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ABSTRACT

Development outcomes come in ‘clusters’ that seem difficult to exit. Using original data from Colombia, we present evidence of the interconnection between two critical political components: state weakness and clientelism. State weakness creates the right environment for clientelism to flourish. Clientelism sets in place a structure of incentives for politicians and citizens that is detrimental to building state capacity. We show that vote buying, as a measure of clientelism, and tax evasion, as a measure of state weakness, are highly correlated at the micro level. We also report evidence that both practices are widely accepted in society, a result consistent with a deeply entrenched relationship of mutually reinforcing influences. Finally, we propose a set of mechanisms that underlie the hypothesis that a weak state and widespread clientelism are part of a political equilibrium with multiple feedback loops. Our results suggest that state weakness is a trap that is likely hard to exit.

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1 Introduction

The absence of essential state capacities (such as the ability to control violence, enforce laws, tax and regulate economic activity, and provide public goods to a broad cross-section of society) is a major obstacle for economic development and political stability in many countries in the world (Acemoglu, 2005; Besley & Persson, 2009, 2010; Fearon & Laitin, 2003). Despite the potential first-order benefits, many fragile states face significant challenges in building these capabilities. While it is widely believed that political incentives help explain the persistence of weak states, and we now have quite an extensive set of models of theoretical mechanisms, we have few empirically detailed descriptions of these incentives or the type of obstacles they produce to building state capacity.

In this paper, we focus on perhaps the salient aspect of the politics of a weak state – it is clientelistic. We conceive of clientelism as the exchange of votes for particularistic benefits like money, jobs, and other private rewards. Using original Colombian data, we provide the first micro evidence that there is a robust and significant correlation at this level between state weakness, measured by tax evasion, and the propensity to engage in clientelistic relationships, who refer to as clients. We show that clients of political patrons are more likely to evade taxes. Critically, our results with list experiments are identical to those with direct questions; there seems to be no ethical inhibition in admitting to engaging in either tax evasion or clientelism. It is just how politics works in countries with weak states.

We then show, again at the micro level, that tax evasion and clientelism robustly correlate with a cluster of other phenomena that justify the description of state weakness as a trap. Tax evading clients are in places with lower levels of public good provision. They are more likely to think it legitimate to break the rules, bribe and take justice into their own hands. However, they are pro-social in the sense of more reciprocal (as in Finan and Schechter (2012); Lawson and Greene (2014)). They articulate less belief in democracy and are less likely to protest, yet they are not alienated from the political system, since it is this that provides clientelism. Indeed, they are more likely to have had contact with politicians, to have a party identity and even a well-defined political ideology. Nevertheless, they are also less well informed about politics.

Taken together, these phenomena add up to a trap. A clientelistic weak state may be individually rational, but it leads to a very sub-optimal outcome collectively. To build a state would require breaking out of the logic of clientelism and state weakness either from

the demand side or the supply side. On the demand side, this would entail making people see that by engaging in such relationships and evading taxes, they undermine the supply of public goods. But, according to our data, clients do not see their actions as wrong. They are also more politically engaged, so it is not merely a matter of reducing their alienation from politics or promoting participation or accountability. Besides, they are more ambivalent about rules, so they seem unlikely to behave differently in response to changes in the rules. Most likely they are demanding clientelism because they see this as the rational strategy. Also, they are less likely to protest and they are less informed about politics, two likely further obstacles to organize things differently.

On the supply side, politicians have incentives to pay attention to the most politically active people. In this case, the tax-evading clients who, being more reciprocal, are probably more reliable political interlocutors. Our findings show how difficult it is in practice to build what Acemoglu (2005) calls a “consensually strong state” because it relies on a type of coordination which seems very unlikely in the empirical context we characterize here.

Our paper is related to extensive literatures in political science, sociology and history, and a more recent one in economics. A long tradition dating back to Weber (1920) contrasts a state which is organized “patrimonially” to one organized according to “rational-legal” principles. In the former, the state is organized “not on the official’s commitment to an impersonal purpose and not on obedience to abstract norms, but on a strictly personal loyalty” (p. 1006) and power is wielded with “discretion and, above all, unencumbered by rules” (p. 1006) and it allows the use of “rents or emoluments in exchange for the rendering of certain services” (p. 595). Officials of patrimonial states, therefore, use public resources in their own interests. Weber did not speak of patrimonial states as weak, but he regarded them as highly ineffectual and argued that they tended to be naturally replaced by rational-legal states, characterized by rules and bureaucracy because

The decisive reason for the advance of bureaucratic organization has always been its purely technical superiority over any other form of organization. The fully developed bureaucratic apparatus compares with other organizations exactly as does the machine with the non-mechanical modes of production. Precision, speed, unambiguity, knowledge of the files, continuity ... reduction of friction and of material and personal costs – these are raised to the optimum point in the strictly bureaucratic administration. (p. 973)

Since Weber wrote, political scientists have tended to emphasize the stability of pat-

rimonial states (sometimes called “neo-patrimonial” (Bratton & Van de Walle, 1997), or “sultanistic” (Chehabi & Linz, 1998)) because dispensing patronage is good politics. Following Bates (1981), they have also tended to associate patrimonialism with a generic underprovision of public goods since these cannot be targeted at supporters and withheld from opponents (an idea formalized by Lizzeri and Persico (2001)). In its most recent incarnation, this literature has focused on democratic politics and studied how the exchange of “rents or emoluments in exchange for the rendering of certain services”, as Weber put it, operates in electoral environments (see Kitschelt (2000); Kitschelt and Wilkinson (2007); Stokes (2007); Hicken (2011) for surveys). Here the word most used is clientelism, which can take many forms, including vote buying, or the distribution of jobs and contracts. This literature has focused on issues of the enforceability and credibility of such relations (Stokes, 2005; Keefer & Vlaicu, 2007; Finan & Schechter, 2012; Robinson & Verdier, 2013; Lawson & Greene, 2014), why they take the form they do (Szwarcberg, 2015; Nichter, 2018), who is targeted and the industrial organization of clientelism (Baland & Robinson, 2008; Stokes, Dunning, Nazareno, & Brusco, 2013; Gans-Morse, Mazzuca, & Nichter, 2014; Larreguy, Marshall, & Querubin, 2016), how much they get (Corstange, 2016), what are the spillover effects into other areas of public policy (Diaz-Cayeros, Estevez, & Magaloni, 2016; Corstange, 2016), and how and why clientelism disappears (Weitz-Shapiro, 2014).

Though there are now quite a few empirical papers using various survey instruments and even list experiments to look at these different aspects of clientelism, to our knowledge ours is the first paper that makes the micro empirical link to state weakness. Possibly, this is because scholars have regarded state weakness as a more aggregate property. Our paper therefore innovates in mapping this weakness onto individual behavior. Ultimately, the effectiveness of the fiscal system in, say Besley and Persson (2009), relies on people deciding to pay taxes. The implicit model the authors have in mind is one where payment is induced either by the threat of punishment or by “tax morale” so that people voluntarily pay taxes to a state they regard as legitimate (see Besley and Persson (2019) for a model). In either case, it is likely theoretically that there is a link between clientelism and tax evasion at the individual level. If one believes that enforcement is the issue, then one favor that a patron can dispense is impunity from the law. If the issue is tax morale, then the personalized and contractual nature of clientelism likely implies that citizens do not conceive of themselves paying taxes to a legitimate state to provide socially desirable public goods. Instead, they see themselves as giving political support to a person in exchange for “rents or emoluments”. Political support, not taxes, is their part of the bargain.

Our argument that clientelistic politics creates state weakness complements existing formal work by economists on this topic. A variety of mechanisms have been suggested that can explain state weakness. Besley and Persson (2009) emphasize that incumbents will not build a state if they worry that it will be used to tax them if they lose power. Acemoglu, Robinson, and Santos (2013) and Fergusson, Robinson, Torvik, and Vargas (2016) argue that incumbents keep the state weak because non-state armed actors are either an effective way of influencing election results or create other forms of incumbency advantage. Acemoglu, Robinson, and Torvik (2016) instead argue that state weakness can be explained by state elites not wanting to risk politically mobilizing society. None of these papers directly model the micro connection between clientelism and state weakness. Besley (in press) does model the idea that if the state does not provide public goods people may refuse to pay taxes, but he does not close the circle and connect this to any form of clientelism.

Our paper also innovates relative to the literature by placing clientelism and state weakness in a much broader empirical setting. Though Finan and Schechter (2012) collected micro-level data on how reciprocal individual clients are, there has been little work investigating at a micro level what other behavioral patterns are associated with clientelism. Some findings mirror our own. Stokes et al. (2013), Khemani (2015) and Diaz-Cayeros et al. (2016) find empirical connections between clientelism and low levels of public good provision. Fergusson, Larreguy, and Riaño (2015) argue theoretically that clientelistic parties, especially when confronted with political competition, have incentives to weaken state capacity to deliver public goods to retain their electoral comparative advantage. Empirical evidence from Mexico concurs with the model’s prediction. The inverse relationship between clientelism and public good provision is also evident in Bobonis, Gertler, Gonzalez-Navarro, and Nichter (2017) who show that reduced household vulnerability following the allocation of residential water cisterns in drought-prone areas significantly decreased requests for private benefits from local politicians, especially by citizens likely to be involved in clientelistic relationships.¹ Stokes et al. (2013) also associate clientelism with party identity showing that it is “core” voters who are clients, something we also find in Colombia. Wang (2018) similarly finds that clientelism is associated with a lack of support for democracy. Closest to our paper Sy-Sahande (2017) conducted a survey experiment in Benin and showed that people who thought their patron would not win power were less in favor of taxes.

¹Also focusing on the positive side of this symbiotic relationship, Santos (2007) argues that an increase in public good provision in the capital city of Bogotá in Colombia in the early 1990s was a result of the collapse of a clientelistic political machine.

In addition to our evidence from Colombia, we use data for a set of African countries available from the Afrobarometer. We show that clientelistic vote buying (in Africa) is more prevalent in places where tax evasion is also more common, and that this correlation is not likely to be explained by omitted factors.

In the next section, we describe the data we use in detail. Section 3 then examines the micro correlation between clientelism and tax evasion in Colombia. Section 4 delves into the correlates of this behavior and uses them to describe the trap in more detail. Section 5 turns to the African evidence and Section 6 concludes.

2 Data: key concepts and measurement

As noted in the introduction, to measure state strength we rely on tax evasion. There is a long tradition relating state capacity to the development of an effective tax capacity (see Besley and Persson (2009) for a discussion). Indeed, the incidence of tax evasion is a good indicator of the state’s enforcement ability and its capacity to mobilize resources. But more importantly for us, it is also influenced by general trust in the state and compliance with the implicit ‘social contract’ in society: citizens pay taxes, the state works for citizens and delivers public goods.

On the other hand, we define the clientelistic exchange as the delivery of any type of particularistic benefit to voters contingent on their support. In this definition, we emphasize that we talk of *particularistic* benefits, delivered to a voter or his inner circle, and that there is a *quid-pro-quo* nature to the transfer –it is given in exchange for political support. In this sense, this definition excludes the allocation of public funds to certain municipalities or geographical areas in hopes of obtaining electoral support (Stokes, 2007; Hicken, 2011). While targeted in the expectation of increasing electoral success, these benefits are not contingent on the delivery of support in the same way as the clientelistic exchange is, as the politician cannot easily deprive a single citizen of a given area of these transfers if she declines her support. Notice also that, in principle, “support” may be broader than voting (activities, campaigning). However, we focus on clientelistic vote-buying as it is not only an essential form of support, but it is also more concrete and more likely to be interpreted equally by all respondents.

We use two main datasets.² Our most detailed data comes from Colombia, drawn from

²Appendix A.1 describes all variables and sources used in the analysis. Here we focus on our main variables of interest.

the Politics Module of the *Encuesta Longitudinal Colombiana de la Universidad de los Andes* (Bernal et al., 2014), or Elca³. The Elca is the first large-scale household panel survey in Colombia, with roughly 10,000 households, representative of urban Colombia and five rural macro regions. The baseline was taken in 2010. In 2013, the first follow-up included a Politics Module applied to one member of the household (the household head or its partner, randomly assigned when both were available).

The survey includes questions on political participation and interest, sources of information, ideological positions, and crucially, two questions we specifically designed to study vote buying and tax evasion. The latter were designed to cope with a critical obstacle for empirical research in this area: eliciting honest answers in surveys about these sensitive issues. Indeed, respondents may avoid truthful answers when asked, and the nature of the behavior implies that there are few other records. To cope with these difficulties, several techniques have been developed. Among these, list experiments of the kind used in the Elca have received considerable attention and have been used in a variety of applications.⁴

To implement our list experiments, households were randomly assigned to three groups in each case: *treatment* (list including a sensitive item), *control 1* (list without the sensitive item, followed by direct question), and *control 2* (only direct question).⁵

Our question for vote buying is similar to existing designs in the literature to evaluate this issue. In the treatment group, households are told “I will read a list of five (5) things people have in mind when deciding who to vote for. I want you to tell me how many of these five things you have taken into account when voting for a candidate. Do not tell me WHICH, ONLY HOW MANY”. Then respondents are handed a card with the following options:

1. The information about the candidate on the radio or television,
2. What you read about his government plan,
3. **The benefits, gifts, or jobs the candidate offered you in exchange for your vote,**
4. The conversations you had with your friends about the candidate,

³Some features of this module are described in Fergusson and Riaño (2014).

⁴Studies of electoral behavior using list experiments include Gonzalez-Ocantos, de Jonge, Meléndez, Osorio, and Nickerson (2012); Holbrook and Krosnick (2010); Corstange (2010, 2012). In the Colombian context, they have been used recently to study support towards specific groups, in particular the military and rebel groups (Matanock & García-Sánchez, 2011a, 2011b; Steele & Shapiro, 2012).

⁵We don't find any difference on the direct question between *control 1* and *control 2*.

5. The candidate’s party.

In the first control group, respondents confront a similar prompt and list, only that the sensitive behavior (item 3 marked in bold above) is not on the list. The question asked directly to *control 1* and *control 2* reads: “Could you tell me if when deciding whom to vote for, you have taken into account the benefits, gifts or jobs that a candidate offered in exchange for your vote?”.

Turning to tax evasion, we focus on the VAT for several reasons. First, it is the most important indirect tax in Colombia (representing 28.69% of all government revenues in 2015) and the most familiar one for most respondents. Corporate taxes are limited to formal entrepreneurs, while direct taxation is very weak and only relevant for the relatively wealthy (Comisión de expertos para la equidad y la competitividad tributaria, 2015). This is true not only in Colombia but, in fact, a common feature in many developing countries (Keen & Lockwood, 2010; De Jantscher, 1986; Besley & Persson, 2014). Second, VAT evasion is an important concern in Colombia and other developing countries (Avila & Cruz, 2012; Corbacho, Fretes, & Lora, 2013; Gómez-Sabaini & Jiménez, 2011). Third, while in theory the VAT promotes enforcement, incentivizing a third-party reported paper trail on transactions between firms, this is not the case for sales to final consumers. This enforcement “Achilles’ heel” (Slemrod, 2007) arises because, unlike firms in the chain, final consumers do not need a receipt to deduct input costs from their VAT bill.⁶ Finally, consistent with this, even though firms are responsible for the VAT before tax authorities, final consumers play an active role in contributing to evasion. Specifically, since the VAT is explicit in the final sale receipt, consumers and firms collude by not producing a receipt: the consumer gets a cheaper product and the firm remains under the radar of tax authorities. Campaigns from the tax authorities have long urged consumers to demand a receipt and avoid being complicit with VAT evasion, often emphasizing the civic duty and “tax morale” logic emphasized in the notion of consensual state capacity we focus on.⁷ In short, our tax evasion question enquires about a practice that is familiar enough to respondents that they can realistically reflect

⁶A field experiment of Chilean firms by Pomeranz (2015) is consistent with the critical role of VAT evasion in final sales. Naritomi (2019) also studies the role of consumers, yet the emphasis is on their role as whistleblowers of firm’s final sales transactions in Brazil, in exchange for monetary rewards as part of an anti-tax evasion program.

⁷An example from a 1999 TV commercial is available in <https://www.youtube.com/watch?v=Ai-c4xI1bI>. The camera displays a striped shirt bought “with a receipt”, yet as it zooms out, the shirt is truly a convict’s shirt with handcuffs and the sign changes to “without a receipt”. A voiceover says, “If you buy without a receipt you are complicit in evasion and are violating the law (...) Don’t cheat on Colombia. Always demand a receipt.”

on whether they are willing to engage in it to save on their purchases, and is particularly well-suited to capture the notion of state capacity we emphasize.

The question design for tax evasion is similar to the vote buying list experiment. In the treatment group, households are told “I will read a list of five (5) actions that people follow to save money when shopping. I want you to tell me how many of these five things you do regularly. Do not tell me WHICH, ONLY HOW MANY”. Then respondents are handed a card with the following options:

1. You choose the cheapest brand even if it is lower quality,
2. You wait for sales in the best brands,
3. You buy in cheaper outlets even if they are far from your home,
4. **You accept buying without a receipt to avoid paying the VAT,**
5. You buy bulk.

In the first control group, the sensitive item (marked in bold above) is not on the list. The direct question, in this case, is: “Could you tell me if you normally accept buying without a receipt, to avoid the VAT”.

The central premise of the experiments is that when asking the sensitive item indirectly with a list that protects their privacy in answers to individual items, individuals are willing to answer truthfully even if social norms suggest that there is a “correct” answer. Comparing the frequency with which individuals in the control and treatment group report adopting the actions listed when voting (or saving on expenditures), the researcher can estimate the proportion of individuals using vote buying (or VAT avoidance) as one of the strategies. Indeed, in this case, the difference in means between treatment and control groups is an unbiased estimator of the incidence of the sensitive item.

Let $Y_i(0) = \sum_{j=1}^J Z_{ij}(0)$ and $Y_i(1) = \sum_{j=1}^{J+1} Z_{ij}(1)$ be the potential answer i would give under control or treatment, respectively.⁸ Formally, the difference in means estimator is (where N_1 and N_0 are the sizes of treatment and control groups, and T_i indicates the treat-

⁸In this notation, there are $j = 1, \dots, J$ control items and one ($j = J + 1$) sensitive item, and $Z_{ij}(t)$ indicates i 's preference for j under treatment status $t \in \{0, 1\}$, where $t = 0$ denotes the control list and $t = 1$ the treatment list.

ment status):

$$\hat{\tau} = \frac{1}{N_1} \sum_{i=1}^N T_i Y_i - \frac{1}{N_0} \sum_{i=1}^N (1 - T_i) Y_i. \quad (1)$$

Several assumptions underlie the validity of the list experiments to capture the behavior of interest faithfully. The first central assumption is that of no *design effects*, stating that the addition of a sensitive item does not affect the response on the sum of control items. Notice that this does not require individuals to answer truthfully to control items, only that the answer does not change when confronted with the treated and control prompts. The second assumption, the *no liar* condition, states that respondents answer the sensitive item truthfully. Fergusson, Molina, and Riaño (2018, 2019) test the validity of the underlying assumptions and find support for them. Finally, multivariate analysis methods have been developed to study the determinants of sensitive items asked via a list experiment (see Blair and Imai (2012)).

Apart from estimating incidence and its correlates, investigating the extent of the social desirability bias (and its potential correlates) is also possible when the experimental design also involves the direct question of the sensitive item, as we did in the Elca. In this design, only individuals who are *not* facing the treatment list (as having observed the sensitive item in the list may predispose them) are asked directly about the sensitive behavior. Comparing the incidence using equation (1) with the direct answer gives a measure of the average social desirability bias in the population, indicating the extent to which individuals want to conceal their behavior when asked directly. This measures the extent to which citizens internalize social rules of conduct and whether or not they believe that clientelism and tax evasion are looked down upon.

In addition to the Colombian data, we use the fifth round of the *Afrobarometer* survey. We code clientelistic vote buying as a simple dummy variable that equals one if the respondent answers “Once or twice”, “A few times” or “Often” to the question “*And during the last national election in [20xx], how often, if ever did a candidate or someone from a political party offer you something, like food or a gift or money, in return for your vote?*” To measure state capacity, we use the question: “*Here is a list of actions that people sometimes take as citizens. 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?*” We code tax evasion as a dummy variable that equals one if the respondent answers: “No, but would do if had the chance”, “Yes, once or twice”, “Yes, several times” or “Yes, often”. This gives us

measures of clientelism and evasion of taxes and fees for 28 out of the 34 countries in the *Afrobarometer*⁹.

3 The link between clientelism and tax evasion

We now use the data described in the previous section to examine the prevalence of clientelism, tax evasion, and more importantly their correlation. We emphasize that we document a *correlation*; the very argument we are making implies that both directions of causality, from tax evasion to clientelism and vice versa, are at play. We do, however, include a rich set of fixed effects and pre-determined household and individual controls to make sure that the correlation we uncover is not an obvious spurious reflection of otherwise omitted characteristics.¹⁰ Of course, even in our most demanding specifications unobservables that we cannot account for may contaminate our estimates. We will show below that the combination of very detailed micro-level data and the stability of the key coefficients suggest that it is unlikely they are merely an artifact of unobservable selection.

To do this more systematically, we also follow the literature on bias from unobservable selection.¹¹ For each regression we report the following set of indicators: the original (uncorrected) *Altonji* value, Oster’s modified δ ratio, and Oster’s β lower bound for the effect of interest. Roughly, the ratios tell us the degree of selection on unobservables relative to observables sufficient to explain away the estimated relationship between the variables of interest. They thus suggest that the correlation is not likely reflecting unobservables when they are either larger than one (suggesting that unobservables must be proportionally more important than observables), or negative (reflecting that controlling for observables tends to strengthen the correlation and unobservables should be selected in a different direction than observables to eliminate the effect).

We now use the Colombian data to show that both tax evasion and clientelism are highly prevalent, with substantial variation across regions and households. We also argue that they are highly accepted practices exhibiting no apparent social desirability bias in survey responses. We document a positive correlation between the prevalence of both phenomena,

⁹Burundi, Benin, Burkina Faso, Botswana, Cameroon, Ivory Coast, Cape Verde, Ghana, Guinea, Kenya, Lesotho, Liberia, Madagascar, Mauritius, Mali, Malawi, Mozambique, Namibia, Niger, Nigeria, South Africa, Senegal, Sierra Leona, Tanzania, Togo, Uganda, Zambia and Zimbabwe.

¹⁰When including controls in our regressions, we focus on plausibly exogenous variables that do not respond to either clientelism and tax evasion to avoid a “bad control” problem (Angrist & Pischke, 2008).

¹¹See Murphy and Topel (1990); Altonji, Elder, and Taber (2005); Bellows and Miguel (2009); Altonji, Conley, Elder, and Taber (2011); Oster (2019). Appendix A.2 briefly reviews those methods.

and confirm that it is unlikely that omitted factors explain this correlation. Taken together, these results suggest that within Colombia, clientelism and tax evasion are part of a hard-to-change political equilibrium.

Figure 1 shows the municipal-level prevalence of clientelism (vertical axis) and VAT evasion (horizontal axis) as measured in our survey¹². By mere visual inspection, places with a higher share of reported clientelism also tend to be the areas of the country with more tax evasion. Also, while the phenomena are widespread, there is important regional variation, with municipality-level incidence ranging from 0% to 50%¹³. The incidence of both phenomena is slightly larger in rural areas. Clientelism reaches 21.9% in rural areas and 14.8% in urban areas, for an overall average of 18.4%. The corresponding numbers for tax evasion are close: 17%, 21.6% and 19.2%, respectively.

3.1 (No) social desirability bias

These estimates rely on direct questions about clientelism and tax evasion, potentially plagued with social desirability bias in respondent answers. However, Figure 2 shows that there is no significant difference between the answers to these direct questions and the list-based estimates. This is the case both for clientelism (upper panel) and tax evasion (lower panel), and for each area (rural or urban) considered independently. Both estimates are very close to each other, and their difference is small and not statistically significant. We can interpret this difference as an estimate of the extent of Social Desirability Bias (SDB), since it compares the extent to which respondents admit to each behavior when asked directly versus when their answers are private with the list.

This result is important and underscores how widely accepted clientelism and tax evasion are as part of the normal state of things, consistent with our view that the practices are deeply embedded in society in an entrenched equilibrium. Put simply, clientelism and tax evasion are not only prevalent in Colombia. They also appear not to oppose any social norms of conscientious voting and “tax morale” (Luttmer & Singhal, 2014). Hence, respondents in our survey are not ashamed of evading taxes or selling their vote and are equally likely to admit to this behavior regardless of privacy in their responses.¹⁴

¹²Panel A in Table 1 shows descriptive statistics for the main variables in the Colombian data used in the analysis.

¹³The survey is not representative at the municipality level, so this figure is merely illustrative of the correlation that we explore in more detail below.

¹⁴In other contexts where clientelistic vote buying is prevalent, researchers have found both underreporting in direct questions relative to the list (Gonzalez-Ocantos et al., 2012; Corstange, 2012), and similar rates of

While this is the most straightforward interpretation of the result, other mechanisms aside from absence may lead the list and the direct responses to look similar. Specifically, list experiments work best when the social desirability effect works in a single direction. Thus far, we have implicitly assumed that vote buying and evasion carry, if any, a negative stigma. It is possible, for instance, that some respondents want to overreport that they sell their votes when asked directly to signal that they do not believe in democracy, or that they evade taxes to convey an impression of rebelliousness or resistance to the state that they are proud of. This may create offsetting effects that complicate the interpretation by inflating direct responses.¹⁵ Nevertheless, it seems hard to believe, given that the treatment and control groups were chosen randomly, that these mechanisms are sufficiently prevalent and distributed in such a way as to produce our null result.¹⁶

An additional question is whether this is a feature of the Colombian population or it occurs merely in our sample. On the one hand, the Elca is representative of urban Colombia and five major rural macro-regions, which gives ample external validity to the exercise. On the other hand, the Politics Module is administered as the final part of a very comprehensive questionnaire, and for a set of households participating in a long-term panel study. Thus, one potential concern is that these activities do carry a stigma, but respondents and survey officers familiarized with each other, so the former are willing to admit to the sensitive actions. While we do not know of a comparable survey for tax evasion, this possibility seems unlikely for clientelism because other, much shorter and cross-sectional surveys in Colombia produce similar results.¹⁷

reporting as we do (Cruz, 2013).

¹⁵See also Andrew Gelman (2014), “Thinking of doing a list experiment? Here’s a list of reasons why you should think again”, Available at <http://andrewgelman.com/2014/04/23/thinking-list-experiment-heres-list-reasons-think/>.

¹⁶Simpser (2017) presents a model in which, because a person’s answer in a survey influences the interviewer’s opinion of the person, second-order beliefs that respondents have about how interviewers view them play may bias their responses to list experiments. Presumably, individual (unobserved) second-order beliefs should vary depending on (observable) individual circumstances. Nevertheless, we find that for both practices the lack of bias holds for individuals with varying observable features. These findings resonate with the idea that these behaviors are widely perceived as normal, and is inconsistent with the notion that the lack of bias is an artifact of second-order beliefs.

¹⁷For instance, the 2015 round of the Latin American Opinion Project (Lapop) includes, in addition to vote buying, other clientelistic strategies and voter manipulation in a sample of Colombian municipalities with high incidence of historical violence and illegal economies. In particular, it contains list experiments to test for vote buying, positive (and negative) patronage –promising to give (or threatening to remove, respectively) benefits contingent on electoral support–, and direct intimidation. The resulting estimates suggest no significant evidence of vote buying (or of negative patronage, though the incidence of intimidation and positive patronage is approximately 7% of voters in both cases). This difference likely reflects the particular sample in Lapop, but there is a similarity with our results: while estimates are much noisier

In short, while alternative interpretations are not easy to entirely rule out, the weight of the evidence favors the view that a similar response rates for the list experiment and direct question reflects the absence of stigma, leading respondents to willingly admit to tax evasion and vote buying.

Another reality check for our clientelism measure comes from a comparison with preferential voting for individual members of party lists in (open) lists to congress. As famously shown in Putnam, Leonardi, and Nanetti (1994), preferential voting is a good indicator of a highly personalistic and clientelistic pattern of political exchange in democracies. In Figure 3 we follow Putnam’s logic and show the municipal-level proportion of preferential voting in the Congressional elections in 2014 in the vertical axis, plotted against our measure of clientelistic vote buying in the horizontal axis. There is an evident positive correlation, again suggesting that our variable is indeed capturing the prevalence of typical clientelistic exchanges.

3.2 The Weak State Trap

Within Colombia, we find a significant and very robust correlation between our measures of tax evasion and clientelism.¹⁸ Table 2 runs an Ordinary Least Squares (OLS) regression of clientelism on tax evasion and adds several additional controls. Column 1 shows the bivariate relation, and column 2 presents results for the same model restricted to the set of observations for which we have information on the additional covariates. The remaining columns add sets of controls. In column 3, we include municipality fixed effects. In column 4, the set of individual controls include age, age squared, gender, race and ethnicity. In column 5, we include in addition geographic controls (agricultural suitability, elevation, rainfall, ruggedness, temperature, and distance from each household’s location to the coast, the closest main city, and the nearest main port city).

One clear message stands out: the significant relationship between the two phenomena does not disappear despite the changes in these sets of controls. While the magnitude of the correlation changes somewhat, the coefficient in the most conservative coefficient in column 5 indicates that clientelism for tax evaders is larger by 8.4 percentage points, or 46.7% of the

given their smaller sample, there is no evidence of social desirability bias either. See García, Montalvo, and Seligson (2015).

¹⁸Aside from the importance of the result, one practical implication of documenting no social desirability bias is that we can rely on the direct questions as reliable measures of the incidence. Therefore, to maximize statistical power and rely on the simplest empirical methods possible, in what follows we report results from regressions using the direct questions.

average and 21.5% of a standard deviation. A one-standard deviation increase in tax evasion (0.4) is associated with an increase in clientelism 18.8%, as large as the mean incidence and 8.8% of a standard deviation.¹⁹

4 The nature of the trap: clientelism and weak states in equilibrium

In this section, we establish some basic patterns in our data which we organize into a set of theoretically distinct mechanisms that help explain why the trap is so hard to break. To do so, we run OLS regressions for both clientelism and tax evasion as a function of key variables that should be relevant if the corresponding mechanism is at play. We report simple bivariate correlations as well as multivariate regressions controlling for (plausibly exogenous) controls.

4.1 Public versus particularistic goods

A first basic fact to document is a negative correlation between the incidence of clientelism and tax evasion and public good provision. There are some direct connections here. For example, lower tax revenues imply fewer resources for public provision. But there are also more subtle mechanisms. As Bates (1981) noted, public goods cannot be targetted, so public goods are strategically under-supplied where clientelism is more intense (though see Bardhan and Mookherjee (2013)). Likewise, they will be under-demanded since clients want private goods. Other mechanisms include the idea that the under-provision of public goods makes clientelism cheaper for politicians (Robinson and Verdier (2013); Fergusson et al. (2015)).

The broad negative correlation between clientelism and tax evasion and the delivery of public goods and services is apparent in our Colombian data, as shown in Table 3. This table and those that follow have a similar structure. Column 1 has a simple regression for clientelism with no additional controls, column 2 restricts the sample to those observations for which we have the demographic and geographic controls, and column 3 includes these controls.²⁰ Columns 4 to 6 are the corresponding specification for tax evasion as a dependent

¹⁹Regarding the possible role of unobservable selection, our results are very reassuring that there is a real relationship between clientelism and tax evasion. Not only is the *Altonji* ratio much larger than one for all specifications, but even in the estimate of column 5, Oster's measure suggests that unobservables would need to be almost 4.3 times as important as observables to produce a zero correlation between these two variables.

²⁰Column 3 also reports Altonji's ratio, Oster's δ ratio, and Oster's lower bound of the effect of interest, to help assess the potential relevance of unobservable selection.

variable. The key independent variables in each panel are indicator variables for whether the household has access to the following public services: aqueduct, electricity, gas system for cooking, landline, sewage and trash collection. For all specifications, the simple bivariate correlation between public service delivery and either clientelism or tax evasion is, as expected, negative. The result is also robust to including basic predetermined household and geographic controls in the case of electricity, landline, and, in the case of clientelism, sewage.²¹

4.2 Personal over institutional links: displacing formal relationships with the state

With prevalent clientelism, citizens' relationship with the state is via personal interaction with politicians or their brokers. These informal relationships may displace potential formal relationships with the state to demand rights and services. In an extreme case, the state does not exist as an apparatus to be controlled by citizens, therefore becoming less effective. As a result, voters become more dependent on informal relationships for benefits, again producing a vicious cycle of more clientelism, less state capacity, more clientelism, and so on.

One crucial implication of relying on personal links is that interpersonal reciprocity becomes a valuable trait. This is obviously the case for vote buying: especially with a secret ballot, politicians would like to target reciprocal voters. Reciprocal voters would more likely vote for them in exchange for the direct benefits despite not being directly monitored, thus reducing the inherent commitment problem in clientelistic exchanges (Robinson & Verdier, 2013). More generally, politicians and their brokers may more easily build a long-term relationship with reciprocal voters, enabling them to both better predict their voting decision and to sustain a cooperative repeated interaction. Existing evidence supports the idea that more reciprocal people are more likely to be involved in clientelism (Finan & Schechter, 2012; Lawson & Greene, 2014). Moreover, there is very little evidence of individual-level monitoring and enforcement (Hicken & Nathan, 2019), reinforcing the potential relevance of mechanisms such as reciprocity.

Personalistic relationships sustained by feelings of reciprocity not only erode institutional

²¹Altonji's ratio for the importance of unobservable selection is smaller than one in some of these cases, raising concerns that these correlations are spurious. However, Oster's corrected measure is always larger than one and the lower bound for the coefficient of interest indicates a negative correlation. Taken together these results suggest that the negative correlation of tax evasion and clientelism with the delivery of these public services is unlikely to be an artifact of unobservable selection.

pressure to strengthen the state. They are also problematic because they make clientelism particularly persistent. Specifically, clientelism will not necessarily disappear with simple institutional innovations as the secret ballot (e.g., Wantchekon, 2003; Vicente, 2014).

Our Colombian data includes some variables that help assess the relevance of these mechanisms, with questions on both positive and negative reciprocity. We measure positive reciprocity with a dummy variable that equals one if the respondent “totally agrees” or “agrees” with the statement “You always have to help those who help you”. Negative reciprocity is an indicator variable that equals one if the respondent “totally agrees” or “agrees” with the statement “whoever harms me pays for it (*el que me la hace la paga*)”.

Table 4 examines the correlation between clientelism (columns 1 to 3) and tax evasion (columns 4 to 6) with these measures of reciprocity (positive in the upper panel and negative in the lower panel). In general, clientelism and tax evasion are indeed more important for more reciprocal individuals. The sole exception is tax evasion and positive reciprocity, which appear to be unrelated. For every other specification, there is a positive and robust correlation that is not significantly affected by unobservable selection.

The lack of a correlation between tax evasion and positive reciprocity may reflect it is an indirect part of a clientelistic relationship. If a patron delivers to his client, then the client reciprocates (positive reciprocity). While if the patron does not deliver a promise (a job, a contract), then the client retaliates (negative reciprocity). It could be that avoiding taxes is something promised by a patron as well, as we noted in the introduction. More plausibly, it is just a side effect of the equilibrium and not part of an explicit political exchange. This could also explain why the “tax morale” channel - the state gives me something and I give taxes in return - does not seem to operate in our data. The Colombian “social contract” does not seem to feature such a mechanism.

Perhaps more directly relevant to the idea that individual exchanges might displace other more institutionalized relationships with the state, Table 5 explores whether clientelism and tax evasion correlate with personal appeals to politicians (congressmen, in the upper panel, and local mayors or local councilors, in the lower panel). In each case, we find a positive and robust correlation that again does not seem to be significantly affected by unobservable selection. This is consistent with the notion that prevalent clientelism exacerbates personal over institutional links and that where this happens the state is less able to raise taxes.

One interpretation of these findings is that these appeals to politicians may, in fact, reflect reaching out to public institutions or perhaps be accountability in action. But Table 6 shows one result that is hard to reconcile with this alternative interpretation. If this were the case,

one would also expect a positive correlation with people’s trust in democracy. Instead, this table reports a robust, statistically significant, and *negative* correlation between the belief in democracy (specifically, the importance of having popularly-elected leaders) and both clientelism and tax evasion.

Given that patrons disperse clientelism in the context of democratic voting, it might sound odd that clients do not evince support for democracy. Isn’t this why they get their rents? Possibly, clients see their relationship as not particularly tied to a specific set of political institutions and merely taking a different form in the absence of democracy. Alternatively, they are cynical about the rhetoric of democracy, given the fundamentally non-democratic nature of their interaction with the state. As Lawson and Greene (2014) put it, “curbing clientelism requires a normative component—specifically, that citizens must reject clientelist exchanges on principle because they feel a greater obligation to vote in accordance with their conscience, obey the law, and support democratic institutions” (p. 62). That individuals more engaged in clientelistic relationships support democratic institutions less is consistent with this claim.²² Finally, it could also be the case that they face greater competition from other potential clients under democracy. Hence, they imagine that their rents would be even higher under non-democratic political institutions.

The displacement of institutional connections with the state is, in short, another potential threat to building a strong and democratically-responsive state in the presence of clientelism.

4.3 Personal over institutional links: fragmenting society

By personalizing links with politicians, the agents of the state, clientelism also contributes to society’s fragmentation. Instead of having common goals and aims in their relationship with institutions, making them accountable and responsive, and seeking to defend their general rights, each fragmented voter seeks some specific benefit from politicians or their brokers. A fragmented society of this kind, in turn, may also be more easily captured with targeted transfers, and fragmentation weakens collective action and political control over the state. The consensually strong state solves the fundamental dilemma of state power (that a state powerful enough to deliver goods is also powerful enough to inflict harm (Levinson, 2014)), by making control and power complements; because the citizens control the state, they are willing to vest it with more power. Instead, with fragmented voters rather than increasing

²²Lawson and Greene (2014) also find more support for clientelism among voters randomly assigned to an anti-civic prime (asked whether they agreed that people did not get ahead unless they took advantage of others) relative to a civic prime (asked whether they believed that it is important to live in a democracy).

in a symbiotic relationship, we see the negative version of this feedback loop: citizens have less control over the state and therefore grant it less power.

In short, we have again a vicious cycle whereby clientelism produces fragmentation, in turn reducing citizen's control of the state. When this occurs, in turn, citizens are unwilling to give the state apparatus more power as it does not respond to citizens' demands. Some related ideas in the context of Colombia appear in Archer (1990), Escobar (2002) and Robinson (2015). Archer (1990) argues, in particular, that the system of highly particularistic clientelistic networks in Colombia creates an "atomized citizenry" that relates to the state on a personal basis with a patron, rather than through any other collective demands they might have. Moreover, citizens' expectations of immediate material rewards hampers the state's ability to implement costly reforms with future benefits, constraining the actions of "potential reformers and institution builders". In line with our emphasis on the detrimental effects of clientelism on state legitimacy, he concludes:

"The traditional parties' ability to channel support through clientelist structures, while providing an impressive degree of regime stability, at the same time undermined the authority and legitimacy of the political elite and the state and made the state's task of providing for the social, political, and economic development of the Colombian people nearly impossible in the long term. The Colombian people, disarticulated and disaggregated through the mechanism of broker clientelism, have been unable to create functional organizations that might better represent their interests and needs before the state." (p. 38)

Similarly, studying the case of the northern department of Sucre, Escobar (2002) argues that clientelism has remained strong in Colombia, hurting citizens' ability to collectively improve political participation and value broader and longer-run benefits over immediate rewards for their votes. Moreover, this persistence is despite democratizing reforms of the late 1980s and early 1990s (among others, popular election of local mayors since 1988 and the promotion of new political parties and movements since the 1991 Constitution).

Table 7 investigates a potential symptom of society's fragmentation, namely that the ability to mobilize and protest collectively is weaker in those areas with more clientelism and a weaker state. To do so, we run regressions for clientelism (columns 1 to 2) and tax evasion (columns 3 to 4) on *municipal-level* protests as recorded by Colombian NGO Cinep (between 2005 and 2014). They code three types of social struggles: labor struggles, peasant and indigenous struggles, and civil struggles. For each protest, there is information on

the place (municipality) and date, actors involved, modes of struggle, conveners, and adversaries. Using the information on adversaries, we examine the correlation between tax evasion and clientelism with the total number of protests against (local or national) authorities and armed groups. Odd columns include no controls, and even columns include our usual demographic and geographic controls, as well as municipal population to account for scale effects. Regardless of the specification, there is a negative and statistically significant correlation. These findings suggest that clientelism might indeed fragment society in ways that weaken collective action, further consolidating state weakness. It also falls in line with Tilly’s (1995) observation for Great Britain, where a strengthening of the state changed the nature of popular contention, creating a public sphere and producing collective action for broad claims on the state.

4.4 The social contract: both sides mutually justified in defaulting

The social contract in the ideal type of a “consensually strong state” a la Acemoglu gives roles to each side: citizens pay taxes and obey the law, politicians use public resources for the common good. Our data do not suggest that the Colombian social contract is of this form. A clientelistic party buying votes sends the signal that it derives a private benefit from public office. Indeed, by the mere fact that the politician is willing to pay for a vote voters infer that politicians are plausibly deriving some private rents from power. But the politician’s action justifies the citizen’s decision to not align themselves with the more idealistic form of social contract.²³ Moreover, when citizens do not pay taxes and break the law, they have no stakes in defending an ideal social contract and controlling politicians and the state (García-Villegas & Revelo Rebolledo, 2010; De León Monsalvo, 2011; Hernández, 2010). This helps consolidate the equilibrium with a consensually weak state and prevalent clientelism.²⁴

Table 8 presents some results consistent with the relevance of this mechanism. In particular, we investigate the correlation between clientelism and tax evasion with various measures of the extent to which citizens are willing to break norms. We take this as a measure of

²³Cullen, Turner, and Washington (2018) show suggestive evidence that people in the US evade more income taxes when the government’s preferences do not align with theirs. This is consistent with the idea that citizens are sensitive to whether or not they feel well represented by the government. However, notice that we are emphasizing a mutual justification in “defaulting” on some ideal social contract that is distinct to a disagreement about the correct policies.

²⁴García-Villegas (2009, 2017) argues that this is particularly the case in Latin America, where following a Hispanic heritage the law is interpreted as stemming from a “pact” between “equals”. According to this “pactist” tradition, when one side defaults the other has the right to default as well. The law (unlike religion or morals) does not hold a higher status than the individual.

the degree to which they consider defaulting on an ideal social contract to be justified. We examine three indicator variables, one for each one of the three panels in the Table: *Breaking the law* equals one if respondents “totally agree” or “agree” with the statement: “To capture criminals, authorities should sometimes break the law”; *Agree with bribery* equals one if respondents “totally agree” or “agree” with the statement: “Considering how things are, sometimes paying a bribe is justified”; and *Justice into own hands* equals one if respondents “totally agree” or “agree” with the statement: “When the government does not punish criminals, it is okay that people take justice into their own hands”. All estimates are positive and statistically significant (and have Altonji and Oster δ ratios exceeding one).

Notice also that in the context of these mutual justifications between politicians and citizens, there can also be negative spillovers between citizens. Indeed, a law-abiding citizen may be discouraged from obeying the law if he observes that others instead take advantage of it. Consistent with these ideas, Buffat and Senn (2017) show that cooperation in a public good game falls in the presence of corruption (in the form of bribes to the punishment authority). Similarly, in a field experiment Beekman, Bulte, and Nillesen (2014) show that corruption in the form of missing inputs for a development intervention discourages individual voluntary contributions to local public goods. Interestingly, in the Buffat and Senn (2017) experiment, cooperation diminishes not just because the punishment of low contributors falls with corruption. In line with these possible negative spillovers within citizens, bribery discourages initially high contributors who gradually decrease their contributions down to the level of initially low contributors. A similar mechanism in the context of tax evasion can likely arise: initially honest taxpayers may reduce their level of contributions after observing that others can get away with cheating. This effect goes beyond the idea that citizens may be discouraged when observing that the state is not accountable, and implies a sort of “social multiplier” effect.

4.5 The social contract: undermining the role of elections

Closely connected with the previous phenomenon, clientelistic vote buying undermines the ideal role of elections. Ideally, politicians and parties are accountable to voters, who decide to keep them or remove them based on their performance in the office. In a clientelistic relationship, rather than voting and controlling the winner (demanding him to fulfill his promises while in office, and not voting for him in the future if necessary) voters give their vote, get their money or direct benefit, and the deal is over. A key implication is that the incentives to

gather information are weak, and in fact one of the prevailing ideas to overcome clientelism is improving voter knowledge (Fujiwara & Wantchekon, 2013). Admittedly, one caveat is that some types of “relational” clientelism require a constant relationship beyond elections, and delivery of transfers off the election cycle (particularly to brokers and dealers). But even when this is the case, citizens need only be informed about the particularistic benefits they receive, not about the politician’s overall performance in office. Also, this exchange suffers from the set of problems discussed above. Among others, this implies that the exchange reduces public goods and investments in state capacity, benefits are not demanded by an organized cohesive citizenry but instead operates with a fragmented citizenry, and rents are often diverted (illegally or otherwise) to produce private gains.

Table 9 examines our data from Colombia, exploring the correlation between clientelism and tax evasion with three measures of political interest and engagement, together with one proxy for the extent to which voters are well informed. The three measures of political engagement are the following indicator variables: *Party Identity* equals one if the respondent answers “yes” to the question: “Do you remember which party you voted for mayor of your city or municipality?”; *Persuasion* equals one if the respondent has tried to convince others to vote for a particular party or candidate; and *Ideology* equals one if the respondent claims to have a defined ideology (left, left-center, center, right-center or right) following the question: “Often, people speak of political leanings from left and right. According to the meaning that the terms “left” and “right” have for you, what political tendency sympathizes with you?”. On the other hand, our proxy for voter knowledge is the variable *information sources*, which sums the sources that the respondent claims to use (among radio, newspapers, internet magazines, books and television) to know about the country’s situation.

There is a positive and robust relationship between each of the measures of political engagement with the clientelism and tax evasion measures. In contrast, if anything these phenomena are *negatively* correlated with “information sources”. This could be surprising at first in the sense that more politically engaged individuals should, in principle, be more active citizens demanding accountability from politicians. Also, the literature on vote buying and directed transfers often emphasizes that strategic politicians should direct rewards to “swing” voters rather than “partisan” supporters. However, this pattern is consistent with situations where clientelism is a common form of political engagement and voters are “endogenously” loyal (Diaz-Cayeros et al., 2016) towards clientelistic parties. Political involvement with highly clientelistic parties creates political engagement, but disincentivizes voters from gathering information.

5 Africa

Though we do not have other similarly rich data sources to examine whether our findings hold up elsewhere in the world, readily existing data for Africa on both vote buying and tax evasion does allow us to get a sense of whether the fundamental relationship between state weakness and clientelism holds.

Panel B in Table 1 summarizes, for countries in the Afrobarometer surveys, the prevalence of tax evasion and clientelism. 26% of respondents point out that they did not (or had no intention to) pay taxes or fees to the government. Turning to clientelism, around 16% of respondents state that during the last national election a candidate or someone from a political party offered them something, like food or a gift or money, in return for their vote.

Figure 4 reveals substantial variation across countries in the incidence of clientelistic vote buying and tax and fees evasion in Africa. Reported levels are as low as 0.59% in Namibia and as high as 40.95% in Uganda for clientelism, whereas tax evasion ranges from 4.33% (Mauritius) to 49.17% (Togo).

Table 10 reports the results of correlating clientelistic vote buying with a dummy variable for whether respondents evade government taxes and fees (tax evasion). All regressions in this table report robust standard errors clustered at the country level. We find a positive and significant correlation between clientelistic vote buying and tax evasion. The correlation is apparent when not including any additional controls (column 1), and is robust (both in magnitude, which decreases only slightly, and statistical significance, which remains at more than the 99% confidence level) to including several additional controls and fixed effects in columns 2 to 4. In particular, column 2 includes respondent age, gender, and zone (urban, semi-urban, or rural areas). Column 3 also includes racial, ethnic and language group fixed effects. Finally, column 4 adds fixed effects for regions within countries.²⁵ The magnitude of the correlation (choosing the coefficient in column 4, which includes the complete set of controls) implies that a one-standard deviation increase in tax evasion (0.44) is associated with an increase in clientelism 14.8% as large as the mean incidence and 6.6% of a standard deviation.

These results provide *prima facie* evidence of a symbiotic relationship between clientelism and the quality of democracy more generally and the state's consensual strength reflected in

²⁵The lower part of the panel reports the relevant coefficients of unobservable selection and Oster's lower bound for the β of interest. Both the Altonji's ratio and Oster's delta are larger than one, suggesting this is unlikely to be driven by omitted variables. Also, the lower bound of the effect is positive and not much smaller than the estimated coefficient.

its ability to successfully impose taxes and fees on citizens that goes beyond the Colombian case. Indeed, there is a robust and quantitatively important correlation between the degree to which citizens are willing to pay taxes and fees and clientelistic vote buying.²⁶

6 Conclusion

In this paper, we have presented evidence that there is an intimate connection at the micro level between state weakness, measured by the propensity to evade taxes, and clientelism. Though scholars have developed several models which can explain why states remain weak, the case study and historical evidence suggests that this is intimately related to clientelistic politics. Clientelism, as a personalized relationship between an individual citizen and a politician, is anathema to the provision of public goods. Patrons and clients deal in private goods, so clients see no interest in paying taxes to a state to provide public goods, while patrons see no incentive to build state institutions to provide public goods. At the same time, the weakness of the state facilitates this type of exchange. We not only documented this connection, but we also showed that such behavior is associated with many other phenomena that justify calling this a trap. People who engage in clientelism and tax evasion are reciprocal, and thus good interlocutors for political exchanges. They are relatively embedded in the political system, in contact with politicians and have well-defined ideologies. So this is not some simple issue of political alienation. However, they are also relatively uninformed about politics, because they know what they want and how to get it. They are willing to break the rules probably because the world they live in is one of expediency and little state legitimacy. Finally, while they are relatively unfavorable to democracy, they are less likely to protest, most likely because clientelism fragments society and undermines the propensity for collective action.

Looked at either from the supply or demand side, in this situation there will be little pressure to make the state stronger. If that were to happen, it would be more difficult to evade taxes and distribute clientelism. The upside would be better public good provision, but providing these is not rational for politicians (they cannot be targeted at supporters and withheld from opponents) and demanding them is not a best response for citizens engaged in clientelism.

²⁶Of course, our Colombian data has the advantage of dealing directly with potential biases in survey respondents and also of including a rich collection of additional household and individual information, which helps us control for relevant factors more convincingly and explore the potential mechanisms underpinning these correlations as in the previous sections.

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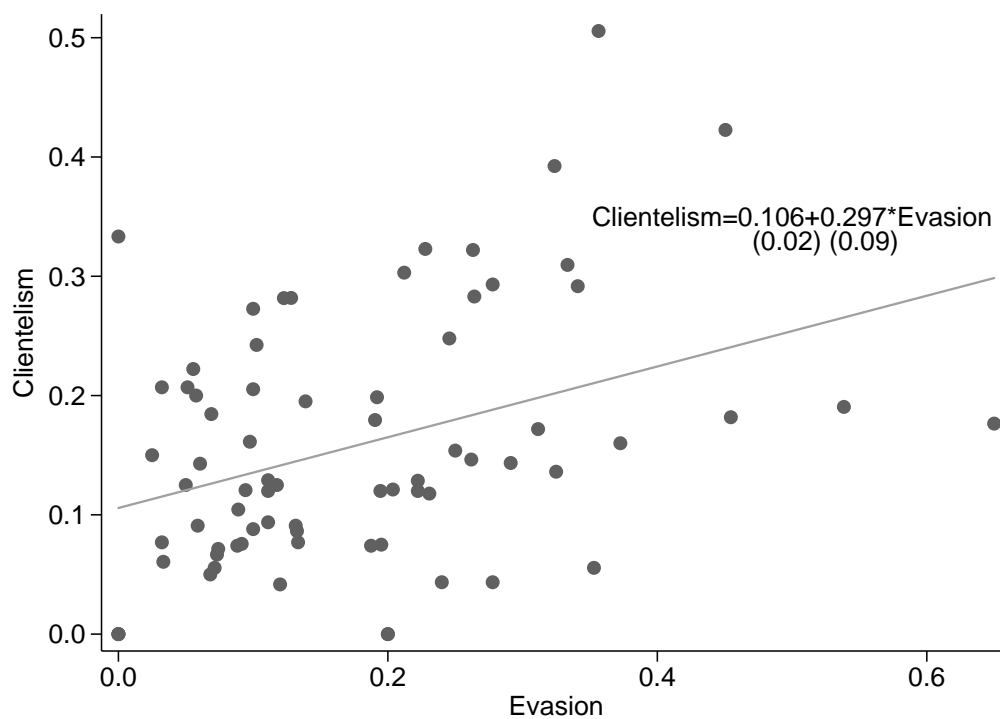
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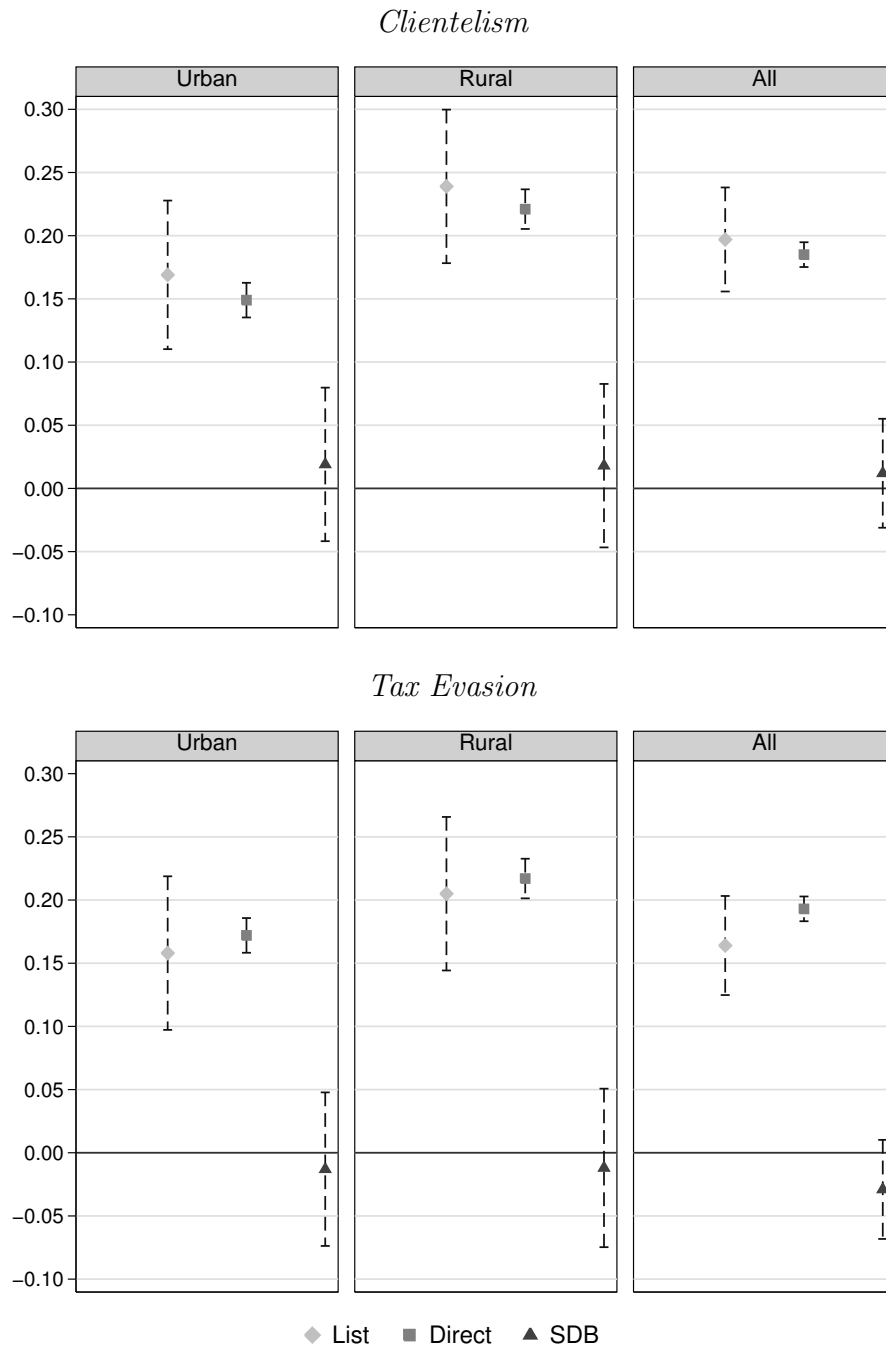
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Figure 1: Municipality-level correlation between Clientelism and Tax Evasion
Colombia, 2013



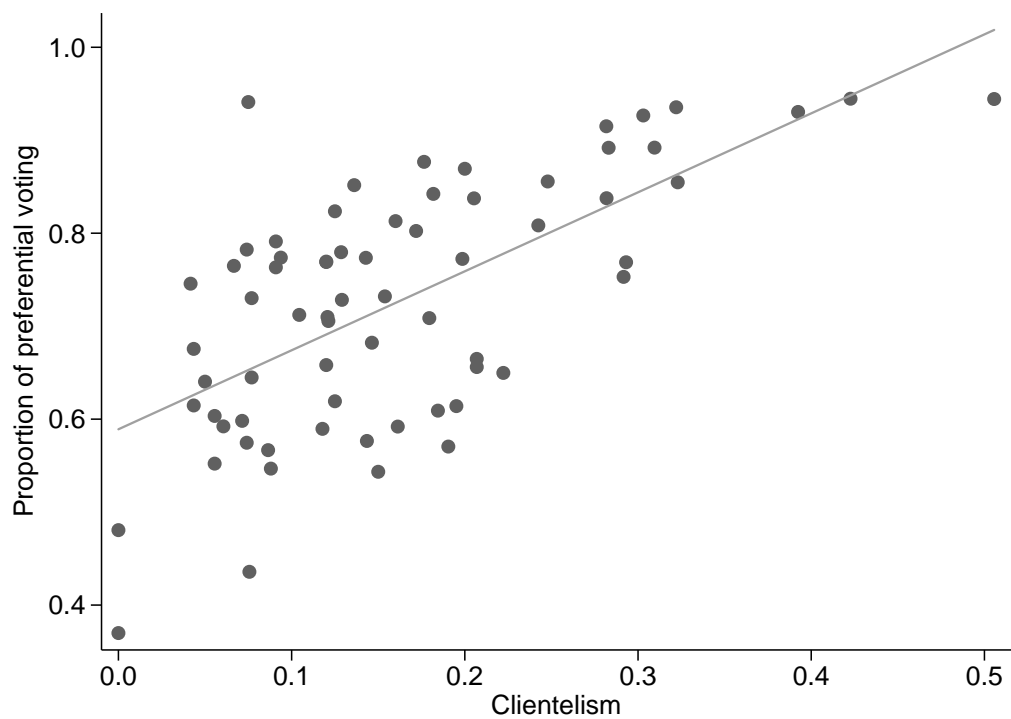
Notes: Clientelism is a dummy variable that equals one if, when deciding who to vote for, the respondent has taken into account the benefits, gifts or jobs that a candidate has offered in exchange for the vote. Tax evasion is a dummy variable that equals one if the respondent answers yes to the question: “Could you tell me if you normally accept buying without a receipt, to avoid the VAT?”

**Figure 2: Clientelism and tax evasion estimates
Colombia, 2013**



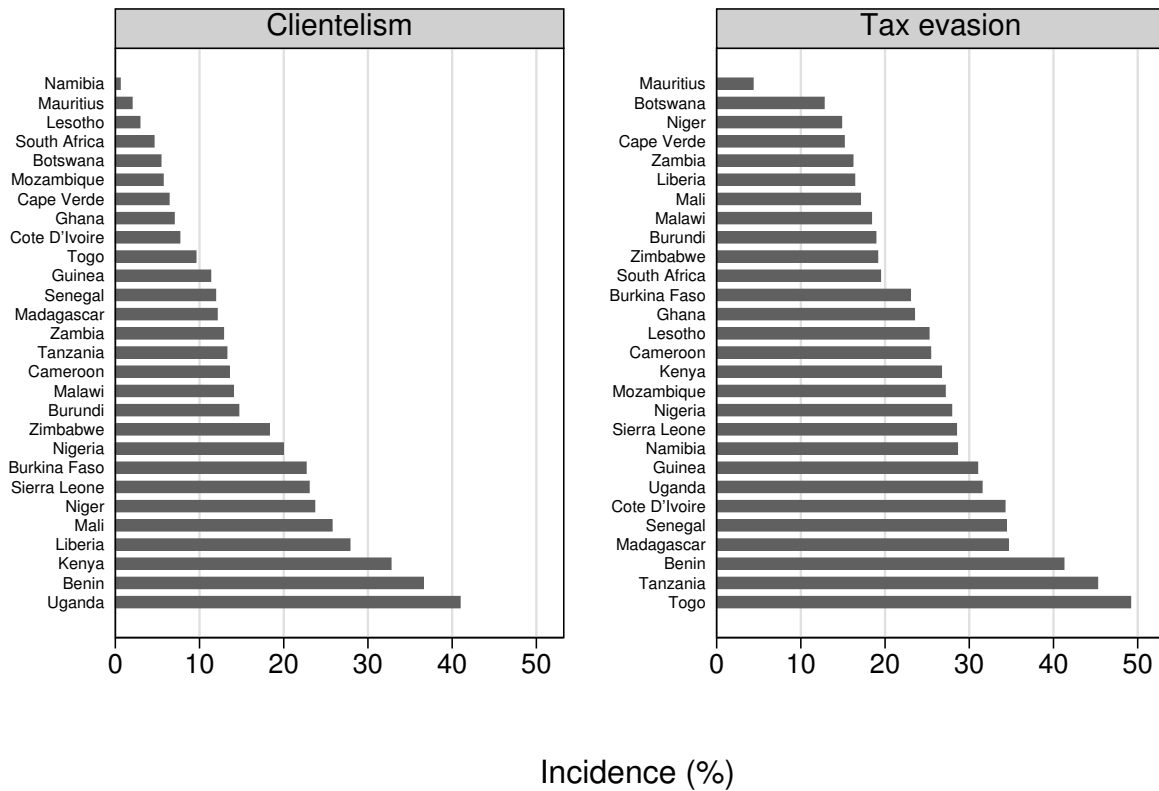
Notes: Incidence of clientelism (upper panel) or tax evasion (lower panel) as implied by the list experiment (diamond), direct question (square), and the difference between these two measures, capturing the extent of Social Desirability Bias (SDB, triangle). Lines mark 95% confidence bounds. Estimates in this figure control for age, gender, education level, wealth, color skin and dummy variables for: employed, voted in the last elections, had political leanings, believes voting is secret, is catholic, and faced an adverse shock.

Figure 3: Municipality-level correlation between preferential voting and clientelism in Colombia



Notes: Clientelism is a dummy variable that equals one if, when deciding who to vote for, the respondent has taken into account the benefits, gifts or jobs that a candidate has offered in exchange for the vote. Preferential voting share for Congressional votes in 2014.

Figure 4: Clientelism and Tax evasion incidence
Africa



Notes: Fifth round of Afrobarometer. Clientelism is measured as a dummy variable that equals one if ever received private benefits from politician in return for vote. Tax evasion is measured as a dummy variable that equals one if the respondent has or would *Refuse to pay a tax or fee to government* following a prompt asking whether he has personally done it during the past year or would do it given the chance.

Table 1: Summary Statistics

	Observations	Mean	Median	SD	Min	Max
Panel A. Colombia (167 municipalities)						
Clientelism	5,095	0.18	0.00	0.39	0.00	1.00
Tax evasion	5,398	0.19	0.00	0.39	0.00	1.00
Aqueduct	8,429	0.82	1.00	0.39	0.00	1.00
Agree with bribery	8,429	0.14	0.00	0.34	0.00	1.00
Breaking the law	8,429	0.34	0.00	0.47	0.00	1.00
Electricity	8,429	0.99	1.00	0.12	0.00	1.00
Gas system for cooking	8,429	0.41	0.00	0.49	0.00	1.00
Ideology	8,429	0.38	0.00	0.48	0.00	1.00
Information sources	8,429	1.75	2.00	1.22	0.00	7.00
Justice into own hands	8,429	0.29	0.00	0.46	0.00	1.00
Landline	8,429	0.25	0.00	0.43	0.00	1.00
Negative reciprocity	8,429	0.19	0.00	0.39	0.00	1.00
Party identity	8,429	0.47	0.00	0.50	0.00	1.00
Persuasion	8,429	0.16	0.00	0.36	0.00	1.00
Popular vote	8,429	0.39	0.00	0.49	0.00	1.00
Positive reciprocity	8,429	0.97	1.00	0.16	0.00	1.00
Protest against local government	8,420	0.17	0.00	0.38	0.00	1.39
Protest against national government	8,420	1.16	1.10	0.96	0.00	3.18
Protest against armed groups	8,420	0.34	0.00	0.55	0.00	1.79
Reach a congressman	8,429	0.08	0.00	0.27	0.00	1.00
Reach a mayor/councilor	8,429	0.23	0.00	0.42	0.00	1.00
Sewage	8,429	0.50	0.00	0.50	0.00	1.00
Trash collection	8,429	0.54	1.00	0.50	0.00	1.00
Agricultural suitability	3,130	0.73	0.74	0.16	0.37	1.00
Rainfall	3,130	0.04	0.02	0.09	0.01	1.00
Ruggedness	3,130	123.17	78.09	129.74	1.00	744.60
Elevation	3,130	1.36	1.36	1.01	0.02	3.17
Temperature	3,130	0.21	0.23	0.06	0.07	0.29
Night light intensity	3,130	30.00	19.00	26.01	0.00	63.00
Distance to main city	3,130	1.55	1.27	1.20	0.00	5.38
Distance to port city	3,130	2.26	1.97	1.12	0.01	4.63
Distance to river	3,130	0.44	0.30	0.37	0.00	1.77
Distance to the coast	3,130	1.79	1.67	1.10	0.00	4.05
Panel B. Africa (28 countries)						
Clientelism	44,234	0.16	0.00	0.36	0.00	1.00
Tax evasion	44,234	0.26	0.00	0.44	0.00	1.00

Notes: Sources are ELCA 2013 (Panel A) and Fifth round of Afrobarometer (Panel B). See Table A-1 for definitions of each of the variables.

Table 2: Clientelism and tax evasion in Colombia

	(1)	(2)	(3)	(4)	(5)
	<i>Dependent variable: Clientelism</i>				
Tax Evasion	0.114*** (0.0175)	0.117*** (0.0181)	0.0834*** (0.0184)	0.0840*** (0.0183)	0.0840*** (0.0183)
Municipality fixed effects	No	No	Yes	Yes	Yes
Individual controls	No	No	No	Yes	Yes
Geographic controls	No	No	No	No	Yes
Observations	3,256	3,168	3,168	3,168	3,168
R-squared	0.053	0.015	0.119	0.132	0.132
<u>Unobservable selection</u>					
<i>Altonji</i>			2.480	2.528	2.551
<i>Delta Oster</i>			3.116	3.862	4.055
<i>Beta Oster</i>			0.0664	0.0718	0.0730

Notes: The dependent variable, clientelism, is a dummy variable that equals one if, when deciding who to vote for, the respondent has taken into account the benefits, gifts or jobs that a candidate has offered in exchange for the vote. Tax evasion is a dummy variable that equals one if the respondent answers yes to the question: “Could you tell me if you normally accept buying without a receipt, to avoid the VAT?” *Individual controls* are age, age squared, gender, race and ethnicity. *Geographic controls* include agricultural suitability, elevation, rainfall, ruggedness, temperature, and (geodesic) distance from household location to: the coast, the closest main city (Bogotá, Medellín, or Cali), and the nearest main port city (Barranquilla, Cartagena, Santa Marta, or Buenaventura). Standard errors clustered at the community level. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

Table 3: Clientelism and tax evasion in Colombia
Delivery of public goods and services

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Dependent variable is...</i>	<i>Clientelism</i>			<i>Tax Evasion</i>		
Aqueduct	-0.0861*** (0.0171)	-0.0865*** (0.0172)	0.00375 (0.0172)	-0.0694*** (0.0156)	-0.0691*** (0.0158)	0.0177 (0.0185)
R-squared	0.008	0.008	0.106	0.005	0.005	0.092
<i>Altonji</i>			-0.042			-0.204
<i>Delta Oster</i>			-0.015			-0.059
<i>Beta Oster</i>			0.593			0.869
Electricity	-0.181*** (0.0490)	-0.188*** (0.0505)	-0.0898* (0.0506)	-0.156*** (0.0585)	-0.161*** (0.0572)	-0.102* (0.0557)
R-squared	0.003	0.003	0.107	0.002	0.002	0.092
<i>Altonji</i>			0.916			1.712
<i>Delta Oster</i>			1.090			1.122
<i>Beta Oster</i>			-0.013			-0.069
Gas system for cooking	-0.0556*** (0.0120)	-0.0589*** (0.0123)	-0.0134 (0.0180)	-0.0501*** (0.0124)	-0.0499*** (0.0130)	-0.00611 (0.0180)
R-squared	0.005	0.006	0.106	0.004	0.004	0.092
<i>Altonji</i>			0.293			0.139
<i>Delta Oster</i>			1.015			0.016
<i>Beta Oster</i>			-0.011			0.002
Landline	-0.0924*** (0.0123)	-0.0927*** (0.0124)	-0.0306* (0.0169)	-0.0677*** (0.0131)	-0.0667*** (0.0139)	-0.0335* (0.0195)
R-squared	0.010	0.010	0.107	0.005	0.005	0.092
<i>Altonji</i>			0.493			1.011
<i>Delta Oster</i>			1.045			1.381
<i>Beta Oster</i>			-0.010			-0.021
Sewage	-0.0895*** (0.0123)	-0.0942*** (0.0125)	-0.0865*** (0.0203)	-0.0620*** (0.0127)	-0.0606*** (0.0133)	0.0163 (0.0233)
R-squared	0.013	0.015	0.108	0.006	0.006	0.092
<i>Altonji</i>			11.300			-0.212
<i>Delta Oster</i>			2.075			-0.017
<i>Beta Oster</i>			-0.012			9.057
Trash collection	-0.0836*** (0.0130)	-0.0872*** (0.0131)	-0.0391 (0.0240)	-0.0569*** (0.0144)	-0.0589*** (0.0145)	0.0316 (0.0223)
R-squared	0.012	0.013	0.107	0.005	0.006	0.092
<i>Altonji</i>			0.811			-0.349
<i>Delta Oster</i>			1.661			-0.030
<i>Beta Oster</i>			-0.029			8.372
Municipality fixed effects	No	No	Yes	No	No	Yes
Individual controls	No	No	Yes	No	No	Yes
Geographic controls	No	No	Yes	No	No	Yes
Observations	5,095	4,949	4,949	5,398	5,250	5,250

Notes: Clientelism is a dummy variable that equals one if, when deciding who to vote for, the respondent has taken into account the benefits, gifts or jobs that a candidate has offered in exchange for the vote. Tax evasion is a dummy variable that equals one if the respondent answers yes to the question: “Could you tell me if you normally accept buying without a receipt, to avoid the VAT?” *Aqueduct*, *Electricity*, *Gas system for cooking*, *Landline*, *Sewage* and *Trash collection* are dummy variables that equal one if the dwelling has the respective service. *Individual controls* are age, age squared, gender, race and ethnicity. *Geographic controls* include agricultural suitability, elevation, rainfall, ruggedness, temperature, and (geodesic) distance from household location to: the coast, the closest main city (Bogotá, Medellín, or Cali), and the nearest main port city (Barranquilla, Cartagena, Santa Marta, or Buenaventura). Standard errors clustered at the community level. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

Table 4: Clientelism and tax evasion in Colombia
The role of reciprocity

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Dependent variable is...</i>	<i>Clientelism</i>			<i>Tax Evasion</i>		
Positive reciprocity	0.0916*** (0.0225)	0.0915*** (0.0225)	0.0679** (0.0265)	0.0220 (0.0331)	0.0221 (0.0331)	0.00647 (0.0344)
R-squared	0.002	0.002	0.108	0.000	0.000	0.091
<i>Altonji</i>			2.879			0.414
<i>Delta Oster</i>			1.580			0.180
<i>Beta Oster</i>			0.0274			-0.0296
Negative reciprocity	0.0792*** (0.0142)	0.0793*** (0.0142)	0.0649*** (0.0147)	0.0820*** (0.0140)	0.0820*** (0.0140)	0.0666*** (0.0174)
R-squared	0.006	0.006	0.111	0.007	0.007	0.095
<i>Altonji</i>			4.520			4.349
<i>Delta Oster</i>			2.372			1.731
<i>Beta Oster</i>			0.0398			0.0302
Municipality fixed effects	No	No	Yes	No	No	Yes
Individual controls	No	No	Yes	No	No	Yes
Geographic controls	No	No	Yes	No	No	Yes
Observations	5,095	4,945	4,945	5,398	5,245	5,245

Notes: Clientelism is a dummy variable that equals one if, when deciding who to vote for, the respondent has taken into account the benefits, gifts or jobs that a candidate has offered in exchange for the vote. Tax evasion is a dummy variable that equals one if the respondent answers yes to the question: “Could you tell me if you normally accept buying without a receipt, to avoid the VAT?” *Positive reciprocity*: equals one if “totally agree” or “agree” with statement “You always have to help those who help you”. *Negative reciprocity*: equals one if “totally agree” or “agree” with statement “whoever harms me pays for it (*el que me la hace la paga*)”. *Individual controls* are age, age squared, gender, race and ethnicity. *Geographic controls* include agricultural suitability, elevation, rainfall, ruggedness, temperature, and (geodesic) distance from household location to: the coast, the closest main city (Bogotá, Medellín, or Cali), and the nearest main port city (Barranquilla, Cartagena, Santa Marta, or Buenaventura). Standard errors clustered at the community level. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

**Table 5: Clientelism and tax evasion in Colombia
Personally reaching politicians**

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Dependent variable is...</i>	<i>Clientelism</i>			<i>Tax Evasion</i>		
Reach a congressman	0.183*** (0.0259)	0.183*** (0.0264)	0.169*** (0.0268)	0.0459** (0.0203)	0.0408** (0.0202)	0.0387** (0.0196)
R-squared	0.018	0.018	0.121	0.001	0.001	0.092
<i>Altonji</i>			12.22			18.45
<i>Delta Oster</i>			3.777			7.344
<i>Beta Oster</i>			0.143			0.0336
Reach a mayor/councilor	0.120*** (0.0153)	0.115*** (0.0157)	0.110*** (0.0156)	0.0463*** (0.0131)	0.0427*** (0.0132)	0.0227* (0.0127)
R-squared	0.017	0.016	0.120	0.002	0.002	0.092
<i>Altonji</i>			25.11			1.131
<i>Delta Oster</i>			9.706			0.468
<i>Beta Oster</i>			0.102			-0.0265
Municipality fixed effects	No	No	Yes	No	No	Yes
Individual controls	No	No	Yes	No	No	Yes
Geographic controls	No	No	Yes	No	No	Yes
Observations	5,095	4,945	4,945	5,398	5,245	5,245

Notes: Clientelism is a dummy variable that equals one if, when deciding who to vote for, the respondent has taken into account the benefits, gifts or jobs that a candidate has offered in exchange for the vote. Tax evasion is a dummy variable that equals one if the respondent answers yes to the question: “Could you tell me if you normally accept buying without a receipt, to avoid the VAT?” *Reach a politician (congressman or mayor/councilor)*: equals one if answering “yes” to: “In order to solve some problems, have you ever requested help or cooperation from... a congressman or his collaborators (congressman) ... any local authority such as mayor or councilor (mayor/councilor)”. *Individual controls* are age, age squared, gender, race and ethnicity. *Geographic controls* include agricultural suitability, elevation, rainfall, ruggedness, temperature, and (geodesic) distance from household location to: the coast, the closest main city (Bogotá, Medellín, or Cali), and the nearest main port city (Barranquilla, Cartagena, Santa Marta, or Buenaventura). Standard errors clustered at the community level. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

Table 6: Clientelism and tax evasion in Colombia
Belief in democracy

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Dependent variable is...</i>	<i>Clientelism</i>			<i>Tax Evasion</i>		
Popular vote	-0.0206* (0.0108)	-0.0207* (0.0108)	-0.0201* (0.0105)	-0.0518*** (0.0119)	-0.0542*** (0.0127)	-0.0475*** (0.0137)
Municipality fixed effects	No	No	Yes	No	No	Yes
Individual controls	No	No	Yes	No	No	Yes
Geographic controls	No	No	Yes	No	No	Yes
<i>Altonji</i>			31.28			7.162
<i>Delta Oster</i>			17			2.822
<i>Beta Oster</i>			-0.0189			-0.0314
Observations	5,095	4,945	4,945	5,398	5,245	5,245
R-squared	0.001	0.001	0.107	0.004	0.004	0.094

Notes: Clientelism is a dummy variable that equals one if, when deciding who to vote for, the respondent has taken into account the benefits, gifts or jobs that a candidate has offered in exchange for the vote. Tax evasion is a dummy variable that equals one if the respondent answers yes to the question: “Could you tell me if you normally accept buying without a receipt, to avoid the VAT?” *Popular vote* equals if “totally agree” with statement: “It is important that rulers are elected by popular vote”. *Individual controls* are age, age squared, gender, race and ethnicity. *Geographic controls* include agricultural suitability, elevation, rainfall, ruggedness, temperature, and (geodesic) distance from household location to: the coast, the closest main city (Bogotá, Medellín, or Cali), and the nearest main port city (Barranquilla, Cartagena, Santa Marta, or Buenaventura). Standard errors clustered at the community level. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

**Table 7: Clientelism and tax evasion in Colombia
Protests**

<i>Dependent variable is...</i>	(1)	(2)	(3)	(4)
	<i>Clientelism</i>		<i>Tax Evasion</i>	
Protest against local authorities	-0.0379*** (0.0142)	-0.0572*** (0.0143)	-0.0180 (0.0174)	-0.0330* (0.0178)
R-squared	0.001	0.057	0.000	0.033
<i>Altonji</i>		-2.966		-2.201
<i>Delta Oster</i>		-3.801		-3.892
<i>Beta Oster</i>		-0.0631		-0.0376
Protest against national authorities	-0.0165** (0.00680)	-0.0208** (0.00982)	-0.0160** (0.00716)	-0.0273** (0.0108)
R-squared	0.002	0.056	0.002	0.033
<i>Altonji</i>		-4.868		-2.412
<i>Delta Oster</i>		-13.29		-4.916
<i>Beta Oster</i>		-0.0221		-0.0308
Protest against armed groups	-0.0606*** (0.00968)	-0.0681*** (0.0221)	-0.0224* (0.0133)	-0.0849*** (0.0192)
R-squared	0.007	0.057	0.001	0.035
<i>Altonji</i>		-9.078		-1.359
<i>Delta Oster</i>		-8.776		-0.519
<i>Beta Oster</i>		-0.0707		-0.104
Individuals controls	No	Yes	No	Yes
Geographic controls	No	Yes	No	Yes
Municipality population	No	Yes	No	Yes
Observations	4,945	4,945	5,245	5,245

Notes: Clientelism is a dummy variable that equals one if, when deciding who to vote for, the respondent has taken into account the benefits, gifts or jobs that a candidate has offered in exchange for the vote. Tax evasion is a dummy variable that equals one if the respondent answers yes to the question: “Could you tell me if you normally accept buying without a receipt, to avoid the VAT?” *Individual controls* are age, age squared, gender, race and ethnicity. *Geographic controls* include agricultural suitability, elevation, rainfall, ruggedness, temperature, and (geodesic) distance from household location to: the coast, the closest main city (Bogotá, Medellín, or Cali), and the nearest main port city (Barranquilla, Cartagena, Santa Marta, or Buenaventura). *Protest* is the log of (one plus) the total municipal protests carried out against national authorities, or armed groups between 2005 and 2014. Standard errors clustered at the community level. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

Table 8: Clientelism and tax evasion in Colombia
Breaking norms

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Dependent variable is...</i>	<i>Clientelism</i>			<i>Tax Evasion</i>		
Breaking the law	0.0245**	0.0256**	0.0210*	0.0353***	0.0299**	0.0249**
	(0.0108)	(0.0113)	(0.0115)	(0.0114)	(0.0120)	(0.0125)
R-squared	0.001	0.001	0.107	0.002	0.001	0.092
<i>Altonji</i>			4.595			5.049
<i>Delta Oster</i>			2.500			2.065
<i>Beta Oster</i>			0.0127			0.0130
Agree with bribery	0.114***	0.114***	0.0915***	0.0965***	0.0968***	0.0794***
	(0.0174)	(0.0181)	(0.0175)	(0.0158)	(0.0159)	(0.0161)
R-squared	0.010	0.010	0.113	0.007	0.007	0.096
<i>Altonji</i>			4.007			4.580
<i>Delta Oster</i>			1.875			1.720
<i>Beta Oster</i>			0.0483			0.0365
Justice into own hands	0.0481***	0.0454***	0.0291**	0.0784***	0.0753***	0.0555***
	(0.0116)	(0.0117)	(0.0113)	(0.0121)	(0.0121)	(0.0120)
R-squared	0.003	0.003	0.108	0.008	0.008	0.095
<i>Altonji</i>			1.795			2.803
<i>Delta Oster</i>			0.974			1.107
<i>Beta Oster</i>			-0.000803			0.00578
Municipality fixed effects	No	No	Yes	No	No	Yes
Individual controls	No	No	Yes	No	No	Yes
Geographic controls	No	No	Yes	No	No	Yes
Observations	5,095	4,945	4,945	5,398	5,245	5,245

Notes: Clientelism is a dummy variable that equals one if, when deciding who to vote for, the respondent has taken into account the benefits, gifts or jobs that a candidate has offered in exchange for the vote. Tax evasion is a dummy variable that equals one if the respondent answers yes to the question: “Could you tell me if you normally accept buying without a receipt, to avoid the VAT?” *Breaking the law* equals one if “totally agree” or “agree” with statement: “To capture criminals, authorities should sometimes break the law”. *Agree with bribery* equals one if “totally agree” or “agree” with statement: “Considering how things are, sometimes paying a bribe is justified”. *Justice by herself* equals one if “totally agree” or “agree” with statement: “When the government does not punish criminals, it is okay that people take justice into their own hands”. *Individual controls* are age, age squared, gender, race and ethnicity. *Geographic controls* include agricultural suitability, elevation, rainfall, ruggedness, temperature, and (geodesic) distance from household location to: the coast, the closest main city (Bogotá, Medellín, or Cali), and the nearest main port city (Barranquilla, Cartagena, Santa Marta, or Buenaventura). Standard errors clustered at the community level. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

Table 9: Clientelism and tax evasion in Colombia
Political engagement and information

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Dependent variable is...</i>	<i>Clientelism</i>			<i>Tax Evasion</i>		
Party identity	0.0669*** (0.00998)	0.0678*** (0.0107)	0.0485*** (0.0108)	0.0445*** (0.0106)	0.0464*** (0.0105)	0.0211** (0.0107)
R-squared	0.007	0.008	0.110	0.003	0.003	0.092
<i>Altonji</i>			2.514			0.835
<i>Delta Oster</i>			1.294			0.344
<i>Beta Oster</i>			0.0117			-0.0418
Persuasion	0.123*** (0.0163)	0.123*** (0.0167)	0.126*** (0.0170)	0.0338** (0.0143)	0.0302** (0.0145)	0.0187 (0.0152)
R-squared	0.014	0.014	0.120	0.001	0.001	0.091
<i>Altonji</i>			-47.29			1.619
<i>Delta Oster</i>			-16.40			0.671
<i>Beta Oster</i>			0.131			-0.00931
Ideology	0.0437*** (0.0111)	0.0441*** (0.0115)	0.0348*** (0.0118)	0.0316*** (0.0113)	0.0322*** (0.0115)	0.0221* (0.0122)
R-squared	0.003	0.003	0.109	0.002	0.002	0.092
<i>Altonji</i>			3.710			2.191
<i>Delta Oster</i>			1.972			0.903
<i>Beta Oster</i>			0.0175			-0.00242
Information sources	-0.0112** (0.00453)	-0.0126*** (0.00463)	-0.00275 (0.00521)	-0.0139*** (0.00373)	-0.0135*** (0.00396)	-0.0120*** (0.00390)
R-squared	0.001	0.002	0.107	0.002	0.002	0.092
<i>Altonji</i>			0.279			7.779
<i>Delta Oster</i>			0.152			3.208
<i>Beta Oster</i>			0.0154			-0.00825
Municipality fixed effects	No	No	Yes	No	No	Yes
Individual controls	No	No	Yes	No	No	Yes
Geographic controls	No	No	Yes	No	No	Yes
Observations	5,095	4,945	4,945	5,398	5,245	5,245

Notes: Clientelism is a dummy variable that equals one if, when deciding who to vote for, the respondent has taken into account the benefits, gifts or jobs that a candidate has offered in exchange for the vote. Tax evasion is a dummy variable that equals one if the respondent answers yes to the question: “Could you tell me if you normally accept buying without a receipt, to avoid the VAT?” *Party Identity* equals one if answering “yes” to: “Do you remember which party you voted for mayor of your city or municipality?”. *Persuasion* equals one if respondent has tried to convince others to vote for a particular party or candidate. *Ideology* equals one if respondent has a defined ideology (left, left-center, center, right-center or right) following the question: “Often, people speak of political leanings from left and right. According to the meaning that the terms “left” and “right” have for you, what political tendency sympathizes with you?”. *Information sources* is the sum of sources used (among radio, newspapers, internet magazines, books and television) to know about the country’s situation. *Individual controls* are age, age squared, gender, race and ethnicity. *Geographic controls* include agricultural suitability, elevation, rainfall, ruggedness, temperature, and (geodesic) distance from household location to: the coast, the closest main city (Bogotá, Medellín, or Cali), and the nearest main port city (Barranquilla, Cartagena, Santa Marta, or Buenaventura). Standard errors clustered at the community level. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level.

**Table 10: Clientelism and tax evasion
Africa**

	(1)	(2)	(3)	(4)
<i>Dependent variable equals 1 if ever received private benefits from politician in return for vote</i>				
Tax Evasion	0.0718*** (0.0144)	0.0707*** (0.0141)	0.0602*** (0.0118)	0.0539*** (0.0111)
Age, Gender and Zone	No	Yes	Yes	Yes
Race fixed effects	No	No	Yes	Yes
Ethnic group fixed effects	No	No	Yes	Yes
Language fixed effects	No	No	Yes	Yes
Region Fixed Effects	No	No	No	Yes
Observations	44,234	44,234	44,234	44,234
Countries	28	28	28	28
<u>Unobservable selection</u>				
<i>Altonji</i>		65.63	5.205	3.003
<i>Delta Oster</i>		1.870	6.578	7.089
<i>Beta Oster</i>		0.0358	0.0530	0.0483

Notes: Standard errors clustered at the country level. * is significant at the 10% level, ** is significant at the 5% level, *** is significant at the 1% level. Fifth round of Afrobarometer. Tax evasion is measured as a dummy variable that equals one if the respondent has or would *Refuse to pay a tax or fee to government* following a prompt asking whether he has personally done it during the past year or would do it given the chance.

A Appendix

A.1 Data and variables

Table A-1: Variable definition and sources

Variable	Description
A. Colombia	
<i>Source is Colombian Household Panel Survey-Universidad de los Andes (Elca) unless otherwise stated</i>	
<i>Clientelism</i>	Equals one if answering “yes” to: “Could you tell me if when deciding who to vote for, you have taken into account the benefits, gifts or jobs that a candidate offered in exchange for your vote?”. Responses based on <i>list experiments</i> are based on the question: “I will read a list of five (5) things people have in mind when deciding who to vote for. I want you to tell me how many of these five things you have taken into account when voting for a candidate. Do not tell me WHICH, ONLY HOW MANY”. Then respondents are handed a card with the following options: 1. The information about the candidate in the radio or television; 2. What you read about his government plan; 3. The benefits, gifts, or jobs the candidate offered you in exchange for your vote ; 4. The conversations you had with your friends about the candidate; 5. The candidate’s party. The item in bold appears only for a randomly selected treatment group of respondents.
<i>Tax evasion</i>	Equals one if answering “yes” to: “Could you tell me if you normally accept buying without a receipt, to avoid the VAT?”. Responses based on <i>list experiments</i> are based on the question: “Could you tell me if when deciding who to vote for, you have taken into account the benefits, gifts or jobs that a candidate offered in exchange for your vote?”. Then respondents are handed a card with the following options: 1. You choose the cheapest brand even if it is lower quality; 2. You wait for sales in the best brands; 3. You buy in cheaper outlets even if they are far from your home; 4. You accept buying without a receipt, to avoid paying the VAT ; 5. You buy bulk. The item in bold appears only for a randomly selected treatment group of respondents.
<i>Age</i>	Self-reported age (in years).
<i>Agricultural suitability</i>	0-1 index for variation in potential crop yield, measured in calories per hectare per year. <i>Source: Galor and Özak (2016), Available at https://ozak.github.io/Caloric-Suitability-Index/</i>
<i>Agree with bribery</i>	Equals one if “totally agree” or “agree” with statement: “Considering how things are, sometimes paying a bribe is justified”.

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Table A-1 – Variable definition and sources, continued from previous page

Variable	Description
<i>Aqueduct</i>	Equals 1 if household dwelling has aqueduct system.
<i>Breaking the law</i>	Equals one if “totally agree” or “agree” with statement: “To capture criminals, authorities should sometimes break the law”.
<i>Distance to the coast</i>	Geodesic distance between household and nearest coast. <i>Source: Socrata, available at https://evergreen.data.socrata.com.</i>
<i>Distance to main city</i>	Geodesic distance between household and the nearest main city (Bogotá, Medellín and or Cali).
<i>Distance to port city</i>	Geodesic distance between household and the nearest main port city (Barranquilla, Cartagena, Santa Marta or Buenaventura).
<i>Electricity</i>	Equals 1 if household dwelling has electric system.
<i>Elevation</i>	Household elevation. <i>Source: Own calculations from Elca and Minnesota Geospatial Information Office, http://www.mngeo.state.mn.us/chouse/elevation/raster.html.</i>
<i>Ethnicity</i>	Dummy variables for each of eight possible ethnic groups (self-reported).
<i>Gas system for cooking</i>	Equals 1 if household dwelling is connected to the gas public network.
<i>Gender</i>	Equals one if respondent’s gender is Male.
<i>Household income</i>	Standardized household income. Sum of (monthly) labor and non-labor income.
<i>Ideology</i>	Equals one if respondent has a defined ideology (left, left-center, center, right-center or right) when responding to the question: “Often, people speak of political leanings from left and right. According to the meaning that the terms “left” and “right” have for you, what political tendency sympathizes with you?”.
<i>Information sources</i>	Sum of sources used (among radio, newspapers, internet magazines, books and television) to know about the country’s situation.
<i>Justice by herself</i>	Equals one if “totally agree” or “agree” with statement: “When the government does not punish criminals, it is okay that people take justice into their own hands”.
<i>Landline</i>	Equals 1 if household dwelling has landline.
<i>Negative reciprocity</i>	Equals one if “totally agree” or “agree” with statement “whoever harms me pays for it (<i>el que me la hace la paga</i>)”.

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Table A-1 – Variable definition and sources, continued from previous page

Variable	Description
<i>Party Identity</i>	Equals one if answering “yes” to: “Do you remember which party you voted for mayor of your city or municipality?”.
<i>Persuasion</i>	Equals one if person answered “frequently” or “sometimes” to the question “During elections, some people try to convince others to vote for a particular party or candidate. How often have you tried to convince others to vote for a party or candidate?”
<i>Popular vote</i>	Equals if “totally agree” with statement: “It is important that rulers are elected by popular vote”.
<i>Positive reciprocity</i>	Equals one if “totally agree” or “agree” with statement “You always have to help those who help you”.
<i>Preferential voting</i>	Proportion of preferential voting in the 2014 Congressional elections (share of total votes cast for congress that are cast for any specific candidate in an open list). <i>Source: Computed using data from Registraduría Nacional.</i>
<i>Protests</i>	Log of (one plus) the total municipal protests carried out against the local government, national government or armed groups between 2005 and 2014. <i>CINEP, Centro de Investigación y Educación Popular.</i>
<i>Race</i>	Dummy variables for each possible respondent’s race. Respondent’s races are Black/African, White/European, Colored/Mixed Race, Arab/Lebanese/North African, South Asian (Indian, Pakistani, etc.), East Asian (Chinese, Korean, Indonesian, etc.) or Other.
<i>Rainfall</i>	Average historical (\approx 1960-1990) rainfall on the household location. <i>Source: WorldClim - Global Climate Data, available at http://worldclim.org/current.</i>
<i>Reach a congressman</i>	Equals one if answering “yes” to: “In order to solve some problems, have you ever requested help or cooperation from... a congressman or his collaborators”.
<i>Reach a mayor/councilor</i>	Equals one if answering “yes” to: “In order to solve some problems, have you ever requested help or cooperation from... any local authority such as mayor or councilor (mayor/councilor)”.
<i>Ruggedness</i>	I Terrain Ruggedness Index originally devised to quantify topographic heterogeneity in wildlife habitats providing concealment for preys and lookout posts. Sum of squares of differences in elevation among contiguous grids. <i>Source and more details in Nunn and Puga (2012), available at http://diegopuga.org/data/rugged/#country</i>
<i>Sewage</i>	Equals 1 if household dwelling has sewage system <i>WorldClim - Global Climate Data, available at http://worldclim.org/current.</i>
<i>Temperature</i>	Average historical (\approx 1960-1990) temperature on the household location.

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Table A-1 – Variable definition and sources, continued from previous page

Variable	Description
<i>Trash collection</i>	Equals 1 if household dwelling has trash collection service.
<i>Wealth index</i>	First principal component following a <i>principal component analysis</i> on a set of reported household assets and dwelling characteristics. See Bernal et al. (2014).

B. Africa

Source is the Fifth Round of Afrobarometer

<i>Clientelism</i>	Equals one if answering “Once or twice”, “A few times” or “Often” to: “And during the last national election in [20xx], how often, if ever did a candidate or someone from a political party offer you something, like food or a gift or money, in return for your vote?”.
<i>Tax evasion</i>	Equals one if answering “No, but would do if had the chance”, “Yes, once or twice”, “Yes, several times” or “Yes, often” to: “Here is a list of actions that people sometimes take as citizens. 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?”.
<i>Age</i>	Self-reported age (in years).
<i>Ethnic group</i>	Dummy variables for self-reported ethnic group. The question is formulated as follows: “Let us get back to talking about you. What is your ethnic community, cultural group or tribe?”. There are 532 different ethnic groups in total.
<i>Gender</i>	Equals one if respondent’s gender is Male.
<i>Language</i>	Dummy variables for self-reported home language (“Which language is your home language?”). There are 469 different languages in total.
<i>Race</i>	Dummy variables for self-reported race. Respondent’s races are Black/African, White/European, Colored/Mixed Race, Arab/Lebanese/North African, South Asian (Indian, Pakistani, etc.), East Asian (Chinese, Korean, Indonesian, etc.) or Other.
<i>Region</i>	Dummy variables for regions within countries. 465 different regions in total.
<i>Zone</i>	Dummy variables for Urban, Semi-urban or Rural.

A.2 Unobservable selection and coefficient stability

A common heuristic for evaluating robustness of results to omitted variable bias is to observe coefficient movements after inclusion of controls.²⁷ The idea behind this heuristic is that unobservables are related to some degree with observables. Consider the regression model:

$$Y = \beta X + \gamma W_1 + W_2 + \varepsilon.$$

We are interested in the parameter β and variables in W_2 are not observed. Denote the coefficient resulting from the short regression of Y on X as $\hat{\beta}$ and the R-squared from that regression \hat{R} . Also, define the coefficient from the intermediate regression of Y on X and W_1 (a vector of variables) as $\tilde{\beta}$ and the R-squared as \tilde{R} . Finally, define R_{max} as the R-squared from a hypothetical regression of Y on X , W_1 and W_2 .

The most basic calculation to test coefficient stability was proposed by Altonji et al. (2005) and is computed as:

$$Altonji = \frac{\tilde{\beta}}{\hat{\beta} - \tilde{\beta}}.$$

If theory suggests that $\hat{\beta}$ is overestimated (and assuming that the relation between unobservables are observables exist), the inclusion of observables tends to decrease (in absolute value) the coefficient. Thus, higher *Altonji* values are associated with coefficient stability. In practice, an *Altonji* number smaller than one ($\tilde{\beta} < 0.5\hat{\beta}$) suggests that the effect isn't strong enough to not be explained by unobservables. In other words, *Altonji* numbers under one lead to skepticism about β truly capturing a relationship between X and Y rather than reflecting the incidence of omitted factors.

A problem with this first indicator, however, is that controls unrelated with both the dependent variables and the interest variable can lead to erroneous conclusions. Indeed, the inclusion of this type of controls doesn't change the β coefficient, but still leads to large *Altonji* values. Consequently, following to Bellows and Miguel (2009) and Altonji et al. (2011), assuming a plausible value for R_{max} we can estimate a corrected *Altonji* as:

$$\frac{\tilde{\beta}(\tilde{R} - \hat{R})}{(\hat{\beta} - \tilde{\beta})(R_{max} - \tilde{R})}.$$

Now, high *Altonji* values are possible only if the coefficient remains stable while relevant controls are included. Notice that this ratio gives valuable information when the coefficient in the regression with controls has the same sign as the coefficient in the baseline (without controls). If this is not the case, then clearly observables may explain the correlation between the two variables, let alone unobservables.

Focusing on the case where the sign remains stable, the ratio intuitively tells us the degree of selection on unobservables relative to observables which would be sufficient to explain away the estimated relationship between X and Y . If this is the case, large positive values suggest that the correlation is not likely driven by omitted variables, as unobservable selection must be much larger than selection based on observables. Negative values may arise too, and would suggest that after controlling for observables, the coefficient tends to be strengthened. Therefore, unobservables should be selected in a different direction than observables to eliminate the effect, which seems implausible in most applications. In short, with stable signs, large positive

²⁷Our discussion of the methods follow mainly Oster (2019).

values or negative values for the ratio help rule out that the correlation is spuriously reflecting the role of unobservables.

Oster (2019), however, develops the asymptotic properties for this estimator finding that even the corrected *Altonji* ratio is adequate only with one control. With more controls, one needs to recognize the share of variation in X accounted for by control variables. To do so, she gives guidelines for choosing values for R_{max} .²⁸ Also, she proposes an alternative estimator for the importance of unobserved to observed variable selection (onwards δ *Oster*), and develops an estimator for the lower bound of the effect of interest (onwards β *Oster*). She suggests that a $\delta = 1$ (equal selection) may be an appropriate lower bound, since researchers typically focus their data collection efforts on the controls they believe *ex ante* are the most important (Angrist & Pischke, 2010).

²⁸Using simulations, she shows that an adequate guess is $\min[1, 1.3\tilde{R}]$.