

DISCUSSION PAPER SERIES

IZA DP No. 12457

**From Citizen's Rights to Civic Responsibilities**

Lucas Ronconi

JULY 2019

## DISCUSSION PAPER SERIES

IZA DP No. 12457

### **From Citizen's Rights to Civic Responsibilities**

**Lucas Ronconi**

*CIAS, CONICET and IZA*

JULY 2019

Any opinions expressed in this paper are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but IZA takes no institutional policy positions. The IZA research network is committed to the IZA Guiding Principles of Research Integrity.

The IZA Institute of Labor Economics is an independent economic research institute that conducts research in labor economics and offers evidence-based policy advice on labor market issues. Supported by the Deutsche Post Foundation, IZA runs the world's largest network of economists, whose research aims to provide answers to the global labor market challenges of our time. Our key objective is to build bridges between academic research, policymakers and society.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

ISSN: 2365-9793

**IZA – Institute of Labor Economics**

Schaumburg-Lippe-Straße 5–9  
53113 Bonn, Germany

Phone: +49-228-3894-0  
Email: [publications@iza.org](mailto:publications@iza.org)

[www.iza.org](http://www.iza.org)

## ABSTRACT

---

### **From Citizen's Rights to Civic Responsibilities**

In less developed countries the state does not extend its legality homogeneously. A share of the population suffers its absence or its illegal presence. In this article we argue that such irregular state intervention has more negative consequences than previously thought. Individuals who suffer lack of access to citizen's rights blame the state for their hardship, and negatively reciprocate by ignoring their civic duties. The building blocks of our hypothesis are attribution theory and reciprocity. We provide evidence based on self-report survey data for almost one hundred developing countries; an observational study where compliance with civic duties can be objectively assessed; and a list experiment. The evidence indicates that people who are discriminated by government officials, or workers who do not receive legally-mandated benefits, are less likely to comply with civic duties such as voting and paying taxes. Exclusion erodes civic responsibilities.

**JEL Classification:** H26, I38, D63

**Keywords:** reciprocity, trust, taxes, voting, rights, citizenship

**Corresponding author:**

Lucas Ronconi  
Centro de Investigación y Acción Social (CIAS)  
Av Callao 542  
Ciudad de Buenos Aires C1022AAS  
Argentina  
E-mail: [lucas.ronconi@cias.org.ar](mailto:lucas.ronconi@cias.org.ar)

## 1 – Introduction

Ramon was born in a low income neighborhood in the periphery of Buenos Aires. He lived in a house without sewage and running water; he attended the local public school and received a low quality education. He dropped out at age 16 when his father lost his job and started working in the construction sector, where he still works. His employer never provided legally-mandated benefits, such as paid vacations and a minimum wage. He lives with his partner Valentina, a domestic servant who also works under-the-table, and their four children in a slum. They have illegally occupied the land because they did not have savings or access to credit to make a legal purchase. They are sometimes discriminated because of their darker skin. When Valentina and Ramon take the public transportation, they avoid paying the fare whenever they can. They buy electronics at bargain prices at the local fair. They know that many goods they purchase are stolen or smuggled; but, they also know that the fair has protection from the mayor and the local police chief. They have accepted cash and food from a local broker in exchange for attending a political rally supporting the mayor. When we asked Ramon about his civic behavior, he justified himself blaming the state for his hardship.

People like Valentina and Ramon are not atypical in the less developed world. One third of the urban population lives in slums (UN-Habitat, 2013); about 50% of employees do not have access to legally-mandated benefits such as social security (World Bank, 2012); and in the regional surveys we study, almost 20% report suffering hunger and 25% being discriminated in Africa, Asia and Latin America. Exclusion from access to basic rights is regrettably pervasive. At the same time, phenomena that could be grouped as lack of civic responsibility are also prevalent, ranging from tax evasion to political clientelism

(Schneider and Enste, 2000; Stokes, 2011). Other examples include littering, vandalism, smuggling and participation in the underground economy.

The extant literature, however, has overlooked the behavioral links between citizenship rights and responsibilities that operate at the individual level. This paper attempts to fill this gap. Our main hypothesis is that the violation of rights erodes civic responsibility. We argue that people who are excluded from their rights tend to blame the state for their hardship, and some reciprocate by not complying with their duties as citizens. That is, exclusion erodes responsibilities. This is, to the best of our knowledge, a novel conceptual contribution. We also empirically test the hypothesis providing non-experimental and experimental evidence for almost one hundred less developed countries, attempting at measuring the magnitude of the correlation, and identifying a causal effect and the mechanisms that intermedate the relationship.

We build our work on a rich and extensive literature. Political philosophers, since the time of Aristotle and Plato, have discussed the meaning and importance of citizenship. The debate between those who emphasize citizenship-as-rights and those who emphasize citizenship-responsibilities has been overcome to some extent by recognition that citizenship involves both rights and responsibilities (Janoski, 1998). Although there are several views as to what constitutes a responsible citizen, they usually tend to include mandatory and non-mandatory aspects that we cover in this study, that is, law-abidingness and the willingness to evaluate the performance of those in office.

O'Donnell (1993), as well as other social scientists (Kaufmann et al., 2008), have clearly pointed out that in less developed countries the rule of law extends irregularly over their territories and social sectors. Some individuals are often unable to get fair treatment in

the courts, to be safe from police violence, or to obtain from state agencies those services to which they are legally entitled; such as, for example, slum-dwellers or informal workers. While in well-established democracies the state extends its legality almost completely homogeneously, in less developed countries, there are situations where the state is absent and others where the state is present, but controlling an illegal business. O'Donnell's work, however, focuses only on one of the components of citizenship (i.e., exclusion from access to rights), and has not fully explored the consequences of such irregular state intervention.

A vast number of theoretical and empirical studies analyze the determinants of the different components of citizen's responsibilities. On the one hand, mandatory civic responsibilities, such as paying taxes and obeying laws, have been mainly covered by economists and criminologists. One of the most influential theories argues that individuals are rational utility maximizers that obey the law when the material benefit of doing so is higher than the cost (Allingham and Sandmo, 1972; Becker, 1968). The empirical evidence, however, suggests that, while the probability of being caught and the expected fine are strong determinants of compliance, other factors that go beyond purely material self-interested behavior, and are usually labeled social norms or tax morale, also influence compliance (Alm, et al., 1992; Andreoni, et al., 1998).<sup>1</sup>

---

<sup>1</sup> Luttmer and Singhal (2014) review the tax morale literature and argue that there are a number of nonpecuniary motivations that play an important role in explaining tax compliance. They are: intrinsic motivation, peer-effects, cultural factors, information imperfections, and reciprocity. By the last term they refer to the influence that the provision of public goods (and their quality) has on people's willingness to pay taxes.

On the other hand, explaining the determinants of the other civic duties, usually non-mandatory such as voting, is more dominated by different traditions in political science and sociology. The “Civic Voluntarism Model”, by underscoring the importance of a wide number of aspects including material resources, psychological engagement, and recruitment networks, tends to encompass the alternative views (Brady et al., 1995; Verba et al., 1995).<sup>2</sup> None of the above traditions, however, stress the importance of exclusion as a determinant of citizen responsibility. On the contrary, we argue that exclusion from access to basic rights helps explaining why people tend to ignore their civic responsibilities, either mandatory such as obeying the law and paying taxes, or non-mandatory such as voting.

This is a strong theoretical claim. But, it does not imply that every excluded individual would ignore their civic duties. Some people blame themselves for their hardship; and some people who blame the state do not reciprocate. This becomes clear in the next section where we developed the intermediate steps of the hypothesis. The rest of the paper is organized as follows: The third section presents correlations between rights and responsibilities relying on self-report data from surveys in almost one hundred less developed countries; the fourth section empirically explores the intermediate steps; the

---

<sup>2</sup> They can be categorized into four groups: A psychological traditional (Denny and Doyle, 2008); a sociological tradition (Merton 1938, Gerber et al. 2003); an economics tradition (Downs, 1957); and a political institutional tradition. See Mettler and Soss (2004) for a review of the literature; and Smets and van Ham (2013) for a recent meta-analysis of individual-level research on voter turnout. Most of the literature, however, focuses on developed countries.

fifth section includes objective data based on observing actual civic behavior, and list experiments aimed at controlling unobserved heterogeneity; finally, we conclude.

## 2 – Conceptual Framework

The proposed hypothesis is that individuals who are excluded (not excluded) from their rights tend to blame (credit) the state for their hardship (wellbeing) and some reciprocate by not complying (complying) with their duties as citizens. The two building blocks are attribution theory and reciprocity.

Since the seminal contributions of Heider (1958), Kelly (1967) and Jones and Davis (1965), attribution theory became an important field of study in psychology. Yet, we still have a partial understanding of the determinants of blame/credit in the political context. Heider's self-serving bias, for example, (i.e., the tendency that people have to exaggerate external factors when they suffer a hardship, while they exaggerate internal factors when they are successful), has received little attention in political science.<sup>3</sup> For the purpose of this paper, we simply need to hypothesize that at least some individuals who suffer exclusion blame the state for their hardship, or that at least some individuals who have access to their rights give credit to the state for their wellbeing.

There are a number of reasons why this is likely to occur. First, basic rights such as an adequate standard of living, or equality before the law, are written in national codes, constitutions and international treaties such as the United Nations Human Rights

---

<sup>3</sup> Recent research explores the importance of party cues and officials' responsibilities in attributing blame after a natural disaster (Malhorta and Kuo, 2007).



Declaration (UNHRD). Therefore, it is reasonable that an excluded person would blame the state for her/his hardship. Second, in less developed countries, poverty, informality, discrimination and exclusion from other basic rights are usually widespread problems. In Sub-Saharan Africa, for example, almost half of the population lives on less than \$1.9 per day at international 2011 prices. In such a context, it is less likely that an excluded individual would blame himself for his hardship. The problem is so pervasive that, at least in part, it is clearly beyond their control. Thus, people are more likely to blame the state than to consider it their individual fault.

Social scientists have long recognized that reciprocity is a strong determining factor of human behavior (Malinowsky, 1932; Gouldner, 1960). We follow Fehr and Gächter (2000, p. 159) for the definition: “reciprocity means that in response to friendly actions, people are frequently much nicer and much more cooperative than predicted by the self-interest model; conversely, in response to hostile actions they are frequently much more nasty.” They term the cooperative reciprocal tendencies ‘positive reciprocity’ while the retaliatory aspects are called ‘negative reciprocity’.

There are two stylized facts from the empirical literature on reciprocity that are worth emphasizing.<sup>4</sup> First, the evidence indicates that reciprocity is not uncommon. About half

---

<sup>4</sup> In a recent study, Falk et al. (2018) compute measures of reciprocity (and other preferences) using an experimentally validated survey data set from 80,000 people in 76 countries. Consistent with our hypothesis, they find that individuals that are relatively negatively reciprocal are more likely to voice their opinion to a public official, which, depending on the circumstances could be seen as a civic duty. The paper, however, does not explore which factors prompted the complaint.

of the population that participates in controlled laboratory experiments exhibit reciprocal behavior (Fehr and Gächter, 2000). Second, the magnitude of the reciprocal response usually correlates with the magnitude of the initial action. That is, people tend to react to a small gift giving back a small gift; or in the case of negative reciprocity, punishment corresponds in kind and degree to the injury. Presumably, most people would not reciprocate by committing murder, rape or child molestation, no matter how serious was the violation of their citizen's rights. Therefore, we expect that our hypothesis applies to civic responsibilities and duties except the worst crimes.

Thus far, we have discussed the primary components of the conceptual framework. There are, however, a number of interesting secondary elements to discuss. Which type of exclusions produce stronger reactions? Is it exclusion from social rights or political rights? Do exclusions complement with each other? Does it matter at which point of the life cycle the exclusion takes place? Is it the effect permanent or does it vanishes over time? Do people only react to the exclusions they personally suffer, or also to what occurs to their family? A well-developed framework would require covering conceptually and empirically these important components; an objective that is beyond the scope of this paper and the available data. For our purposes, we focus on the main claim: access to citizen's rights affects compliance with civic duties.

### 3 – Evidence from Regional Surveys

This section relies on self-report data from several regional barometer surveys (i.e., Afrobarometer round 6, Arab Barometer waves 2 and 3; Asian Barometer waves 2 and 3, South Asia Barometer wave 2, Latinobarometro 2006, 2009, 2013 and 2015, the Andean-

Corporation 2011 survey, and the World Values Survey (WVS) wave 6). We select these surveys because they include information about both access to citizen's rights and compliance with duties. All surveys use national probability samples of adults, with about 1,000 to 3,000 respondents per country.

None of these surveys have been designed to investigate the individual-level consequences of exclusion on civic responsibilities, but they do allow measuring violation of five basic social, civil and political rights, as well as two indicators of civic behavior: voting and tax evasion. In particular, people report whether they have gone without food to eat and without access to medical treatment, which imply a violation of article 25 of the United Nations Human Rights Declaration (UNDHR); whether they are discriminated against, which imply a violation of article 7 of the UNDHR; whether votes are counted unfairly in the election, which imply a violation of article 21 of the UNDHR; and whether their employer provides legally-mandated labor benefits. Also, people report whether they voted in the last election, and whether they have evaded taxes. Furthermore, the surveys usually include measures of trust in public institutions, which allows exploring the mechanisms linking citizen's rights and responsibilities.

We create five indicators of noncompliance with citizen's rights: *Lack Food*, *Lack Medical Treatment*, *Discriminated*, *Unfair Vote Counting*, and *Informal Employee*. Each variable adopts a value equal to one if the individual is excluded from accessing the right and zero otherwise. For example, *Discriminated<sub>i</sub>* equals one for every individual *i* who reports being discriminated against and equals zero for every individual who reports not being discriminated against. The dependent variables, *Voted* and *Tax Evasion*, are also

indicators at the individual level based on self-report data, but capturing compliance with citizen's responsibilities and duties. Definitions are in Appendix I.

Regrettably, questionnaires differ across surveys. A clear example is the question used to capture discrimination. Afrobarometer asks: "How often, if ever, are [respondent's ethnic group] treated unfairly by the government?"; while Arabarometer asks: "To what extent do you feel that you are being treated equally to other citizens in your country?"; and Latinobarometro asks: "Would you describe yourself as part of a group that is discriminated against?" However, all individuals within each country answered the same question, implying that a cross-sectional analysis with country fixed effects eliminates all biases due to variation in the questionnaires (Heckman et al., 1997).

We pool the surveys and create a dataset that includes 275,425 individuals who live in 92 less developed countries.<sup>5</sup> Appendix II indicates the number of individuals, and countries

---

<sup>5</sup> We focus on less developed countries, defined as those that are not in the IMF list of advanced economies (IMF, 2016). The sample includes: Algeria, Argentina, Armenia, Azerbaijan, Bahrain, Bangladesh, Belarus, Benin, Bolivia, Botswana, Brazil, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Chile, China, Colombia, Costa Rica, Cote d'Ivoire, Dominican Rep., Ecuador, Egypt, El Salvador, Estonia, Gabon, Georgia, Ghana, Guatemala, Guinea, Honduras, India, Indonesia, Iraq, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Lebanon, Lesotho, Liberia, Libya, Madagascar, Malawi, Malaysia, Mali, Mauritius, Mexico, Mongolia, Morocco, Mozambique, Namibia, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Palestine, Panama, Paraguay, Peru, Philippines, Poland, Qatar, Romania, Russia, Rwanda, Sao Tome and Principe, Saudi Arabia, Senegal, Sierra Leone, South Africa, Sri Lanka, Sudan, Swaziland, Tanzania, Thailand, Togo, Trinidad and

in brackets, for which each variable is available in each survey. There are a number of empty cells, indicating that some relationships, such as the links between lack of access to legally-mandated labor benefits and voting, could only be empirically analyzed for a small number of people and countries. Other relationships, however, such as the effects of lack of food or medical treatment on voting behavior are available for a much larger sample.

Exclusion from access to basic rights is, unfortunately, not a rare event. One out of four individuals report suffering discrimination; 18.5% report lack of food and 20.2% lack of medical treatment; 42.5% indicate that votes were not counted fairly in the last election; and 49.6% of employees do not receive legally-mandated labor benefits. Table 1 provides a profile of people who are excluded. Usually they are, compared to those who have access to the analyzed rights, poorer, less educated, and more likely to be female and live in rural areas.

<Table 1>

We use the following econometric model to test the hypothesis that individuals who are excluded from their rights are less likely to comply with their civic duties and responsibilities than their peers,

$$Responsibility_{ij} = \alpha_j + \beta Right_{ij} + X_{ij} + \varepsilon_{ij}, \quad (1)$$

where *Responsibility* is a placeholder for one of the two outcome variables (i.e., *Voted* and *Tax Evasion*); *Right* is a placeholder for one of the five indicators of exclusion from

---

Tobago, Tunisia, Turkey, Uganda, Ukraine, Uruguay, Uzbekistan, Venezuela, Vietnam, Yemen, Zambia, Zimbabwe.

access to citizen's rights (i.e., *Discriminated*, *Lack Food*, *Lack Medical Treatment*, *Unfair Vote Count*, and *Informal Employee*);  $X$  is a vector of covariates that includes the respondent's sex (*Female*), *Age*, *Education*, *Socioeconomic status*, and *Urbanization*;<sup>6</sup>  $\alpha_j$  are country dummies; and  $\varepsilon$  is a mean-zero disturbance term. We use a probit model and report the marginal effects. Standard errors are clustered at the lowest possible unit.<sup>7</sup>

Panel A in Table 2 presents the results for voting, and panel B for tax evasion. All coefficients have the hypothesized sign and are statistically significant. People who are excluded from basic social, civil and political rights are less likely to vote and more likely to evade taxes. The magnitude of the coefficients is usually small, but far from trivial. For example, an individual who suffers discrimination, compared to an individual who does not suffer discrimination, is 2.6 percentage points less likely to vote and 5 percentage points more likely to evade taxes.

<Table 2>

To test if the results vary according to demographic characteristics we run separate regressions for males and females, and for three age groups (i.e., 18 to 30, 31 to 45, and 46 or older). We also run separate models for Africa, Asia, and Latin America. In all

---

<sup>6</sup> *Socioeconomic status* indicates the quintile of individual  $i$  in country  $j$ . Depending on the survey, it is based on self-report income, subjective social status, or ownership of various goods. See Appendix 1.

<sup>7</sup> For Afrobarometer it is the district; for Arabarometer it is the province or governorate; for the Asian barometers it is the country; for Latinobarometro it is the municipality; for the Andean-Corporation survey it is the city; for the WVS it is the region.

cases there is an individual-level negative correlation between lack of access to citizen's rights and civic responsibility.<sup>8</sup> These results suggest that the proposed hypothesis does not circumscribes to any particular region or demographic group.

Finally, we analyze whether exclusions have a cumulative effect on civic duties. We first restrict the sample to individuals for which we observe *Discrimination*, *Unfair Election*, and either *Lack Food* or *Lack Medical* treatment. The sample shrinks to 58 countries in Africa, the Middle East and Latin America. We then compare the results obtained including each indicator of exclusion separately (Row I of Table 3) with the results obtained when the three variables are included in the same regression (Row II).

<Table 3>

The results suggest that the impacts of exclusions cumulate. For example, the probability of evading taxes is, compared to an individual who suffers no exclusion, 4.4 percent higher if the person only suffers discrimination; 9 percent higher if the person suffers discrimination and lack of food or medical treatment; and 14.3 percent higher if he/she suffers discrimination, unfair elections and lack of food or medical treatment.

#### 4 – Mechanisms: Attribution and Reciprocity

The previous section provides estimates of the effects of access to citizen's rights on civic behavior, but does not elucidate the mechanisms that intermedate the relationship. We argue that at least some individuals blame/credit the State for their situation, and that

---

<sup>8</sup> Results are not shown in the paper; available upon request.

some of those individuals reciprocate by complying/non-complying with their civic duties.

This section attempts to empirically analyze attribution and reciprocity. Fortunately, the regional surveys provide measures of trust in public institutions which we use as a proxy of blaming/crediting the State.<sup>9</sup> This is an adequate proxy under the assumption that people who blame the State for their hardship report in the regional surveys lower levels of trust in public institutions than people who credit the State for their access to rights. More specifically, we create the variable *Trust in Public Institutions*, which measures the level of trust that each individual has on four public institutions (i.e., government, legislative, judiciary, and police); it varies from 0 to 12, adopting a value equal to 12 if the individual has a great deal of trust in each of the four institutions and a value equal to zero if she/he has no trust at all in any of the four institutions.

We first test whether excluded individuals are more likely to blame the State than non-excluded individuals. We run separate regressions for each measure of exclusion and include the same covariates as in table 2. We also cluster at the lowest possible level, but compute coefficients with ordinary least squares (OLS). Table 4 presents the results. All coefficients are negative and statistically significant, suggesting that at least some people who (does not) suffer exclusion effectively (credit) blame the State for their (wellbeing) hardship.

<Table 4>

---

<sup>9</sup> See Gambetta (1988) for a seminal analysis on the importance of trust.



We now attempt to empirically explore the presence of positive and negative reciprocity.<sup>10</sup> An excluded person, who blames the State for her hardship, is negatively reciprocal if she reacts by not complying with her civic duties. Therefore, if the sample is restricted to excluded individuals, negative reciprocity requires that those who blame more the State for their hardship are particularly less likely to comply with their civic duties. Conversely, if the sample is restricted to people who have access to their rights, positive reciprocity requires that those who credit more the State for their wellbeing are particularly more likely to comply with their civic duties.<sup>11</sup>

---

<sup>10</sup> Note that the empirical literature in reciprocity relies on laboratory experiments. This is because in real world interactions, it is usually difficult to rule out with certainty that an actor derives a future material benefit from a reciprocal response (in which case it could indicate self-interested forward-looking behavior rather than reciprocity). The cases we study, however, are unlikely to suffer that problem. Whether an individual pays taxes or not, has a negligible impact on government expenditure. Whether an individual votes or not, has an inconsequential effect on the electoral result. Therefore, deriving future material benefits is very unlikely to be the motivation for paying taxes and voting.

<sup>11</sup> Trust in public institutions is likely to be affected by other factors, such as for example political legitimacy, implying that the effects of trust on voting and/or tax evasion are likely to capture this alternative mechanism. However, considering that trust is strongly influenced by access to citizen's rights as shown in Table 4, we expect that the effect of trust on compliance with citizen's duties is at least partially capturing the influence of reciprocity.

We test these hypotheses by restricting the sample to people who do not suffer exclusion from their rights (panel A table 5); and then, by restricting the sample to those who are excluded (panel B). We use a probit model, report the marginal effects, include the same covariates as before, and compute standard errors clustering at the lowest possible unit.

<Table 5>

All the coefficients have the expected sign and are usually statistically significant. Blaming (giving credit to) the State for their own hardship (wellbeing) is negatively (positively) associated with compliance with citizen's responsibilities. For example, a worker who does not receive legally-mandated benefits and blames the State for his hardship (that is, his level of trust in public institutions equals zero), is approximately 5 percentage points less likely to vote than an informal employee who's level of trust in public institutions equals the sample average.

## 5 – Addressing threats to causal inference

People do not choose their race; people do not select whether to be born in a slum or not. During adulthood, many situations are also beyond their control. A number of barriers, including collective action problems, make individuals unable to remove a racist police officer, a corrupt judge, or a clientelary politician. Certainly, suffering exclusion from access to basic rights is in most cases an exogenous event to any individual. Nonetheless, in this section we attempt to address four threats to causal inference: self-report bias, omitted variable bias, reverse causation and selection bias.

## 5.1 – Directly observing behavior

People may not respond truthfully to questionnaires and interviews, either because they cannot remember or because they wish to present themselves in a socially acceptable manner. Social desirability bias is likely to be an important concern with self-report measures of civic behavior (Elffers et al., 1992; Karp and Brockington, 2005). The two measures presented in the previous section (i.e., voting and tax evasion) are likely to overestimate the actual extent of good citizen behavior. For example, according to the self-reported data in the regional surveys, 89% of adults voted in Burundi and 78% in Cambodia, but according to administrative records the actual turnout in those elections was lower, 77% and 69% respectively. The gaps between reported and actual behavior are presumably larger for law and tax compliance. For example, only 29% of individuals in Argentina and 34% in Brazil, report in the regional survey buying products at lower prices in exchange for not receiving a ticket, which implies being complicit in tax evasion. Estimates, however, suggest that the real extent of valued added tax evasion in those countries is higher (Gomez Sabaini and Jimenez, 2012). While measurement error in the dependent variable causes no bias when it is uncorrelated with the explanatory variables, the possibility cannot be ruled out a priori. Exclusive reliance on subjective data, however, is regrettably not uncommon in the social sciences.

We attempt to overcome this problem by directly observing whether people pay or not the mandatory fare when they take public transportation in Argentina. When passengers enter the commuter rail station, they can tap a smart card to pass through the turnstile or evade the fare using the emergency exit. By directly observing their behavior, we

construct an objective measure of compliance with civic responsibilities that overcomes the usually intractable problem of self-report bias.

The Buenos Aires Metropolitan area has an extensive commuter rail system of 559 miles. Every weekday, more than one million people commute from their homes in Greater Buenos Aires to the capital city for work. Between May and July 2016, we went to the local stations of the following four commuter rail lines: Belgrano, Mitre, San Martin and Sarmiento, and collected the data.<sup>12</sup> We directly observed whether 1,000 individuals paid the mandatory fare or not (i.e., whether they entered the station through the turnstile or through the emergency exit). We then asked them to answer a very short survey while they were waiting on the platform for the arrival of the train. We mentioned that the collected data would only be used for research purposes and they were not asked to provide any identification information; 795 people accepted and completed the survey.

It should be mentioned that the transportation fare is relatively cheap in Argentina. Depending on the length of the trip, the fare varies from 4 to 6 pesos, or 0.3% to 0.5% of the hourly wage of the average formal employee. For economically disadvantaged people the fare is even more inexpensive, varying from 1.8 to 2.7 pesos, or 0.3% to 0.5% of the hourly minimum wage.<sup>13</sup> Despite the low fare, only 20% of passengers in the sample paid the mandatory fee.<sup>14</sup>

---

<sup>12</sup> The fifth major line is Roca, but the turnstile was not in operation in this line.

<sup>13</sup> It includes beneficiaries of social programs, domestic servants, pensioners, and low skilled self-employed. All values are at the time the data was collected.

<sup>14</sup> The fine equals 60 pesos but it is not enforced.

To compute measures of exclusion we asked passengers whether they work, whether they have a boss, and whether they receive health insurance through their employer, which in Argentina is compulsory. We categorize employees with access to legally-mandated health insurance as formal, and employees without health insurance as informal. 30.3% of workers in the sample are informal, a figure quite similar to the estimate that result from Argentina's main household survey.<sup>15</sup> We also asked people to report how included they feel by the State and society using a scale from 1 to 10. More than one third of the sample feels more excluded than included, since they report a value between 1 and 5.<sup>16</sup>

Table 5 presents estimates of the relationship between the two indicators of exclusion (i.e., *Informal* and *Excluded*) and the objective measure of citizen responsibility (i.e., *Pays Public Transportation*). Columns (1) and (3) only include train line fixed effects, and columns (2) and (4) add a set of individual socioeconomic controls.<sup>17</sup> We use a probit model and report the marginal effects.

<Table 5>

---

<sup>15</sup> See the Encuesta Permanente de Hogares (EPH) at [www.indec.gob.ar](http://www.indec.gob.ar)

<sup>16</sup> The exact wording (translated) is: Some people feel that the State and society sometimes leave them apart. On a scale of 1 to 10, where 10 means very included, how do you feel?

<sup>17</sup> They are age, sex, and education level (i.e., no formal education, incomplete primary, complete primary, incomplete secondary, complete secondary, incomplete university, and complete university).

The results indicate that informal workers (i.e., those who are excluded from receiving legally-mandated labor benefits) are ten percentage points less likely to pay public transportation compared to formal workers. Similarly, people who report feelings of exclusion from the State and society are also less likely to comply with the civic responsibility of paying the mandatory fare. All coefficients are statistically significant and robust to the inclusion of observed covariates. These results suggest that the negative relationship between exclusion and subjective measures of civic duties shown in the previous section, is not driven by social desirability bias or other problems related to self-reporting. We find the same negative relationship in the data collected at the train platforms, where the actual civic behavior of people could be objectively assessed.

## 5.2 – List Experiments

There are, however, other potential reasons why the previous correlations could differ from causal effects. First, while we include a number of socioeconomic controls such as age, education and income, it is always possible that an additional factor –not observed by the econometrician- produces omitted variable bias. Given the robustness of the results across different forms of exclusion, civic duties, age group, gender, and region, it is improbable that omitted variables could account for the negative correlation between access to rights and compliance with civic responsibilities. But, the possibility cannot be ruled out a priori. Second, in some circumstances there could be reverse causation, such as for example, if the police and other state officials discriminate against people who have illegally occupied land. In other cases, however, reverse causation seems implausible at the individual level. Does paying the transportation fare increases the

probability of finding a job with legally-mandated benefits? Does voting improves the chances of not been discriminated? Third, in other circumstances there could be a selection process, wherein unobserved individual heterogeneity in the intrinsic value of obeying the law explains both access to, and compliance with, laws and regulations. Suppose that, regardless of their access to citizen's rights, some people have a preference for ignoring the laws (deviants). Then, deviants would be more likely to accept violations of their own rights and at the same time would be less likely to comply with their civic duties compared to non-deviants. If selection bias is sufficiently strong, then, the previous correlations could become spurious. But, this can only occur if a large share of the population has such rare preferences. Presumably, the large majority of people do not enjoy violating the law. Deviants are infrequent. As point out by Cooter (2006), however, we still know little about the distribution across people of the intrinsic value of obeying laws.

To deal with these potential threats, we present evidence based on a list experiment. This methodology has proven useful to measure different phenomena including discrimination (Kuklinski et al., 1997), voter turnout (Holbrook and Krosnick, 2009), clientelism (Gonzalez-Ocantos et al., 2012), drug consumption (Biemer and Brown, 2005), civic behavior (Ronconi and Zarazaga, 2015), shoplifting (Tsuchiya et al., 2007), and use of loan proceeds (Karlan and Zinman, 2012).

We conducted two experiments. The first experiment attempts at measuring the share of the population that negatively reciprocates lack of access to legally-mandated labor rights by not complying with their civic duties; and the second experiment attempts at measuring the share of the population that negatively reciprocates suffering

discrimination from a public official by ignoring their civic responsibilities. We focus on these two forms of exclusion (i.e., informality and discrimination) because both variables are also analyzed in the regional surveys and the observational study, allowing testing the robustness of the results across alternative methodologies.

Both experiments were conducted in Retiro, the main railroad station in the city of Buenos Aires Argentina, while people were waiting for the suburban train. People were asked to complete a short survey. We mentioned that the collected data would only be used for research purposes and they were not asked to provide any identification information (i.e., neither their name and address nor the name and address of the employer). The first experiment was conducted during June 2014, and the second during June 2019.

The sample was randomly selected among the non-white-collar adult population waiting in the railway station. We asked 600 individuals to complete each survey; 502 accepted completing the first survey (i.e., response rate 83.7%), and 491 accepted completing the second survey (i.e., response rate 81.8%). In both experiments the sample was split into random halves, a treatment and a control group, and both groups were asked the same question and received the same options, except that the treatment group also received the sensitive item. Specifically, in the first experiment we asked:

*Suppose that you become unemployed, and the only job you find is under the table, that is without access to legally mandated benefits such as a contribution to the pension system.*

*The state does not inspect and penalize the employer, so you work under these conditions.*

*In such a case, how many of the following actions would you take? Please, do not tell me which ones, only how many.*



The list of options for the control group is:

- *I would work harder so the employer would register my job.*
- *I would denounce the employer to the labor union.*
- *If I have a chance, I would steal something from the firm.*

The treatment group receives the same options plus the sensitive item:

- *I would comply less with the law; why should I do it if the state did not protect me?*

In the second experiment, we first asked:

*Some people argue that public officials do not treat all people equally. For example, sometimes there is discrimination in public hospitals, in public schools, or by police officers. Do you agree this happens in Argentina?*

People who agreed with the above statement (461 out of 491), were asked the following question:<sup>18</sup>

*Suppose now that you are part of a group that is discriminated against. Please try to imagine the situation, try to put yourself into their shoes. How would you react? How many of the following actions would you take? Please, do not tell me which ones, only how many.*

The list of options for the control group is:

---

<sup>18</sup> For those 30 individuals who answer negatively (6.1% of the sample) the interview finished here. Assuming that those 30 individuals would select zero options, then, the estimated effect is smaller, but still positive and statistically significant.

- *I would peacefully wrangle with each one of the discriminators.*
- *I would let it go, what do I gain by getting angry?*
- *I would denounce it to INADI, the Argentine anti-discrimination agency.*

The treatment group receives the same options plus the sensitive item:

- *I would comply less with my civic duties; why should I do it if the state discriminates against me?*

Comparing the average number of items selected by each group provides an estimate of the proportion of respondents that reacts against lack of access to citizen's rights by becoming less likely to fulfill their civic duties. The estimate is unlikely to be driven either by observable or unobservable heterogeneity across groups because they were randomly assigned. Furthermore, the incentives to misreport lack of civic responsibility are expected to be lower in the list experiment, compared to direct questioning, because respondents do not have to reveal the specific actions.<sup>19</sup>

After the item count question, the survey asked the age, sex, and education of the respondent; plus type of employment in the first experiment, and whether she/he suffered

---

<sup>19</sup> A potential concern with list experiments is the presence of floor and ceiling effects, since they lead to an underestimation of the sensitive item (Blair and Imai, 2012). In the collected data, these effects are likely to be quite small. In the labor exclusion (discrimination) experiment, only 3.6% (0.9%) of individuals said they would take none of the options and 2% (1.7%) said they would take all three actions.

discrimination by a public official in the second experiment.<sup>20</sup> Based on these questions we categorize individuals as formal or informal, and as discriminated or not-discriminated.

There is balance in observable characteristics in both experiments, indicating that randomization worked properly (Panel A table 7). Panel B presents the point estimates for both the whole sample and the excluded populations. Results indicate that a non-negligible share of the population negatively reciprocate lack of rights by ignoring their civic duties; and that the share is higher among those who have effectively suffered exclusion. In the first experiment, individuals in the control group selected, on average, 1.37 out of the three actions, while individuals in the treatment group selected 1.57 out to the four actions. Therefore, 20% of the population reacts against employer noncompliance and government's failure to correct the violation by becoming less likely to fulfill their civic duties. When the sample is restricted to informal workers, the difference is 32%. In the second experiment, individuals in the control group selected 1.45 actions and individuals in the treatment group 1.77 actions, indicating that 32% of the population reacts against discrimination by ignoring their civic responsibilities. When

---

<sup>20</sup> The exact questions are: In the first experiment: *Does your employer make the mandatory contribution to the pension system?* In the second experiment: *In your own experience with public officials, how many times did you feel discriminated? Never; once or a few times; many times.* We group the last two categories and create a variable equal to one if the person reports having suffered discrimination from a public official at least once.

the sample is restricted to people who effectively were discriminated by government officials, the effect is 41%. All estimates are statistically significant.

<Table 7>

Summing up, the evidence obtained from the list experiments suggests that the correlations found in both the regional surveys and the observational study between access to citizen's rights and compliance with civic duties is not spurious. There is a causal relationship going from exclusion to noncompliance with civic duties, and the mechanism driving that relationship is reciprocity.

## 6 – Conclusion

In less developed countries the rule of law extends irregularly over their territories and social sectors. Such unequal state intervention has more negative consequences than previously thought. This paper argues that there is a behavioral link between citizen's rights and duties; people who are excluded from their citizen's rights tend to blame the state for their hardship, and some reciprocate by not complying with their civic duties. That is, exclusion erodes responsibilities. We do not, however, propose a one-size fits all theory. The emphasis on access to citizen's rights as a determinant of compliance with civic duties, should not create the wrong idea that, either all people located in the poorest deciles ignore their civic duties, or that people born in affluent families are examples of civic virtue. Many factors influence civic behavior. We do emphasize the individual-level behavioral link between citizen's rights and responsibilities because it is empirically relevant and, to the best of our knowledge, a novel conceptual contribution.

We build our work on a rich and extensive literature. The importance of citizen's rights and responsibilities have been recognized by political philosophers since the time of Aristotle and Plato; and the two building blocks of our hypothesis (i.e., attribution theory and reciprocity) have a long tradition in social sciences. Furthermore, there is a very large empirical literature on the determinants of mandatory and non-mandatory civic duties, such as voting and tax compliance, although most empirical work focuses on developed countries.

We provide strong empirical evidence of an individual-level behavioral link between access to rights and compliance with civic duties that is robust across different methodologies. First, we combine regional surveys and compute individual level correlations between rights and responsibilities using a sample of 275,000 individuals in 92 less developed countries. We analyze five measures of access to rights (i.e., food, medical treatment, no-discrimination, legally-mandated labor benefits, and fair vote count in elections), and two measures of civic duties (i.e., voting and paying taxes). Results always indicate that people who are excluded from their rights are less likely to comply with their duties, either when pooling together the whole sample, or when focusing on particular demographic groups (age, gender, or region). Females and males, young and old, from Latin America to Africa and Asia, individuals who are excluded from access to basic social and political rights are less likely to comply with their civic duties. The magnitude of the coefficients is usually small, but far from trivial. For example, an individual who suffers discrimination, compared to an individual who does not suffer discrimination, is 2.6 percentage points less likely to vote and 5 percentage points more likely to evade taxes. Second, to overcome the usually intractable problems of self-

reporting bias and endogeneity, we conduct two list experiments and an observational study where compliance with civic duties can be objectively assessed in Buenos Aires, Argentina. The results indicate that a non-negligible share of the excluded population blames the state for their hardship, and negatively reciprocate by not complying with the civic duties.

This paper presents some key primary elements of the hypothesis, but a well-developed framework would require covering conceptually and empirically other important components. For example, does it matter at which point of the life cycle the exclusion takes place? Is it the effect permanent or does it vanishes over time? Do people only react to the exclusions they personally suffer, or also to what occurs to their family? Is the relationship a by-product of the Universal Declaration of Human Rights and the rapid dissemination of information produced by technological advances, or was it present in ancient times? How do religion principles, such as “render unto Caesar” in Christianity, mediate the relationship between access to civic rights and compliance with responsibilities? Furthermore, this article only discusses the individual-level links between citizen’s rights and responsibilities. This opens up exciting new avenues for investigation at a more aggregate level, where critical junctures, peer-effects and multiple equilibria might help explaining why some countries appear to be in a low-intensity citizenship trap.

Tables

Table 1 – Characteristics of excluded individuals

Type of exclusion	Excluded individuals, compared to non-excluded are...				
Discriminated	Poorer	Similarly educated	Rural	Equally old	No difference
Lack Food	Poorer	Less educated	Rural	Equally old	Female
Lack Medical Treatment	Poorer	Less educated	Rural	Equally old	No difference
Unfair vote count	Equally poor	Similarly educated	Urban	Younger	No difference
Informal	Poorer	Less educated	Rural	Younger	Female

Table 2 – Effects of Exclusion on Civic Responsibilities

Panel A – DV is Voted					
	Discrimination	Lack Food	Lack Medical Treatment	Unfair Vote Count	Informal Employee
Voted	-0.0260***	-0.0213***	-0.0235***	-0.0948***	-0.0424***
	(0.0049)	(0.0054)	(0.0063)	(0.0056)	(0.0149)
# observations	119,702	151,107	164,258	183,033	21,435
# countries	58	83	90	82	22
R-squared	0.1004	0.1328	0.1216	0.1136	0.0927
Panel B – DV is Tax Evasion					
	Discrimination	Lack Food	Lack Medical Treatment	Unfair Vote Count	Informal Employee
Tax Evasion	0.0498***	0.0167**	0.0364***	0.0543***	0.1313***
	(0.0091)	(0.0068)	(0.0082)	(0.0076)	(0.0374)
# observations	41,538	70,678	58,799	54,257	4,388
# countries	32	54	40	40	9
R-squared	0.0366	0.0857	0.0705	0.0682	0.0563

Notes: Table reports marginal effects and robust standard errors clustered at the lowest possible unit (in parentheses). Dependent variable in Panel A is whether the individual voted, and in Panel B whether it evaded taxes. All models control for sex, age, education, socioeconomic status, urban, and include country fixed effects. \*\* Statistically significant at the 0.05 level, \*\*\* at the 0.01 level.



Table 3 – Cumulative Effects of Exclusion on Civic Responsibilities

	DV is Voted			DV is Tax Evasion		
	Discrimination	Lack Food or Medic	Unfair Vote Count	Discrimination	Lack Food or Medic	Unfair Vote Count
Row I	-0.0277***	-0.0190***	-0.0842***	0.0526***	0.0553***	0.0595***
	(0.0058)	(0.0065)	(0.0051)	(0.0094)	(0.0128)	(0.0090)
Row II	-0.0168***	-0.0116*	-0.0821***	0.0436***	0.0465***	0.0526***
	(0.0055)	(0.0064)	(0.0051)	(0.0093)	(0.0126)	(0.0089)

Notes: Table reports marginal effects and robust standard errors clustered at the lowest possible unit (in parentheses). Dependent variable in columns (1) to (3) is whether the individual voted, and in columns (4) to (6) whether he/she evaded taxes. In Row I, each cell is computed running a separate regression; while in Row II all measures of exclusion are included together in the same regression. All models control for sex, age, education, socioeconomic status, urban, and include country fixed effects. \*\* Statistically significant at the 0.05 level, \*\*\* at the 0.01 level.

Table 4 – Blaming the State

	Discrimination	Lack Food	Lack Medical Treatment	Unfair Vote Count	Informal Employee
Trust Public Institutions	-1.1259***	-0.1892*	-0.4243***	-1.6028***	-0.3074***
	(0.0506)	(0.1031)	(0.1624)	(0.0927)	(0.0768)
# observations	115,456	147,754	151,333	171,228	14,763
# countries	59	84	90	81	13
R-squared	0.1877	0.1870	0.1821	0.2155	0.2348

Notes: Table reports OLS estimates and robust standard errors clustered at the lowest possible unit (in parentheses). Dependent variable is Trust in Public Institutions (president, judiciary, legislative, police). All models control for sex, age, education, socioeconomic status, urban, and include country fixed effects. \*\* Statistically significant at the 0.05 level, \*\*\* at the 0.01 level.

Table 5 – Reciprocity: Effect of Trust Public Institutions

Panel A – Positive Reciprocity: Effects of Trust on Civic Responsibilities among not Excluded					
	Do not suffer Discrimination	Do not suffer Lack Food	Do not suffer Lack Medical Treatment	Fair Vote Count	Formal Employee
Voted	0.0103***	0.0137***	0.0140***	0.0086***	0.0270***
	(0.0008)	(0.0007)	(0.0011)	(0.0016)	(0.0033)
Tax Evasion	-0.0075***	-0.0052***	-0.0076***	-0.0074***	-
	(0.0014)	(0.0009)	(0.0012)	(0.0013)	
Panel B – Negative Reciprocity: Effects of Trust on Civic Responsibilities among Excluded					
	Suffer Discrimination	Suffer Lack Food	Suffer Lack Medical Treatment	Unfair Vote Count	Informal Employee
Voted	0.0084***	0.0103***	0.0104***	0.0067***	0.0102**
	(0.0013)	(0.0010)	(0.0009)	(0.0011)	(0.0043)
Tax Evasion	-0.0058***	-0.0014	-0.0051***	-0.0040***	-
	(0.0018)	(0.0016)	(0.0019)	(0.0015)	

Notes: Table reports marginal effects and robust standard errors clustered at the lowest possible unit (in parentheses). Dependent variable in all models is Trust Public Institutions. In Panel A, the sample is restricted to people who are not excluded from each basic right (as defined in the columns); while in Panel B, the sample is restricted to those who are excluded. All models control for sex, age, education, socioeconomic status, urban, and include country fixed effects. \*\* Statistically significant at the 0.05 level, \*\*\* at the 0.01 level.

Table 6 – The effects of Exclusion on an Objective Measure of Civic Responsibility

	Informal		Excluded	
	(1)	(2)	(3)	(4)
Pays public transportation fare	-0.1287***	-0.1025***	-0.0858***	-0.0661**
	(0.0283)	(0.0316)	(0.0242)	(0.0247)
Socioeconomic controls	No	Yes	No	Yes
# observations	544	544	795	795
R-squared	0.2007	0.2147	0.1976	0.2203

Note: Table reports marginal effects and robust standard errors (in parentheses). Dependent variable in all regressions is whether the individual pays the public transportation fare. All models include train line fixed effects. Socioeconomic controls include age, gender and education. \*\* Statistically significant at the 0.05 level, \*\*\* at the 0.01 level.

Table 7 – Results of the List Experiments

Response Value	Experiment #1 – Informality		Experiment #2 – Discrimination	
	Difference Treatment minus Control	Std. error	Difference Treatment minus Control	Std. error
Panel A				
Age	0.31 [502]	1.29	0.99 [461]	1.37
Sex (female = 1)	-0.07 [502]	0.04	0.02 [461]	0.05
High school dropout	0.04 [502]	0.03	0.03 [461]	0.04
Informal	-0.03 [403]	0.04	-	-
Discriminated	-	-	0.01 [491]	0.04
Panel B				
All respondents	0.20*** [502]	0.06	0.32*** [461]	0.06
Only informal	0.32** [89]	0.15	-	-
Only discriminated	-	-	0.41*** [461]	0.09

Note: Own estimation based on two separate list experiments conducted in Buenos Aires. The number of observations is in brackets. Panel A presents differences in demographic characteristics of individuals in the treatment and control group. Panel B presents the results of the item count question for different samples. \*\* Statistically significant at the 0.05 level, \*\*\* at the 0.01 level.

## Appendix I – Variables Definitions

Survey	Voted	Tax Evasion	Lack Food	Lack Medical Treatment	Discriminated	Informal	Unfair Vote Count	Socioeconomic status
Afrobarometer Round 6	Understanding that some people were unable to vote in the most recent national election in [20xx], which of the following statements is true for you?	Here is a list of actions that people sometimes take as citizens when they are dissatisfied with government performance. For each of these, please tell me whether you, personally, have done any of these things during the past year. If not, would you do this if you had the chance: Refused to pay a tax or fee to government	Over the past year, how often, if ever, have you or anyone in your family: Gone without enough food to eat?	Over the past year, how often, if ever, have you or anyone in your family: Gone without medicines or medical treatment?	How often, if ever, are [R's Ethnic Group] treated unfairly by the government?	-	In your opinion, how often do the following things occur in this country's elections: Votes are counted fairly	We group people into 5 categories based on ownership of car, TV, toilet inside the house, and shelter quality
Arabarameter Waves 2 & 3	Did you vote in the last parliamentary elections that were held on (date of the last elections):	-	-	Based on your actual experience, how difficult or easy is it to obtain appropriate medical treatment in a nearby clinic or public hospital? (only wave 2)	To what extent do you feel that you are being treated equally to other citizens in your country?	If you are currently working or have worked in the past, which of the following does your current work provide or your former work if you are retired or unemployed?	In general, how would you evaluate the last parliamentary elections that were held on (date of the last elections)?	We group people into 5 categories based on their income deciles
Asianbarometer Waves 2 & 3	In talking to people about elections, we often find that a lot of people were not able to vote because they were away from home, they were sick or they just didn't have time. How about you? Did you vote in the election [the most recent national election, parliamentary or presidential] held in [year]?	Here is a list of actions that people sometimes take as citizens. For each of these, please tell me whether you, personally, have never, once, or more than once done any of these things during the past three years. Refused to pay taxes or fees to the government (only wave 2)	-	Based on your experience, how easy or difficult is it to obtain medical treatment at a nearby clinic?	-	-	On the whole, how free and fair would you say the last national election was?	We group people into 5 categories based on their subjective social status
Latinobarometro 2006, 2009, 2013, 2015	Did you vote in the last election? (Only Latino 2006). In the last presidential election what did you do? (Only Latino 2009, 2013, 2015).	Here is a list of actions that people sometimes take as citizens. For each of these, please tell me whether you, personally, have never, once, or more than once done any of these things during the past three years: Refused to play taxes or fees to the government. (Only Latino 2013)	In the last 12 months, how often have you or your family not had enough to eat? (Only Latino 2013, 2015)	How much access to healthcare do you have today? How much access to health care did your family have five years ago? (Only Latino 2006)	In this country, there are three main groups of people: people who for some reason generally have privileges, people who are neither discriminated against nor have privileges, and people who for some reason are generally discriminated against. To which group do you think you belong, or do you not belong to any of them? (Only Latino 2006). Would you describe yourself as part of a group that is discriminated against in (country)? (Only Latino 2009, 2015)	-	Generally speaking, do you think that the elections in this country are clean or rigged? (Latino 2006). Do you believe that, generally speaking, elections are clean in this country or a fraud? (Latino 2009). Do you believe that, generally speaking, elections are very clean, clean, fraudulent or very fraudulent? (Latino 2015)	We group people into 5 categories based on the perception of the respondent's socioeconomic status. Point of reference: Quality of housing, quality of furniture and respondent's looks.
Survey Andean-Corporation 2011	Did you vote in the last presidential election?	Have you ever accepted a price discount in exchange for not receiving the receipt?	-	-	-	Does your employer contribute to social security, or not?	-	We group people into 5 categories based on ownership of dwelling, quality of house and building materials.
South Asia barometer wave 2	In talking to people about elections, we often find that some people were able to	-	-	Based on your experience, how easy or difficult is it to obtain	-	-	On the whole, how free and fair would you say the last national	We group people into 5 categories based on ownership (quantity and

	vote while others were not able to vote. Talking of the last parliamentary/ presidential elections, were you able to vote or not able to vote?			Medical treatment at a nearby government clinic/Hospital?			election was?	quality) of vehicle, TV, radio.
WVS wave 6	When elections take place, do you vote always, usually or never?	-	In the last 12 month, how often have you or your family: Gone without enough food to eat	In the last 12 month, how often have you or your family: Gone without medicine or medical treatment that you needed	-	Are you registered through your employer with the Social Security?	In your view, how often do the following things occur in this country's elections? Votes are counted fairly	We group people into 5 categories based on their subjective income deciles

## Appendix II

Survey	Voted	Tax Evasion	Trust Public Institutions	Lack Food	Lack Medical Treatment	Discriminated	Unfair Vote Count	Informal Employee
Afrobarometer round 6	48,788 [35]	52,033 [36]	48,967 [35]	53,823 [36]	53,746 [36]	43,340 [32]	49,715 [36]	-
Arabarometer wave 2	11,278 [9]	-	8,258 [7]	-	12,195 [10]	12,504 [10]	9,819 [9]	5,798 [10]
Arabarometer wave 3	14,688 [12]	-	13,634 [12]	-	-	14,353 [12]	12,606 [12]	6,826 [12]
Asia barometer wave 2	7,720 [4]	8,399 [4]	4,468 [4]	-	9,340 [5]	-	7,327 [4]	-
Asia barometer wave 3	11,045 [8]	-	7,068 [6]	-	11,990 [8]	-	10,777 [8]	-
Andean Corporation 2011	10,066 [9]	9,865 [9]	-	-	-	-	-	4,547 [9]
Latinobarometro 2006	19,715 [18]	-	18,667 [18]	-	19,344 [18]	20,232 [18]	18,329 [18]	-
Latinobarometro 2009	19,599 [18]	-	18,891 [18]	-	-	19,399 [18]	18,216 [18]	-
Latinobarometro 2013	19,767 [18]	19,587 [18]	19,002 [18]	20,034 [18]	-	-	-	-
Latinobarometro 2015	19,775 [18]	-	19,049 [18]	20,081 [18]	-	19,896 [18]	18,140 [18]	-
South Asia barometer wave 2	10,247 [5]	-	8,021 [5]	-	9,720 [5]	-	8,516 [5]	-
World Values Survey wave 6	66,691 [45]	-	64,166 [46]	68,481 [46]	68,184 [46]	-	43,934 [36]	6,295 [8]

Notes: Each cell indicates the number of individuals and countries [in brackets], for which each variable is available in each survey.



## References

- Allingham, Michael and Agnar Sandmo. 1972. Income tax evasion: A theoretical analysis. *Journal of Public Economics* 1(3-4): 323-338.
- Alm, James, Gary McClelland and William Schulze. 1992. Why do people pay taxes? *Journal of Public Economics* 48(1): 21-38.
- Andreoni, James, Brian Erard and Jonathan Feinstein. 1998. Tax Compliance. *Journal of Economic Literature* 36(2): 818-860.
- Becker, Gary. 1968. Crime and Punishment: An Economic Approach. *Journal of Political Economy* 76: 169–217.
- Biemer, Paul and Gordon Brown. 2005. Model-based estimation of drug use prevalence using item count data. *Journal of Official Statistics* 21(2): 287-308.
- Blair, Graeme and Kosuke Imai. 2012. Statistical analysis of list experiments. *Political Analysis* 20(1): 47-77.
- Brady, Henry, Sidney Verba and Kay Schlozman. 1995. Beyond SES: A resource model of political participation. *American Political Science Review* 89(2): 271-294.
- Christ, Matthew. 2006. The Bad Citizen in Classical Athens. Cambridge: Cambridge University Press.
- Cooter, Robert. 2006. The intrinsic value of obeying a law: Economic analysis of the internal viewpoint. *Fordham Law Review* 75(3): 1275-1285.
- Downs, Anthony. 1957. An economic theory of political action in a democracy. *Journal of Political Economy* 65(2): 135-150.
- Denny, Kevin and Orla Doyle. 2008. Political interest, cognitive ability and personality: determinants of voter turnout in Britain. *British Journal of Political Science* 38(2): 291–310.
- Elffers, Henk, Henry Robben and Dick Hessing. 1992. On measuring tax evasion. *Journal of Economic Psychology* 13(4): 545-567.

- Falk, Armin, Anke Becker, Thomas Dohmen, Benjamin Enke, David Huffman and Uwe Sunde. 2018. Global Evidence on Economic Preferences. *The Quarterly Journal of Economics*, 133(4): 1645–1692
- Fehr, Ernst and Simon Gächter. 2000. Fairness and Retaliation: The Economics of Reciprocity. *The Journal of Economic Perspectives*. 14(3): 159–181.
- Gambetta, Diego. 1988. Trust: Making and Breaking Cooperative Relations. Oxford, UK: Blackwell.
- Gerber, Alan, Donald Green and Ron Shachar. 2003. Voting may be habit-forming: evidence from a randomized field experiment. *American Journal of Political Science* 47(3): 540-550
- Gouldner, Alvin. 1960. The norm of reciprocity: A preliminary statement. *American Sociological Review* 25(2): 161-178.
- Gómez Sabaini, Juan and Juan Jiménez. 2012. Tax Structure and Tax Evasion in Latin America. Macroeconomics of Development Series # 118. Santiago: Economic Commission for Latin America and the Caribbean.
- Gonzalez-Ocantos, Ezequiel, Chad De Jonge, Carlos Meléndez, Javier Osorio and David Nickerson. 2012. Vote buying and social desirability bias: Experimental evidence from Nicaragua. *American Journal of Political Science* 56(1): 202-217.
- Heckman, James, Hidehiko Ichimura and Petra Todd. 1997. Matching as an econometric evaluation estimator: Evidence from evaluating a job training programme. *The Review of Economic Studies* 64(4): 605-654.
- Heider, Fritz. 1958. The Psychology of Interpersonal Relations. New York: Wiley
- Holbrook, Allyson and Jon Krosnick. 2009. Social desirability bias in voter turnout reports: Tests using the item count technique. *Public Opinion Quarterly* 74(1): 37-67.
- IMF. 2016. World Economic Outlook
- Janoski, Thomas. 1998. Citizenship and civil society: A framework of rights and obligations in liberal, traditional, and social democratic regimes. Cambridge University Press.

Jones, Edward and Keith Davis. 1965. From acts to dispositions the attribution process in person perception. *Advances in Experimental Social Psychology*, 2: 219-266.

Karlan, Dean and Jonathan Zinman. 2012. List randomization for sensitive behavior: An application for measuring use of loan proceeds. *Journal of Development Economics* 98(1): 71-75

Karp, Jeffrey and David Brockington. 2005. Social desirability and response validity: A comparative analysis of overreporting voter turnout in five countries. *Journal of Politics* 67(3): 825-840.

Kaufmann Daniel, Aart Kraay and Massimo Mastruzzi. 2008. Governance matters VII: Aggregate and individual governance indicators 1996–2007. World Bank Policy Research Working Paper 4654. World Bank, Washington, DC

Kelley, Harrold. 1967. Attribution Theory in Social Psychology. *Nebraska Symposium on Motivation*, 15, 192-238.

Kuklinski, James, Paul Sniderman, Kathleen Knight, Thomas Piazza, Philip Tetlock, Gordon Lawrence and Barbara Mellers. 1997. Racial prejudice and attitudes toward affirmative action. *American Journal of Political Science* 41(2): 402– 419.

Luttmer, Erzo and Monica Singhal. 2014. Tax morale. *Journal of Economic Perspectives* 28(4): 149-168.

Malhotra, Neil and Alexander Kuo. 2008. Attributing blame: The public's response to Hurricane Katrina. *The Journal of Politics* 70(1): 120-135.

Malinowski, Bronisław. 1932. Crime and Custom in Savage Society. Kegan Paul, Trench, Trubner & Co; Harcourt, Brace & Company, London, New York.

Merton, Robert. 1938. Social Structure and Anomie. *American Sociological Review* 3(5): 672–682

Mettler, Suzanne and Joe Soss. 2004. The Consequences of Public Policy for Democratic Citizenship: Bridging Policy Studies and Mass Politics. *Perspectives on Politics* 2(1): 55-73

- O'Donnell, Guillermo. 1993. On the state, democratization and some conceptual problems: A Latin American view with glances at some postcommunist countries. *World Development* 21(8): 1355–1369.
- Ronconi, Lucas and Rodrigo Zarazaga. 2015. Labor Exclusion and the Erosion of Citizenship Responsibilities. *World Development* 74: 453-461
- Schneider, Friedrich and Dominik Enste. 2000. Shadow economies: Size, causes, and consequences. *Journal of Economic Literature* 38(1): 77-114.
- Smets, Kaat and Carolien Van Ham. 2013. The embarrassment of riches? A meta-analysis of individual-level research on voter turnout. *Electoral Studies* 32(2): 344-359.
- Stokes, Susan. 2011. Political Clientelism. The Oxford Handbook of Political Science: Oxford University Press.
- Tsuchiya, Takahiro, Yoko Hirai and Shigeru Ono. 2007. A Study of the Properties of the Item Count Technique. *Public Opinion Quarterly* 71: 253-272.
- U. N. Habitat. 2013. State of the world's cities 2012/2013: Prosperity of cities. Routledge
- Verba, Sidney, Kay Schlozman and Henry Brady. 1995. Voice and equality: Civic voluntarism in American politics. Harvard University Press.
- World Bank. 2012. World Development Report 2013: Jobs. World Development Report. Washington, DC.