

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

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Abstract

In the nineteenth-century United States vote buying was commonplace. Nowadays, however, vote-buying seems to have declined considerably. Unfortunately, the literature has put its emphasis on studying vote-buying, ignoring the micro-dynamics of vote-selling. We seem to know that vote-buyers cannot afford this strategy any longer. 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. The results are striking. Approximately 25% would sell their votes for \$730. Democrats and liberals are systematically more likely to sell, while education levels and income do not seem to have a systematic impact on vote-selling. In addition to the list experiment, an online conjoint experiment was also fielded. This design was used to measure—in an unbiased way—attitudes towards democracy, a multi-dimensional concept. The analyses suggest that U.S. citizens have “healthy” democratic values. In turn, combining both experimental designs, the paper also finds that likely vote-sellers have lower support levels towards a system governed by principles of checks and balances.

Please consider downloading the last version of the paper [here](#).

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I. VOTE-SELLERS *and* VOTE-BUYERS

Many advanced democracies were first very clientelistic political systems. For instance, Stokes, Dunning, Nazareno, and Brusco 2013, p. 200 explains that in the nineteenth-century United States “vote buying was commonplace.” In Chicago, New York City, Newark, and other big cities, votes were exchanged for “cash, food, alcohol, health care, poverty relief, and myriad other benefits,”¹ even resembling the worst practices in the current developing world. The street price of the right to vote freely seemed to be very low. Benseal 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.”² Vote buying, besides being cheap, was “the major urban political institution in the late nineteenth century”³ in “one-half of the nation’s twenty largest cities.”⁴ Students of American political development have analyzed vote-buying in more detail, confirming both its early development, and its generalized practice.⁵

However, nowadays vote-buying seems to have declined considerably. Stokes, Dunning, Nazareno, and Brusco 2013, p. 201 have shown that industrialization has driven up the median income of the electorate, making vote-buying more expensive for party machines.⁶ In line with that, Figure 1 suggests—using survey data from the U.S.—that 93.6% of respondents have “never” received a clientelistic offer from a political party.⁷

We seem to know that vote-*buyers* cannot afford this strategy any longer, not at least in a massive scale, thus making vote-buying a rare event. However, several questions remain unanswered. And worryingly, most of them pertain to vote-*sellers*. 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? Given that most of the emphasis so far has been devoted to studying vote-*buying*,⁸ prior *empirical* studies do not offer satisfactory answers to these questions.⁹ In fact, in a recent paper, Nichter and Peress (2016) explain that studies continue to view clientelism typically as a top-down process, generally overlooking citizens’ demands.

Figure 1 shows responses about whether a candidate or someone from a political party has offered something in exchange for people’s votes, completely ignoring voter’s preferences, or the supply side. The figure, in fact, represents the canon in the clientelism literature, begging the question about whether survey respondents answering “never” *would* still be willing to sell their votes. I contend that this *demand-side bias* gives an incomplete picture. Overlooking the supply-side should give the falsely optimistic impression that U.S. voters systematically *oppose* vote-buying, “thus”

engaging almost *never* in clientelism (as Figure 1 strongly suggests). Moreover, demand-side studies of clientelism have traditionally focused, with a few exceptions,¹⁰ on what parties do by asking *voters* about what parties do, introducing additional bias.

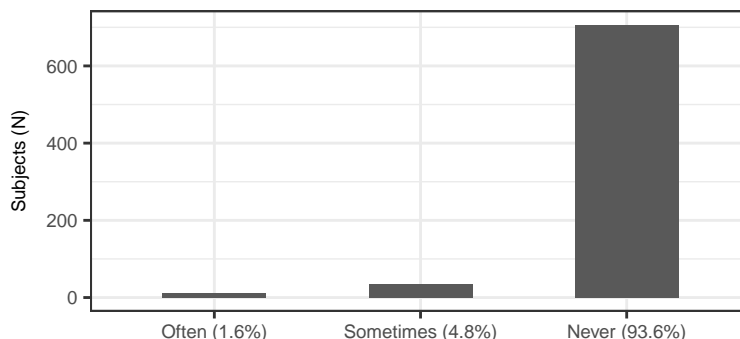


Figure 1: Frequency of Clientelism.

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?”

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. Leveraging this experimental design, 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 to that, a conjoint experiment was implemented to capture—in an novel and unbiased way—support levels towards democracy. Given that democracy is a multi-dimensional concept, the conjoint analyses shed light on which particular democratic sub-dimension has to fail in order to produce likely vote-sellers.

The results are striking. The list data suggest that a sizable portion of U.S. voters of the nationally representative sample are willing to sell their votes (approximately 25%), that they would sell it at an optimal price of \$730, and that they would systematically lie about it (approximately 8% of the nationally representative sample). Given that these data are representative at the national level—and that this is not a convenient sample—these findings are astonishing, going against the standard optimistic panorama offered by analysts of the *vote-buying* approach (and exemplified in

Figure 1). Democrats and liberals are systematically more likely to sell than the rest. Education levels and income 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 Congress, sell their vote systematically more.

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

While we believe describing a social phenomena—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, p. 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 is mostly about developing countries) describes vote-sellers as poor,¹¹ uneducated,¹² and undemocratic.¹³ Our priors, then, inform us that the willingness to sell votes should be low, making the U.S.—a developed country—a “hard case” for vote-selling. However, the counterintuitive results presented in this paper make our efforts worth pursuing.

In a highly controversial pair of articles, Foa and Mounk 2016, p. 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 say that it is “unimportant” in a democracy for people to “choose their leaders in free elections.”¹⁴

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 a multi-dimensional one.¹⁵ Consequently, in order to capture the complexity of these attitudes, a novel method was developed. This strategy builds directly on Carlin (2017) and Luna (2006), who challenge the standard practice of asking survey respondents *directly* about their levels of democratic support. Instead, and building on ODonnell1998, I operationalize “support

for democracy” by specifying three components—liberal, republican, and democratic—which in turn, have a number of sub-dimensions. In turn, each sub-dimension has its corresponding survey questions.

Unsurprisingly, I find that levels of democratic support in the U.S. are high in all three dimensions. However, since individual probabilities of vote selling are observed (as per the list experiment), I am able to observe which democratic component should “fail” to produce likely vote-sellers. I find that likely-sellers do not value the role of Congress, as a valid institutional offset to the President’s power, a sub-dimension which belongs to the “liberal” component, which in turn pertains to what **ODonnell1998** calls “horizontal accountability.” The paper leaves the corresponding explanations for future research.

The **next section** gives a historical account of vote-buying in the U.S. The section is also an effort to situate both vote-selling and vote-buying within a historical context. It particularly shows how vote-buying transitioned from being a very important institution in American elections, to a scarcely practiced method of winning elections. The **following section** explains the measurement, experimental strategies, and empirical findings. Finally, I offer some **working hypotheses and possible lines for future research**.

II. VOTE-SELLING AND PATRONAGE IN THE U.S.: A BRIEF HISTORICAL ACCOUNT

“I took it because it was there to take. I know it isn’t right, but this has been going on for so long that we no longer looked upon it as a crime.”

American vote seller in 1910 (Reynolds 1980, p. 200).

The exercise of the *sine qua non* democratic practice (i.e., voting) in the early U.S. was questionable, to say the least. While norms that existed to exclude women, African-Americans and Native Americans from politics were systematically enforced, norms that were imposed to restrict voting based on property qualifications, or made vote buying illegal, were not.

While all states had made the bribery of voters illegal at very early stages,¹⁶ these laws were purposely ignored. Well before the Gilded Age (1877-1896), there were a number of norms that

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.¹⁷ However, these restrictions were systematically bypassed. To get around property qualifications, for instance, it was common that office-seekers (and their supporters) would buy “freeholds for landless men in return for their vote,”¹⁸ a practice that was known as “fagot voting.” Since it was a coercive bribe, after “the election, the land was simply returned to the original owner.”¹⁹

Weak institutions, poor bureaucracies, and bad-quality record-keeping²⁰ 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.²¹ Historians frequently report that judges at polling places had a hard time figuring out not only the age of the potential voter,²² but also whether the prospective voter was a U.S. citizen, especially in cases that involved newly naturalized immigrants, who had strong foreign accents.²³ Consequently, often times it was at the judge’s discretion whether to let prospective voters cast a ballot. Since judges were party appointees,²⁴ their discretionary powers were systematically used to shape electoral outcomes.

Low literacy levels helped to sustain vote-selling in the U.S. 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.²⁵ The *viva voce* method, of course, was very convenient for party workers who usually swarmed around the polling places. Eventually, this method was substituted with the ticket system due to a number of issues. First of all, and given a series of factors that I explain later in this section, voters had a hard time “memoriz[ing] the names of the candidates for office.”²⁶ Second of all, the *viva voce* method was impractical. It worked relatively “well” in small towns, but as population grew, polls had to be kept open for up to three consecutive days, so each citizen could vote.²⁷

However, the “party strip” or “unofficial” ballot system,²⁸ permitted all sorts of fraudulent election practices too. Party tickets were produced by the parties themselves. Since they 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.”²⁹ Since party workers were hired to monitor the surroundings of the voting window,³⁰ this gave ample opportunities to punish (or reward) voters accordingly.

The ticket system required very strong party machines, which in turn, required lots of economic resources to make it work. While it is true that the street price of vote-buying was very cheap,

votes were sold and purchased at massive scales.³¹ In addition, higher levels of electoral competition drove up the unit price of each vote.³² In fact, it has been described that “party hawkers” usually peddled it “to the voters in what resembled an *auctioneering* atmosphere in and around the polling station.”³³ Moreover, tickets had to be printed by each party, and handed on an individual-basis outside the polls, and throughout the entire country. All these factors combined made political campaigns very expensive enterprises.³⁴ Consequently, to perform well at all these tasks, political parties developed well-oiled national machines.

Political machines were not only oiled with money. On the one hand, many “ticket peddlers”³⁵ were volunteers,³⁶ 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.”³⁷ On the other hand, political appointees, “from janitor to secretary of state,” and some corporations too, donated part of their salaries on a yearly basis.³⁸ Parties, then, amassed huge amounts of money.

With all these resources flooding the polls on election day, voting was truly a Dantesque spectacle. On election day, as “men moved about the polling place, party agents would often offer them liquid refreshment, almost always whisky, as an enticement to vote their ticket.”³⁹ Moreover, party machines would make sure that “liquor was both freely available and consumed to excess.”⁴⁰ “As a result, 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.”⁴¹ 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.”⁴² In summary, the environment outside the voting window was pitiful. Crowds were so drunk that not only voters were accustomed to fights outside the polls,⁴³ but also “were thoroughly inebriated by the time they turned in their ticket.”⁴⁴

The Australian ballot system lowered the frequency of most of these malpractices significantly.⁴⁵ However, as vote-selling and vote-buying were so embedded into what was considered normal,⁴⁶ the immediate effect of the Australian system was to lower turnout levels.⁴⁷

Even while the *modus operandi* of clientelism has changed, and both the frequency of vote-buying and the importance of party machines have declined,⁴⁸ there are still some contemporary accounts

of vote-buying in American elections. For instance, Campbell 2005, pp. 243–244 explains how a Democratic leader in Logan County, West Virginia, accepted \$35,000 in cash in exchange of supporting Senator Kennedy. As the Democratic leader explains it, “this money was for one purpose: ‘We bought votes with it. Regardless of what you want to believe, that’s the way real politics works.’” Other examples are the famous primary election in March 1972 in Chicago, where twenty *Tribune* reporters managed to act as precinct officials. As one reported, “[when] one voter was offered a ballot by a precinct official, the voter casually replied, ‘I already have one.’”⁴⁹ And in the 1980s, in the coal-rich Appalachian mountains, “[c]oal companies still exercised considerable leverage in election contests [where] liquor and cash were displayed in large quantities.”⁵⁰

Non-academic sources still find that, in current elections, for instance, the 2010 elections, “selling votes is *common* type of election fraud,”⁵¹ while others find that “[v]ote-buying is *extremely* common in *developed* and developing countries.”⁵² Clearly, there exists lack of clarity on how common vote-selling is. Next section attempts to quantify in an unbiased way the willingness to sell of a representative sample of U.S. voters, particularly, articulating a connection between hypothetical vote-selling, and support for democracy.

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, in avoiding being judged by the interviewer, individuals might not want to reveal that they have done something illegally, like selling one’s vote. If this systematic source of bias is not taken into consideration, this will pose threats to causal inference.

List experiments, among other techniques,⁵³ are well suited to elicit truthful answers. List experiments administer two lists of items; one to the control group, one to the treated group. Both lists look exactly the same (say, each one containing the three same items), however the treatment list includes (traditionally) a fourth item, which is the sensitive item related to some socially condemned behavior.

Respondents are asked how many items in the list they would endorse, not which ones. This particular feature helps in learning about individual’s preferences in a non-intrusive fashion. For

instance, if an experimental subject answers “2,” the interviewer will not know whether that number includes the sensitive item. Consequently, if the survey respondent wants to endorse the sensitive item, the answer will be “masked” by the other items in the list. This concealment makes this technique suitable to study socially condemned behaviors, such as vote-buying,⁵⁴ drug use,⁵⁵ sexual preferences,⁵⁶ attitudes towards race,⁵⁷ among others.

Methodologically, given that both lists are assigned at random, the mean number of nonsensitive activities that respondents endorsed should be equal across the two lists. However, if there are any differences in means, they should be attributed only to the presence of the sensitive item. Blair and Imai 2012 formalize two assumptions, namely, there are (1) “no design effects” (i.e. the inclusion of a sensitive item has no effect on respondents’ answers to control items), and (2) “no liars” (i.e. respondents give truthful answers for the sensitive item).

While list experiments are very common, researchers unfortunately “[utilize] only a difference-in-means estimator, and [do] not provide a measure of the sensitive item for each respondent.”⁵⁸ Fortunately, Blair and Imai 2012 and Imai, Park, and Greene 2015 explain that when the two assumptions hold, and given that the item count for types $y = 0$ and $y = 4$ are fully observed,⁵⁹ experimental subjects with item count types $y = 1$, $y = 2$ and $y = 3$ can be inferred using multivariate techniques.

There are a number of advantages in using statistical methods to analyze list experiments data. First, using statistical methods allows inferring who answered “yes” to the sensitive item. Second, they permit to study the relationship between preferences over the sensitive item and individual’s characteristics, such as gender, income, party identification, among others. Given that traditional list experiments contain information about two groups (i.e. treatment and control), individual preferences are not observed. Whilst still unobserved, under reasonable assumptions, statistical analyses permit estimating preferences at the individual level. Third, if a “direct” (i.e. non-experimental) question over the sensitive item is included in the design, it is also possible to estimate the amount of social desirability bias by comparing the results of the list experiment and the direct question.

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 the developed world. For instance, Gonzalez-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 where 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.⁶⁰

Figure OA1 shows the geographical distribution of survey respondents broken by party identification.

The experiment was framed as a study about crime in the U.S., not as a study about vote-selling. Before splitting the subject pool into their respective experimental conditions, participants were asked to read an **excerpt** where four illegal activities were described (including vote-selling). All of them were formatted as pieces of news. The idea was to explain to “newsreaders” what “vote-selling” was.⁶¹

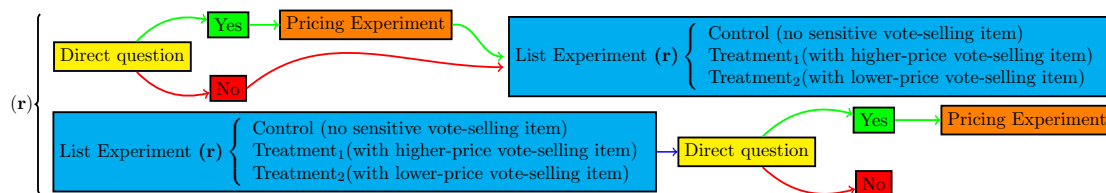


Figure 2: Experimental Flow of the List Design..

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,⁶² and as suggested in Figure 2, the order in which experimental 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 was going to 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 then were used to estimate the proportion of “liars,” a process which I describe below.

Subjects answering “yes” to the direct question, answered as a follow-up a **pricing experiment** where they were asked to put a price on their votes. Subjects who answered “no” to the direct

question, were asked another 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 one indicating which price was considered “too high” for one’s vote. Both sliders ranged from \$0 to \$1,000, in \$1 increments. As I explain below, 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 (without any sensitive vote-selling item), and two possible treatments, each with different vote-selling prices. Since it is difficult to price a vote, based on a number of pretests, it was decided to consider both an arbitrarily low (\$100) or an arbitrarily high (\$500) price as possible treatments. To be sure, participants randomly assigned to the treatment condition, only answered one of these two treatments. More than being hard pricing tests, these two treatments account for (possible) different elasticities that might have interacted with individual socio-economic backgrounds, mainly income.⁶³

Moving forward, subjects randomly assigned to the control condition⁶⁴ 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

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 the following two treatments. The ones assigned to the “low” price condition, read and 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) sell your vote to a candidate for \$100
- (4) download your favorite music from the internet illegally

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

However, the ones assigned to the “high” price condition, read exactly the same vignette, with the only difference that the third item read as follows: (3) **sell your vote to a candidate for \$500**. Figure 3 shows the distinct frequencies of participants declaring how many (if any) illegal things they 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.⁶⁵ Importantly, the sensitive item might or might not be included in this frequency. Finally, and following standard practice in the literature, the order of the items was not randomized so as to not violate the stable unit treatment value assumption, or “SUTVA.”⁶⁶

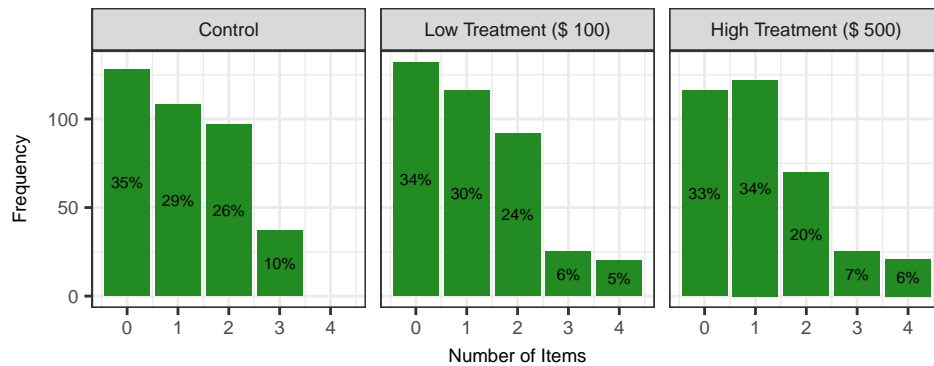


Figure 3: Frequency and Percentages of Subjects Declaring How Many (if Any) Illegal Things They Would Do.

Note: Notice that the X-axis denotes the number of items, not which ones.

Given that the focus is to outline some conditions under which voters would sell, the paper acknowledges that there is considerable friction and transaction costs in the real world that might mean that actually creating a market for vote selling would not be easy. For instance, party identification might increase (or decrease) the cost of selling one’s vote, presumably preventing (or fostering) the transaction. For instance, if the party of both sellers and buyers coincide, that might represent a win-win situation for both, presumably fostering vote-selling. The experimental design does not consider blocking on party identification, as that might have increased the number of cells considerably.⁶⁷ Having that in mind, the paper’s aim is to explore the micro-dynamics of the willingness to sell the vote, presumably, in elections that are relatively non-partisan.

List Experiment: Would U.S. citizens sell their vote? Following the advice of Blair and Imai 2012 and Imai, Blair, and Park 2014, the list data were analyzed using a statistical multivariate approach.⁶⁸ 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.”

Based on the statistical analyses of the list experiment data, Figure 4 shows the estimated proportion of vote-sellers, the estimated proportion of declared vote-sellers (based on the direct question), and the difference between the two, which is the estimated proportion of “liars.” Each estimation is broken down by treatment (“high”/“low”). As stated before, both of them were introduced to control for possible different selling elasticities associated with discrete increments in income. 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, combining the estimates of the “low” and “high” treatments, approximately 25% of the nationally representative sample would be willing to sell their vote.⁶⁹ While a considerable proportion answered the direct question affirmatively (18%),⁷⁰ the analyses still suggest that survey respondents systematically under-reported their true answers. Around 8% of the nationally representative sample lied about it.⁷¹ Overall, these results are striking, and the author is not aware of any other experimental design where subjects in an industrialized democracy are asked whether they would sell their votes, and moreover, finding positive results.

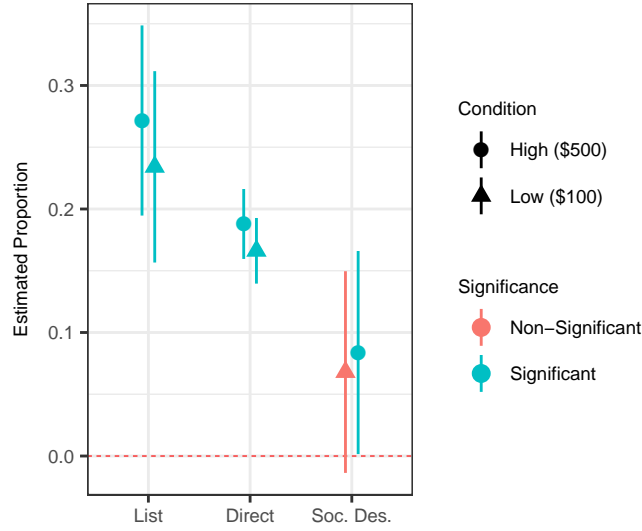


Figure 4: List Experiment Data: Declared and Predicted Vote-Sellers.

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 idea behind having 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.

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 hand, the results presented in this study strongly suggest that they would: a very high proportion of the nationally representative sample would be willing to give up, in exchange for money, its right to vote freely. That is, while buyers (e.g. parties) are not buying, there is a large proportion of latent vote-sellers willing to sell its votes.

Price Experiment: What would be the tipping point for vote-sellers? *Where do supply and demand meet?* A pricing experiment was conducted in this study. Subjects were directed to declare which price—within a \$1-\$1,000 range, and in \$1 increments—was considered “too cheap,” and which price—idem—was considered “too expensive.” With these two pieces of information, it was possible to construct two supply curves. The “too cheap” curve represents the lower bound

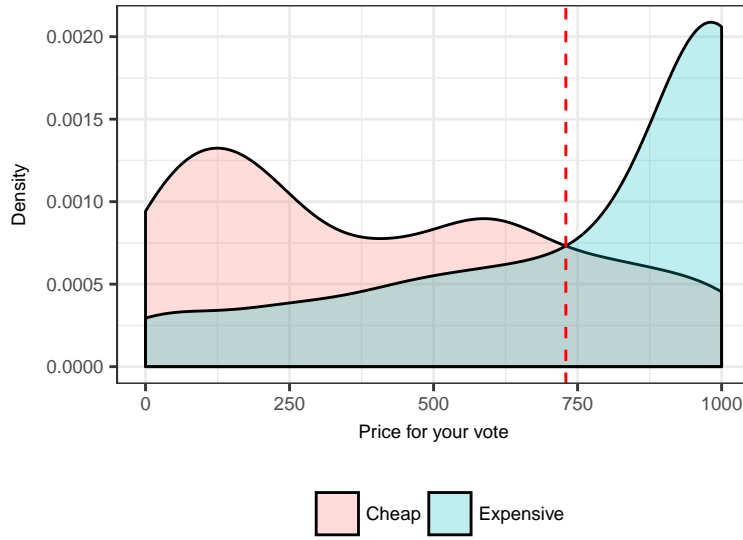


Figure 5: Pricing Experiment: Ideal Selling Price.

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.

(with an estimated mean of \$418), while the “too expensive” curve represents the upper bound (with an estimated mean of \$744). Substantively, the optimal selling price is located where both curves intersect. Following this procedure, [Figure 5](#) indicates that the average survey respondent would sell his vote for \$730. In practice, these results go in line with some non-academic accounts, where it is found that a broker purchased one man’s vote for \$800 during the 2010 elections in eastern Kentucky.⁷²

In light of what is explained in Stokes, Dunning, Nazareno, and Brusco [2013](#), these results are aligned with their findings. 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, turning vote-buying into an increasingly expensive strategy to win votes. Evidently, with the selling price being so expensive, the demand-side (i.e. parties) is not able to catch up with the supply-side, making vote buying in the U.S. a rare event.⁷³ This has forced party machines to turn to other, less prohibitively costly alternatives. However, and as these results confirm, 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 democratic values of U.S. citizens “in good health”? And how can they be measured?* This section proposes a new experimental way to measure individual attitudes towards democracy. Considering that democracy is a multi-dimensional concept, the proposed methodology tests which particular democratic dimension(s) should “fail” in order to produce likely vote-sellers.

Carlin (2017, p. 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 “Linjian” question, which asks whether democracy is preferred over other types of regimes. Unfortunately, these kinds of questions are not only really hard to answer,⁷⁴ but also they introduce a number of validity concerns, including social desirability biases.⁷⁵

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 immigrant’s characteristics, such as country of origin, language skills, among others. 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.”⁷⁶ In their design, they were interested in knowing what kinds of immigrant profiles were more likely to be granted citizenship. Following their lead, in this paper 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. Importantly, this novel technique captures attitudes towards democracy in a non-intrusive way, and such, the design minimizes the risks of introducing social desirability bias.⁷⁷

In an important paper, ODonnell1998—building on Dahl (1971)—explains that democracy is a multi-dimensional concept. He identifies three sub-dimensions, a democratic sub-dimension, and a liberal and republican sub-dimensions. 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 (liberal component),⁷⁸ and whether there are “obligations to individuals placed in the public

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.*

sphere”⁷⁹ (republican component). Luna (2006) conceptualizes these three dimensions in a series of survey questions. Building on his approach, I developed a conjoint experiment that all survey respondents answered after the list experiment portion of the study. Table 1 shows Dalh’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. Every time, both candidates endorsed different (or not) policy positions. Table 2 shows one possible example. To minimize spillover effects, every task had different candidates. That is, the first task asked respondents to choose between candidates “1” and “2.” In the next task, respondents were asked to choose between candidates “3” and “4,” and so on. Attributes’ order (rows) were randomized. Both the “CAN” and “CANNOT” were also randomized.⁸⁰ In sum, survey respondents, in practice, chose among unique profiles every time. As the table shows, both candidates could (or could not) differ on their respective policy positions.⁸¹

Statistically, the ACME was estimated. As explained by Hainmueller, Hopkins, and Yamamoto (2014, p. 20), 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 where citizens “CANNOT”).⁸² All estimated coefficients then represent a comparison between, say, “Citizens CAN vote in the next two elections” and “Citizens CANNOT vote in the next two elections.” Following this procedure for all attributes, it was possible to estimate the mean attitudes towards democracy in a non-intrusive way.

Figure 6 suggests that survey respondents have in general “healthy” democratic values. And to

Please carefully review the options detailed below. Which of these two candidates represents the lesser of two evils for you?		
	Candidate 1	Candidate 2
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.*

answer the question above, they do systematically value their voting rights (“citizens CAN vote”). Political participation (“citizens CAN run for office”) ranks a little bit 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.

Conjoint Experiment: Democratic Values and Vote Selling. The following portion of the analyses identified which of these democratic sub-dimensions should fail to produce likely vote-sellers. The statistical analyses performed on list experiment data allowed 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.⁸³ Using this method, it was possible to regress vote-selling on the chosen democratic sub-dimensions. This allowed investigating which dimensions should fail to produce likely 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](#) shows that individuals who systematically 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 individual vote-selling. Sub-dimensions that involve the relative empowerment of citizens and press, do not have a statistical effect on vote-selling. Interestingly, attitudes towards voting do not have an effect on vote-selling either. That

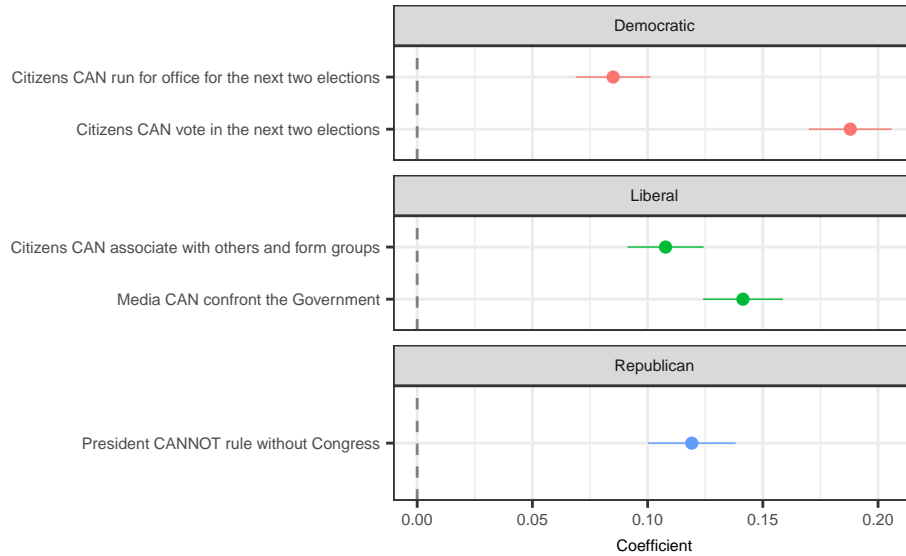


Figure 6: Democratic Values of the American Public: A Conjoint Experimental Approach.

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 ODonnell1998; Dahl 1971; 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). 95% confidence intervals are included. All observations were included. $N = 14,770$.

is, 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 (“Media CANNOT confront the Government”), which is another form of horizontal accountability, tend to sell their votes more (i.e. coefficient is positive, but non-significant).

List Experiment: Who are the most-likely vote-sellers? While there might be a wide range of important factors that explain vote-selling, the motivation of the statistical approach presented here is to provide an overview of the phenomenon. Considering this, four covariates were included

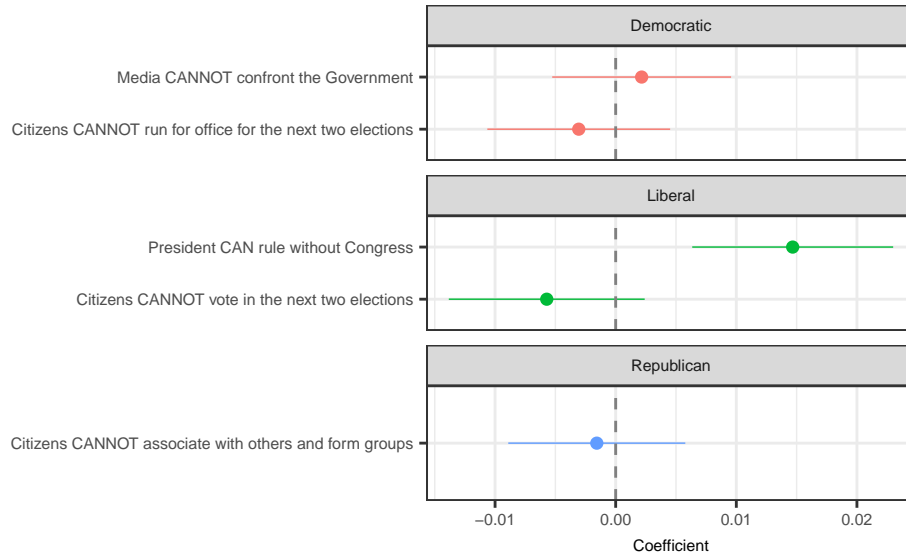


Figure 7: Predicting Vote Selling: Broken Democratic Dimensions.

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. 95% confidence intervals 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."

when analyzing the list data; namely, income, education, party identification, and political ideology. These variables have been widely considered in the clientelism literature.⁸⁴ Each variable was estimated twice, i.e. one model per treatment ("low"/"high").⁸⁵

[Figure 8](#) shows the estimated effect of each variable on vote-selling. Democrats and liberals are systematically more likely to sell. These findings go in line with a string of research that has studied the different constitutive values of liberals and conservatives. Political psychologists have found that liberals, when compared to conservatives, construct their moral systems primarily upon narrower psychological foundations. Particularly, liberals consider less important both the authority/respect and the purity/sanctity dyads.⁸⁶ 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](#), p. 7 explain that conservatives "see impure violations as relatively more wrong," in turn, presumably, making them less likely to engage in illegal activities. In turn, liberals' constitutive set of values make them more likely to sell their votes.

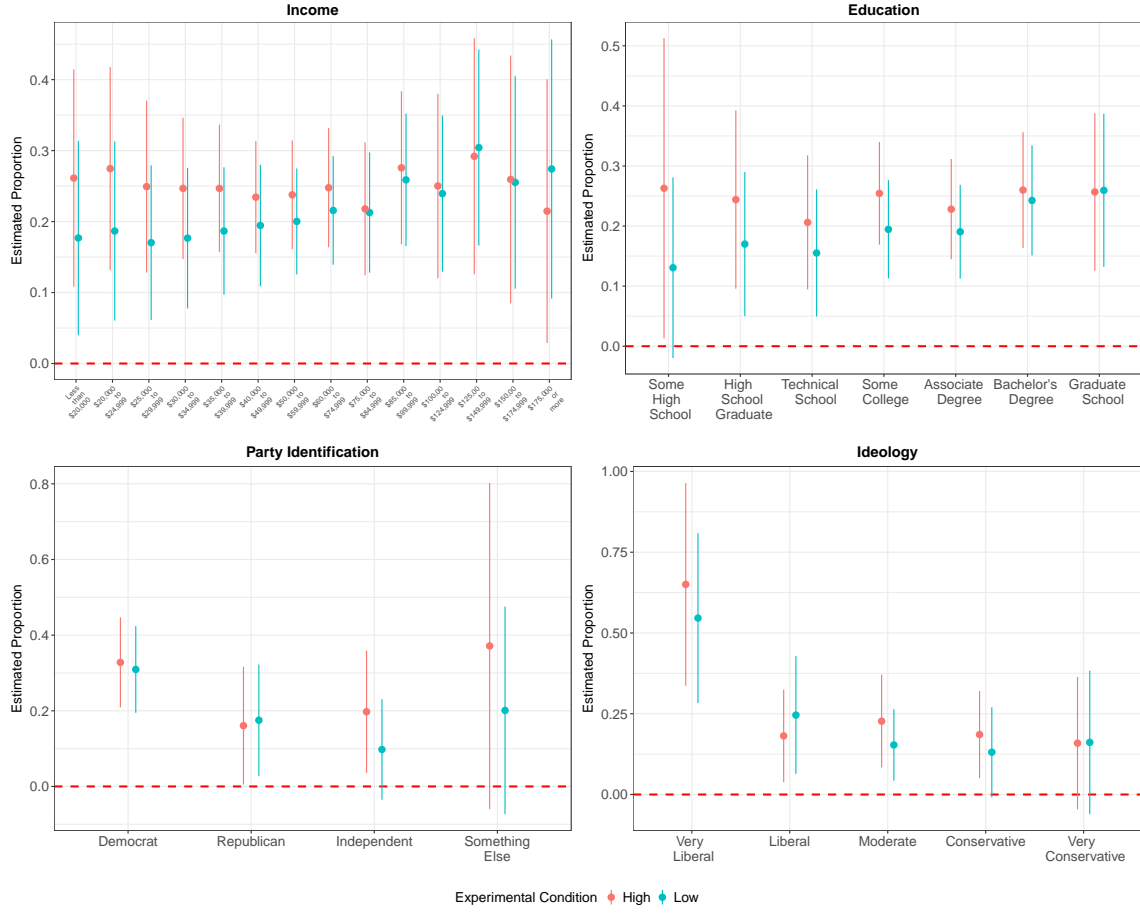


Figure 8: List Experiment: Predicting Vote-Selling.

Note: After fitting the model on the list experiment data (see [Table A1](#)), in this figure are shown the predicted probabilities, and their corresponding 95% confidence intervals, of: 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.

Education and income levels do not seem to have a systematic impact on vote-selling. Interestingly, poverty has long been associated with vote-selling.⁸⁷ Brusco, Nazareno, and Stokes 2004, Stokes, Dunning, Nazareno, and Brusco 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, p. 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 Gonzalez-Ocantos, de Jonge, Meléndez, Osorio, and Nickerson 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.⁸⁸ Overall, the findings presented in this paper seem to support the idea that low-income individuals are not necessarily more likely to sell their votes relative to wealthier individuals.

While the differences between the two treatments are not statistically significant, 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. That is, even when poor individuals do not seem to sell more (when compared to wealthier individuals), there does seem to be important within-group differences regarding both experimental stimuli. 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 go 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.”⁸⁹ In other words, less educated and low-income individuals, being 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. On the contrary, higher-income and more educated individuals do not seem to be affected by the different stimuli, and sell their vote in the same proportion, regardless of the price. For instance, highly-educated individuals (graduate school level) sell their vote at the same proportion, both under the “high” (25.68%) and “low” (25.95%) conditions. Relatedly, Gonzalez-Ocantos, Kiewiet de Jonge, and Nickerson 2014, p. 205 and Corstange 2012, p. 494, also

find very weak results for education in Peru and Nicaragua, and Lebanon, respectively.

IV. GENERAL DISCUSSION

The paper began by establishing the tension between supply and demand sides within a clientelistic relationship, that is, between the ones who sell and the ones who buy votes. 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, p. 131 explains all the well-known problems of studying “only cases that have achieved the outcome of interest.” Questions involving hypothetical scenarios, on the contrary, are able to potentially shed light on unrealized transactions. Notably, Gonzalez-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 U.S. 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. Consistently with the literature, they are willing to sell their votes, but for an estimated very high price—\$730.

In turn, 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 particular, a lack of support of a Congress able to balance the President’s political power, in what both ODonnell1998 and Dahl (1971) call “horizontal accountability,” increases the individual probability of selling one’s vote.

Moving forward, *What are the implications that a 25% of the representative sample are 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, Gonzalez-Ocantos, de Jonge, Meléndez, Osorio, and Nickerson 2012,

p. 210 find that 24% of Nicaraguan votes were bought. In turn, the findings presented in this paper are below of what Corstange 2012, p. 493 finds for the Lebanon, where 55% of voters sold their votes. In any case, the existence of a critical mass willing to sell their votes in the United States, has broader implications for American democracy. This is particularly important in times where the integrity of elections, and the democratic system in general, have been delegitimized by the President of the United States himself,⁹⁰ 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. Not only presenting experimental evidence about a large critical mass willing to sell their votes in a developed country was novel. As explained in the paper, much inferential leverage is derived when, given our priors, counterintuitive evidence is found in a “least-likely” design. It was well beyond the goal of this paper to investigate the long-term structural causes of vote-selling in the U.S., 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, where both developed and developing countries are included.

Future research should also consider different values placed on different offices.⁹¹ 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. Not only that, future research should consider blocking on party identification. For example, designing a more complex experiment, where not only the price varies (like it does in the presented design), but also where the vote-selling treatment is partisan. *Do subjects sell more when they sell it to the party of their like? Or do citizens opt-out of vote-selling when they are being bought by the opposite party? Or do vote-sellers do not care about these distinctions at all?* One downside of such a design might be that the number of cells increases from 2 (i.e. *high* and *low* treatments), to $3 \times 2 \times 3 = 18$ cells.⁹² Such higher-dimension factorial design, in turn, implies having enough number of individuals in every cell, increasing the cost of the experiment. Moreover, within the behavioral economics framework, future designs should consider real monetary incentives and real (monetary) risks of selling one’s vote. Another interesting addition might be to assign a random probability of being caught selling the vote.

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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.

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...

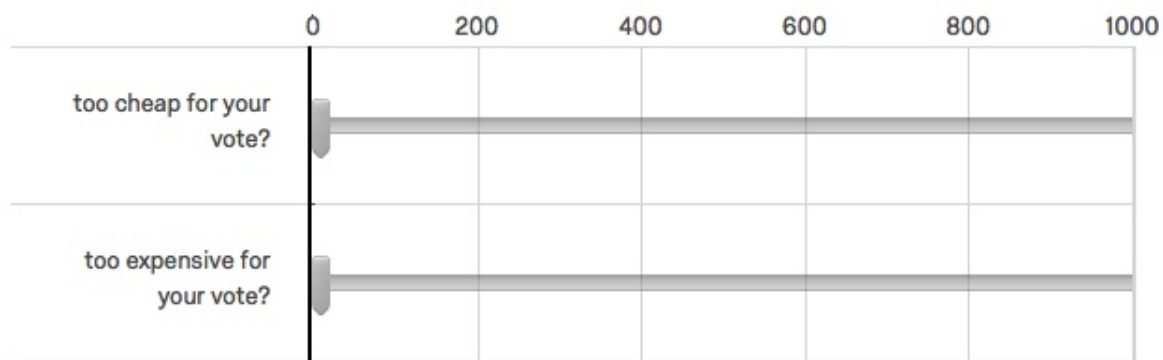


Figure A1: *Pricing Experiment.*

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			
	<i>Low Treatment</i>		<i>High Treatment</i>		<i>Low Condition</i>		<i>High Condition</i>	
	<i>Est.</i>	<i>SE</i>	<i>Est.</i>	<i>SE</i>	<i>Est.</i>	<i>SE</i>	<i>Est.</i>	<i>SE</i>
Intercept	−0.06	1.03	0.82	1.2	−0.73	0.22	−0.76	0.24
Ideology _{Liberal}	−1.36	0.8	−2.11	0.9	0.41	0.19	0.36	0.2
Ideology _{Moderate}	−1.79	0.76	−1.74	0.88	0.1	0.18	0.3	0.19
Ideology _{Conservative}	−2.1	0.89	−1.86	0.87	0.23	0.2	0.34	0.21
Ideology _{VeryConservative}	−1.88	1.12	−2	1.03	0.01	0.25	0.09	0.25
Party Id _{Republican}	−0.18	0.75	−0.6	0.73	−0.53	0.15	−0.55	0.15
Party Id _{Independent}	−1.2	0.89	−0.55	0.65	−0.37	0.13	−0.35	0.13
Party Id _{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.*

Respondent Types	<i>Low Condition</i>		<i>High Condition</i>	
	<i>Est.</i>	<i>SE</i>	<i>Est.</i>	<i>SE</i>
(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

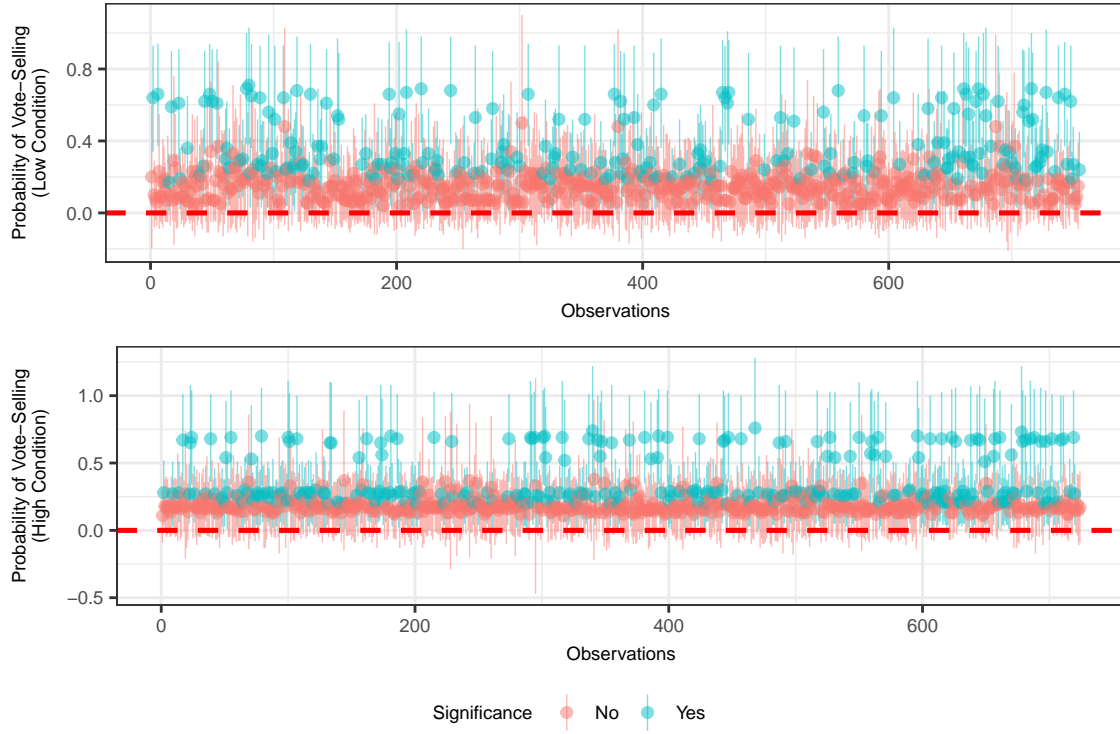


Figure A2: Individual Estimated Probabilities of Vote-Selling.

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

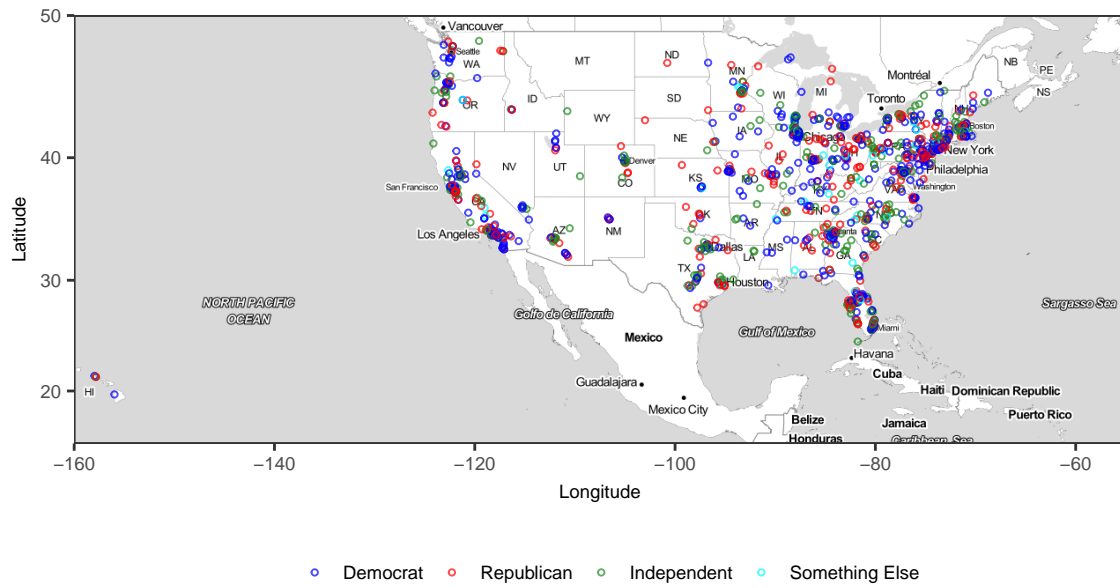


Figure OA1: *Geographical Distribution of Survey Respondents broken by Party Identification.*