing to pay more taxes to the extent that the use of these resources by the state is beneficial both for them and for society as a whole. The departure from self-interested behavior is clear, since the individual's contribution to the government's budget is negligible and thus cannot be expected to make a difference in the amount of goods and services received.

According to this argument, then, tax morale is very closely related to the concept of reciprocity toward the government. Reciprocity has also been

15. Fehr and Gächter (2000).

related to the notion of social norms or societal institutions.<sup>16</sup> In this case, the individual's willingness to evade or pay taxes also depends, in part, on the perception that other society members comply with their tax obligations.<sup>17</sup> This can be interpreted as reciprocal behavior toward one's fellow citizen rather than toward the government. Another way to see this other dimension of tax morale is as a coordination problem, where even though people realize that their individual contribution to the state makes no difference in terms of overall government income and service delivery, they also understand that if most people do not comply with taxes, government performance will be negatively affected, whereas if everyone complies, performance will improve. In this interpretation, a high level of tax morale implicitly means a decision by most individuals to cooperate in the tax/expenditure game of financing the state. Given this other possible interpretation of tax morale, which is complementary to reciprocity toward the government, we include a social norm variable as a control in all regressions presented below.<sup>18</sup>

Finally, there may be other reasons beyond reciprocity and conditional cooperation that explain why people think that paying taxes is the right thing to do. These may be related to a deep moral judgment or values that are induced by religious beliefs or educational background and that are unconditional on the behavior of other people or institutions. Given that it could be difficult to capture all these other dimensions, our OLS and experimental exercises directly include the usual measure of tax morale: whether people think tax evasion is morally ever justifiable.

## Data

The data used in this paper are from a household survey conducted in 2011 in seventeen cities in Latin America. The survey sampled 600 households per city (making it representative at the city level), for a total of 10,200 observations.<sup>19</sup> Survey respondents are heads of household between twenty-five and sixty-five years of age, regardless of their occupational status. The survey has been

16. Bird, Martínez Vázquez, and Torgler (2004).

17. Frey and Torgler (2007).

18. In equation 1 we use the individual perception of overall evasion in the country/city as the social norm variable.

19. CAF (2011). The surveyed cities are Buenos Aires, Córdoba, La Paz, Santa Cruz, Sao Paulo, Rio de Janeiro, Bogotá, Medellín, Quito, Guayaquil, Lima, Arequipa, Caracas, Maracaibo, Montevideo, Salto, and Panama City. The data set is available online at [www.caf.com](http://www.caf.com).

undertaken yearly since 2008 (but it is not a panel), and in 2011 it included a special module on taxes and perceptions of government quality.

The 2011 survey has three sections. The first section covers demographic information; the second section asks mainly about access to public services and taxes (including a number of conditional questions in which the reciprocal relationship is explicit); and the third section asks about government performance and willingness to pay taxes after respondents are randomly assigned information letters with positive or negative news about government performance.<sup>20</sup>

Table A1 in the appendix shows the descriptive statistics. The surveyed population is, on average, forty-two years old, has 2.1 children, and lives in a household with 4.1 persons. Within the households, 65 percent are married or live with their partner, 42 percent did not complete high school, and a third lean to the right ideologically and overall are not very satisfied with democracy (5.4 out of a possible score of 10).

We use four alternative measures of willingness to pay taxes. First, people were asked whether they are willing to pay a small increase in two local taxes: namely, housing taxes and vehicle taxes. Based on this information we create two indicators (*Housing tax* and *Vehicle tax*), which take a value of one if the individual answers positively and zero if negatively. Only 9 percent of the sample is willing to pay a small increase in housing taxes, and 6 percent is willing to pay a small increase in automobile taxes. For the third measure, people were asked whether they consider that the amount they pay for local services (that is, water, electricity, street lighting, and garbage collection) is too low or too high, using an ordinal scale from 1 to 5 (*Local taxes too high*). Less than 3 percent of the population considers that local taxes are low or too low. Finally, respondents were confronted with a hypothetical situation and were

20. Four envelopes were randomly assigned to each respondent: one had positive factual information about the performance of the local government, one had negative facts on the local government, one was empty, and finally, one had positive news about the national government. The survey also asked about willingness to pay local taxes, as described below, and willingness to pay national taxes (namely, income tax, wealth tax, and consumption taxes). In this paper, we focus on the relationship between the performance of the local government and willingness to pay local taxes because the information message about the local government had an impact on respondents' perceptions about its performance, whereas the information message about the national government did not affect perceptions about the national government. That is, there is no first stage for national government performance. OLS estimates of the correlation between perceptions about the performance of the national government and willingness to pay national taxes (that is, income, wealth, and consumption taxes) are always positive and statistically significant (results available on request).

asked how they would react if the owner of a shop offered them a 10 percent discount in exchange for not providing a receipt. We then create the variable *Tax evasion*, which is an indicator that takes a value of one if the individual responds that he or she would accept the deal and zero otherwise. Almost 40 percent of the sample said that they would accept the deal.<sup>21</sup>

A major limitation of these measures is that they are based on what people say they would do rather than on actual tax payments. Although the survey was anonymous and respondents were explicitly informed that the data were collected by a nongovernmental organization, it is likely that the measures overestimate tax compliance and willingness to pay taxes due to social desirability bias. Because people tend to want to be accepted by others, they might think that “paying more taxes” and “not accepting the deal offered by the seller” are the socially desirable answers.<sup>22</sup> That is, the actual share of the population willing to pay a small increase in vehicle taxes is presumably lower than 6 percent; the share that considers that taxes are low is likely to be lower than 3 percent; and the share that does not accept the deal offered by the seller is presumably lower than 60 percent. Regrettably, the data do not provide an indication of how much lower the actual figures are. According to the estimates by Gómez-Sabaini and Jimenez, the evasion rate of the value added tax (VAT) in Latin America is 27 percent, and the evasion rate of the income tax is 52 percent.<sup>23</sup>

This raises the question of whether survey responses are correlated with actual behavior. The CAF survey asks workers whether their employer is contributing to the social security system. This information is unlikely to suffer from biases because the question is asked to the employee, and lack of compliance with labor regulations is a fault of the employer, not the employee. Furthermore, measures of labor informality based on household surveys have been shown to accurately capture the extent of evasion of social security taxes.<sup>24</sup> As shown in figure 1, there is a strong positive correlation across cities between compliance with social security taxes and our measure of willingness to be part of a tax evasion maneuver (the correlation is 0.64 and statistically significant at the 1 percent level). This evidence is clearly insufficient to answer the above question, but the results are at least not inconsistent with the idea that responses and actual behavior are positively correlated.

21. All these questions are part of the third section of the survey.

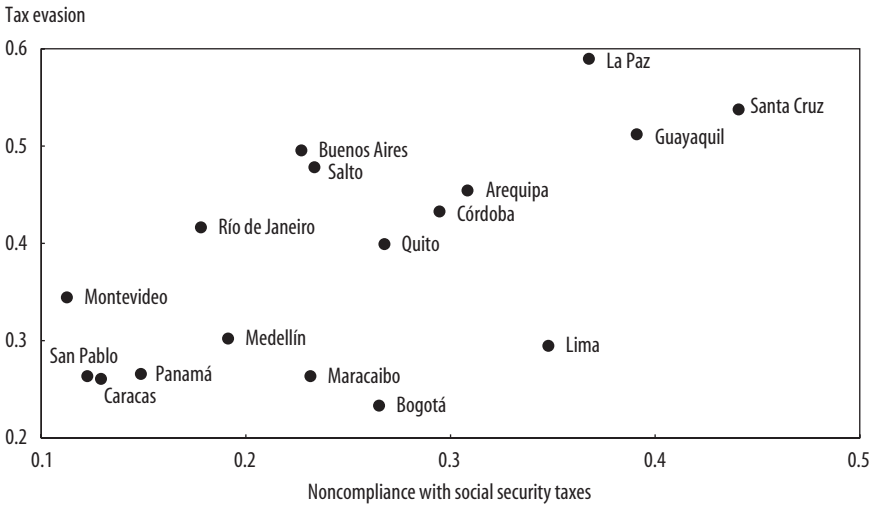
22. See Demaio (1984) for a review of social desirability bias.

23. Gómez-Sabaini and Jimenez (2012).

24. Ronconi (2010).



**FIGURE 1. Noncompliance with Social Security Taxes and Willingness to Be Complicit in Evasion of the Sales Tax in Seventeen Latin American Cities<sup>a</sup>**



a. Tax evasion is the share of the population in the city that reports that he or she would accept buying at a discount price in exchange for not receiving a receipt from the seller. Noncompliance with social security taxes is the share of employees that reports that this or her employer does not contribute to the social security system.

## Evidence Based on Conditional Questions

We begin analyzing the relationship between government performance and willingness to pay taxes using conditional questions. In the second section of the CAF survey (that is, before the random assignment of letters), people were asked whether they would be willing to pay less, the same, or more taxes if the government improved its performance among several dimensions. We explore six different measures of performance: government corruption, transparency, tax collection, quality of public health and education services, crime, and social assistance.<sup>25</sup> A plausible measure of reciprocity in this setting is the share of the population that is willing to pay more taxes minus the share that is willing to pay fewer taxes in reaction to an improvement in government performance.

25. The questions are typically worded as follows: If the government were to improve *health and education services*, would you be willing to pay more, the same, or less taxes than you do currently?

**TABLE 1. Willingness to Pay Taxes If the Government Improves Performance<sup>a</sup>**

<i>Government improvement</i>	<i>More taxes (1)</i>	<i>Same (2)</i>	<i>Less taxes (3)</i>	<i>Difference (1):(3)</i>
Less corruption	29.93	51.72	18.35	11.58***
More transparency	27.90	55.72	16.38	11.52***
Less tax evasion	25.22	59.55	15.23	9.99***
Better social assistance	27.45	54.34	18.21	9.24***
Better health and education	30.88	49.61	19.51	11.37***
Less crime	29.28	52.86	17.86	11.42***
Simple average	28.44	53.97	17.59	10.85

\*\*\*Statistically significant at the 1 percent level.

a. The table reports the fraction of the population that is willing to pay more, the same, or less taxes in response to improvements in government performance. The last column is the net share of respondents willing to pay more minus the fraction that would pay less. Statistically significantly different than zero at 99% (\*\*\*) level of confidence

The majority of the population (54 percent) reports that they are willing to pay the same amount of tax regardless of improvements in government performance, as shown in table 1.<sup>26</sup> The rest of the population is generally more likely to report a willingness to pay more taxes under hypothetical situations of improved government quality. There is a statistically significant net share of the population that is willing to pay more taxes in all of the six analyzed subjects. The magnitude of the coefficients is often small, ranging between 9 and 12 percent of the population. On average, Latin Americans declare themselves just as likely to reciprocate when the government improves the quality of services (namely, social assistance, protection against crime, and health and education) as when there are improvements in procedural or institutional aspects such as transparency, corruption, and the effectiveness of tax collection.<sup>27</sup>

At the city level, we find evidence of reciprocity in all cities, albeit with substantial heterogeneity. For example, in Rio de Janeiro (Brazil) there is a positive and statistically significant net share of the population willing to pay more taxes in all six areas of increased government performance, with an average of 22 percent of the population—that is, twice the size of the effect in the region. In contrast, in Córdoba (Argentina) there is a positive and significant coefficient in only two cases, with an average of 5 percent

26. This percentage is a simple average across measures of government performance.

27. The coefficients are larger for males and for younger cohorts, although differences are small. People who have a left-leaning ideology (defined as those who consider that the government's priority is to reduce poverty and inequality and provide free and universal access to health and education) are more likely to indicate reciprocity in all aspects except reductions in crime. (Results are not shown in the text, but are available on request.)

of the population. We return to the city-level analysis when discussing the experimental evidence.

A potential criticism of this evidence is, again, social desirability bias. People may state that they would pay more taxes because they think it is the socially desirable response to an improvement in government performance, leading to an overestimation of reciprocity. We therefore explore other methods to test for the presence of reciprocity.

## Econometric Evidence

According to the reciprocity hypothesis, people are willing to pay more taxes (or pass over easy opportunities for tax evasion) if they think that the government would use the money to improve the welfare of the population. We test for the presence of reciprocity conditional on tax morale and perceptions of tax evasion using the following model:

$$(1) \quad Y_i = \beta \text{Govt. performance}_i + \pi \text{Perception of tax compliance}_i \\ + \theta \text{Tax morale}_i + \mathbf{X}_i \boldsymbol{\delta} + e_i,$$

where  $Y_i$  is a measure of the willingness to pay taxes of individual  $i$ . We use the four alternative measures of willingness to pay taxes described above. We create a measure of local *Government performance* asking people to express their level of agreement with the following statement: “The taxes that are collected in your city are used to finance public policies aimed at improving the welfare of the population.” They choose between a value of one (meaning that they totally disagree with the statement) and ten (meaning that they totally agree with the statement). The sample mean is 4.9, with almost half of the sample choosing a value between four and six, but a nonnegligible share took extreme positions (specifically, 12.8 percent expressed total disagreement and 5.9 percent total agreement with the statement). In contrast to the evidence presented in the previous sections—where we use issue-specific measures of government performance—here we use an overall measure.<sup>28</sup>

28. Table A2 in the appendix presents estimates of the effects of issue-specific measures of government performance on willingness to pay taxes. We analyze three areas: satisfaction with the garbage collection service, with electricity services, and with water services. We find that five out of the twelve coefficients (that is, three measures of performance and four measures of willingness to pay taxes) have the expected sign and are statistically significant; the other seven coefficients are not significant.

People's willingness to pay taxes could also be influenced by their perception of the compliance of others.<sup>29</sup> That is, according to the conditional cooperation hypothesis, people who think that fewer of their fellow citizens evade taxes are more willing to pay taxes or to pass over easy opportunities for evasion. To test this hypothesis, we use a variable (*Perception of tax compliance*) that ranges from one to ten, taking a value of one if the individual thinks that no fellow citizens fully comply with taxes and ten if the individual thinks they all fully comply.

We also explore the importance of a narrow definition of tax morale, which, in contrast to the previous two hypotheses, is an unconditional concept. People have high tax morale if they think it is right to pay taxes regardless of how the government uses the money and regardless of the tax behavior of others. Several studies argue that tax morale affects compliance, although the term has sometimes been used vaguely.<sup>30</sup> We measure *Tax morale* as a binary variable based on the following question: do you think it is morally justifiable to evade taxes? (The variable takes the value of one if it is totally unjustifiable and zero otherwise).<sup>31</sup> Finally, in **X** we include a set of controls (namely, age, sex, educational attainment, employment status, nationality, ideology, perceived level of enforcement, and wealth).<sup>32</sup>

Table 2 presents the OLS results for the four measures of willingness to pay taxes. In columns 1, 5, 9, and 13 we only include our main explanatory variable (that is, local *Government performance*) and city fixed effects. In columns 2, 6, 10, and 14, we add *Tax morale* and *Perception of tax compliance*; in columns 3, 7, 11, and 15, we include the demographic controls;

29. Frey and Torgler (2007).

30. Alm, McClelland, and Schulze (1992); Frey (2003); Lewis (1982); Torgler (2001).

31. As discussed earlier, Frey and Torgler (2007) analyze the determinants of tax morale and find that it is positively and statistically significantly correlated with both government performance and perceptions of others' tax compliance. Based on this finding, one may tend to conclude that tax morale should not be included as a separate regressor because it is actually caused by the other two factors. However, those two variables explain very little of the variation in tax morale (with a pseudo *R* squared below 0.05 in Frey and Torgler, 2007, and below 0.01 in our sample).

32. The perceived level of enforcement is captured using two variables. First, *Perceived detection probability* takes a value from zero to ten based on the following question: If you evade taxes ten times, how many times do you think you would be fined? Second, *Perceived fines* takes a value from zero to ten based on the following question: How do you qualify the level of fines that apply to those who evade taxes? Regrettably, approximately 20 percent of the sample did not answer these questions. Wealth is an ordinal variable that can take five values based on whether the person owns his or her dwelling, the type of house (namely, free standing, apartment, shack), and the building materials.

**TABLE 2. Effects of Government Performance, Tax Morale, and Perceptions of Compliance on Individuals' Willingness to Pay Taxes: OLS Estimates<sup>a</sup>**

Explanatory variable	Tax evasion			Willingness to pay small increase in housing tax				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Government performance	-0.004 (0.003)	-0.006 (0.004)	-0.006* (0.004)	-0.006 (0.004)	0.006*** (0.002)	0.006*** (0.002)	0.006*** (0.002)	0.007*** (0.002)
Tax morale		-0.167*** (0.018)	-0.163** (0.018)	-0.139*** (0.020)		0.007 (0.009)	0.004 (0.009)	-0.002 (0.011)
Perception of compliance		-0.004 (0.004)	-0.004 (0.004)	-0.002 (0.005)		0.002 (0.002)	0.002 (0.002)	0.003 (0.003)
<i>Willingness to pay small increase in vehicle tax</i>								
Explanatory variable	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Government performance	0.003*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.004*** (0.002)	-0.008*** (0.003)	-0.008*** (0.003)	-0.008*** (0.003)	-0.011*** (0.003)
Tax morale		0.008 (0.007)	0.005 (0.007)	0.005 (0.008)		0.006 (0.014)	0.010 (0.014)	0.001 (0.015)
Perception of compliance		-0.001	-0.001	-0.001		-0.010***	-0.010***	-0.010***

\*Statistically significant at the 10 percent level.

\*\*Statistically significant at the 5 percent level.

\*\*\*Statistically significant at the 1 percent level.

a. The table reports marginal effects and robust standard errors (in parentheses). A probit model is used in all columns except 13 to 16, where an ordered probit model is used. The marginal effects in columns 13 to 16 are computed for the highest value of the dependent variable. Columns 4, 8, 12, and 16 include the perceived level of government enforcement as a control. All models include city fixed effects.

and in the remaining columns, we include the perceived level of government enforcement. We only report the marginal effects for the three variables used to test reciprocity, conditional cooperation, and tax morale. Columns 1 to 12 use a probit model, and the rest of the columns are an ordered probit model.

There is a positive and statistically significant correlation between government performance and all measures of willingness to pay taxes. An increase from five to six in the perception of government performance is correlated with a 0.6-percentage-point increase in the willingness to pay a small increase in property taxes, a 0.4-percentage-point increase in the willingness to pay more vehicle taxes, and a 0.6-percentage-point reduction in tax evasion.<sup>33</sup> This evidence supports the reciprocity hypothesis. People in Latin America appear to be more willing to pay more taxes when they think that the government uses the money to improve the welfare of the population.

We find weaker support for the conditional cooperation and tax morale hypotheses. The variables *Tax morale* and *Perception of compliance* are significantly correlated with only one of the four measures of willingness to pay taxes (namely, people with more tax morale are less likely to evade taxes, and people who consider that their fellow citizens tend to comply are less likely to report paying too much in taxes).<sup>34</sup>

## Experimental Evidence

We asked respondents to choose one of three identical envelopes. One of the envelopes included statements on the real positive achievements of the local government, another reported negative facts, and the third envelope was empty (see appendix B for the messages in each city).<sup>35</sup> After the respondents read the letter, we asked for their opinion about the performance of the local government and their willingness to pay taxes. The objective of this randomized experiment is to produce some exogenous variation in people's

33. When the sample is restricted to the population that owns a house (vehicle), the correlation between government performance and willingness to pay a small increase in housing (vehicle) taxes is positive, statistically significant, and larger than the coefficients reported in table 2. When the population is restricted to those that report paying housing (vehicle) taxes, the coefficients of interest are also positive, statistically significant, and larger than the coefficients reported in table 2. Results are available on request.

34. People who think that government enforcement is more stringent are less likely to evade taxes and are less likely to be willing to pay an increase in vehicle and housing taxes.

35. Except in Guayaquil where no empty envelopes were included.

**TABLE 3. Randomization Checks<sup>a</sup>**

<i>Variable</i>	<i>Positive letter (1)</i>	<i>No letter (2)</i>	<i>Negative letter (3)</i>	<i>Difference (1)–(3)</i>	<i>Difference std. error (1)–(3)</i>
Government performance	5.429	5.382	5.138	0.292***	(0.065)
Age	42.15	42.08	41.54	0.61	(0.31)
Male	48.07	48.99	48.27	−0.20	(1.31)
Native	97.48	98.19	97.65	−0.17	(0.40)
High school dropout	42.63	42.84	40.60	−2.03	(1.30)
Right-leaning ideology	40.67	40.42	40.93	−0.27	(1.29)
Owns good-quality house	38.89	39.41	39.29	−0.39	(1.28)
Employed	67.91	66.64	68.29	−0.38	(1.22)
Perceived detection probability	6.56	6.76	6.48	0.08	(0.09)
Perceived fines	5.55	5.61	5.50	0.06	(0.07)
Observations	2,823	2,266	2,983	5,089	

\*\*\*Statistically significant at the 1 percent level.

a. The table reports the characteristics of the population that received a positive letter, no letter, and a negative letter.

perception of government performance and then exploit it to estimate its effect on willingness to pay taxes.

Table 3 presents the characteristics of individuals in the three groups. There are no significant differences in any of the traits (that is, age, sex, nationality, education, wealth, ideology). The only significant difference is that individuals who received an envelope with negative information on the government's performance subsequently report a worse opinion about the government, as intended. The difference is small (0.24 points on a ten-point scale) but statistically significant at the 0.001 level. The positive letter, however, did not have the intended effect of improving people's perception of government performance.

Table 4 presents the results of the first-stage regressions. We find that the instrument (which takes a value of 1 if the individual received positive news, −1 if negative news, and 0 if an empty envelope) is statistically positively related to the public's perception of the government, and the result is robust to the inclusion of city fixed effects, measures of tax morale, perceptions of compliance, and the full set of individual socioeconomic characteristics.

Table 5 presents estimates of a causal effect of government performance on willingness to pay taxes, exploiting the change in perceptions produced by the randomly assigned letters. We find that an improvement in individuals' perception of the government's performance leads to less tax evasion. The size of the effect is substantial: the marginal effect is −0.08, and the implied elasticity

**TABLE 4. Effects of Government Performance, Tax Morale, and Perceptions of Compliance on Individuals' Willingness to Pay Taxes: First-Stage Regressions<sup>a</sup>**

Explanatory variable	Tax evasion			Willingness to pay small increase in housing tax				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Letter	0.201*** (0.060)	0.210*** (0.060)	0.207*** (0.060)	0.222*** (0.065)	0.200*** (0.058)	0.204*** (0.058)	0.204*** (0.058)	0.201*** (0.061)
F statistic	11.18	12.21	11.88	11.65	12.03	12.58	12.43	11.02
	<i>Willingness to pay small increase in vehicle tax</i>							
Explanatory variable	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Letter	0.206*** (0.059)	0.217*** (0.058)	0.216*** (0.059)	0.215*** (0.062)	0.198*** (0.057)	0.207*** (0.057)	0.206*** (0.057)	0.216*** (0.063)
F statistic	12.3	13.81	13.63	12.62	11.96	13.05	12.89	11.86

\*\*\*Statistically significant at the 1 percent level.

a. The table reports marginal effects and robust standard errors (in parentheses). A probit model is used in all columns except 13 to 16, where an ordered probit model is used. The marginal effects in columns 13 to 16 are computed for the highest value of the dependent variable. Columns 4, 8, 12, and 16 include the perceived level of government enforcement as a control. All models include city fixed effects.





is  $-1.5$ . This implies that if perceived government performance increases by 10 percent, the fraction of people willing to be part of a tax evasion maneuver decreases by 15 percent. That is, an increase in the perception of government quality from its average of five to six would reduce average tax evasion from 0.34 to 0.24.<sup>36</sup>

## Interpretation

The IV estimates are clearly local average treatment effects, that is, the effects for those who changed their perceptions about government performance with one simple information letter. Furthermore, the magnitude of the coefficient in the first-stage regression suggests that a rather small proportion of the population falls in this category (an expected outcome, in part because the information in the letters was usually taken from relatively well-known sources). These individuals could be different from the rest of the population on a number of dimensions (the most obvious is that they are likely to be less informed), implying the need to be very careful before extrapolating the results.

To explore this issue further, we compute IV estimates by city. The information letters were able to generate a sufficiently large change in perceptions about the government (that is, an  $F$  statistic above 10 in the first stage) in only two cities: Córdoba and Rio de Janeiro.<sup>37</sup> In Córdoba, a city where the level of reciprocity is below the regional average according to the analysis based on conditional questions and where none of the OLS estimates are significant, we do not find support for reciprocal behavior in any of the four measures of willingness to pay taxes (see table 6). In Rio de Janeiro, where reciprocity is above the regional average according to the analysis based on conditional questions and OLS coefficients are significant, we find support in two cases: tax evasion and vehicle taxes. The size of the effect is substantial, as the implied elasticities reported in the table show: if perceived government performance increases by

36. Results are very similar using a linear probability model (available on request).

37. Results are available on request. The low number of observations per city (that is, 600 or fewer) contributes to explaining the lack of a first stage at the city level. In Córdoba and Rio de Janeiro, however, the letters did have significant effects. We speculate that this difference across cities could be due, in part, to variation in the novelty of the information, since in both Córdoba and Rio de Janeiro the information in the letters was taken from sources that have relatively little dissemination among the local population (for example, Human Rights Watch Report and the Córdoba Noticias website). However, we cannot discard the possibility that the same information was transmitted by more popular media.

**TABLE 6. Instrumental Variable Regressions in Cordoba and Rio de Janeiro<sup>a</sup>**

<i>Variable</i>	<i>Tax Evasion</i>	<i>Willingness to pay small increase property tax</i>	<i>Willingness to pay small increase vehicle tax</i>	<i>Local taxes are too high</i>
<i>Cordoba</i>				
Government performance	0.12 (0.13)	0.09 (0.18)	0.16 (0.25)	0.16 (0.09)
No. observations	413	449	449	443
First stage <i>F</i> test of excluded instruments	20.35			
<i>Rio de Janeiro</i>				
Government performance	-0.25*** (0.09)	-0.01 (0.18)	0.28** (0.13)	-0.04 (0.08)
Implied elasticity	-1.26	-	1.97	-
No. observations	421	453	451	443
First stage <i>F</i> test of excluded instruments	28.67			

\*\*Statistically significant at the 5 percent level.

\*\*\*Statistically significant at the 1 percent level.

a. For the case of the statistically significant coefficients in Rio de Janeiro, implied elasticities are also reported. Robust standard errors are in parentheses.

10 percent, the fraction of people willing to pass over an easy opportunity for tax evasion decreases by 12.6 percent, while the fraction of people willing to pay a slightly higher vehicle tax increases by 19.7 percent.

Why might we expect a different level of reciprocity toward the local government between these two cities? One can argue that citizens make a link between tax and expenditure decisions only when governments have enough tax and expenditure autonomy. Although both Argentina and Brazil have a high degree of fiscal decentralization, states and local governments only have a high degree of tax autonomy in Brazil. Thus, for Brazilian cities, we expect more chances to find evidence of this connection between local government performance and citizens' willingness to pay taxes.<sup>38</sup>

38. We analyzed differences in observables and found that the sample in Córdoba is substantially more likely to report that evading taxes is morally totally unjustifiable than the sample in Rio de Janeiro (that is, 55 percent in Córdoba versus 31 percent in Rio, while the average for Latin America is about 40 percent). This difference could help explain the positive results in Rio de Janeiro and the null results in Córdoba if people who consider that it is never justifiable to evade taxes are less reciprocal. Such a relationship between tax morale and reciprocity has some appeal. It is plausible that people who pay taxes because it is the right thing to do are less likely to change their behavior based on the performance of the government. These arguments, however, are very speculative.

## Conclusion

This paper investigates issues of reciprocity and willingness to pay taxes in Latin America using a variety of methods. Most previous studies focus on countries such as Denmark, Austria, or the United States, which have very high tax compliance. Consequently, there is little room for increasing tax observance through moral suasion or other channels such as an improved perception of the quality of government. In developing countries, enforcement institutions are weak and compliance is generally low, so there may be more opportunities to increase tax collection through channels that are complementary to traditional enforcement mechanisms.

The multiple-methods strategy we follow is suitable in this context given the limitations of any particular methodology. Experimental evidence, for example, is an important tool for offsetting the potential endogeneity and social desirability bias implicit in correlations, but it also has limitations given the difficulty of changing taxpayers' beliefs. People's views of the performance of the government are usually formed through a lifetime of personal experience, so treatment letters may fail to change beliefs or may only affect a small and nonrepresentative share of the population. This raises questions about the external validity of the results.

Our simple survey experiment conducted in Latin America, in which respondents received a brief piece of factual information that could reflect positively or negatively on the local government, was able to generate a small but statistically significant change in perceptions. The IV estimates point to the presence of reciprocity. These results are consistent with the evidence based on conditional questions and OLS regressions, which indicate that about 10 percent of Latin Americans would be willing to pay more taxes or pass over easy opportunities for tax evasion in exchange for improvements in government performance. Evidence based on real cases also suggests that reciprocity is relevant in Latin America. Antanas Mockus, a university professor elected and reelected as Mayor of Bogotá in the late 1990s and early 2000s, called for a voluntary contribution of 10 percent of each person's local tax dues, pleading support for his policies of social inclusion and progress. In 2002, these voluntary contributions amounted to 0.51 percent of total receipts, which, while not of game-changing magnitudes, demonstrate a willingness to contribute to a well-regarded local administration.

Our findings suggest that reciprocity toward governments can be an additional tool (besides deterrence) to improve tax collection in developing countries, where tax rates and compliance are often low. Other studies argue that

Latin American governments need to increase tax collection of the personal income tax. Increasing audits and fines, which are presumably the most effective tools for increasing tax collection, are not politically attractive for democratic governments. This paper shows that improving government performance can be an effective (albeit limited) tool for raising revenues, although this research does not advocate for simple positive publicity campaigns as a strategy for increasing tax collection.

## Appendix A: Supplementary Tables

**TABLE A 1. Descriptive statistics, CAF 2011 Survey<sup>a</sup>**

<i>Variable</i>	<i>No. observations</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Minimum</i>	<i>Maximum</i>
Age	10,200	41.94	11.24	25	65
Sex (male=1)	10,200	0.47	0.50	0	1
Married or cohabitating	10,200	0.65	0.48	0	1
No. children	10,183	2.07	1.72	0	13
No. HH members	10,196	4.10	2.02	1	27
Immigrant (native=1)	10,200	0.98	0.13	0	1
High school dropout	10,181	0.42	0.49	0	1
Right-leaning ideology	10,200	0.34	0.47	0	1
Satisfaction with democracy	9,781	5.37	2.61	1	10
Perceived detection probability	8,428	6.82	3.17	1	10
Perceived fines	8,775	5.54	2.76	1	10

a. Right-leaning ideology is equal to one if the respondent states as the government's top responsibility one of the following four options: to preserve law and order, to promote private investment, to protect private property, or to protect freedom of speech. Satisfaction with democracy, perceived detection probability, and perceived fines are measured on a scale of one to ten.

**TABLE A 2. Effects of Satisfaction with Public Services on Willingness to pay Taxes<sup>a</sup>**

<i>Variable</i>	<i>Tax evasion</i>	<i>Willingness to pay small increase in housing taxes</i>	<i>Willingness to pay small increase in vehicle taxes</i>	<i>Local taxes are too high</i>
Satisfaction with electricity services	0.002 (0.004)	0.003 (0.002)	0.003** (0.001)	-0.022*** (0.003)
Satisfaction with garbage collection	-0.007* (0.004)	-0.001 (0.002)	0.002 (0.001)	-0.003 (0.003)
Satisfaction with water services	0.003 (0.004)	0.005*** (0.002)	0.002 (0.002)	-0.017*** (0.003)

a. The table reports the twelve coefficients obtained by regressing each of the four measures of willingness to pay taxes on three measures of satisfaction with public services (that is, electricity, garbage collection, and water). All regressions include the full set of controls as in table 2, except that the variable *Government performance* is replaced by a measure of satisfaction with public services. The satisfaction variables are in a ten-point scale based on questions such as "Are you satisfied with the electric power service that you receive?" (where one is not satisfied at all and ten is completely satisfied).

## Appendix B: Information Letters

This appendix presents the original letters (in Spanish) that were distributed with the CAF household survey on access to, quality of, and satisfaction with public services in Latin America, for each of the seventeen cities included in the survey.<sup>39</sup> Respondents were asked to choose one of three identical envelopes: one contained positive factual information about the performance of the local government, one had negative facts on the local government, and one was empty. After the respondents read the letter, they were asked for their opinion about the performance of the local government and their willingness to pay taxes.

### Argentina

#### *Buenos Aires*

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** A mediados de 2010, la jefatura de la ciudad de Buenos Aires lanzó el Plan Integral de Educación Digital, a través del cual se entregaron computadoras portátiles a 815 alumnos y 76 docentes en la Escuela N°18 del distrito 5. El programa está diseñado para que además de aumentar el acceso a esta importante herramienta tecnológica, esta se integre al sistema de educación primaria de manera que complemente el proceso de enseñanza tradicional. (Source: *Diario La Nación*, 11 May 2011)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** Un informe presentado en días recientes determinó que Buenos Aires presenta riesgos de inundación debido al precario estado en que se encuentran los 35 mil sumideros de la ciudad, así como las desembocaduras de ríos y arroyos. Un año después de las inundaciones ocurridas en febrero de 2010, el problema persiste y es incluso peor; las autoridades parecen no contemplan esta problemática en su agenda de gobierno ya que solo se adoptan medidas superficiales (como campañas de concientización) mientras se siguen quitando espacios absorbentes, se repavimenta sin prever las consecuencias y se construye torres en zonas de riesgo. (Source: *Impulso Baires*, 23 February 2011)

39. CAF (2011).

## Córdoba

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** En 2011 comenzó en la ciudad de Córdoba un servicio de recolección de desechos sólidos denominado Servicio de Recolección Diferenciada que cubre 151 barrios, para un total de aproximadamente 650 mil habitantes. Este sistema de recolección prevé que las familias separen y coloquen en bolsas distintas papel, cartón, plástico, vidrios y latas, y su objetivo es maximizar el aprovechamiento de los residuos que genera la ciudad. (Source: Córdoba Noticias website, 21 February 2011)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** Recorridos por los casi 100 kilómetros de ciclovías de la ciudad, evidencian las falencias de la municipalidad a la hora de mantener en buen estado estas vías. Un gran número de ellas presentan yuyales, obstáculos, roturas y desniveles del asfalto, falta de mantenimiento, de iluminación y demarcación, además de tramos en los que directamente no hay sendas. Otras tienen tramos en los cuales las raíces levantan el asfaltado, hay pozos, barandas en mal estado, tramos mal demarcados y veredas improvisadas. (Source: *Diario La Voz*, 13 February 2011)

## Bolivia

### La Paz

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** La Alcaldía de la Paz está llevando a cabo esfuerzos importantes para aumentar la seguridad en el municipio. La Dirección Especial de Riesgos de la alcaldía invirtió Bs. 4,3 millones para construir 150 metros lineales de doble bóveda del río Cohatuma. Similarmente, a través de la Subalcaldía Hampaturi se construyó un muro de contención y 80 metros lineales de canal abierto con el objeto de evitar la inundación de canchas deportivas. Además, actualmente se está embovedando el Río Choqueyapu para luego construir una nueva avenida de cuatro carriles. (Source: Gobierno Municipal de la Paz)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** El general Isaac Pimentel, ex Comandante General de la Policía, afirmó que durante el 2010 cinco de cada diez incidentes de tránsito (atropellos, colisiones, encunetamientos, deslizamientos, embarrancamientos) ocurrieron en el departamento de La Paz. También aseguró que la mitad de los muertos y heridos por estas causas corresponden a La Paz. Asimismo, hizo referencia a que al momento no existían en el gobierno municipal planes y programas integrales para atender la seguridad vial. (Source: Gobierno Municipal de La Paz)

## *Santa Cruz*

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** El gobierno municipal de Santa Cruz adelanta un importante Programa de Construcción de Canales de Drenaje con apoyo de la Corporación Andina de Fomento. Esta obra será de una longitud de más de 35 km y permitirá discurrir rápidamente las aguas pluviales hacia sus cursos naturales, aliviando rebalses e inundaciones a los barrios más alejados de la ciudad. (Source: Gobierno Municipal de Santa Cruz)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** La basura en las calles de Santa Cruz constituye un grave riesgo para la salud pública, y las autoridades competentes han fallado en atenderlo eficientemente. El Servicio Departamental de Salud advirtió que la excesiva acumulación de basura en las áreas públicas de Santa Cruz representa un serio problema para la salud de las personas, porque se convierten en reservorios de vectores mecánicos, como moscas, mosquitos, chulupis y ratones que transmiten enfermedades. Alertó también que el dengue es uno de los males que puede aumentar debido a los basurales porque proliferan los criaderos de mosquitos, y también se presentan las infecciones gastrointestinales. (Source: *El Deber*, 23 March 2011)

## **Brazil**

### *São Paulo*

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** Em 2011, a prefeitura de São Paulo realizou uma série de investimentos com foco na segurança das vias públicas da Cidade. Entre esas medidas inclue-se a reativação do Comando de Policiamento de Transito, formado por um grupo de 1600 oficiais da Policia Militar e Civil. Em janeiro, a prefeitura entrou a este Comando 171 veículos, e em março foram entreguem mais 229 novas viaturas com a finalidade de fiscalizar mais de 150 pontos críticos da cidade e estabelecer novas rotas de patrulhas permantes em 900 localidades. O Secretário de Segurança Publica do Estado, Antonio Ferreira Pinto, disse que a prefeitura nunca tinha investido tanto em segurança como este governo tem investido. (Source: Prefeitura de São Paulo)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** A prefeitura da cidade de São Paulo tem demonstrado pouca capacidade para garantir o éxito da implementação de alguns projetos de infra-estrutura. Por exemplo, em novembro de 2009, foi apresentado um projeto para construção de 64 edificios-garagem em São Paulo. No entanto, em março de 2011 o projeto foi engavetado e uma nova proposta será apresentada em janeiro de 2012. Da mesma forma, a licitação para a construção de estacionamentos no Mercado Municipal, no Pátio do Colégio e na



Praça João Mendes também foi adiada. (Source: [www.estadao.com.br/noticias/geral,prefeitura-deixa-de-lado-projeto-de-64-edificios-garagem,697619,0.htm](http://www.estadao.com.br/noticias/geral,prefeitura-deixa-de-lado-projeto-de-64-edificios-garagem,697619,0.htm))

### *Rio de Janeiro*

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** O prefeito do Rio de Janeiro, Eduardo Paes, lançou o “Programa Ampliado de Coleta Seletiva”, com o objetivo de garantir a implementação de um sistema de coleta seletiva de resíduos domésticos na cidade do Rio de Janeiro para o ano de 2013. O investimento de R\$ 50 milhões será utilizado para construir seis centrais de coleta de lixo nas regiões do centro, norte e oeste da cidade. Além disso, pretende-se aumentar o número de ruas atendidas e o número de caminhões em circulação, o qual permitirá reduzir a quantidade de resíduos mandados aos lixões da cidade. Este programa vai fazer com que o Rio de Janeiro seja a primeira cidade brasileira com capacidade de reciclagem de resíduos domésticos. (Source: Prefeitura do Rio de Janeiro)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** Segundo a organização Human Rights Watch, o abuso policial, incluindo execuções ilegais por parte da polícia, é um problema crônico no Rio de Janeiro. De acordo com dados oficiais, a polícia foi responsável por 505 mortes no Estado do Rio de Janeiro durante os primeiros 6 meses de 2010. Isto resulta em três mortes por causa da polícia diariamente. Visto de outra maneira, a cada 6 homicídios intencionais, um é causado pela polícia. Apesar de terem sido instaladas “Unidades de Pacificação Policial” nas favelas, o governo local tomou medidas para assegurar que aqueles policiais que abusam de seu poder sejam penalizados. (Source: Human Rights Watch, *World Report 2011—Brazil*)

## **Colombia**

### *Bogotá*

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** El programa de inversión social “Bogotá Bien Alimentada” fue creado por la alcaldía de la ciudad con el objetivo de reconocer y garantizar el derecho del ciudadano a la alimentación a través de la distribución de apoyos alimentarios diarios en comedores escolares y la atención a madres gestantes y lactantes. Según la Secretaría Distrital de Salud (SDS), gracias a este programa se atendieron en 2010 a más de 100.000 personas vulnerables y a 670.000 menores de edad de 345 jardines infantiles y 609 instituciones educativas de bajos recursos. Este programa permitió reducir el número de muertes por desnutrición infantil de 19 en 2009 a 1 en 2010. (Source: *El Tiempo*, 18 October 2010)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** El 3 de mayo, la Procuraduría General de la Nación suspendió por tres meses al alcalde mayor de Bogotá, Samuel Moreno, por sospechas de irregularidades en la contratación pública y corrupción en la construcción de la fase III del sistema de transporte masivo Transmilenio: las obras presentan actualmente un retraso de 50%, y ni siquiera se han empezado muchas de las obras adjudicadas en 2009. (Source: *El Espectador*, 3 May 2011)

### *Medellín*

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** La Alcaldía y el Concejo Municipal de Medellín atenderán en 2011 aproximadamente a 317.000 niños con los programas Restaurantes Escolares y Vaso de Leche Escolar. El objetivo de estos programas es mejorar los niveles de nutrición, disminuir la deserción escolar y generar un ahorro significativo a las familias beneficiadas. Para una familia con un niño participando en el programa el ahorro sería de 100.000 pesos, aproximadamente 6% del salario mínimo legal vigente. (Source: Portal de Medellín, 27 January 2011)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** Según la Personería de Medellín, dos meses después de haberse iniciado las actividades escolares, aún 600 niños en situación de calle no tienen acceso al sistema educativo. La imposibilidad de acceder a una educación digna impedirá a estos niños adquirir herramientas que les permitan mejorar su calidad de vida en el futuro. Investigadores de la Unidad de Derechos Humanos de la Personería informaron que las adecuaciones requeridas para brindar a estos niños una cobertura integral que contemple salud, alimentación y alojamiento (además de educación) se han retrasado en la alcaldía de Medellín. (Source: Personería de Medellín, 11 March 2011)

## **Ecuador**

### *Quito*

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** En fecha reciente, la Alcaldía Metropolitana de Quito inauguró una serie de espacios públicos destinados al uso recreativo de las comunidades en buena medida con el fin de reducir los índices de criminalidad. Estos espacios, denominados puntos seguros, fueron construidos en terrenos que anteriormente estaban abandonados y eran focos de inseguridad. La inversión de 1,2 millones de dólares, que beneficia a aproximadamente 500 mil personas, brindará espacios aptos

para el esparcimiento de las comunidades, con parques, caminerías, canchas, etc. (Source: Distrito Metropolitano de Quito)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** La alcaldía de Quito enfrenta problemas para atender las urgencias de la población más débil, como es el caso del barrio Huarca. Sus calles agrietadas y sin pavimentar ponen en peligro la vida de sus habitantes, y están tan deterioradas que ni el transporte público puede transitar. Están, además, constantemente amenazados por las inundaciones y derrumbes provocados por las lluvias, y la única respuesta que han obtenido de la Alcaldía es que no hay presupuesto para atender sus problemas. (Source: *Diario La Hora*, 31 March 2011)

### *Guayaquil*

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** La Alcaldía de Guayaquil implementa desde hace un tiempo el plan Más Salud a través de cual se brinda periódicamente atención médica primaria a las zonas más necesitadas de la ciudad. Este plan consiste en ofrecer atención médica gratuita y en distribuir medicinas para atender afecciones generales, así como problemas de cardiología, pediatría, odontología y ginecología. La importancia de la implementación de “Más Salud” radica en que las personas que residen en zonas donde las clínicas móviles no pueden llegar, o donde es difícil acceder a hospitales o dispensarios, pueden disfrutar de servicios médicos básicos y obtener medicamentos de forma gratuita. (Source: Alcaldía de Guayaquil)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** Según un informe de la ONU de 2010, Guayaquil se encuentra entre las 15 ciudades más peligrosas de América Latina. Los arrebatos, robos a mano armada, homicidios y secuestros afectan la calidad de vida de los ciudadanos. La Alcaldía aún no se ha sumado por completo a los esfuerzos del Plan de Seguridad Nacional, ni tampoco parece entender la importancia de construir espacios para el esparcimiento y las prácticas deportivas que desincentiven la comisión de delitos. (Source: *El Universo*, September 2009)

## **Panama**

### *Panama City (Municipio de Panamá)*

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** Los gobiernos locales de Panamá, en conjunto con USAID, iniciaron el “Programa Alcance Positivo” en octubre de 2010 para apoyar la seguridad ciudadana y los esfuerzos

para reducir los niveles de violencia. En el Municipio de Panamá los esfuerzos se han enfocado hacia la prevención de la delincuencia en la niñez y la juventud a través del desarrollo de actividades deportivas en áreas propensas al pandillerismo. (Source: *The Panama Digest*, 02 March 2011)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** La alcaldía de Panamá recientemente se ha visto envuelta en acusaciones de corrupción. En marzo 2011, los abogados de la compañía de armas MKG presentaron una denuncia ante el Ministerio Público contra el alcalde capitalino Bosco Vallarino, por supuestos delitos de corrupción, tráfico de influencias, extorsión y extralimitación de funciones. El alcalde y otros dos funcionarios de la alcaldía fueron querellados penalmente el 19 de marzo ante la Procuraduría de la Nación. Ante esta situación, la corregidora de Calidonia, Liliana Flores, renunció a sus funciones en la Alcaldía. (Source: *La Estrella*, 19 March 2011)

## Peru

### Lima

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** La alcaldía de Lima recibió recientemente en Roma el distinguido “Premio Campeones del Mundo en Gas Natural Vehicular (GNV)” otorgado por la Asociación Internacional de Vehículos a Gas Natural. Este premio ha reconocido la labor de la Alcaldía en promover el uso de energías limpias y la preservación del medio ambiente a través de la construcción del bus Metropolitano—único corredor exclusivo en el mundo que utiliza gas natural vehicular—y la financiación para la compra de vehículos modernos a gas natural para los taxistas limeños. (Source: *Revista GNV Magazine*, 2010)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** La alcaldía de Lima revela que actualmente el Metropolitano está funcionando a medio gas. En este momento transporta apenas 300.000 pasajeros cuando debería estar atendiendo a 700.000. Esta situación genera pérdidas importantes, ya que de los 541 buses que fueron adquiridos por 180 millones de dólares hay 241 sin operar, es decir 44 de cada 100. Esta ineficiencia se debe en parte a que la alcaldesa no ha retirado las rutas que compiten con el Metropolitano y a la inexistencia de más troncales y/o estaciones de conexión. (Source: *El Comercio*, 28 February 2011)

### Arequipa

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** Como parte del cronograma de actividades del Plan Local Distrital, efectivos de la comisaría

José Luis Bustamante y Rivero, en coordinación con el Área de Participación Vecinal, han organizado ferias escolares a favor de familias de escasos recursos, entregando paquetes escolares que contienen cuadernos, lápices, colores y otros útiles para 200 niños. Se espera que este tipo de iniciativas sociales continúe en el futuro. (Source: *Diario El Pueblo*, 22 March 2011)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** El Consejo Nacional de Ambiente advierte que Arequipa se ha convertido en una de las ciudades más contaminadas del país. Casi la totalidad de las aguas servidas producidas en Arequipa son depositadas en el río Chili, una de las principales fuentes de agua de las que dispone la ciudad. El resultado es que las personas consumen agua contaminada con residuos fecales, así como productos agrícolas cultivados en las cercanías con irrigación del mismo río. (Source: *Diario La República*, 06 October 2010)

## Uruguay

### Montevideo

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** La intendencia de Montevideo comenzó en marzo a implementar iniciativas dirigidas a proteger a la ciudadanía de enfermedades infectocontagiosas como el dengue. El operativo, coordinado por la Intendencia Municipal, consiste en la utilización de camionetas equipadas con aspersores que fumigan en distintos lugares de la ciudad mientras la recorren los días miércoles de cada semana. (Source: *Observa*, 17 March 2011)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** La basura en las calles de Montevideo constituye un grave riesgo para la salud pública y las autoridades competentes han fallado en atenderlo eficientemente. En una sola semana de diciembre, se acumularon 7.000 toneladas de basura. El Plan Montevideo Recicla, implementado en 2007, y que buscaba mejorar la forma en que las familias manejan los residuos, no ha dado los resultados que se esperaban. Las grandes cantidades de basura son un problema de sanidad por la enorme cantidad de enfermedades infecciosas que ocasionan (como diarrea o parasitosis intestinal). (Source: Casa Abierta, 23 March 2011)

### Salto

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** La Jefatura de la Policía de Salto se encuentra en este momento probando un sistema de cámaras de seguridad para monitorear, controlar y prevenir actos delictivos. El objetivo

de este plan es monitorear permanentemente la zona del centro, micro-centro, zonas bancarias, locales de cobro de dinero y cambio, así como lugares considerados críticos por la Policía, como aquellos en donde hay una alta ocurrencia de delitos. Estos equipos ayudarán a prevenir el crimen y permitirán dar respuesta rápida a episodios delictivos e identificar a los delincuentes. (Source: *Diario Cambios Digital*, 12 February 2011)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** Salto se ha convertido en una ciudad peligrosa para conducir, sobre todo para aquellos que circulan en motos. En parte esto se ha debido a una respuesta lenta o insuficiente de las autoridades locales. En 2010 hubo 1.700 accidentes reportados en los que fallecieron 20 personas, uno de los años más fatídicos en la historia de Salto en materia de tránsito. En los últimos 5 años, estas cifras no han hecho más que aumentar. De acuerdo a la ONG “La Ruta de los Jóvenes”, las medidas que debe tomar el gobierno local para resolver este problema, como el control de velocidad y del consumo del alcohol, no son costosas y no requieren de experiencia técnica. Además, son sencillas e intuitivas de implementar. (Source: *Diario El Pueblo*, 03 March 2011)

## Venezuela

### Caracas

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** Recientemente, los gobiernos municipales de la ciudad de Caracas han realizado un esfuerzo conjunto en la recuperación de espacios públicos, con la intención de ofrecer a los habitantes de la ciudad lugares de esparcimiento, descanso y recreación. Entre los espacios recuperados destacan la plaza Caracas, el bulevar de Sabana Grande, la Biblioteca Francisco Herrera Luque de la Plaza los Palos Grandes, la plaza Pérez Bonalde, el bulevar de Catia, las canchas deportivas de Petare y caminerías, escaleras, barandas, veredas y torrenteras recuperadas en la comunidad de Caricuao. (Source: *El Universal*, 03 June 2010)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** Caracas se encuentra entre las 4 ciudades más inseguras de América Latina, junto con Ciudad Juárez en México, San Pedro Sula en Honduras y San Salvador en El Salvador. Según cifras oficiales para el 2007, 94 de cada 100 mil caraqueños fueron víctimas de homicidio, situación que se agravó para 2009 ascendiendo a 233 homicidios por cada 100 mil habitantes según la encuesta de Victimización del INE. Aunque existen políticas a nivel nacional que pueden aplicarse, la seguridad

ciudadana ha sido y sigue siendo principalmente responsabilidad de los gobiernos municipales de la ciudad. (Source: *El Universal*, 25 August 2010)

### *Maracaibo*

**POSITIVE INFORMATION ON THE LOCAL GOVERNMENT:** Las autoridades locales de Maracaibo, conscientes de la importancia que tiene preservar los espacios públicos de esparcimiento y recreación para la prevención del crimen, han realizado importantes mejoras como la renovación del estadio el Chivo del municipio Francisco Javier Pulgar y del parque la Vereda del municipio Maracaibo, el cual ofrece al público 64 hectáreas de recreación, instalaciones deportivas y actividades culturales. Esta medida se complementa con un Plan Integral de Seguridad Ciudadana para la prevención de ingesta de alcohol en dichos espacios, que cuenta con el compromiso de 100 funcionarios, y de los ciudadanos de las municipalidades. (Source: Abrebrecha Portal de Noticias)

**NEGATIVE INFORMATION ON THE LOCAL GOVERNMENT:** El descontento y la preocupación por la inseguridad se acrecientan en Maracaibo, así como el número de protestas y manifestaciones. Los esfuerzos de los gobiernos municipales por velar por la seguridad de los ciudadanos que allí viven y trabajan, no han sido suficientes. Un estudio realizado en el Municipio Maracaibo sobre la “sensación de inseguridad” confirma que el 98,6% de las personas que han sido víctimas de algún delito han dejado de realizar actividades, por temor a que les suceda nuevamente. Las principales conductas evitadas son: salir de noche, tomar un taxi, usar joyas, llevar dinero en efectivo y visitar a parientes y amigos. (Source: *El Universal*, 25 August 2010)

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