Still for Sale: The Micro-Dynamics of Vote-Selling in the United States, Evidence From a List and Conjoint Experiments

Hector Bahamonde

*Assistant Professor • Instituto de Ciencias Sociales • O′Higgins University

hector.bahamonde@uoh.cl

www.HectorBahamonde.com

November 14, 2018

Abstract

In nineteenth-century United States politics, vote buying was commonplace. Nowadays, vote-buying seems to have declined. Yet, the literature emphasizes vote-buying, ignoring the micro-dynamics of vote-selling. We seem to know that vote-buyers can no longer afford this strategy, however, we do not know what American voters would do if offered the chance to sell their votes. Would they sell their votes (and at what price) or would they consistently opt-out of vote-selling? Exploiting a novel experimental dataset representative at the national level, 1,479 U.S. voters participated in an online list experiment in 2016 and the results are striking: Approximately 25

Keywords— vote-buying; vote-selling; clientelism; conjoint experiments; list experiments; United States

Please consider downloading the last version of the paper here.

I.   VOTE-SELLERS *and* VOTE-BUYERS

Many advanced democracies were the first clientelistic political systems. For instance, Stokes et al. (2013, 200) explain that in the nineteenth-century United States, "vote buying was commonplace," and that it was "the major urban political institution in the late nineteenth century" (Erie 1990, 2). In Chicago, New York City, Newark, and other large American cities, votes were exchanged for "cash, food, alcohol, health care, poverty relief, and myriad other benefits" (Stokes et al. 2013, 200). The street price of the right to vote freely was low. Bensel explains that "[voters] handed in a party ticket in return for a shot of whiskey, a pair of boots, or a small amount of money" (in Stokes et al. (2013, 227)). In general, students of American political development have analyzed vote-buying in more detail, confirming both its early development and its generalized practice (Bensel 2004; Campbell 2005).[1]

Nowadays vote-buying seems to have declined considerably for two competing explanations. First, Stokes et al. (2013, 201) have shown that industrialization drove up the electorate's median income making vote-buying more expensive for party machines. However, Kitschelt and Wilkinson (2006, 320) explain that "it is not economic development that accounts for the [...] decline of [vote-buying]," but lower levels of "[s]tate involvement in the public sector." Regardless, clientelist linkages are now rare. In fact, Figure 1 suggests—using survey data from the United States—that 93.6% of respondents have "never" received a clientelistic offer from a political party.[2]

Yet, the clientelism literature should "bring the voters back in." There is a solid "vote-buying" literature, but we lack a proper "vote-selling" *body* of research. A unified framework that stresses the preferences and incentives of both sellers *and* buyers in the literature is missing. Thus, this paper's analytical contribution is to tackle this problem as a story of demand *and* supply, by explicitly considering the preferences of those who have the votes (voters), *and* that which demands them (parties).

This reconceptualization is necessary since several questions remain unanswered—and worryingly most of them pertain to vote-*sellers*. For instance, *What would voters do, if offered the chance to sell their votes? Would they sell their votes (and at what price), or would they consistently opt-out of vote-selling?* Except for a number of important studies (Hicken et al. 2015, 2018; Corstange 2012; Nichter and Peress 2017), the emphasis remains on studying vote-*buying*. In fact, Nichter and Peress

---

1. For the British case during the Victorian era, see Kam (2017).
2. A very small percentage (4.8%) report to have received some kind of clientelistic offer from a political party.

([2017](#)) explain that studies continue to view clientelism typically as a top-down process, generally overlooking citizens' demands.

To illustrate the issue at hand, Figure 1 shows responses to whether a candidate or a member of a political party has offered something in exchange for people's votes, *completely ignoring voters' preferences*. Indeed, the figure represents the canon of the clientelism literature, begging the question if survey respondents answering "never" *would* still be willing to sell their votes. I contend that this *demand-side bias* gives an incomplete picture because overlooking the supply-side gives lie the falsely optimistic impression that U.S. voters systematically *oppose* vote-buying and "thus" almost *never* engage in clientelism (as Figure 1 strongly suggests).
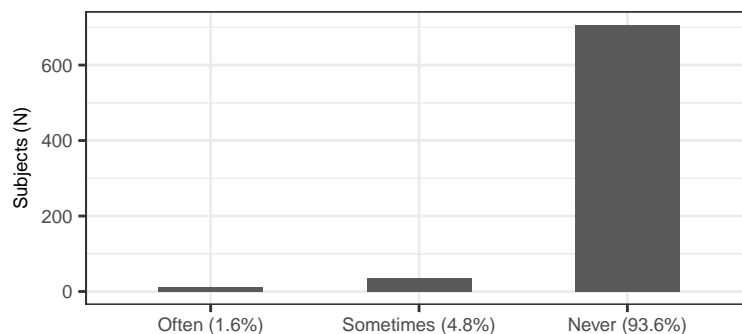

Figure 1: Frequency of Clientelism in the United States (2010).
    Note: *Figure shows the frequency of survey respondents, N = 755.*
    Source: *LAPOP, 2010 wave for the United States. Question is* `clien1`: *"In recent years and thinking about election campaigns, has a candidate or someone from a political party offered you something, like a favor, food, or any other benefit or object in return for your vote or support? Has this happened often, sometimes, or never?"*

Importantly, most contributions to vote-selling are generally formal/theoretical rather than empirical (Vicente and Wantchekon 2009). Thus, previous empirical studies do not offer satisfactory answers to questions about vote-selling. A methodological contribution of this paper is to shed some light on these issues by leveraging an experimental design.

In 2016, a novel dataset representative at the national level was collected. A total of $1,479$ U.S. voters participated in a list and a conjoint experiments between March $2nd$ and March $6th$. Thanks to this experiment, it was possible to identify the demographic factors that would make U.S. voters more likely to sell their votes, at what price, and whether they would systematically lie about

selling their votes. In addition, a conjoint experiment was implemented to capture—in a novel and unbiased way—support levels towards democracy. Given that democracy is a multi-dimensional concept, the conjoint analyses suggests that lower levels of specific democratic principles are likely to produce hypothetical vote-sellers.

The results are striking. The list data from the nationally representative sample suggests that a sizable portion of U.S. voters are willing to sell their vote (approximately 25%), would sell it at an optimal price of $730, and would systematically lie about it (approximately 8%). Given that these data are representative at the national level—and that this is not a convenient sample—these findings are surprising. Democrats and liberals are systematically more likely to sell than Republicans. Education and income levels do not seem to have a systematic impact on vote-selling. In turn, the conjoint data suggest that while democratic values of U.S. voters are in good shape, survey respondents who systematically do not value horizontal accountability, particularly between the president and the Congress, sell their vote systematically more.

While this paper essentially describes the phenomena, it leaves for future research further considerations about the causes of hypothetical vote-selling in the United States. Ultimately, this paper is an attempt to bridge the gap between the supply side and the demand side, i.e. vote-sellers and vote-buyers, by reporting unprecedented high levels of hypothetical vote-selling.

While we believe describing a social phenomenon—such as the existence of high levels of willingness to sell—is still a valuable exercise *per se*, it is more so if done in a "crucial case" design framework, specifically, a "least-likely" design. As Levy (2008, 12) explains, "[i]nferential leverage from a least likely case is enhanced if our theoretical priors for the leading alternative explanation make it a most likely case for that theory." The vote-buying literature (which mostly considers developing countries) describes vote-sellers as poor (Weitz-Shapiro 2014, 12), uneducated (González-Ocantos, Kiewiet de Jonge, and Nickerson 2014), and undemocratic (Carlin and Moseley 2015). Previous literature, then, informs us that the willingness to sell votes should be low, making the United States—a developed country—a "hard case" for vote-selling. Thus, the counterintuitive results presented in this paper make our efforts worth pursuing.

In a highly controversial pair of articles, Foa and Mounk (2016, 7) document a deep "crisis of democratic legitimacy [which] extends across a [...] wider set of indicators" in the United States. They find that 26% of millennials declare that it is "unimportant" in a democracy for people to "choose their leaders in free elections" (Foa and Mounk (2016, 10), and Foa and Mounk (2017)).

These findings raise a number of (unanswered) questions regarding the actual value citizens give to American electoral institutions, possibly undermining the legitimacy of the integrity of voting. *Is voting "unimportant" enough to make U.S. citizens sell their votes, if offered the possibility?*

Leveraging the ability of conjoint experiments to study attitudes towards multi-dimensional concepts, a conjoint experiment was implemented to study attitudes towards democracy. Democracy, as a concept, is multi-dimensional (Munck and Verkuilen 2002). Consequently, to capture the complexity of these attitudes towards the concept, a novel method was developed. This strategy builds directly on Carlin (2018) and Luna (2006), who challenge the standard practice of asking survey respondents *directly* about their levels of democratic support. Instead, and building on O'Donnell (1998), I operationalize "support for democracy" by specifying three components—liberal, republican, and democratic—which in turn, have a number of sub-dimensions while each sub-dimension has its corresponding survey questions. Unsurprisingly, I find that levels of democratic support in the United States are high in all three dimensions.

In particular, using the estimated individual probabilities of vote selling—as per the list experiment—as dependent variables and the set of chosen attributes of the conjoint experiment as independent variables, I can observe which specific democratic principles show scores low enough to produce hypothetical vote-sellers. I find that likely-sellers have lower levels of support for checks on presidential power, which in turn pertains to what O'Donnell (1998) calls "horizontal accountability." The paper leaves the corresponding explanations for future research.

The next section gives an historical account of vote-buying and vote-selling in the United States. The section is also an effort to situate both within a historical context. It particularly shows how vote-buying and vote-selling transitioned from important institutions in American elections, to scarcely practiced electoral methods. The following section explains the measurement, experimental strategies, and empirical findings. The last section offers some working hypotheses and possible lines for future research.

4

II. Vote-Selling and Patronage in the United States: A Brief Historical Account

While all of the U.S. states made bribery of voters illegal early in U.S. history, these laws were purposely ignored. Well before the Gilded Age (1877-1896), a number of norms aimed to prohibit bribery, clientelism, and patronage. For instance, as early as 1725, the New Jersey legislature had already outlawed a number of electoral malpractices (Bensel 2004, 59). However, these restrictions were systematically bypassed. To circumvent property qualifications, for instance, it was common for office-seekers (and their supporters) to buy "freeholds for landless men in return for their vote" (Campbell 2005, 6), a practice known as "fagot voting." Since it was a coercive bribe, after "the election, the land was simply returned to the original owner" (6).

Weak institutions, poor bureaucracies, and bad-quality record-keeping[3] helped to foster a number of electoral malpractices. First and foremost, most states did not have actual registration laws, making voter eligibility difficult to determine (Argersinger 1985, 672). Historians frequently report that judges at polling places had a hard time determining not only the age of the potential voter,[4] but also whether the prospective voter was a U.S. citizen, especially in cases that involved newly naturalized immigrants with strong foreign accents (Bensel 2004, 20). Consequently, often times it was at the judge's discretion whether to let prospective voters cast a ballot. Since judges were party appointees (Argersinger 1985, 672), their discretionary powers were systematically used to shape electoral outcomes.

Low literacy levels helped to sustain vote-selling in the United States as well. In places like Kentucky and Missouri, voters were required by law to verbally announce their choices at the polling places, instead of using party tickets (Bensel 2004, 54). The *viva voce* method was convenient for

---

3. The U.S. Bureau of the Census did not exist. Consequently, it was relatively easy to invent names, "repeat," or use any other subterfuge to "stuff the ballot box." In fact, "a St. Louis politician admitted registry fraud but argued that there was no proof that the names he copied into the registry were of real people and, therefore, no crime had been committed" (Argersinger 1985, 680).

4. Judges used as a rough proxy whether the prospective voter had the ability to grow a beard (Bensel 2004, 20).

party workers who usually swarmed around the polling places. Eventually, however, this method was supplanted with the ticket system.

The "party strip" or "unofficial" ballot system permitted all sorts of fraudulent election practices, too. Party tickets were produced by the parties themselves. Since tickets varied by size and color, it made "the voter's choice of party a public act and rendered voters susceptible to various forms of intimidation and influence while facilitating vote buying" (Argersinger 1985, 672). Similarly, Rusk (1970, 1221) explains that distinctive ticket colors and shapes, "assured instant recognition of the ballot by the voters [and] party workers." Reynolds and Mccormick (1986, 836) present similar evidence. And, since party workers were hired to monitor the voting window (Argersinger 1985, 672), this gave ample opportunity to punish (or reward) voters accordingly.

The ticket system required very strong party machines, which in turn, required considerable economic resources to make it work. Political machines were not only oiled with money, however. On the one hand, many "ticket peddlers" (672) were volunteers (Bensel 2004, 17), saving some of the costs needed to maintain the machine. Most of these volunteers, "enjoyed the patronage of elected party officials by holding government jobs, drawing public pensions, servicing government contracts, or enjoying special licensing privileges" (17). On the other, political appointees, "from janitor to secretary of state," and some corporations too, donated part of their salaries on a yearly basis (Reynolds 1980, 197). Parties, then, amassed huge amounts of money.

With all these resources flooding the polls on election day, voting was truly an interesting spectacle. On election day, party agents would offer voters plenty of liquor as an incentive to vote their ticket. Hence, "the street or square outside the voting window frequently became a kind of alcoholic festival in which many men were clearly and spectacularly drunk [up to the point that] some could not remember whether or not they had voted" (Bensel 2004, 20). American elections, even before the Gilded Age, were engineered according to these "principles." When running for the Virginia House, a young George Washington "spent nearly 40 pounds—a considerable sum for the day—on gallons of rum, wine, brandy, and beer; all used to win over the votes of his neighbors" (Campbell 2005, 5).[5]

The *modus operandi* of clientelism has changed, and both the frequency of vote-buying/selling, and the importance of party machines, have declined. Scholars have pointed out that "party machines are a thing of the past" (Stokes et al. 2013, 230). However, there are still some contemporary

_____

5. $1,250 in 2017 U.S. dollars. Conversion based on Williamson (2018).

accounts of vote-buying/selling in American elections. For instance, Campbell (2005, 243-244) explains how a Democratic leader in Logan County, West Virginia, accepted $35,000 in cash in exchange for supporting Senator Kennedy. As the Democratic leader explained, "this money was for one purpose: 'We bought votes with it [...] that's the way real politics works."' Other examples are the famous primary election in March 1972 in Chicago (262) or the elections at the coal-rich Appalachian mountains during the 1980s (275). Similarly, non-academic sources find that during the 2010 elections, "selling votes [was] common type of election fraud" (Fahrenthold 2012). Others find that "[v]ote-buying is extremely common in *developed* [...] countries" (Leight, Pande, and Ralston 2016, 1). *If vote-buying is "a thing of the past," why do we still see it? How common vote-selling is, then?* The next section attempts to quantify—in an unbiased way—the willingness to sell votes in a representative sample of U.S. voters.

III. Vote-Selling in an Experimental Context

List Experiment: Estimating Hypothetical Willingness to Sell. The study of individual preferences depends on truthful answers. However, there might be circumstances under which individuals might not want to answer truthfully due to social pressure. For instance, to avoid being judged by the interviewer, individuals might not want to reveal that they have done something illegal, like selling one's vote. If this systematic source of bias is not considered, it will pose threats to causal inference. List experiments, among other techniques, are well suited to elicit truthful answers (Blair 2015).

While list experiments are common, researchers unfortunately "[utilize] only a difference-in-means estimator, and [do] not provide a measure of the sensitive item for each respondent" (Glynn 2013, 159). Fortunately, Blair and Imai (2012), and Imai, Park, and Greene (2015) provide a statistical framework to more efficiently analyze list data. There are a number of advantages in using statistical methods to analyze list experiments data. First, using statistical methods allows for inferring who answered "yes" to the sensitive item—in this paper, this is a fundamental feature. A statistical approach of the list data allowed us to infer individual probabilities of vote-selling. Second, the statistical analyses permitted studying the relationship between preferences over the sensitive item (i.e. vote-selling) and an individual's characteristics, such as gender, income, party identification, among others. Third, since a "direct" question over the sensitive item was included in the design, it

was also possible to estimate the amount of social desirability bias.

Experimental Design. Despite all these methodological refinements, most studies about vote-buying/selling have been conducted in developing countries only, overlooking a number of interesting questions about developed countries. For instance, González-Ocantos, Kiewiet de Jonge, and Nickerson (2014) designed a list experiment to study *hypothetical vote-buying* norms in Latin America. Employing a similar strategy, this paper exploits variance of an online survey list experiment conducted in the United States in which subjects were asked whether they would sell their votes. Since the focus of this study is on the willingness to sell, the ability of list experiments to elicit truthful preferences regardless of whether the behavior is real, or hypothetical, seems the ideal strategy to pursue. The data (N=1,479) were collected in 2016 and are representative at the national level.[6] Figure OA1 shows the geographical distribution of survey respondents broken by party identification.

The experiment was framed as a study about crime in the United States, not a study about vote-selling.[7] Before splitting the subject pool into their respective experimental conditions, participants were asked to read an excerpt in which four illegal activities were described (including vote-selling). All were formatted as pieces of news. The idea was to explain to "newsreaders" what "vote-selling" was.
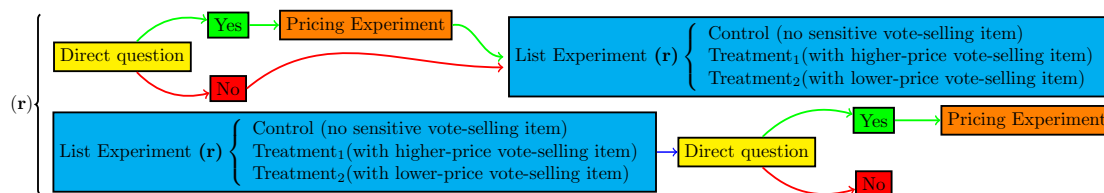

Figure 2: Experimental Flow of the List Design.
Note: *This figure shows the flow of the list experiment. Notice that (1) the order in which experimental subjects answered both the direct question and the list experiment was randomized, (2) there are two treatments, one with a selling price of $100 ("low") and one with a selling price of $500.*

To prevent possible priming effects,[8] and as suggested in Figure 2, the order in which experimental

---

6. The data were collected by *Research Now SSI* between March 2*nd* and March 6*th*. Survey respondents belong to the online panel owned and administered by SSI. Notice of IRB exemption Protocol #E16-292 is kept in file at the Office of Research and Regulatory Affairs of ⬚ University.

7. To isolate the risks and costs associated with engaging in any illegal activity, the next sentence was included: "assuming you would not go to jail."

8. Blair and Imai (2012, 54) explain that asking the direct question to individuals in the treated group might bias

subjects answered the direct question, and the list experiment, was randomly assigned. To be sure, all subjects answered both the direct question and the list experiment. To further prevent the possibility of biased answers when asking the direct question to individuals in the treated group, the direct question stated that there would be assigned, at random, the hypothetical possibility to do one of the illegal things mentioned previously in the excerpt. However, all participants were directly asked whether they would be interested in selling their votes. Direct answers were then used to estimate the proportion of "liars."

Subjects answering "yes" to the direct question, answered as a follow-up a pricing experiment in which they were asked to put a price on their votes. Subjects who answered "no" to the direct question, were asked a follow-up question asking them whether they were sure they did not want to sell their votes. Following standard practice in marketing research, participants slid two handles, one indicating which price was considered "too cheap," and another indicating which price was considered "too high" for one's vote. Both sliders ranged from \$0 to \$1,000, in \$1 increments. The intersection of the "too cheap" and "too high" empirical distributions was used to estimate the optimal selling price for a vote.

The list experiment contemplated one control, and two possible treatments, each with different vote-selling prices. Since it is difficult to price a vote, and based on a number of pretests, I decided to consider both an arbitrarily low (\$100) *or* an arbitrarily high (\$500) price. Participants randomly assigned to the treatment condition, only answered one of these two treatments. More than hard pricing tests, these two treatments account for (possible) different elasticities that might have interacted with individual socio-economic backgrounds, mainly income.[9]

Moving forward, subjects randomly assigned to the control condition answered the following question:

```
Now, you will have to type HOW MANY, if any, of the following illegal activities
    you might engage in, assuming you would not go to jail.


(1) steal an iPod from a large department store
(2) speed on the highway because you're late for work/school
(3) download your favorite music from the internet illegally
```

the results.

9. Holland and Palmer-Rubin (2015, 1189) explain that "the poor are thought to be more susceptible to vote buying."

> Type in HOW MANY (NOT WHICH), if any, of these things you would do.

In turn, subjects randomly assigned to the treatment condition answered one of the following two treatments. Subjects assigned to the "low" price condition read the exact same vignette, but the next line was added in the third place: (3) sell your vote to a candidate for $100. Those assigned to the "high" price condition read the following line: (3) sell your vote to a candidate for $500.[10]

Figure 3 shows the distinct frequencies of participants declaring how many (if any) illegal things participants would do. Notice that the figure shows the total number of items, not which ones. For instance, a frequency of "3" does not mean the frequency of the third item, but the total number of individuals answering that they would do three of the illegal activities described in the vignette.[11] The order of the items was not randomized so as not to violate the stable unit treatment value assumption, or "SUTVA."[12]
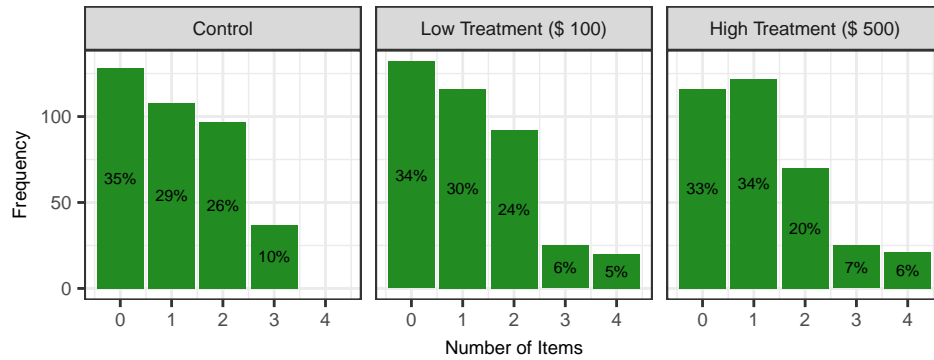

Figure 3: **Frequency and Percentages of Subjects Declaring How Many (if any) Illegal Things They Would Do**.
Note: *Notice that the X-axis denotes the number of items, not which ones.*

List Experiment: Would U.S. citizens sell their vote? Following the advice of Blair and Imai (2012) and Blair et al. (2016), the list data were analyzed using a statistical multivariate

---

10. Since one of the two sentences was added, item (3) download your favorite music from the internet illegally was moved to the fourth place.

11. The experimental design passes the standard tests for design effects (floor and ceiling effects). See Table A2.

12. Morton and Williams (2010, 98) explain that the treatment should be invariant, or "stable."

approach.[13] These analyses allow estimating the individual probability of vote-selling (shown in Figure A2). Using this information, it is possible to estimate the proportion of individuals selling their votes. In combination with the estimates of the direct question, it was also possible to estimate the number of "liars."
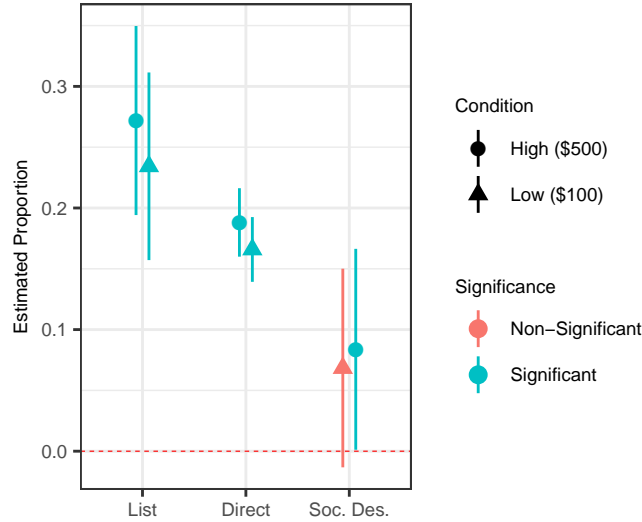

Figure 4: List Experiment Data: Declared and Predicted Vote-Sellers.
Note: *The figure shows the proportion of declared and predicted vote-sellers, and its difference ("liars"). These estimations were obtained from the model specified in Table A1. The figure shows 95% confidence intervals. Since the vote-selling prices were set arbitrarily, the reason for two conditions ("high" and "low") was to control for possible price elasticities. While there are some perceptible changes, they are not statistically significant. Consequently, these arbitrary decisions do not threaten the identification strategy.*

Based on the statistical analyses of the list experiment data, Figure 4 shows the estimated proportion of vote-sellers, the proportion of declared vote-sellers (based on the direct question), and the difference between the two ("liars"). Each estimation is divided by treatment ("high"/"low"). Since the proportion of vote-sellers does not increase with the high-price treatment, it is then reasonable to think that there are not specific concerns associated with the design of the treatments.

Substantively, the figure suggests that after combining the estimates of the "low" and "high"

---

13. The R package `list` was used (Blair et al. 2016). The estimation method used was the "ml"and the maximum number of iterations was 200,000. The remaining arguments were left at their default values. Table A1 shows the regression table.

treatments, approximately 25% of the nationally representative sample would be willing to sell their vote.[14] While a considerable proportion answered the direct question affirmatively (18%),[15] the analyses still suggest that survey respondents systematically under-reported their true answers: Approximately 8% of the nationally representative sample lied about it.[16] Overall, these results are striking, and the author is not aware of any other experimental design in which subjects in an industrialized democracy are asked whether they would sell their votes, and moreover, find positive results.

There seem to be two conflicting pictures. On the one hand, and leaving concerns of social desirability bias aside, we "know"—using *non*-experimental data—that most people have never been offered the possibility to sell their votes (as per Figure 1). On the other, the results presented here strongly suggest that they would be willing to sell their votes. In other words, while buyers (e.g. parties) are not buying, there is a large proportion of *latent* vote-sellers willing to sell their votes.

Price Experiment: What would be the tipping point for vote-sellers?   *Where do supply and demand meet?* This study conducted a pricing experiment. Subjects were directed to declare which price was considered "too cheap" and which was "too expensive."[17] With these two pieces of information, it was possible to construct two supply curves. The "too cheap" curve, representing the lower bound (mean = $418) and the "too expensive" curve, representing the upper bound (mean = $744). Substantively, the optimal selling price is located where both curves intersect. Figure 5 indicates that the average survey respondent would sell his/her vote for $730.

These results are not unrealistic. Bahamonde (2018) finds that clientelist political parties in Brazil target non-poor voters at considerably higher prices. In the U.S. context, Shawn (2012, 6) noted that a broker purchased one man's vote for $800 during the 2010 elections in eastern Kentucky, which aligns with Stokes et al. (2013). From the demand-side, vote-buying is no longer an efficient strategy for party machines. Industrialization has driven up the median income of the electorate, increasing the selling price, turning vote-buying into an increasingly expensive strategy to win votes. Evidently, with the selling price so expensive, the demand-side (i.e. parties) are unable to catch

---

14. This number was calculated averaging over the "high" (27%) and "low" (23%) conditions.

15. This number was calculated averaging over the "high" (19%) and "low" (17%) conditions.

16. This number was calculated averaging over the "high" (8%) and "low" (7%) conditions. The "low" condition is barely non-significant, and hence it does not alter the substantive results.

17. Since there is no other way of knowing what "cheap" and "expensive" mean without mentioning directly what specific good is being considered, it was necessary to ask survey respondents directly how much they would sell their votes for. Only 189 individuals would sell their votes when asked directly.
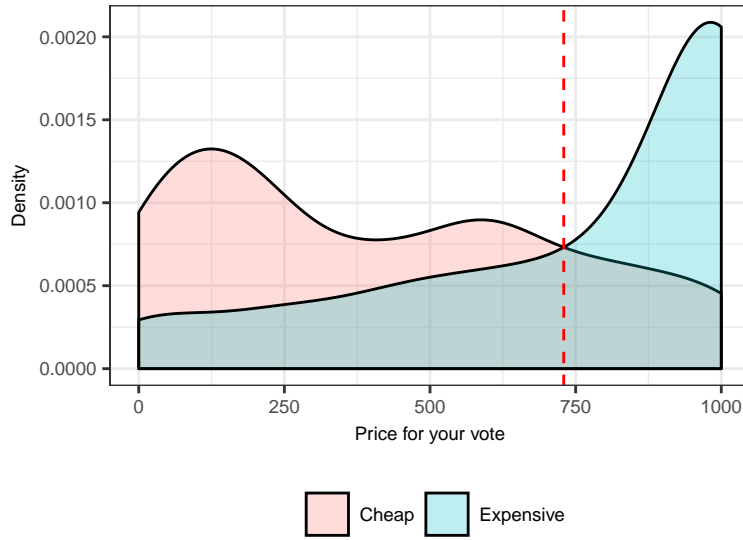
Figure 5: Pricing Experiment: Ideal Selling Price.
Note: *Subjects who answered "yes" to the direct question (N = 189) were asked to price their votes via a pricing experiment (see Figure A1). This figure shows the empirical distributions of the "too cheap" and "too expensive" answers. The intersection of these two supply curves (the vertical dashed line) represents the estimated optimal selling price. The data suggest that the right price for one's vote is $730.*

up with the supply-side, making vote buying in the United States a rare event. This situation has forced party machines to turn to other, less prohibitively costly alternatives. Thus, these results confirm that from the supply-side (i.e. voters) the vote is still for sale, only for a very high price—a price that party machines cannot really afford.

Conjoint Experiment: Attitudes Towards Democracy. Willingness to sell seems high. *Are the democratic values of U.S. citizens "in good health"? And how can they be measured?* This section proposes a new experimental way to measure—indirectly and in an unbiased fashion—individual attitudes towards democracy. Considering that democracy is a multi-dimensional concept, the task is a complex one.

Carlin (2018, 3) explains that the "most common survey questions of democratic support explicitly ask respondents whether they prefer democracy over other regime types." That type of strategy is based on the "Linzian" question, which asks whether democracy is preferred over other types of regimes. Unfortunately, these kinds of questions are not only difficult to answer (McClosky 1964,

13

Dalh's Polyarchy Component	O'Donnell's Dimension	Experimental Operationalization
Right to vote	Democratic	Citizens can vote in the next two elections
Eligibility for public office	Democratic	Citizens can run for office for the next two elections
Freedom to form and join organizations	Liberal	Citizens can associate with others and form groups
Freedom of expression	Liberal	Media can confront the government
Alternative sources of information	Liberal	Media can confront the Government
Right of political leaders to compete for support	Republican	President can rule without Congress

Table 1: *Attitudes Towards Democracy: A Conjoint Experimental Approach.*

376), but also they introduce a number of validity concerns, including social desirability biases (Carlin 2018, 3), and measurement error due to the inter-subjective meaning survey respondents give to the concept of "democracy" (Carlin and Singer 2011, 1502).

Hainmueller, Hopkins, and Yamamoto (2014) and Hainmueller and Hopkins (2015) implemented a series of conjoint experiments to study attitudes towards immigration—a multi-dimensional concept too—particularly attitudes towards a number of immigrants' characteristics, such as country of origin or language skills. Generally, conjoint designs "ask respondents to choose [...] hypothetical profiles that combine multiple attributes, enabling researchers to estimate the relative influence of each attribute value on the resulting choice" (Hainmueller, Hopkins, and Yamamoto 2014, 2). In their design, they were interested in knowing what kinds of immigrant profiles were more likely to be granted citizenship. Following their lead, a conjoint experiment was designed to study what kinds of democratic sub-dimensions—administered via different hypothetical candidate profiles—were more salient among U.S. citizens. And, while candidates do not usually describe themselves in these terms, the advantage is that this technique captures attitudes towards democracy in a non-intrusive way. The design minimizes the risks of introducing social desirability bias (3).

In an important paper, O'Donnell (1998)—building on Dahl (1971)—explains that democracy is a multi-dimensional concept. He identifies three sub-dimensions: a democratic, liberal, and republican. The first component relates to the degree in which polyarchies hold free and fair elections (or "vertical accountability"). The last two components, however, pertain to "horizontal accountability;" that is, whether the private and individual spheres are protected from the state

	Candidate 1	Candidate 2
	Please carefully review the options detailed below. Which of these two candidates represents the lesser of two evils for you?	
Right to vote	Citizens CAN vote in the next two elections	Citizens CAN vote in the next two elections
Right to run	Citizens CANNOT run for office for the next two elections	Citizens CAN run for office for the next two elections
Right to associate	Citizens CANNOT associate with others and form groups	Citizens CAN associate with others and form groups
Free press	Media CAN confront the government	Media CANNOT confront the government
President Autonomy	resident CAN rule without Congress	President CAN rule without Congress

Table 2: *Experimental Design: Example of the Tasks Respondents were Asked to Respond.*

(liberal component)[18] and whether there are "obligations to individuals placed in the public sphere" (republican component, see O'Donnell (1998, 3)). Luna (2006) conceptualizes these three dimensions in a series of survey questions. Building on his approach (and partially on Carlin and Singer (2011)), I developed a conjoint experiment that all survey respondents answered after the list experiment portion of the study. Table 1 shows Dahl's polyarchy components, O'Donnell's re-conceptualization (three dimensions), and the proposed experimental operationalization.

Following standard practice, experimental subjects were asked to choose between candidates "1" and "2" five times. Each time, both candidates endorsed different (or not) policy positions. Table 2 shows one possible example. To minimize spillover effects, every task had different candidates such that the first task asked respondents to choose between candidates "1" and "2," then in the next task, between candidates "3" and "4," and so on. Attributes' order (rows) were randomized. Both the "CAN" and "CANNOT" were also randomized.[19] In practice, survey respondents chose among unique profiles every time. As the table shows, both candidates could (or could not) differ on their respective policy positions. More than hard tests of different candidate profiles, this design accounts for hypothetical policy positions on relevant democracy dimensions, which are fundamental for understanding its multidimensionality.

Statistically, the ACME was estimated. As Hainmueller, Hopkins, and Yamamoto (2014, 20)

---

18. Essentially, "the idea that there are some rights that should not be encroached upon by any power, prominently including the state" (O'Donnell 1998, 3).

19. To minimize experimental fatigue, it was decided to capitalize both the "can" and "cannot" to accentuate the differences (or similarities) between the two hypothetical candidates.
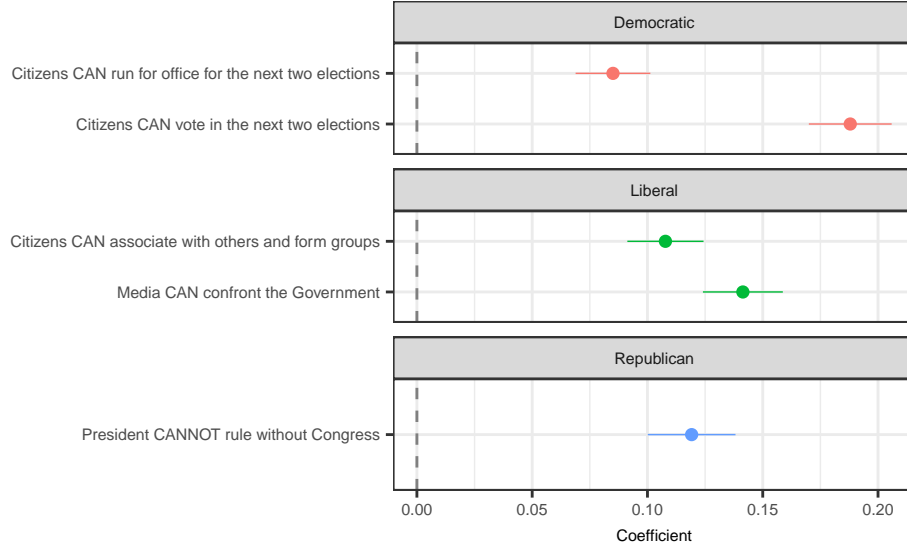
Figure 6: Democratic Values of the American Public: A Conjoint Experimental Approach.
Note: Besides answering the list experiment, survey respondents also answered a conjoint experiment. Following the advice of Hainmueller, Hopkins, and Yamamoto 2014, the ACME for every democratic sub-dimension (as conceptualized by Dahl 1971; O'Donnell 1998; Luna 2006) was computed. The figure shows estimated preferences towards different democratic sub-dimensions. For instance, and regarding the "democratic" dimension, survey respondents systematically value having political rights in the next two elections as opposed to not have them. Similarly, and regarding the "republican" component, survey respondents systematically value the role of Congress (as opposed to a system where the President "CAN" rule without Congress). The 95% confidence intervals are included. All observations were included. N = 14,770.

explain, ACMEs for all attributes were obtained by running a single regression of the choice outcome on the dummy variables for the attribute values (say 1 for where "Citizens CAN vote in the next two elections" and 0 when citizens "CANNOT").[20] All estimated coefficients then represent a comparison between these two policy positions.

Figure 6 suggests that survey respondents in general hold "healthy" democratic values: All attitudes move in the expected direction. And, to answer the question above, they do systematically value their voting rights ("citizens CAN vote"). Political participation ("citizens CAN run for office") ranks slightly lower relative to the rest. Power of the media is slightly stronger than the ability to form groups. The role of Congress is seen as more relevant than the right to run for office. The

---

20. More formally, for every sub-dimension, the next OLS model was fitted: $y_i = \beta_0 + \beta_1 \text{Sub-Dimension}_{0,1} + \epsilon_i$, where y_i is the observed choice, for all survey respondents i. Every sub-dimension has either the "CAN" (1) or "CANNOT" (0) option, which is administered at random, as Table 2 shows.

following portion of the analyses identified which democratic principles should score low to produce hypothetical vote-sellers.

Conjoint Experiment: Democratic Values and Vote Selling. The statistical analyses performed on list experiment data allowed for estimating individual probabilities of vote-selling (as shown in Figure A2). Next, the predicted individual probabilities of vote-selling were arranged on the left-hand side of the ACME linear regression, with the set of chosen attributes (i.e. the "CAN" and "CANNOT") on the right-hand side of the equation.

More formally, for every sub-dimension, the next OLS model was fitted:

$$y_i = \beta_0 + \beta_1 \text{Observed Choice}_i + \epsilon_i \tag{1}$$

where y_i is the predicted individual probability of vote selling (Figure A2), obtained via the methods formalized in Blair and Imai (2012), for all survey respondents i. In other words, by using this method, it was possible to regress individual probabilities of vote-selling (Figure A2) on the chosen democratic sub-dimensions. This allowed for an investigating of which dimensions should score low to produce hypothetical vote-sellers.

Vote-selling seems to be associated with lower levels of support of a system framed within the tradition of checks and balances (horizontal accountability). Figure 7 illustrates that individuals who systematically have lower levels of support towards a system governed by principles of checks and balances, in what both O'Donnell (1998) and Dahl (1971) call "horizontal accountability," increases the individual probability of selling one's vote; that is, individuals who do not value Congress as an institution capable of offsetting the president's political power, systematically sell their vote more. Neither the democratic nor the republican components seem to have a systematic explanatory power in predicting hypothetical vote-selling.

Sub-dimensions that involve empowerment of citizens and press, do not have an effect on vote-selling. Interestingly, attitudes towards voting do not have an effect on vote-selling either, meaning individuals supporting hypothetical candidates whose preferences include "Citizens CANNOT vote in the next two elections" do not necessarily sell more.

Overall, a structural failure to value a political system embedded within the checks and balances tradition seems to be associated with vote-selling. For instance, and while not statistically significant, survey respondents supporting candidates that might ban the free press, which is another form of
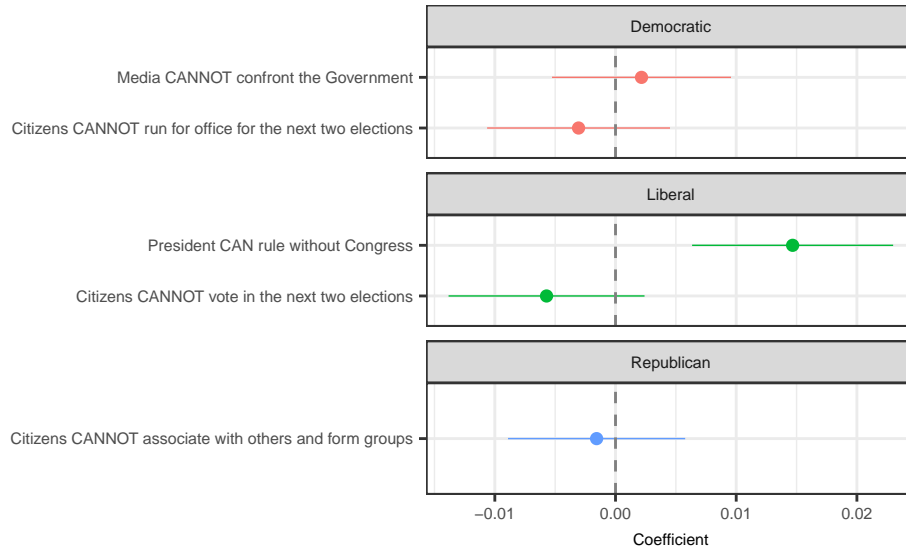
17

Figure 7: Predicting Vote Selling: Broken Democratic Dimensions.
Note*: Figure shows the estimated dimension associated with vote-selling. After estimating the individual propensities for vote-selling via the list experiment, those estimations became the dependent variable in the conjoint portion. The plot shows which of Dahl's dimensions are associated with vote-selling. The 95% confidence intervals are included. As per Figure A2, only statistically significant estimations were included. N = 7,385. Note that every individual performed five tasks, i.e. "voted" in five "elections."*

horizontal accountability, tend to sell their votes more.

List Experiment: *Who* are the most-likely vote-sellers? Four covariates were included when analyzing the list data: income, education, party identification, and political ideology. These variables have been widely considered in the clientelism literature before (Nazareno, Brusco, and Stokes 2008; González-Ocantos, Kiewiet de Jonge, and Nickerson 2014; Bahamonde 2018; Weitz-Shapiro 2012).[21]

Figure 8 shows the estimated effect of each variable on vote-selling. Democrats and liberals are systematically more likely to sell. These findings are in line with research that studies the different constitutive values of liberals and conservatives. Political psychologists have found that liberals, when compared with conservatives, construct their moral systems primarily upon narrower psychological foundations. Particularly, liberals consider less important both the authority/respect

21. Each variable was estimated twice (one per treatment). The regression table is Table A1.
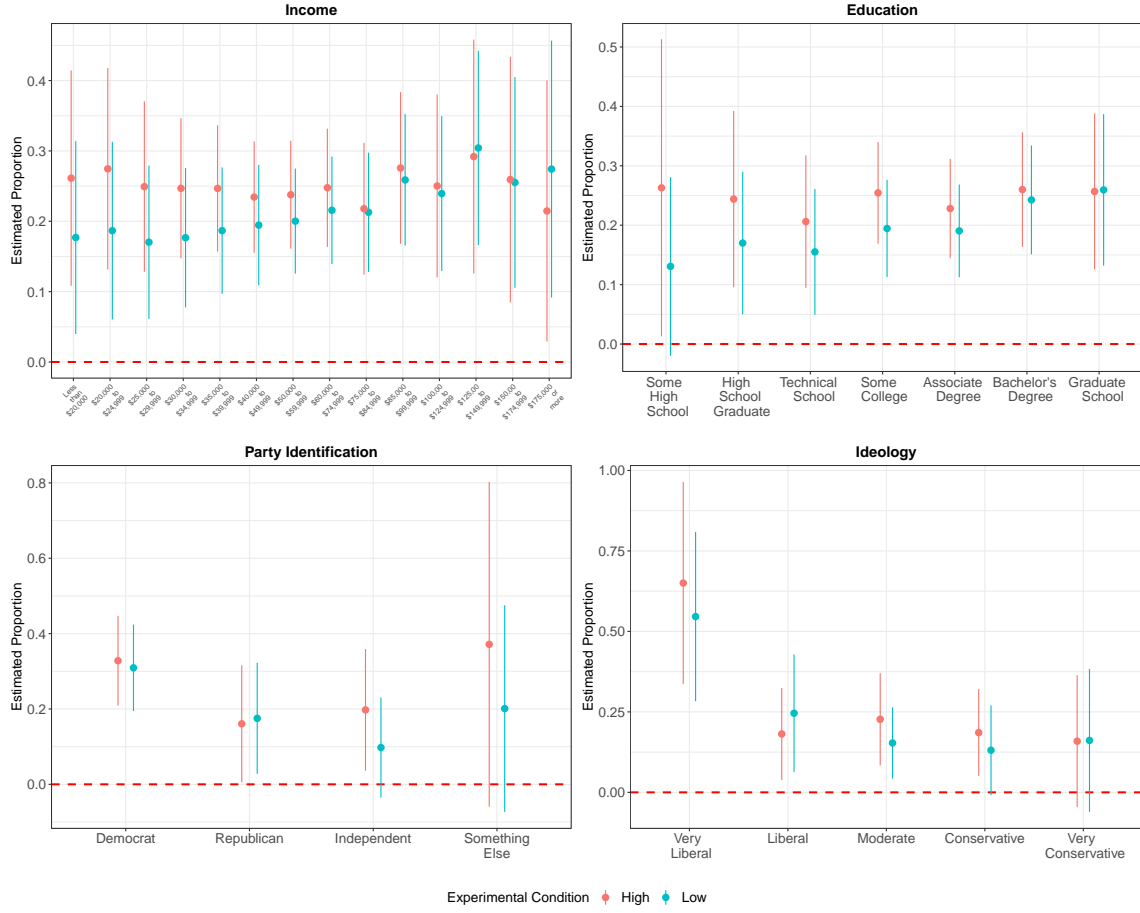
Figure 8: List Experiment: Predicting Vote-Selling.
Note: *After fitting the model on the list experiment data (see Table A1), this figure shows the predicted probabilities and their corresponding 95% confidence intervals for: income, education, party identification, and ideology. Since the vote-selling prices were set arbitrarily, the idea behind having two experimental conditions ("high" and "low") was to control for possible price elasticities. While there are some perceptible changes, they are not statistically significant. Consequently, these arbitrary decisions do not threaten the identification strategy.*

and the purity/sanctity dyads (Graham, Haidt, and Nosek 2009, 1029). This might lead liberals to engage more frequently in behaviors that might be considered "wrong," such as vote-selling. In fact, Gray, Schein, and Ward (2014, 7) explain that conservatives "see impure violations as relatively more wrong."

Education and income levels do not seem to have a systematic impact on vote-selling. Interestingly, poverty has long been associated with vote-selling (Calvo and Murillo 2004; Weitz-Shapiro 2012; Kitschelt 2000; Carlin, Singer, and Zechmeister 2015). Brusco, Nazareno, and Stokes (2004), Stokes et al. (2013) and Nazareno, Brusco, and Stokes (2008) explain that since the poor derive more utility from immediate transfers relative to returns associated with future (and risky) policy packages, clientelistic political parties only target the poor. For instance, Weitz-Shapiro (2014, 12) explains that "[a]lmost universally, scholars of clientelism treat and analyze [this] practice as an exchange between politicians and their poor clients." However, this canonical predictor has recently been questioned. Szwarcberg (2013) "challenges the assumption [that brokers] will always distribute goods to low-income voters in exchange for electoral support," while González-Ocantos et al. (2012) and Holland and Palmer-Rubin (2015) find that income had little or no effect on vote-buying. In fact, Bahamonde (2018) advances an argument for why brokers would also target non-poor individuals.

While the differences between the two treatments are not statistically significant—which in fact confirms that the arbitrarily low and high treatments were well-chosen—there seems to be a substantive pattern regarding these two treatments. Factors that heavily determine economic status (income and education), seem to be more elastic to the buying price of the vote: Even when poor individuals do not seem to sell more (when compared with wealthier individuals), there does seem to be important within-group differences between the treatments. Particularly, low-income and less educated individuals are willing to sell their vote (just like the rest), but more so under the high-price condition. This might indicate that, for them, it is worthwhile to behave illegally, but only when the payoff is "large enough." These results are in line with experimental and applied economists who argue that "risk aversion decreases as one raises above the poverty level and decreases significantly for the very wealthy" (Riley and Chow 1992, 32). In other words, less educated and low-income individuals, who are more fragile and precarious, tend to avoid risks, and hence, illegal activities. However, a discrete increase in the payoff makes the immediate monetary transfer more attractive, lessening risk aversion.

IV. General Discussion

The paper began by establishing the tension between supply and demand sides within a clientelistic relationship. In order to study the micro-dynamics of clientelism, more hypothetical questions should be fielded. If clientelism is conceptualized as a transaction between party machines and citizens, studying only realized transactions should produce only partial answers. Geddes (1990, 131) explains the well-known problems of studying "only cases that have achieved the outcome of interest." Questions involving hypothetical scenarios, on the contrary, can potentially shed light on unrealized transactions. Notably, González-Ocantos, Kiewiet de Jonge, and Nickerson (2014) constitutes one of the few examples in the study of hypothetical behaviors in the vote-buying literature. Following their lead, the paper presents evidence of vote-selling in the United States.

While vote-buying/selling in the United States was commonplace during the 19th century, higher median incomes have increased the cost of this strategy as a feasible tool to win elections, in turn, making vote-buying rare in the United States. The paper confirms this hypothesis by suggesting that an important estimated proportion of U.S. voters—25%—is very much willing to sell their votes, but for an estimated very high price—$730.

The conjoint experiment reveals that U.S. citizens have consistently "healthy" democratic values, scoring high in every democratic sub-dimension. Vote-sellers, however, have lower levels of support towards a system governed by principles of checks and balances, in what both O'Donnell (1998) and Dahl (1971) call "horizontal accountability," increases the individual probability of selling one's vote.

Moving forward, *What are the implications of* 25% *of the representative sample willing to sell their votes? Is that considered "high" or "low"?* While there is a big jump between realized and hypothetical behaviors, the results presented in this paper are still worrisome. If that jump is made, this proportion is roughly comparable to what others have found in developing countries. Employing a similar strategy, González-Ocantos et al. (2012, 210) find that 24% of Nicaraguan votes were bought. In turn, the findings presented in this paper are below of what Corstange (2012, 493) finds for the Lebanon, where 55% of voters sold their votes. Then again, there are a number of important institutional and economic differences between the United States and these countries. However, what this paper shows is the existence of a rather important proportion that, under very general conditions, *would* sell their votes.

In any case, the existence of a critical mass of Americans willing to sell their votes has broader

implications for U.S. democracy. This is particularly important at times in which the integrity of elections and the democratic system in general have been delegitimized by the president of the United States (Levitsky and Ziblatt 2018, 61,185),[22] possibly denoting a structural democratic legitimacy crisis.

While the paper is rather descriptive in nature, the author believes that the exercise was rather worth pursuing. The experimental evidence of a large critical mass willing to sell their votes in a developed country was novel. Also, a new experimental measurement to capture unbiased attitudes towards democracy was introduced. However, it was well beyond the goal of this paper to investigate the long-term structural causes of vote-selling in the United States as well as the substantive implications of democratic attitudes on vote-selling. Hopefully, the paper sets the stage for future research and encourages other scholars to field the experimental designs presented in this paper, including the conjoint experiment, in a comparative setting, such that both developed and developing countries are included. Future research should also consider different values placed on different offices.[23] It is reasonable to think that presidential, Senate, House, state legislature, mayor, and city council elections, follow different incentives and constraints to buy and sell votes. And, future research should consider blocking on party identification. For example, designing a more complex experiment in which not only the price varies (like it does in the presented design), but also the vote-selling treatment is partisan.

---

22. They argue that "no major presidential candidate had cast such doubt on the democratic system since 1860."
23. I owe this point to   .

References

Argersinger, Peter. 1985. "New Perspectives on Election Fraud in the Gilded Age." *Political Science Quarterly* 100 (4): 669–687.

Bahamonde, Héctor. 2018. "Aiming Right at You: Group versus Individual Clientelistic Targeting in Brazil." *Journal of Politics in Latin America* 10 (2): 41–76.

Bensel, Richard. 2004. *The American Ballot Box in the Mid-Nineteenth Century.* Cambridge University Press.

Blair, Graeme. 2015. "Survey Methods for Sensitive Topics." *Comparative Newsletter:* 12–16.

Blair, Graeme, and Kosuke Imai. 2012. "Statistical Analysis of List Experiments." *Political Analysis* 20 (1): 47–77.

Blair, Graeme, Kosuke Imai, Bethany Park, Alexander Coppock, and Winston Chou. 2016. *package "list": Statistical Methods for the Item Count Technique and List Experiment.*

Brusco, Valeria, Marcelo Nazareno, and Susan Stokes. 2004. "Vote Buying in Argentina." *Latin American Research Review* 39 (2): 66–88.

Calvo, Ernesto, and María Victoria Murillo. 2004. "Who Delivers? Partisan Clients in the Argentine Electoral Market." *American Journal of Political Science* 48 (4): 742–757.

Campbell, Tracy. 2005. *Deliver the Vote: A History of Election Fraud, an American Political Tradition-1742-2004.* Carroll & Graf.

Carlin, Ryan. 2018. "Sorting Out Support for Democracy: A Q-Method Study." *Political Psychology* 39 (2): 399–422.

Carlin, Ryan, and Mason Moseley. 2015. "Good Democrats, Bad Targets: Democratic Values and Clientelistic Vote Buying." *The Journal of Politics* 1 (77): 14–26.

Carlin, Ryan, and Matthew Singer. 2011. "Support for Polyarchy in the Americas." *Comparative Political Studies* 44 (11): 1500–1526.

Carlin, Ryan, Matthew Singer, and Elizabeth Zechmeister, eds. 2015. *The Latin American Voter: Pursuing Representation and Accountability in Challenging Contexts.* University of Michigan Press.

Corstange, Daniel. 2012. "Vote Trafficking in Lebanon." *International Journal of Middle East Studies* 44 (3): 483–505.

Dahl, Robert. 1971. *Polyarchy: Participation and Opposition.* Yale University Press.

Erie, Steven. 1990. *Rainbow's End: Irish-Americans and the Dilemmas of Urban Machine Politics, 1840-1985.* University of California Press.

Fahrenthold, David. 2012. *Selling Votes is Common Type of Election Fraud.*

Foa, Roberto, and Yascha Mounk. 2016. "The Danger of Deconsolidation: The Democratic Disconnect." *Journal of Democracy* 27 (3): 5–17.

———. 2017. "The Signs of Deconsolidation." *Journal of Democracy* 28 (1): 5–15.

Geddes, Barbara. 1990. "How the Cases You Choose Affect the Answers You Get: Selection Bias in Comparative Politics." *Political Analysis* 2 (1): 131–150.

Glynn, Adam. 2013. "What Can We Learn with Statistical Truth Serum?: Design and Analysis of the List Experiment." *Public Opinion Quarterly* 77 (S1): 159–172.

González-Ocantos, Ezequiel, Chad de Jonge, Carlos Meléndez, Javier Osorio, and David Nickerson. 2012. "Vote Buying and Social Desirability Bias: Experimental Evidence from Nicaragua." *American Journal of Political Science* 56 (1): 202–217.

González-Ocantos, Ezequiel, Chad Kiewiet de Jonge, and David Nickerson. 2014. "The Conditionality of Vote-Buying Norms: Experimental Evidence from Latin America." *American Journal of Political Science* 58 (1): 197–211.

Graham, Jesse, Jonathan Haidt, and Brian Nosek. 2009. "Liberals and Conservatives Rely on Different Sets of Moral Foundations." *Journal of Personality and Social Psychology* 96 (5): 1029–1046.

Gray, Kurt, Chelsea Schein, and Adrian Ward. 2014. "The Myth of Harmless Wrongs in Moral Cognition: Automatic Dyadic Completion from Sin to Suffering." *Journal of Experimental Psychology* 143 (4): 1600–1615.

Hainmueller, Jens, and Daniel Hopkins. 2015. "The Hidden American Immigration Consensus: A Conjoint Analysis of Attitudes toward Immigrants." *American Journal of Political Science* 59 (3): 529–548.

Hainmueller, Jens, Daniel Hopkins, and Teppei Yamamoto. 2014. "Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments." *Political Analysis* 22 (01): 1–30.

Hicken, Allen, Stephen Leider, Nico Ravanilla, and Dean Yang. 2015. "Measuring Vote-Selling: Field Evidence from the Philippines." *American Economic Review* 105 (5): 352–356.

———. 2018. "Temptation in Vote-Selling: Evidence from a Field Experiment in the Philippines." *Journal of Development Economics* 131:1–14.

Holland, Alisha, and Brian Palmer-Rubin. 2015. "Beyond the Machine: Clientelist Brokers and Interest Organizations in Latin America." *Comparative Political Studies* 48 (9): 1186–1223.

Imai, Kosuke, Bethany Park, and Kenneth Greene. 2015. "Using the Predicted Responses from List Experiments as Explanatory Variables in Regression Models." *Political Analysis* 23 (02): 180–196.

Kam, Christopher. 2017. "The Secret Ballot and the Market for Votes at 19th-Century British Elections." *Comparative Political Studies* 50 (5): 594–635.

Kitschelt, Herbert. 2000. "Linkages between Citizens and Politicians in Democratic Polities." *Comparative Political Studies* 33 (6-7): 845–879.

Kitschelt, Herbert, and Steven Wilkinson, eds. 2006. *Patrons, Clients and Policies: Patterns of Democratic Accountability and Political Competition.* 392. Cambridge University Press.

Leight, Jessica, Rohini Pande, and Laura Ralston. 2016. "Value for Money in Purchasing Votes? Vote-buying and Voter Behavior in the Laboratory."

Levitsky, Steven, and Daniel Ziblatt. 2018. *How Democracies Die.* Crown.

Levy, Jack. 2008. "Case Studies: Types, Designs, and Logics of Inference." *Conflict Management and Peace Science* 25 (1): 1–18.

Luna, Juan Pablo. 2006. "The Income-Elasticity of Support for Democratic Governance Components: A Double-Bounded Dichotomous Choice Measurement Proposal."

McClosky, Herbert. 1964. "Consensus and Ideology in American Politics." *American Political Science Review* 58 (02): 361–382.

Morton, Rebecca, and Kenneth Williams. 2010. *Experimental Political Science and the Study of Causality: From Nature to the Lab.* Cambridge University Press.

Munck, Gerardo, and Jay Verkuilen. 2002. "Conceptualizing and Measuring Democracy: Evaluating Alternative Indices." *Comparative Political Studies* 35 (1): 5–34.

Nazareno, Marcelo, Valeria Brusco, and Susan Stokes. 2008. "Why Do Clientelist Parties Target the Poor?"

Nichter, Simeon, and Michael Peress. 2017. "Request Fulfilling: When Citizens Demand Clientelist Benefits." *Comparative Political Studies* 50 (8): 1086–1117.

O'Donnell, Guillermo. 1998. "Horizontal Accountability and New Polyarchies."

Reynolds, John. 1980. "'The Silent Dollar': Vote Buying in New Jersey." *New Jersey History* 98 (3): 191–211.

Reynolds, John, and Richard Mccormick. 1986. "Outlawing 'Treachery': Split Tickets and Ballot Laws in New York and New Jersey, 1880-1910." *The Journal of American History* 72 (4): 835–858.

Riley, William, and Victor Chow. 1992. "Asset Allocation and Individual Risk Aversion." *Financial Analysts Journal* 48 (6): 32–37.

Rusk, Jerrold. 1970. "The Effect of the Australian Ballot Reform on Split Ticket Voting: 1876-1908." *The American Political Science Review* 64 (4): 1220–1238.

Shawn, Eric. 2012. "Drug Money Funds Voter Fraud in Kentucky." *Fox News:* 1–9.

Stokes, Susan, Thad Dunning, Marcelo Nazareno, and Valeria Brusco. 2013. *Brokers, Voters, and Clientelism: The Puzzle of Distributive Politics.* Cambridge University Press.

Szwarcberg, Mariela. 2013. "The Microfundations of Political Clientelism. Lessons from the Argentine Case." *Latin American Research Review* 48 (2): 32–54.

Vicente, Pedro, and Leonard Wantchekon. 2009. "Clientelism and Vote Buying: Lessons from Field Experiments in African Elections." *Oxford Review of Economic Policy* 25 (2): 292–305.

Weitz-Shapiro, Rebecca. 2012. "What Wins Votes: Why Some Politicians Opt Out of Clientelism." *American Journal of Political Science* 56 (3): 568–583.

———. 2014. *Curbing Clientelism in Argentina: Politics, Poverty, and Social Policy.* Cambridge University Press.

Williamson, Samuel. 2018. *Seven Ways to Compute the Relative Value of a U.S. Dollar Amount, 1774 to Present.* MeasuringWorth.

.............................**Word count**: 7,777 ....

V.   Appendix

I.   Experimental Manipulations and Vignettes

Distractor Paragraph.   The next paragraph was used to distract subjects from the main purpose
of the study, and also to define what vote-selling was.

```
Washington, D.C.- A department store downtown had a robbery incident last week,
    reporting several missing iPods from their inventory. Authorities also inform
    that a group of local residents are trying to ``sell'' their votes to
    political candidates ahead of a local election for city council. Residents
    approached some of the candidates running for office and offered to vote for
    that candidate in return for monetary compensation. In a different subject
    matter, the local police station released a report on driving habits and
    behaviors in the Capitol district last week. Finally, cyber-crime has become
    an increasingly serious issue in the area in the past few year.
```

Direct Question.   All subjects read the next paragraph, and then answered the direct question:

```
Now you will be entered into a random lottery for the opportunity to do ONE of
    the illegal things you just read before. This means that you might be randomly
     offered to hypothetically do ANY of the activities mentioned before.
```

```
After a random assignment, you have been selected for the opportunity to
    hypothetically sell your vote. This means that you will have the hypothetical
    opportunity to accept money from a candidate for your vote. Would you be
    willing to accept the offer, assuming you would not go to jail? By selecting
    ``Yes,'' you could earn up to $1,000.
```

I

Pricing Experiment. Subjects who answered "yes" to the direct question, were immediately asked to price their votes.

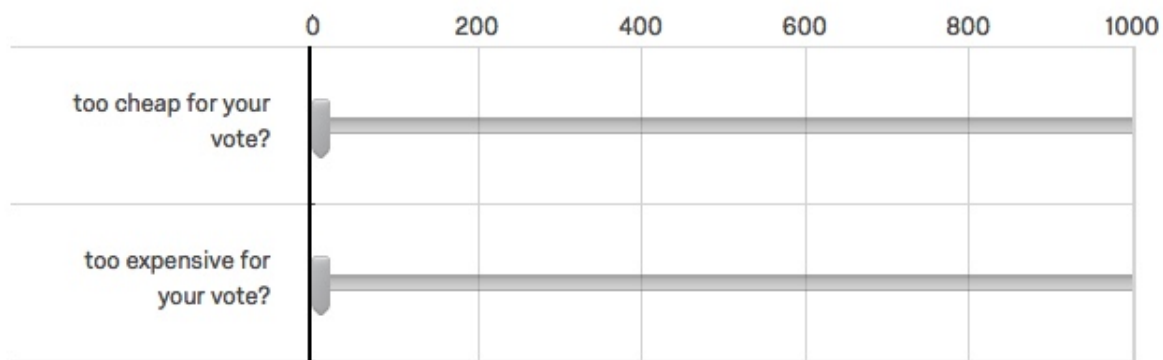Which of the following prices (in USD $) would you consider...

Figure A1: *Pricing Experiment.*

II. Statistical Analysis of the List Experiment: Regression Table

Table A1: *Statistical Analysis of the List Experiment: Estimated coefficients from regression models where the outcome variables are whether or not subjects would sell their vote to a candidate for $100 or $500.*

Variables	Sensitive Items				Control Items			
	Low Treatment		High Treatment		Low Condition		High Condition	
	Est.	SE	Est.	SE	Est.	SE	Est.	SE
Intercept	−0.06	1.03	0.82	1.2	−0.73	0.22	−0.76	0.24
$\text{Ideology}_{\text{Liberal}}$	−1.36	0.8	−2.11	0.9	0.41	0.19	0.36	0.2
$\text{Ideology}_{\text{Moderate}}$	−1.79	0.76	−1.74	0.88	0.1	0.18	0.3	0.19
$\text{Ideology}_{\text{Conservative}}$	−2.1	0.89	−1.86	0.87	0.23	0.2	0.34	0.21
$\text{Ideology}_{\text{VeryConservative}}$	−1.88	1.12	−2	1.03	0.01	0.25	0.09	0.25
$\text{Party Id}_{\text{Republican}}$	−0.18	0.75	−0.6	0.73	−0.53	0.15	−0.55	0.15
$\text{Party Id}_{\text{Independent}}$	−1.2	0.89	−0.55	0.65	−0.37	0.13	−0.35	0.13
$\text{Party Id}_{\text{Something Else}}$	−0.23	1.02	0.32	1.1	−0.4	0.25	−0.24	0.27
Income	0.06	0.08	0.02	0.08	0.02	0.01	0.01	0.02
Education	0.02	0.16	−0.03	0.17	0.01	0.03	0	0.03

III.   Testing for Design Effects

Table A2: *Test for List Experiment Design Effects.*

	Low Condition		High Condition	
Respondent Types	*Est.*	*SE*	*Est.*	*SE*
$(y = 0,\ t = 1)$	0	0.03	0.02	0.04
$(y = 1,\ t = 1)$	-0.01	0.03	-0.03	0.04
$(y = 2,\ t = 1)$	0.02	0.02	0.03	0.02
$(y = 3,\ t = 1)$	0.05	0.01	0.06	0.01
$(y = 0,\ t = 0)$	0.34	0.02	0.33	0.02
$(y = 1,\ t = 0)$	0.3	0.03	0.33	0.04
$(y = 2,\ t = 0)$	0.25	0.03	0.23	0.03
$(y = 3,\ t = 0)$	0.05	0.02	0.04	0.02

Note: Since the Bonferroni-corrected p-values of the *low* (0.86) and *high* (0.33) conditions are above the specified alpha (0.05), I fail to reject the null of no design effects.

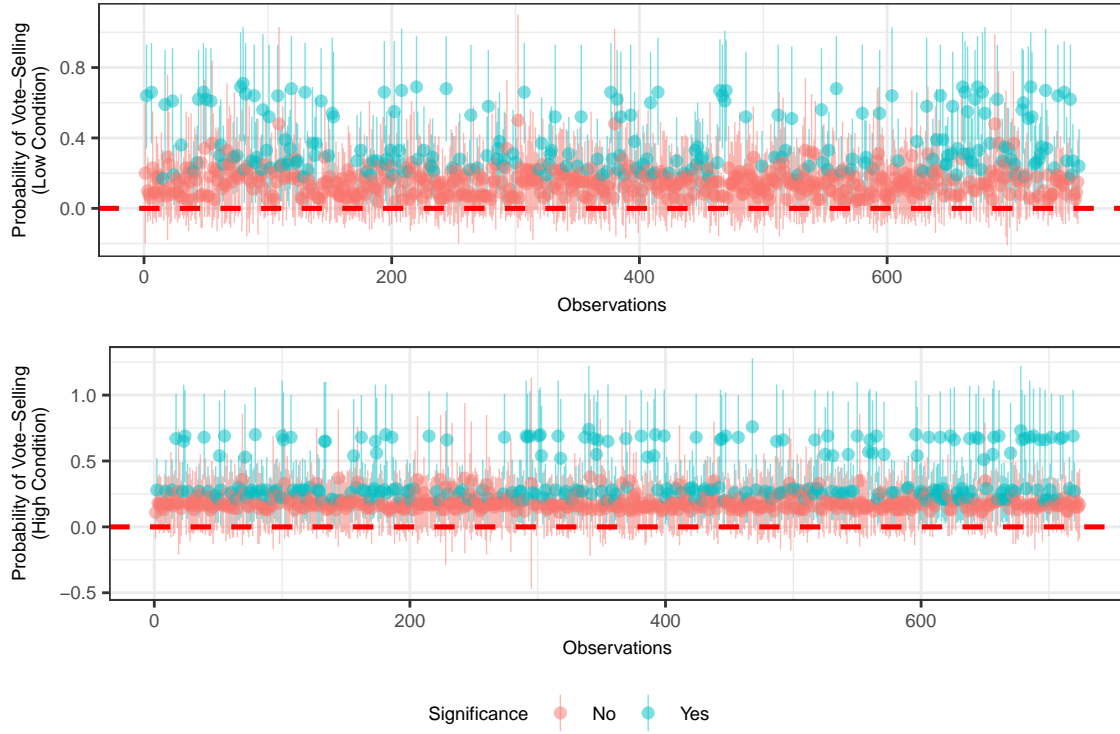# IV. Statistical Analysis of the List Experiment: Individual Probabilities of Vote-Selling

Figure A2: Individual Estimated Probabilities of Vote-Selling.
Note: *Figure shows the individual probabilities of vote-selling (N = 1,479) under the "low" and "high" conditions. After fitting the model in Table A1, and following the advice of Blair and Imai (2012) and Imai, Park, and Greene (2015), individual probabilities of vote-selling under the "low" and "high" conditions were estimated. A total of 501 estimations are significant (both conditions). The figure also shows 95% confidence intervals.*
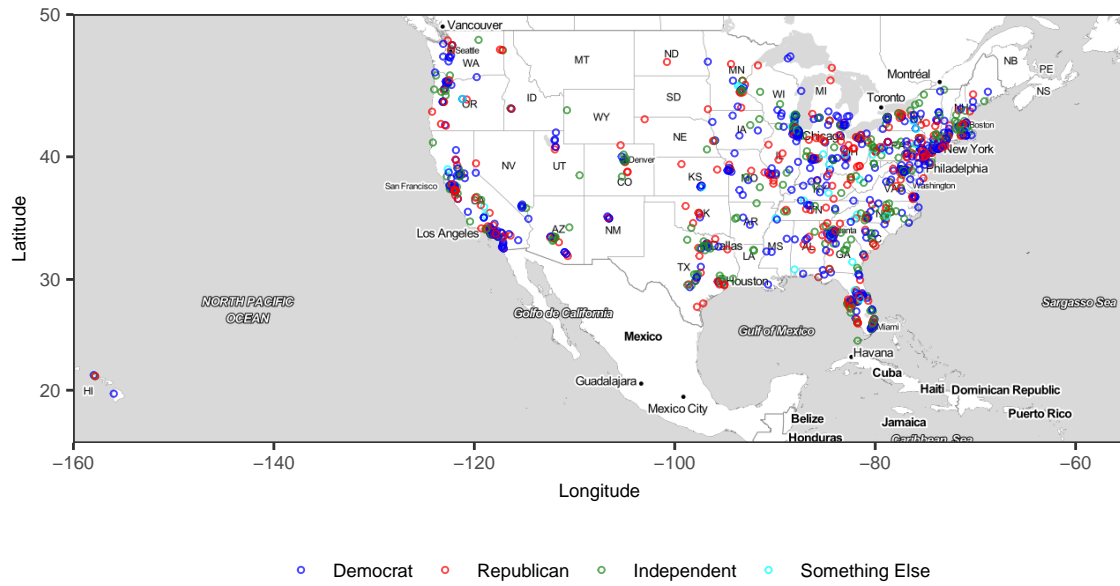
VI. Online Appendix

Figure OA1: *Geographical Distribution of Survey Respondents broken by Party Identification.*