# The Super Rich and the Rest: Campaign Finance Pressures and the Wealth of Politicians

Running Header: The Super Rich and the Rest

Keywords: campaign finance, political elites, wealth distribution, political selection

#### Lucia Motolinia

Washington University in St. Louis
Department of Political Science
1 Brookings Drive, Seigle 233
St. Louis, MO 63130
luciam@wustl.edu

#### Marko Klašnja

Georgetown University
School of Foreign Service and Government Department
Mortara Center 210, 3600 N Street NW
Washington, DC 20007
marko.klasnja@georgetown.edu

#### Simon Weschle

University of North Carolina at Chapel Hill Department of Political Science 361 Hamilton Hall, CB 3265 Chapel Hill, NC 27599 weschle@unc.edu

For helpful comments and suggestions, we thank Nikolaj Broberg, Nick Carnes, Maria Carrieri, Jordan Gans-Morse, Marty Gilens, Jake Grumbach, Noam Lupu, Jonathan Nagler, Abe Newman, Christopher Ojeda, Benjamin Page, Miguel Pereira, Rachel Porter, Nita Rudra, Danielle Thomsen, Rocío Titiunik, Hye Young You, participants at the 2020 APSA meetings, 2021 MPSA meetings, 2022 Copenhagen Money in Politics Conference, 2023 Money in Politics APSA Pre-conference, 2023 Women in Legislative Studies Seminar, and at seminars at American University, Georgetown University, George Washington University, the Peterson Institute for International Economics, and Washington University in St Louis. We also thank Ágnes Czibik, Kevin Deegan-Krause, Andy Eggers, Mihály Fazekas, Jon Fiva, Olle Folke, Miriam Golden, Roberto Kukutschka, Antonio Merlo, Elżbieta Morawska, Hanna Niczyporuk, Jonas Olofsson, András Pethő, Kuba Pochrybniak, Johanna Rickne, Alexandra Rusu, Daniel Smith, Gergő Sling, Gabriel Šipoš, Yuhki Tajima, Margit Tavits, and Janne Tukiainen for their assistance with the data collection. Ryan Johnson and Hashem Krayem provided superb research assistance. Klašnja gratefully acknowledges support through the National Science Foundation Grant SES-2049256.

The Super Rich and the Rest:

Campaign Finance Pressures and the Wealth of Politicians

**Abstract:** We provide a comprehensive theoretical and empirical account of the relationship be-

tween campaign finance pressures and the wealth of politicians. We argue that the heavily right-

skewed wealth distributions observed in contemporary societies translate into similarly skewed

distributions of campaign resources. Such unequal resources mean that greater pressures to spend

on campaigns disproportionately benefit the very wealthy. We also identify several conditions that

determine the extent of the financing advantages of the very rich, and at whose expense they ac-

crue. We test our propositions using a unique original dataset on the wealth of more than 23,000

national legislators from 41 countries, as well as by exploiting quasi-random variation in financing

pressures provided by recent campaign finance reforms in Brazil and Chile. The analyses consis-

tently show that greater financing pressures lead to greater shares of wealthy, and especially very

wealthy legislators, and that these advantages vary in ways consistent with our predictions.

Verification Materials: The data and materials required to verify the computational repro-

ducibility of the results, procedures and analyses in this article are available on the American

Journal of Political Science Dataverse within the Harvard Dataverse Network, at: https://doi.org/

10.7910/DVN/GLMWLB

Word Count: 9,973

To paraphrase the famous exchange between F. Scott Fitzgerald and Ernest Hemingway, politicians are different from the rest: they have more money. Political elites are much less likely to have previously held working-class jobs than the citizens they represent (Carnes and Lupu, 2015; Kirkland, 2020), and executives and legislatures in many countries are populated by millionaires and billionaires (Krcmaric, Nelson and Roberts, 2024). Yet, there is large variation across countries in how wealthy the political elites are. For example, our original data (described below) indicates that more than 90 percent of South Africa's national legislators are over 50 times wealthier than the average household, but less than 5 percent of their Bulgarian counterparts are as wealthy. Why?

An oft-cited reason for the prevalence of wealthy politicians is the influence of money in politics. Campaigns are crucial for electoral success (Weschle, 2022; Thomsen, 2023), and they can be expensive, whether because of permissive regulations on spending and contributions, long campaign calendars, or large electorates that candidates need to appeal to. Such financing pressures may advantage wealthier candidates, who can more easily self-finance their campaigns (Gerber, 1998), face lower opportunity costs in lost income and forgone employment (Carnes, 2018), and have better connections to potential donors (Bonica, 2017).

We advance scholarship in this area by proposing a novel explanation of how campaign financing pressures affect the composition of a political elite's wealth. We argue that in general, an increase in financing pressures advantages primarily the *very wealthy*. The key reason is that wealth distributions are heavily right-skewed (Benhabib and Bisin, 2018), so most people – and political candidates – own relatively little wealth and a few possess a lot of it. While one's wealth provides direct advantages through self-financing in the majority of campaign finance regimes around the world, we also argue that inequalities in personal wealth either beget similar inequalities in other financing resources (such as private donations) or tend to be insufficiently redressed through other sources (such as public financing). In other words, the heavily skewed distribution of wealth translates into a heavily skewed distribution of campaign resources. As campaign financing pressures increase along this "resource curve," the very well-heeled reap the biggest electoral advantages.

Our simple conceptual framework further identifies conditions that affect the extent to which the very wealthy experience financing advantages. Greater wealth inequality magnifies the gains

<sup>&</sup>lt;sup>1</sup>For details on the original exchange, see *The New York Times*, "The Rich Are Different," November 13, 1988, https://www.nytimes.com/1988/11/13/books/l-the-rich-are-different-907188.html.

to the very wealthy. Moreover, when these pressures rise from a lower initial level, the returns for very wealthy individuals are more moderate, and relatively poor candidates lose out the most; when pressures increase from an already high level, the super wealthy<sup>2</sup> stand to gain the most, yet mainly at the expense of the 'merely' wealthy (rather than the relatively poor) candidates.

To evaluate these propositions, we first analyze an original dataset on the wealth of more than 23,000 national legislators in 41 countries around the world. While politicians are generally much wealthier than ordinary citizens in their country, we detect large variation across nations: The average politician in the average country in our data is 72 times wealthier than the average household, but this mean politician-to-population wealth ratio varies between 3.7 and 455. This variation is strongly associated with campaign financing pressures. Countries with greater funding pressures have considerably wealthier legislators, and especially larger shares of the uber wealthy. The very wealthy are more likely to enjoy such advantages where wealth in a country is more unequally distributed, and the advantages are distributed differently if the pressures rise from a higher compared to a lower base. These associations persist even after controlling for an extensive set of characteristics of politicians, parties, wealth and campaign disclosure systems, and countries, as well as, where possible, in models with country fixed effects.

While novel and robust, these findings are descriptive and correlational. To aid causal identification, we also exploit two sources of plausibly exogenous variation in financing pressures provided by recent campaign finance reforms in Brazil and Chile. To date, Avis et al. (2022) is the only study that causally identifies the effect of campaign finance rules on politicians' wealth, leveraging a discontinuous increase in the campaign spending limit in the 2016 Brazilian mayoral elections. Focusing on the municipal council elections in the same year, we examine the same discontinuous increase in light of our theoretical predictions. Since even the more restrictive spending limit is rather high – about 85 percent of those municipalities' average GDP per capita – we predict and indeed find that an increase in the spending limit benefits only the very wealthy, and primarily comes at the expense of the medium wealthy but not the relatively poor candidates.

Finally, we analyze the 2017 Chilean national parliamentary elections, a context where parties play a bigger role in nominating candidates and financing campaigns, thus arguably representing a harder test of our argument. We utilize two simultaneous reforms, a campaign finance reform that

<sup>&</sup>lt;sup>2</sup>We use the terms very wealthy, super wealthy, and uber wealthy interchangeably.

uniformly lowered the campaign spending limits, and an electoral system reform that increased district magnitudes and changed district boundaries in ways that induced differential changes in the spending limits within and across the new districts. Leveraging this variation, we again find that increases in spending pressures increase the share of very wealthy legislators.

Our arguments and evidence further our understanding of the role of personal wealth in politics. Very wealthy individuals are exceptionally politically active (Hersh, 2023; Page, Seawright and Lacombe, 2018), and often enter politics at the height of their economic power (Markus and Charnysh, 2017; Roberts, 2019). If political elites are overwhelmingly wealthy, this raises concerns about unequal representation, since the rich tend to exhibit different attitudes, experiences, and preferences from the rest of the population (Cohn et al., 2023; Page, Bartels and Seawright, 2013; Pereira, 2021; Suhay, Klašnja and Rivero, 2021) and are more likely to enact policies that favor the affluent (Bartels, 2018; Szakonyi, 2021). We provide the most comprehensive overview of politicians' wealth across the globe to date, and are among the first to extensively and rigorously examine a key driver of this variation – campaign financing pressures.

Our analyses also identify the limitations of potential campaign finance reforms. While our results suggest that lowering the financing pressures can help reduce the wealth gap between politicians and the public, even in the most restrictive campaign finance regimes in our cross-national sample, a politician at the 90th percentile of the wealth distribution of their country's political elite is almost 20 times wealthier than the average household.<sup>3</sup> This suggests that wealth may provide other advantages, for example because it connotes other electorally appealing characteristics such as professional success (Manin, 1997), or because the wealthy exert broader influence in business, popular culture, news media, and innovation (Pevnick, 2016). Lessening the influence of money in politics is therefore likely not enough to eliminate the overrepresentation of the wealthy in politics.

# Campaign Financing Pressures and Politicians' Wealth

We define *campaign financing pressures* as the cumulative effect of the rules and norms that determine candidates' needs to raise and spend money in elections. Campaign finance regulations, of course, play an important role. Financing pressures are low when it is possible to win with small

<sup>&</sup>lt;sup>3</sup>Even the average politician is almost four times wealthier than the average household.

amounts of campaign funds, for example when there are strict spending limits or a robust public funding system. In contrast, if campaign finance regulations permit considerable contributions and spending, then candidates who want to be competitive are under greater pressure to fundraise and spend (Avis et al., 2022; Bonneau and Cann, 2011; Fouirnaies, 2021).<sup>4</sup> There are, however, other factors in addition to regulations that influence candidates' need to raise and spend campaign funds. For example, longer campaigns should increase financing pressures by extending the parties' and candidates' effort on outreach and mobilization. Candidates in larger constituencies are under greater spending pressures than those with fewer voters. Low reporting transparency may also increase campaign finance pressures, as it makes it possible, or even necessary, for candidates to illicitly spend more than the law allows.

The argument that greater campaign financing pressures are beneficial for wealthier candidates is of course not new (e.g. Dawood, 2015; Bonica, 2017; Carnes, 2018; Thomsen, 2023). We build upon this research by incorporating the shape of the distribution of wealth and deriving its implications. In his seminal work, Pareto (1897) demonstrated that the wealth distribution in all the societies he studied looked remarkably similar: a large mass of households holding small amounts of wealth, and a small number of households owning large fortunes. This observation has subsequently become known as "Pareto's Law," for the regularity with which such right-skewed wealth distributions have been observed over time and across countries (cf. Benhabib and Bisin, 2018). For example, Supplementary Appendix (SA) Figure A1<sup>5</sup> shows that the wealth distribution in the United States accords with Pareto's Law: individuals in the top wealth percentiles own most of the country's assets; those in the 99th percentile own almost 40 percent of the total wealth. We posit that such skewed wealth distributions in a population tend to be replicated in a pool of political candidates, as candidates tend to reflect the characteristics of the populations they come from (Dal Bó et al., 2017; Gulzar, 2021). Indeed, SA Figure A2 shows Pareto-shaped wealth distributions among candidates in our two case studies of Brazil and Chile that we examine below.<sup>6</sup>

<sup>&</sup>lt;sup>4</sup>This does not mean that lower-spending candidates have *no* chance of winning, as they may have other characteristics (charisma, grassroots support, high social standing, previous political experience, etc.) that are appealing to voters. However, it does mean that, all else equal, a candidate who spends more has a greater chance of winning, which may, in turn, pressure other candidates to spend more heavily as well to remain competitive. We show in SA Section F.1 (p. 22) with our data from Brazil that greater financing pressures lead to higher campaign expenditures, primarily among competitive candidates.

<sup>&</sup>lt;sup>5</sup>On page 1 of the SA.

<sup>&</sup>lt;sup>6</sup>On page 1 of the SA.

How do campaign financing pressures impact the wealth of elected politicians when the wealth distribution in the population, and therefore in the pool of potential candidates, is right-skewed?

## Simple Conceptual Framework with Self-Financing and Spending Limit

Every campaign finance regime has two key dimensions: (a) how parties and candidates obtain funds (receipts) and (b) how they spend them (expenditures). For simplicity, assume for now that receipts only come from candidates' own pockets, and that a simple and hard spending limit regulates campaign expenditures. The top panel of Figure 1 depicts this situation schematically. The red, upward-sloping line in each of the three graphs in the top panel denotes the wealth of potential candidates at different percentiles in a Pareto-like wealth distribution. The dashed horizontal line represents the spending limit. For those to the right of the intersection of the two lines, wealth exceeds the spending limit (as highlighted by the shaded area). These individuals can personally afford to spend the maximum amount. Those below the intersection cannot afford to reach the spending limit using their own resources. Moving from left to right, the three graphs illustrate the impact of an increase in financing pressures via a more permissive spending limit (e.g. across constituencies, federal units, countries, or over time within a geographic unit). We provide formal proofs in SA Section B,<sup>8</sup> but two implications are intuitive and readily apparent. First, as the limit increases (the dashed line moves up), the intersection of the lines moves to the right and the shaded area shrinks, indicating that greater spending pressures advantage those with more wealth. The second and related implication, driven by the convex shape of the wealth curve, is that the shaded area shrinks at an increasing rate as the spending limit increases, indicating that only the very wealthy continue to have the means to spend the maximum amount on their campaigns. In other words, because of Pareto's Law, an increase in campaign spending pressures tends to disproportionately advantage the super wealthy.

Figure 1 about here

<sup>&</sup>lt;sup>7</sup>Whether a candidate who can spend at the limit actually does so depends on the spending choices of their competitors (see, for example, Avis et al., 2022). Our claim is that candidate wealth increases the likelihood that they outspend others as needed, including spending at or near the limit.

<sup>&</sup>lt;sup>8</sup>On page 2 of the SA.

# Incorporating Other Sources of Receipts and Other Aspects of Campaign Financing Pressure

While self-financing is an important way in which candidates pay for campaigns (70 percent of countries allow it, see IDEA 2018), there are other relevant sources of campaign funding. Moreover, our definition of campaign finance pressures highlighted other important factors that determine candidates' expenditures. The top panel of Figure 1 may, therefore, misrepresent either the distribution of campaign resources across candidates of varying wealth (the solid red line), the level of campaign financing pressures (the dashed line), or both. Below and in SA Section C,<sup>9</sup> we argue that our simple framework remains a useful schema even, and perhaps especially, when other key features of campaign finance regimes are considered.

First, the other key sources of receipts also disproportionately favor the very wealthy, or are at least unlikely to significantly redress their unequal advantages. Private donations from other individuals and organizations are another major funding source. In principle, the ability to attract such donations need not be correlated with a candidate's wealth. However, in practice, fundraising relies heavily on candidates' personal networks. Because wealth is a key driver of homophily (cf. Chetty et al., 2022), wealthier individuals tend to have greater access to a network of wealthy potential donors. This is true in the US (Aneja, Grumbach and Wood, 2022; Bonica, 2017, 2020; Eggers and Klašnja, 2020; Grumbach, Sahn and Staszak, 2020), and perhaps even more so in other countries where contributions come almost exclusively from candidates' personal connections (Boas, Hidalgo and Richardson, 2014; Bueno and Dunning, 2017; Rueda and Ruiz, 2024; Weschle, 2024a).

The third major source of campaign money is public funding, which in theory can level the playing field. However, in most campaign finance regimes, public subsidies are either fixed or proportional to prior electoral success (IDEA, 2018). Unless own and private contributions are banned or severely restricted, their unequal distributions cannot be redressed with equitable public funds. On the other hand, public subsidies based on prior electoral performance may well reinforce inequities since, as discussed above, the wealthy tend to have more campaign resources, which are likely to have provided an edge in the prior election (Abdul-Razzak, Prato and Wolton, 2020; Avis et al., 2022; Sides, Vavreck and Warshaw, 2022).

<sup>&</sup>lt;sup>9</sup>On page 3 of the SA.

In SA Section C,<sup>10</sup> we further discuss how other important characteristics of campaign finance regimes either impose similar pressures as the spending limits depicted in Figure 1 or influence both the distribution of resources and the level of pressure, but not in a way that fundamentally alters our simple conceptual framework. Therefore, we argue that after accounting for the common aspects of campaign financing regimes, the simple framework from Figure 1 remains a useful way to conceptualize the relationship between campaign financing pressures and a candidate's wealth.

# Hypotheses

Given these arguments, we can generalize our conceptual framework beyond self-financing and spending limits, so that the solid red line represents the distribution of broader campaign resources and the horizontal dashed line represents the net total of various financing pressures. Thus:

• **H1**: Greater campaign financing pressures advantage the wealthy, and especially the *very* wealthy.

We also draw two additional implications. First, the top panel of Figure 1 illustrated the variation in the level of campaign pressures (the dashed line), but kept the shape of the financial resource curve (the solid red line) fixed. We have claimed that unequal distributions of wealth are very likely to produce unequal distributions of campaign resources. While Pareto's Law applies widely to empirical distributions of wealth, there is variation in how right-skewed those distributions are (Zucman, 2019). It is thus straightforward to conclude that in our conceptual framework, higher campaign financing pressures should confer greater benefits to the very wealthy when the distribution of wealth is more unequal (i.e. when it is more right-skewed). The bottom panel of Figure 1 illustrates this: with a more even distribution of financial resources (solid red line) compared to a more unequal distribution (dotted red line), the share of candidates who are not priced out by the increasing financing pressures (the size of the lighter shaded area moving from the left to right graphs) decreases less rapidly than with greater wealth inequality (the darker shaded area), indicating less disproportionate advantages accruing to the wealthiest.

<sup>&</sup>lt;sup>10</sup>On page 3 of the SA.

• **H2**: Greater financing pressures provide larger advantages to the very wealthy as the wealth distribution becomes more right-skewed.<sup>11</sup>

The second additional implication of our simple framework, once again driven by the shape of the resource curve, is that the magnitude of the advantage to the very wealthy – and the disadvantage to others – depends on the level the financing pressures start from. Consider an increase in financing pressures from a low base (i.e. a move from the left-most to the middle graph in the top panel of Figure 1). On the left, even relatively poor candidates can spend up to the limit. However, as the spending cap increases in the middle graph, the poor are priced out, but those with very high or intermediate wealth (the 'merely' or 'medium' wealthy) remain above the intersecting lines. In other words, an increase in financing pressures from a low base mainly disadvantages the relatively poor candidates, and the advantages to the very wealthy relative to the merely wealthy should be smaller. However, an increase in financing pressures from an already elevated base (i.e. a move from the middle to the right graph in the top panel of Figure 1) exclusively benefits the very wealthy, but mainly at the expense of the medium wealthy, since the relatively poor candidates have already been priced out.

• H3: An increase in financing pressures from low to medium primarily disadvantages the relatively poor candidates, and the advantage to the very wealthy compared to the medium wealthy is smaller. An increase in financing pressures from medium to high primarily disadvantages the medium wealthy but does not strongly impact the relatively poor candidates, and the advantage to the very wealthy is larger.

# Cross-National Evidence

# Cross-National Patterns in Legislator Wealth

We first evaluate our conceptual framework descriptively using an original cross-national dataset of politicians' wealth, assembled from mandatory and publicly available financial disclosures by

<sup>&</sup>lt;sup>11</sup>Figure 1 also suggests that as inequality rises, the increasing gains for the very wealthy are likely to come at the expense of the 'merely' wealthy, as it is the middle of the wealth distribution that gets most 'hollowed out' by the increase in its convexity. A sufficient condition for this is that the CDF of the wealth distribution under lower inequality first-order stochastically dominates its CDF under higher inequality.

national legislators in 41 countries, comprising around 45 percent of the world's population and close to half of global GDP. $^{12}$  The data contains information on almost one million immovable, movable, and financial assets and liabilities of over 23,000 unique politicians for a total of more than 76,000 observations. SA Table A1 $^{13}$  summarizes the years covered, the number of observations, and the number of unique politicians in each country. $^{14}$ 

We compute the ratio of total gross wealth<sup>15</sup> of each national legislator relative to the average household wealth in their country.<sup>16</sup> Figure 2 summarizes the distribution of this politician-to-population wealth ratio for each country, sorted in ascending order by the size of the median ratio. The figure excludes extreme values to avoid distorting the overall distributions. Moreover, it includes two panels because the lower panel features countries whose ratios would dwarf the values in the upper panel if displayed on the same scale. The figure indicates that politicians in most countries are considerably wealthier than the populace. Even in the lowest-ranked country, Guatemala, the average politician is five times wealthier than the average household. Yet, the wealth disparity varies considerably among countries. In the upper panel, the median national legislator is 1.6–15 times wealthier than the average household; in the lower panel, this ratio ranges from 27 to 200.

# Figure 2 about here

Figure 2 also illustrates that, while the politician-to-population wealth ratio is considerably skewed to the right, there is large cross-country variation. For instance, a legislator at the 75th percentile of the wealth distribution (of legislators' wealth) in Guatemala has 36.5 times the wealth of the average Guatemalan household. While quite wealthy, it pales in comparison to the same legislator in South Africa, who is almost 420 times wealthier than the average household. In other words, the considerable variation in inequality observed within the political class in each country is largely driven by the frequency of very wealthy politicians.

<sup>&</sup>lt;sup>12</sup>We discuss country coverage in SA Section D (pp. 4-5).

 $<sup>^{13}\</sup>mathrm{On}$  page 6 of the SA.

<sup>&</sup>lt;sup>14</sup>What and how politicians report, and to what degree this information is verified, varies across countries in several ways. SA Section D (pp. 4-5) documents these and other data challenges and how we address them.

<sup>&</sup>lt;sup>15</sup>We focus on gross wealth rather than net worth because liabilities are not reported in all countries.

<sup>&</sup>lt;sup>16</sup>We mainly rely on household wealth estimates from Credit Suisse (2022), complementing them where necessary with national estimates. We would have preferred to use median household wealth as the benchmark, but were unable to do so due to data limitations. See SA Section D (pp. 4-5) for more details.

# Operationalizing Campaign Financing Pressures Across Countries

Our operationalization of campaign financing pressures conforms with our broad conceptualization. Like others before us (Norris and Van Es, 2016; Pinto-Duschinsky, 2002), we incorporate the regulations governing private and public funds in politics: limits on donations by organizations, individuals, anonymous donations, and self-financing; spending limits, public funding, and public subsidies for campaign advertising. We also account for rules on public disclosure of contributions and expenses, the length of the official campaign period, and the approximate number of individuals represented by each legislative seat.<sup>17</sup> As outlined earlier, we assume that financing pressures increase with rules that permit greater private money (higher or no limits on own, individual, organizational or anonymous contributions) and less public money (no or lower public funding or subsidies for advertising), higher or no spending limits, less reporting transparency, longer campaign calendars, and larger electorates. We primarily rely on data from the International IDEA database (IDEA, 2018; Fulguera, Jones and Ohman, 2014; Austin and Tjernström, 2003) and supplement it with several other sources listed in SA Table A2. 18 For simplicity, we create an additive index, which we call the Campaign Financing Pressure (CFP) Index. It ranges from 0 (less financing pressure) to 1 (more financing pressure). SA Figure A4 displays the average index values; South Africa is ranked the highest and Montenegro the lowest. <sup>19</sup>

# Campaign Financing Pressures and the Distribution of Legislator Wealth

To simplify the presentation of results and mitigate the risk of influential outliers, we divide the legislators' wealth ratios into six equally sized wealth sextiles (calculated across all observations), balancing the granularity of the wealth groups with sufficient group size.<sup>20</sup> The top two categories, and especially the top sextile, contain very wealthy individuals: the median legislator in the highest (sixth) sextile is almost 180 times wealthier than the average household in their country and in the fifth sextile close to 40 times wealthier. These ratios are comfortably in the top 1-5% of the wealth distributions in each country. The median politician-to-population wealth ratios in the

<sup>&</sup>lt;sup>17</sup>SA Table A2 (p. 6) lists and describes all the variables.

<sup>&</sup>lt;sup>18</sup>On page 6 of the SA.

<sup>&</sup>lt;sup>19</sup>On page 7 of the SA.

<sup>&</sup>lt;sup>20</sup>The distribution of legislators in each sextile in each country is shown in SA Figure A6 (p. 12). Results with sextiles calculated separately within each country are substantively similar (SA Figure A7, p. 13).

first to fourth sextiles are 0.7, 3, 7, and 14, respectively.<sup>21</sup> Given our expectations about the disproportionate advantages to the very wealthy, we focus particularly on the highest sextile.

# Evaluating H1

Panel (a) in Figure 3 reports estimates based on an ordinal logistic regression of the wealth sextiles on the CFP index. While this analysis is only correlational, we control for a number of individual (age, gender, occupation, position), party (center/left/right ideology), disclosure system (disclosure comprehensiveness, extent of asset verification, and penalties for false disclosure), country (GDP, income and wealth inequality, electoral system), and data quality characteristics, as well as region dummies.<sup>22</sup> This model, however, may fail to account for other possible sources of confounding, particularly at the country level. Panel (b), therefore, shows the results from linear probability models (LMP) with country fixed effects estimated separately for each sextile.<sup>23</sup> Each panel displays the change in the predicted probability of belonging to a wealth sextile as the CFP index increases from a low (25th percentile) to a high value (75th percentile).

The figure indicates that the probability that a legislator belongs to a higher wealth sextile generally increases with greater financing pressures. For example, panel (a) shows the estimate for the top sextile is 5.4 percentage points (p < 0.01), or almost a 50 percent higher share (the estimated share for the top sextile is 11.4 percent at low CFP and 16.8 at high CFP). By contrast, the probability of being in the bottom sextile is lower by 7.1 percentage points (p < 0.01). While the results with country fixed effects in panel (b) are statistically noisier and less monotonic, they remain consistent with our key expectation from H1 that a greater CFP disproportionately advantages the wealthiest legislators, as the point estimate for the top sextile is virtually identical to that in panel (a).<sup>24</sup>

# Figure 3 about here

<sup>&</sup>lt;sup>21</sup>The ranges of the wealth ratios for the sextiles are: <1.8, 1.8-4.6, 4.6-9.8, 9.8-21.8, 21.8-72.0, >72.0.

<sup>&</sup>lt;sup>22</sup>SA Section E (pp. 5-11) provides details on covariates and model specifications and presents the coefficient estimates underlying the figures in this section.

<sup>&</sup>lt;sup>23</sup>The downside of this approach is that the sample is considerably smaller, because in 13 of the 41 countries we either have data from only one year or no over-time variation in the CFP.

<sup>&</sup>lt;sup>24</sup>SA Figure A16 (p. 21) shows that multiple components of the CFP index are predictive of greater shares of wealthier legislators: less restrictive spending limits, less restrictive donation limits, lower public funding, and longer electoral calendars.

#### Evaluating H2

We next evaluate H2. We add an interaction between the CFP index and our measure of wealth inequality: the wealth share of the top 1 percent minus the wealth share of the bottom 50 percent, based on country-year data from Chancel et al. (2021).<sup>25</sup> Each panel of Figure 4 displays the difference in the estimated change in the predicted probability of belonging to a wealth sextile at high vs. low CFP, for high wealth inequality (at the 90th percentile) compared to low wealth inequality (at the 10th percentile). As before, panel (a) presents the cross-sectional results from an ordinal logistic regression, and panel (b) from the models with country fixed effects.<sup>26</sup>

# Figure 4 about here

The results are consistent with H2. The positive correlation between a rise in the CFP index and the increasing probability of belonging to higher wealth sextiles (observed in Figure 3) is more pronounced under a more unequal wealth distribution than under a more equal one. For example, panel (a) shows that an increase in the CFP is associated with an 8.6 percentage point larger increase in the probability of a legislator belonging to the top wealth sextile when wealth inequality is high than when it is low (p < .01). With low wealth inequality, the estimated share of the top sextile is 6 percent at low CFP and 8 percent at high CFP; with high inequality, it is 22 percent at low CFP and 32 percent at high CFP. The latter share is almost 4 times as high as at low CFP, and almost double the share of the top sextile at average CFP. In panel (b), the relative patterns are similar and somewhat more pronounced for the top sextile.<sup>27</sup>

#### Evaluating H3

H3 predicts that the extent to which rising financing pressures advantage the wealthy – and at whose expense – depends on where that rise starts from. Assessing this expectation would benefit from a wide range of variation in the CFP, and SA Figure A5<sup>28</sup> shows that the variation in the allowable spending amounts varies particularly markedly. We therefore examine the correlation between the wealth sextiles and the components of the CFP index that capture spending limits (for

<sup>&</sup>lt;sup>25</sup>We also control for the wealth share of the top 10 percent, to isolate the inequality driven by the very wealthy.

<sup>&</sup>lt;sup>26</sup>Panel (b) uses logit rather than LMP models; see SA Section E.1 (pp. 5-8).

<sup>&</sup>lt;sup>27</sup>In line with the brief discussion of H2 above (footnote 11), we also see that these increasing gains to the very wealthy accrue primarily at the expense of the medium wealthy.

<sup>&</sup>lt;sup>28</sup>On page 12 of the SA.

parties and candidates) using the same ordinal logistic regression specification as before.<sup>29</sup> We lack sufficient within-country variation to use the specifications with country fixed effects, so we stress that here we are primarily relying on between-country rather than within-country variation. That said, our case studies in Brazil and Chile (discussed below) offer evidence that is also relevant and plausibly better identified.

Figure 5 displays the difference in the estimated change in the probability of a legislator belonging to each wealth sextile when spending pressures increase from medium (median) to high (the 90th percentile) compared to the increase from low (10th percentile) to medium. The patterns accord with H3. The change in the probability of belonging to the bottom sextile is virtually the same when the spending pressures increase from a lower or higher base. Instead, as predicted, we see a decline in the share of the moderately wealthy (those in sextiles two, three, and to a lesser extent four), which is reallocated as the gain among the top two sextiles, and especially the wealthiest legislators.

# Figure 5 about here

In summary, analyzing the most comprehensive data on politicians' wealth to date and using a broad measure of financing pressures, we identify patterns that align with our theoretical expectations. While only correlational, these patterns appear to be quite robust. In SA Section E.2,<sup>30</sup> we provide detailed motivations for a variety of robustness checks, showing that our conclusions are unchanged when we employ: (a) alternative versions of the CFP index, (b) alternative interaction term specifications for H2, (c) data pooled to country-year averages, (d) balancing weights that down-weight countries with more observations, (e) more flexible ordered logistic models, and (f) different numbers of wealth categories. We also demonstrate that our results are not particularly sensitive to large amounts of potentially unobserved confounding or measurement error in our key variables. To move beyond correlations, we now turn to utilizing quasi-random variation in campaign spending limits in two contexts: Brazil and Chile.

<sup>&</sup>lt;sup>29</sup>SA Figure A13 (p. 18) shows that the results for H1 and H2 using these components instead of the composite CFP index produce similar results.

<sup>&</sup>lt;sup>30</sup>On pages 8-21 of the SA.

# Quasi-Experimental Evidence from Brazil

To the best of our knowledge, Avis et al. (2022) is the only study that has causally identified the effect of campaign finance regulation on politicians' wealth. It examines Brazil's 2016 mayoral elections and exploits a discontinuous jump in the campaign spending limit for identification. The analysis indicates that higher spending limits lead to fewer candidates, less competitive elections, higher re-election rates, and (crucially for our purposes) winners who are on average wealthier. In this first case study, we examine the same context in light of our argument. Because we analyze the effect of higher campaign spending limits across the entire wealth distribution, we require significantly more statistical power. We therefore focus on the 2016 elections of municipal councilors (vereadores), who are members of the municipal legislatures. They were subject to a similar discontinuous jump in campaign spending limits as the mayoral elections, but councils have a minimum of nine members, which increases the number of observations considerably.

# **Empirical Context**

In 2015, Brazil's Congress passed a set of campaign finance reforms that introduced stricter spending limits, among other changes.<sup>31</sup> These limits came into effect for the 2016 municipal elections. As Avis et al. (2022) describe, the way in which spending caps were determined introduced a discontinuity: some municipalities had a higher limit, whereas other (otherwise similar) municipalities had a lower cap. Two provisions determined a municipality's spending limit for the 2016 council elections. First, the cap was set at R\$10,000 or at 70 percent of the highest spending by any candidate in the municipality during the previous campaign in 2012, whichever was higher. This generated a kink in the spending limit: it was R\$10,000 in municipalities where the most profligate candidate in 2012 spent less than about R\$14,286 (10,000/0.7), while the cap increased linearly above that amount.<sup>32</sup> In a second provision, these spending limits were adjusted for inflation a few months later using two different rates. The rate of 8.04 percent – between the law's passage and the time of the adjustment – was used for municipalities where the limit was set to R\$10,000. The rate of 33.7 percent – between the 2012 election and the time of the adjustment – was used for

 $<sup>\</sup>overline{^{31}}$ Law 13.165, September 29, 2015, http://www.planalto.gov.br/ccivil\_03/\_ato2015-2018/2015/lei/l13165.htm.

<sup>&</sup>lt;sup>32</sup>The limits for mayoral elections were determined in a similar way, but using R\$100,000 or 70 percent of the highest spending as the limit.

municipalities where the limit was set to 70 percent of the maximum amount spent in 2012. This results in a discontinuity at a 2012 maximum spending of R\$14,286.

The discontinuity is illustrated by the black line in Figure 6a: just below the threshold, candidates could spend R\$10,804; just above, the limit was roughly 24 percent higher (R\$13,370). Each dot shows a candidate's reported 2016 campaign expenditures plotted against the 2012 maximum spending in their municipality. The discontinuity in expenditures around R\$14,286 is clearly visible, suggesting that the stricter limit was binding for many candidates.<sup>33</sup> The vast majority of spending comes from self-funding and from individual donors, which together account for about 94 percent.<sup>34</sup>

## Figure 6 about here

Figure 6b shows the average ratio of legislator to median household wealth in R\$500 bins.<sup>35</sup> Three things stand out. First, even though municipal councils are the lowest level of Brazilian electoral politics, legislators tend to be quite wealthy. In municipalities with the lowest spending limit, the average councilor elected in 2016 was about 14 times as wealthy as the median Brazilian household. Second, as the spending limit increases linearly on the right of the discontinuity, the pool of elected legislators becomes wealthier as well. Third, the separately fitted LOESS lines show that on average, those elected just to the right of the discontinuity are wealthier than those who won a seat just to the left, which is consistent with the findings in Avis et al. (2022).

#### Theoretical Expectations

Assuming that candidates for municipal councils cannot control which side of the discontinuity they are on, municipalities just above the jump should, on average, be similar to those just below – except for the permissiveness of the spending limit.<sup>36</sup> Thus, candidates running in municipalities

<sup>&</sup>lt;sup>33</sup>Some candidates exceeded the spending limit (0.19 percent on the left of the discontinuity, 0.009 percent on the right). Since non-compliance led to financial penalties rather than disqualification, non-compliers are wealthier on average. Because there are more non-compliers on the left of the discontinuity, the non-adherence to spending limits should attenuate our estimates toward zero for wealthier groups, given the expectation that wealthier candidates are advantaged by higher spending limits.

<sup>&</sup>lt;sup>34</sup>See SA Section H (pp. 33-36).

<sup>&</sup>lt;sup>35</sup>For legislators who failed to submit a wealth declaration for the 2016 elections, we used their declarations from other election years, if available, and benchmarked them to the median household wealth from those years.

<sup>&</sup>lt;sup>36</sup>Falsification tests, presented in SA Section F.2 (p. 25), support the RD assumptions. Municipalities close to the discontinuity are, on average, similar on a number of predetermined characteristics, with one exception that we control for in our analyses (see below). There is no evidence of strategic sorting of candidates, in part because they

on the right of the discontinuity are subject to greater campaign financing pressures than those running in municipalities on the left. SA Figure  $A2^{37}$  illustrates that the distribution of candidates' wealth accords with Pareto's Law. H1 therefore predicts that we should observe a greater share of very wealthy council members on the right of the discontinuity.

Furthermore, although this is the lowest level of Brazilian electoral politics, the spending limits are high. The most restrictive limit of R\$10,804 on the left of the discontinuity amounts to, on average, about 85 percent of those municipalities' GDP per capita. According to our conceptual framework, this suggests that the spending cap increases from a medium level on the left of the discontinuity to a high level (more than 100 percent of municipal GDP, on average). H3 therefore anticipates that the higher limit provides a large advantage to the very wealthy, and primarily comes at the expense of the merely wealthy. Because poor candidates are mostly priced out even in the municipalities with the most restrictive limits, they should be largely unaffected by the increase.

It is worth pointing out that Figure 6a showed that many candidates do not spend near the limit.<sup>38</sup> Municipal council elections are the lowest level of electoral politics in Brazil, and the municipalities around the cutoff are relatively small (municipalities on the left of the discontinuity have on average around 8,000 eligible voters). Given that there are at least 9 seats in every municipality, this means that candidates may only need a few hundred votes to win a seat. In such a context, factors such as candidates' reputation in the community play an important role, and it may not be necessary to spend heavily for electoral success. This should attenuate our estimates below towards zero, and we would expect any effects we find to be stronger in elections where money may play a greater role.

# **Estimation Approach and Results**

To test our expectations, we examine how the discontinuous jump in the spending limit affects the probability of having legislators from different parts of the wealth distribution win a council seat. As before, we divide the legislators who won a council seat in the 2016 elections in municipalities

must maintain residency in the municipality in which they run for office for at least a year prior (Article 9 of Lei 9.504) and the campaign finance reform was enacted within a year of the 2016 election.

<sup>&</sup>lt;sup>37</sup>On page 1 of the SA.

<sup>&</sup>lt;sup>38</sup>This is consistent with spending in mayoral elections (Avis et al., 2022).

around the cutoff into sextiles.<sup>39</sup> The median legislator in the lowest sextile declared about 0.7 times the wealth of the median Brazilian household. The ratios are 2.4, 4.9, 8.8, and 15.4 for sextiles two through five, respectively. The median legislator in the highest sextile declared assets 35.7 times those of the median household.<sup>40</sup> Members of the top sextile have assets worth at least 24.6 times the spending limit on the left of the discontinuity. The median member of the top sextile in the window around the discontinuity has assets worth 39.0 times the spending limit on the left of the discontinuity.

To examine the effect of higher spending limits on who holds office, we estimate a set of six regression discontinuity models, where the unit of observation is individual council seat winners, and the dependent variable is a dummy indicating whether a legislator belongs to a certain wealth sextile. We employ local linear regressions with a triangular kernel and present bias-corrected estimates with robust standard errors and a masspoint correction (Calonico, Cattaneo and Titiunik, 2014). We use the same bandwidth in all six models, which we obtain by averaging the MSE-optimal bandwidths for the six separate models. Using a common bandwidth ensures that the treatment effects of the six models sum to zero. Finally, we include dummies for council size and the year in which legislators' wealth was measured as controls.

# Figure 7 about here

In SA Section F.1,<sup>41</sup> we show that candidates who are subject to more permissive spending limits spend on average about 8 percent more than those who have to adhere to the stricter limits. This increase is driven by wealthy candidates, especially those in the highest sextile, who spend on average almost 18 percent more. Figure 7 depicts how being subject to the higher spending limit affects the probability that a given elected legislator belongs to a certain wealth sextile. Consistent with H1, the *only* group that significantly benefits from more permissive spending limits is the top sextile – those with declared assets at least 21.4 times the median Brazilian household wealth. A given legislative seat is about 4.6 percentage points more likely to be occupied by a person in the highest wealth sextile just to the right of the discontinuity than a seat just on the left. Given that

<sup>&</sup>lt;sup>39</sup>Around the cutoff refers to municipalities within a R\$4,000 window of the discontinuity, which is roughly the bandwidth we use in our regression discontinuity analyses below.

 $<sup>^{40}</sup>$ The ranges of the wealth ratios for the sextiles are: <1.5, 1.5–3.5, 3.5–6.7, 6.7–11.6, 11.6–21.4, >21.4.

 $<sup>^{41}</sup>$ On pages 22-25 of the SA.

(in the window around the discontinuity) 16.7 percent of legislators are in this group, this is a large effect.

By contrast, the point estimate for the fifth wealth sextile is quite close to zero and not statistically significant. By any reasonable definition, members of this group are wealthy, as their assets are 11.6–21.4 times the median household wealth. Nevertheless, the probability that a legislative seat is occupied by a member of this group is not significantly larger in municipalities where the spending limit is 24 percent higher. Members of the fourth sextile are somewhat less likely to occupy a given seat when there are more permissive spending limits, although not significantly so. There is, however, a significant negative effect for the third sextile: a seat is 3.7 percentage points less likely to be occupied by a member of this group under permissive spending limits. Again, this is a fairly well-off demographic: all of them have at least 3.5 times (and up to 6.7 times) the wealth of the median Brazilian household. However, they are the losers of more permissive campaign finance limits, as they are displaced by candidates who are *very* wealthy. This is in line with H3, which predicts that when financing pressures rise from an already high baseline level, this will advantage the very wealthy at the expense of the medium wealthy.

Also in line with H3, there is no significant difference between the left and right of the discontinuity in the probability that a given legislator is from the bottom two sextiles. Thus, more permissive spending limits do *not* decrease the number of politicians with assets less than 3.5 times the median household. Because of their (relatively) low wealth, it is difficult for them to spend at or close to the cap, regardless of whether they are on the left or right of the discontinuity.<sup>42</sup>

Thus, the hypotheses we derived from our framework also find support in a situation in which campaign finance pressures vary quasi-randomly. In SA Section F.3,<sup>43</sup> we demonstrate that our results are robust to accounting for missing wealth data, using different bandwidths, and using five or seven wealth categories. In addition, in SA Section H<sup>44</sup> we provide evidence that, under more permissive spending limits, candidates from the highest wealth sextile are more likely to run for a seat in the first place, as well as more likely to win a seat conditional on running.

<sup>&</sup>lt;sup>42</sup>In SA A17 (p. 24), we show candidate spending by wealth sextile, which makes clear that wealthier candidates spend more and are more likely to spend close to the limit.

 $<sup>^{43}</sup>$ On pages 25-27 of the SA.

<sup>&</sup>lt;sup>44</sup>On pages 33-36 of the SA.

# Evidence from a Combination of Reforms in Chile

The context of our analysis in Brazil – a lower office with limited political power, a candidate-centric political system with weak parties (Samuels, 2003), and campaigns that primarily rely on candidates' own resources and individual donations – may be particularly favorable for finding that greater spending pressures strongly boost the electoral success of well-resourced candidates. To evaluate whether we observe similar effects in a different context, we turn to the elections for the Chamber of Deputies in Chile. These are elections to the highest legislative office, in a system where political parties play a much more active role than in Brazil (Valenzuela, Somma and Scully, 2018). For example, candidates in the 2017 election in Chile received on average close to 30 percent of their campaign funds from parties, compared to around 6 percent that the candidates for the municipal councils received in Brazil.<sup>45</sup> This context, thus, represents a plausibly harder case for finding that financing pressures shape the wealth of the political class. Should our results resemble those in Brazil and across countries, our theoretical arguments can more plausibly be considered generalizable.

# **Empirical Context**

We leverage changes to financing pressures driven by a combination of an electoral reform and a campaign finance reform, both of which came into effect for the 2017 parliamentary election. The campaign finance reform, among other things, lowered the amount candidates could spend per voter in each district compared to the previous election in 2013. The electoral reform decreased the number of districts from 60 to 28 and changed the district magnitude from two seats for all districts to 3–8 seats in the new districts. Combined, these two reforms changed the spending pressures differentially across seats within and across districts; some seats experienced a decrease and others an increase in spending pressures compared to the previous election. This is because the campaign spending limit was benchmarked against the number of voters in a district, but without taking into account the change in district magnitudes. Therefore, candidates for seats in districts that experienced a larger increase in magnitude had a higher spending limit (and were thus subject to greater campaign finance pressures) than candidates for seats in districts with a

<sup>&</sup>lt;sup>45</sup>See SA Figure A31, p. 36.

smaller increase in magnitude, even though the number of voters per seat (and thus, all else equal, the number of votes needed to win office) was roughly equal in all districts. While the reforms occurred in close temporal proximity to each other, their implementation was not coordinated, as they were driven by separate considerations and supported by distinct political actors. This lack of coordination alleviates potential concerns that wealthier legislators shaped the reforms simultaneously to reinforce their resource advantages, and provides us with potentially exogenous variation in spending pressures.

# Theoretical Expectations

As in Brazil, the distribution of wealth of candidates for Chile's Chamber of Deputies is heavily right-skewed.<sup>48</sup> According to H1, we therefore expect to observe an increase in the share of wealthy, and particularly very wealthy, legislators for seats experiencing a (larger) rise in spending pressures.

Also like in Brazil, the spending limits in Chile were set at a high level, ranging from 180 to 750 percent of district GDP per capita. Therefore, according to H3, we anticipate that the benefits accruing to the very wealthy from the increased spending limit will primarily be at the expense of the moderately wealthy rather than the relatively poor legislators.

#### Estimation Approach and Results

As before, we divide the legislators into wealth sextiles. The median legislator in the top sextile is 36 times wealthier than the median Chilean household.<sup>49</sup> The ratios are 0, 1.5, 4.3, 8.7, and 14.0 for the second through the fifth sextiles, respectively.<sup>50</sup> Since our treatment is the change in the spending limit per seat (per voter) between the 2013 and 2017 elections, we would ideally examine its impact on *changes* in the distribution of legislators' wealth across seats between those two elections. However, wealth disclosures were not mandated until 2016, and so we do not have

 $<sup>^{46}</sup>$ SA Section G.2 (pp. 29-31) establishes that larger increases in the spending limit correlate with greater campaign spending in the 2017 election.

<sup>&</sup>lt;sup>47</sup>See SA Section G.1 (p. 28) for more details.

<sup>&</sup>lt;sup>48</sup>SA Figure A2 (p. 1).

<sup>&</sup>lt;sup>49</sup>Legislators in the top sextile have assets worth at least 8.7 times the spending limit per seat in districts with the below-median 2013/2017 change in the spending cap, and 6.7 times the spending limit per seat in the districts with the above-median change in the spending cap. The median member of the top sextile has assets worth 14.2 times the spending limit in the former group of districts, and 11 times the spending limit in the latter group.

<sup>&</sup>lt;sup>50</sup>The median legislator in the bottom sextile reports no assets. We have extensively checked the data and found there to be no identifiable errors. The range of ratios for the bottom sextile is 0–0.54 times the median household wealth. The ranges for the other sextiles are: 0.57–2.9, 2.9–5.7, 5.7–10.8, 10.8–21.6, and more than 21.6.

data on legislators' wealth in the 2013 election. We can therefore only examine the impact of the 2013-2017 spending limit changes on the *level* of the distribution of legislators' wealth in 2017.<sup>51</sup>

As in our cross-national analysis, we run an ordered logistic model on the sample of electoral winners. The distribution of changes in the spending limit across seats is not smooth, so to avoid model extrapolation we dichotomize the seats into those experiencing an above-median change (roughly corresponding to an increase in the spending limit relative to the 2013 election) and below-median change (roughly experiencing either no change or a decrease in the limit). To isolate the effect of the financing pressure changes as best as possible, we include indicators for the new districts and parties, and several election-specific district-level and individual-level covariates. <sup>52</sup>

## Figure 8 about here

Figure 8 shows the difference in the probability of a legislator belonging in each wealth sextile for seats seeing an above-median change in spending pressures compared to those seeing a belowmedian change. An increase in spending pressures leads to a 15 percentage point increase in the probability of the seat being occupied by a legislator from the wealthiest sextile (from 8.3 percent to 23.3 percent, p = 0.014). The probability of a legislator being in the fifth sextile also increases, by about half the magnitude, although the estimate is noisier. The estimates for the third and fourth sextiles are close to zero, whereas the probability of being in the second sextile decreases by 9 percentage points (p = 0.01) and in the bottom sextile by 15.5 percentage points (although that estimate is noisier). Therefore, in line with H1, and with our previous findings in Brazil and crossnationally, the increase in financing pressures primarily advantages the very wealthy. In SA Section G.4,<sup>53</sup> we confirm that the results are robust to using five or seven wealth categories. Moreover, we conduct a placebo test using the 2021 elections, where changes in the spending limit compared to 2017 were minimal and driven only by changes in the number of registered voters per district, and indeed find null results. In SA Section H,  $^{54}$  we also find that higher spending pressures had no impact on the wealth composition of candidates who chose to run, but increased the chance of winning conditional on running for wealthy candidates.

<sup>&</sup>lt;sup>51</sup>This limitation also restricts our ability to assess the plausibility of parallel trends; however, in SA Section G.3 (p. 32), we find no visible pre-treatment trends in the demographic characteristics that typically correlate with wealth.

<sup>&</sup>lt;sup>52</sup>The variables are described in SA Section G.2 (pp. 29-31), which also reports the coefficient estimates.

 $<sup>^{53}</sup>$ On pages 32-33 of the SA.

 $<sup>^{54}</sup>$ On pages 33-36 of the SA.

We note, however, that the patterns in Figure 8 are not fully consistent with H3, as the relatively poor candidates rather than the medium wealthy appear to bear most of the electoral disadvantages generated by greater financing pressures. This may in part be because of the greater role of parties in the Chilean context, and how they chose to financially support their candidates. While in general, parties channeled substantial funds to the less wealthy candidates, <sup>55</sup> in constituencies with greater increases in financing pressures they directed the funds away from such candidates and toward both the medium wealthy and especially those in the top sextile, compared to constituencies with lower spending pressures. <sup>56</sup> We return to this point below.

# Discussion

Our paper examined the relationship between pressures to raise and spend campaign funds and the wealth of a country's political class. A crucial feature of our approach that has not been considered in previous work on the topic is that we explicitly incorporate Pareto's Law, the empirical regularity that wealth tends to be concentrated in the hands of the few. This allowed us to derive several nuanced predictions about the relationship between campaign finance pressures and politicians' wealth. Our framework not only indicates that a rise in financing pressures benefits the wealthy, but that it disproportionately advantages the *very* wealthy – especially when wealth inequality is greater. Our framework also predicts that who benefits and who loses (and by how much) from a rise in campaign finance pressures depends on what level the pressures rise from. We find support for our hypotheses by descriptively analyzing original data on the wealth of more than 23,000 national legislators in 41 countries, and by exploiting quasi-random variation in campaign finance pressures in Brazil and Chile.

Our findings shed light on a potential cause of wealthy political elites, and we hope they inspire additional research into the topic. One interesting difference between Brazil and Chile we observed is the mechanism by which the wealthy benefit from higher campaign finance pressures. In Brazil, greater spending pressures make the wealthy more likely to both run and win conditional on running. In Chile, the main channel is the increased chance of winning by wealthy candidates rather than through candidate entry. Why the difference? Our intuition, briefly mentioned above and which

<sup>&</sup>lt;sup>55</sup>SA Figure A31, p. 36.

<sup>&</sup>lt;sup>56</sup>SA Figure A28, p. 33.

we elaborate on in SA Section H,<sup>57</sup> is that in Chile parties play a more important role, including in campaign funding. Greater party transfers may help ease the financing pressures for the less wealthy candidates, encouraging them to run. At the same time, wealthier candidates should be able to recover some of their advantage under greater financing pressures by increasing the amount of self-financing. Moreover, seat-maximizing parties should find it hard to credibly commit to not support the wealthier candidates, at least to some degree, given that their greater funding advantages make them more likely to win. Combined, this means that greater party transfers may lessen the potential deterrence effect of higher financing pressures on the less wealthy, but not eliminate the resource advantages by the very wealthy and how they shape their probability of winning. While we provide some suggestive evidence consistent with this conjecture in the Supplementary Appendix, a rigorous test is beyond the scope of this article. We think it would be fruitful to further study the role of party (as opposed to candidate) funding in electoral competition and representation.

Another factor to study in greater detail is the effect of so-called "moonlighting" – politicians concurrently maintaining outside sources of income (cf. Weschle, 2021, 2024b). Such rules may promote a financially more representative political class if, by maintaining employment and contacts while in office, they help alleviate the uncertainties of political tenure that may otherwise discourage less wealthy candidates from running (Norris, 1996). However, the marginal returns of holding office with the possibility of moonlighting may be particularly high for high-human-capital politicians (Gagliarducci, Nannicini and Naticchioni, 2010). If so, moonlighting rules may disproportionately attract wealthier politicians. Our data on politicians' wealth can help provide novel insights on these questions.

Finally, it is also vital to study the consequences of having very wealthy politicians in office. Wealthy individuals tend to have more conservative economic preferences (Cohn et al., 2023; Page, Bartels and Seawright, 2013; Suhay, Klašnja and Rivero, 2021). If such preferences extend to office holders, wealthier elites may preside over lower taxes and less social spending than if the political class were more financially diverse. At the same time, even if wealthy politicians' sincere preferences push them to enact less redistributive policies, their induced preferences in response to constituent demands may have countervailing effects. However, there is mounting evidence that

 $<sup>^{57}\</sup>mathrm{On}$  pages 33-36 of the SA.

politicians tend to be more responsive to wealthier constituents (Bartels, 2018; Lupu and Warner, 2022), perhaps partly because, as we have shown, the overwhelming majority of politicians are wealthy. There is also some evidence that politicians' wealth correlates with their revealed policy preferences (Eggers and Klašnja, 2020). We hope our data facilitates further research in this area to evaluate these questions more comprehensively.

# References

- Abdul-Razzak, Nour, Carlo Prato and Stephane Wolton. 2020. "After Citizens United: How Outside Spending Shapes American Democracy." *Electoral Studies* 67:102190.
- Aneja, Abhay, Jacob M. Grumbach and Abby Wood. 2022. "Financial Inclusion in Politics." NYU Law Review 97(2):566–630.
- Austin, Reginald and Maja Tjernström. 2003. "Funding of Political Parties and Election Campaigns." International Institute for Democracy and Electoral Assistance, Stockholm, Sweden.
- Avis, Eric, Claudio Ferraz, Frederico Finan and Carlos Varjão. 2022. "Money and Politics: The Effects of Campaign Spending Limits on Political Entry and Competition." *American Economic Journal: Applied Economics* 14(4):167–199.
- Bartels, Larry M. 2018. Unequal Democracy: The Political Economy of the New Gilded Age. Princeton NJ: Princeton University Press.
- Benhabib, Jess and Alberto Bisin. 2018. "Skewed Wealth Distributions: Theory and Empirics." Journal of Economic Literature 56(4):1261–1291.
- Boas, Taylor C., F. Daniel Hidalgo and Neal P. Richardson. 2014. "The Spoils of Victory: Campaign Donations and Government Contracts in Brazil." *Journal of Politics* 76(2):415–429.
- Bonica, Adam. 2017. "Professional Networks, Early Fundraising, and Electoral Success." *Election Law Journal: Rules, Politics, and Policy* 16(1):153–171.
- Bonica, Adam. 2020. "Why Are There So Many Lawyers in Congress?" *Legislative Studies Quarterly* 45(2):253–289.
- Bonneau, Chris W. and Damon M. Cann. 2011. "Campaign Spending, Diminishing Marginal Returns, and Campaign Finance Restrictions in Judicial Elections." *Journal of Politics* 73(4):1267–1280.
- Bueno, Natália S. and Thad Dunning. 2017. "Race, Resources, and Representation: Evidence from Brazilian Politicians." World Politics 69(2):327–365.
- Calonico, Sebastian, Matias D. Cattaneo and Rocío Titiunik. 2014. "Robust Nonparametric Confidence Intervals for Regression-discontinuity Designs." *Econometrica* 82(6):2295–2326.
- Carnes, Nicholas. 2018. The Cash Ceiling: Why Only the Rich Run for Office-and What We Can Do about It. Princeton, NJ: Princeton University Press.
- Carnes, Nicholas and Noam Lupu. 2015. "Rethinking the Comparative Perspective on Class and Representation: Evidence from Latin America." American Journal of Political Science 59(1):1–18.
- Chancel, Lucas, Thomas Piketty, Emmanuel Saez and Gabriel Zucman. 2021. "World Inequality Report 2022." World Inequality Lab, wir2022.wid.world.
- Chetty, Raj, Matthew O. Jackson, Theresa Kuchler, Johannes Stroebel, Nathaniel Hendren, Robert B. Fluegge, Sara Gong, Federico Gonzalez, Armelle Grondin, Matthew Jacob, Drew Johnston, Martin Koenen, Eduardo Laguna-Muggenburg, Florian Mudekereza, Tom Rutter, Nicolaj

- Thor, Wilbur Townsend, Ruby Zhang, Mike Bailey, Pablo Barberá, Monica Bhole and Nils Wernerfelt. 2022. "Social Capital I: Measurement and Associations with Economic Mobility." *Nature* 608:108–121.
- Cohn, Alain, Lasse J. Jessen, Marko Klašnja and Paul Smeets. 2023. "Wealthy Americans and Redistribution: The Role of Fairness Preferences." *Journal of Public Economics* 225:104977.
- Credit Suisse. 2022. "Global Wealth Reports and Global Wealth Databook." Credit Suisse, https://www.credit-suisse.com/about-us/en/reports-research/global-wealth-report.html.
- Dal Bó, Ernesto, Frederico Finan, Olle Folke, Torsten Persson and Johanna Rickne. 2017. "Who Becomes a Politician?" The Quarterly Journal of Economics 132(4):1877–1914.
- Dawood, Yasmin. 2015. "Campaign Finance and American Democracy." *Annual Review of Political Science* 18:329–348.
- Eggers, Andrew and Marko Klašnja. 2020. "Wealth, Fundraising, and Voting in the U.S. Congress." Manuscript, Georgetown University.
- Fouirnaies, Alexander. 2021. "How Do Campaign Spending Limits Affect Electoral Competition? Evidence from Great Britain 1885-2019." American Political Science Review 115(2):395–411.
- Fulguera, Elin, Samuel Jones and Magnus Ohman. 2014. "Funding of Political Parties and Election Campaigns: A Handbook on Political Finance." International Institute for Democracy and Electoral Assistance, Strömsborg, Sweden.
- Gagliarducci, Stefano, Tommaso Nannicini and Paolo Naticchioni. 2010. "Moonlighting Politicians." *Journal of Public Economics* 94(9-10):688–699.
- Gerber, Alan. 1998. "Estimating the Effect of Campaign Spending on Senate Election Outcomes using Instrumental Variables." American Political Science Review 92(2):401–411.
- Grumbach, Jacob M., Alexander Sahn and Sarah Staszak. 2020. "Gender, Race, and Intersectionality in Campaign Finance." *Political Behavior* 44:319–340.
- Gulzar, Saad. 2021. "Who Enters Politics and Why?" Annual Review of Political Science 24(1):253–275.
- Hersh, Eitan. 2023. "The Political Role of Business Leaders." Annual Review of Political Science 26:97–115.
- IDEA. 2018. "Political Finance Database." International Institute for Democracy and Electoral Assistance, Stockholm, Sweden, https://www.idea.int/data-tools/data/political-finance-database.
- Kirkland, Patricia A. 2020. "Mayoral Candidates, Social Class, and Representation in American Cities." *Journal of Political Institutions and Political Economy* 1(1):105–136.
- Krcmaric, Daniel, Stephen C. Nelson and Andrew Roberts. 2024. "Billionaire Politicians: A Global Analysis." *Perspectives on Politics* 22(2):357–371.
- Lupu, Noam and Zach Warner. 2022. "Affluence and Congruence: Unequal Representation Around the World." *Journal of Politics* 84(1):276–290.

- Manin, Bernard. 1997. The Principles of Representative Government. Cambridge, UK: Cambridge University Press.
- Markus, Stanislav and Volha Charnysh. 2017. "The Flexible Few: Oligarchs and Wealth Defense in Developing Democracies." Comparative Political Studies 50(12):1632–1665.
- Norris, Pippa. 1996. "The Nolan Committee: Financial Interests and Constituency Service." Government and Opposition 31(4):441–448.
- Norris, Pippa and Andrea Abel Van Es. 2016. Checkbook Elections? Political Finance in Comparative Perspective. Oxford, UK: Oxford University Press.
- Page, Benjamin I., Jason Seawright and Matthew J. Lacombe. 2018. *Billionaires and Stealth Politics*. Chicago, IL: Chicago University Press.
- Page, Benjamin I., Larry M. Bartels and Jason Seawright. 2013. "Democracy and the Policy Preferences of Wealthy Americans." *Perspectives on Politics* 11(1):51–73.
- Pareto, Vilfredo. 1897. Cours d'Économie Politique. Vol. II Lausanne: F. Rouge.
- Pereira, Miguel M. 2021. "Understanding and Reducing Biases in Elite Beliefs About the Electorate." American Political Science Review 115(4):1308–1324.
- Pevnick, Ryan. 2016. "The Anatomy of Debate about Campaign Finance." *Journal of Politics* 78(4):1184–1195.
- Pinto-Duschinsky, Michael. 2002. "Financing Politics: A Global View." *Journal of Democracy* 13:69.
- Roberts, Andrew. 2019. "Czech Billionaires as Politicians." *Problems of Post-Communism* 66(6):434–444.
- Rueda, Miguel R. and Nelson A. Ruiz. 2024. "How Do Electoral Outcomes Affect Campaign Contributions? The Role of Personal Loyalty and Investment Motives." Manuscript, Emory University.
- Samuels, David. 2003. Ambition, Federalism, and Legislative Politics in Brazil. Cambridge University Press.
- Sides, John, Lynn Vavreck and Christopher Warshaw. 2022. "The Effect of Television Advertising in United States Elections." American Political Science Review 116(2):702–718.
- Suhay, Elizabeth, Marko Klašnja and Gonzalo Rivero. 2021. "Ideology of Affluence: Explanations for Inequality and Economic Policy Preferences among Rich Americans." *Journal of Politics* 83(1):367–380.
- Szakonyi, David. 2021. "Private Sector Policy Making: Business Background and Politicians' Behavior in Office." *Journal of Politics* 83(1):260–276.
- Thomsen, Danielle M. 2023. "Competition in Congressional Elections: Money versus Votes." American Political Science Review 117(2):675–691.
- Valenzuela, J. Samuel, Nicolás Somma and Timothy R. Scully. 2018. Resilience and Change: The Party System in Redemocratized Chile. In Party Systems in Latin America: Institutionalization, Decay, and Collapse, ed. Scott Mainwaring. Cambridge University Press pp. 135–163.

- Weschle, Simon. 2021. "Parliamentary Positions and Politicians' Private Sector Earnings: Evidence from the UK House of Commons." *Journal of Politics* 83(2):706–721.
- Weschle, Simon. 2022. Money in Politics: Self-Enrichment, Campaign Spending, and Golden Parachutes. Cambridge University Press.
- Weschle, Simon. 2024a. Campaign Finance. In *The Political Economy of Lobbying: Channels of Influence and their Regulation*, ed. Karsten Mause and Andreas Polk. Springer Studies in Public Choice pp. 143–165.
- Weschle, Simon. 2024b. "Politicians' Private Sector Jobs and Parliamentary Behavior." American Journal of Political Science 68(2):390–407.
- Zucman, Gabriel. 2019. "Global Wealth Inequality." Annual Review of Economics 11:109–138.

Figure 1: Financing pressures with right-skewed wealth distribution: Conceptual framework

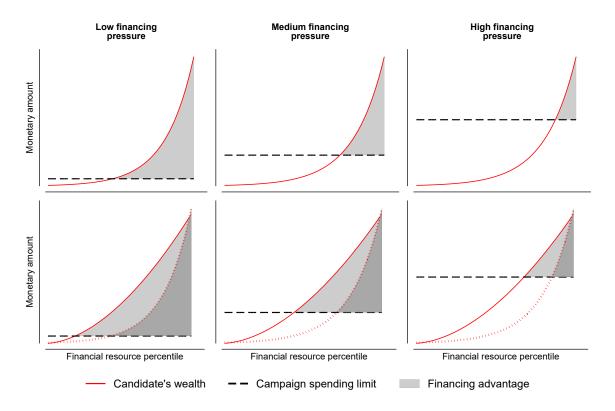
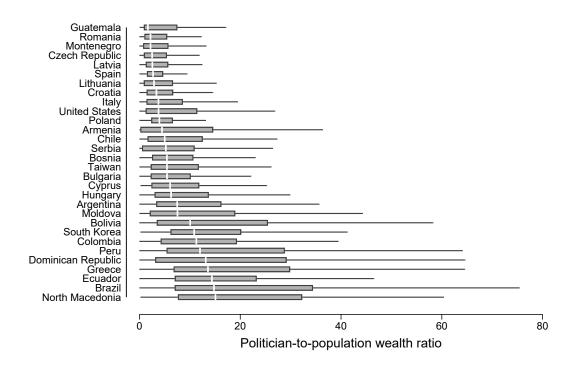
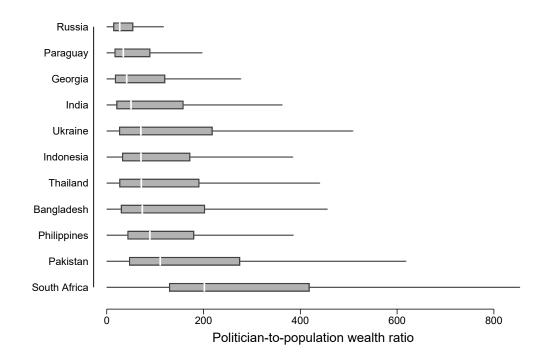


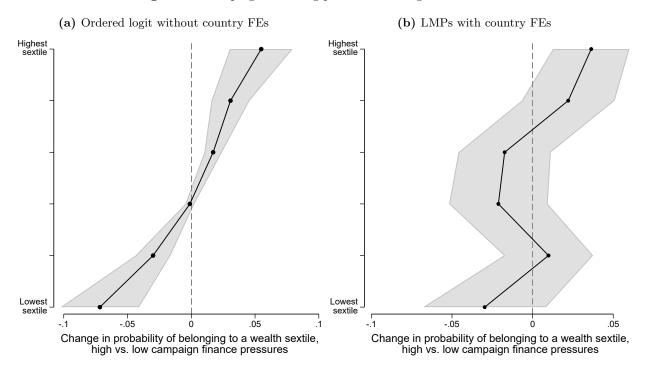
Figure 2: Wealth among political elites around the world





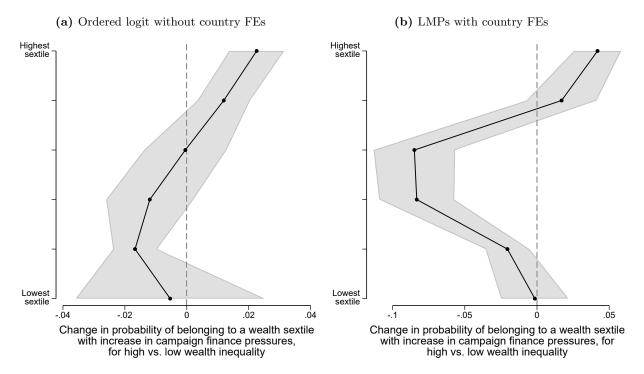
Note: Box plots present the distribution of the ratio of politicians' wealth to average household wealth in each country (in current US dollars). Upper and lower lines on boxes denote the 75th and 25th percentiles, respectively; the middle line is the median. Endpoints on whiskers are "adjacent" values (the 75th (25th) percentile plus (minus)  $1.5 \times 1.5 \times 1$ 

Figure 3: Campaign financing pressures and legislator wealth



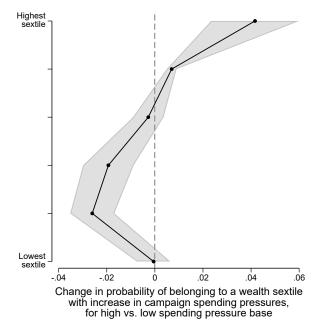
Note: Estimates are differences in the predicted probability of belonging to a wealth sextile at high (90th percentile) vs. low (10th percentile) CFP index values. The shaded area is the 95 percent confidence intervals based on standard errors clustered by country-year. Estimates in panel (a) are based on an ordered logistic model and in panel (b) on linear probability models with country fixed effects estimated separately for each sextile.

Figure 4: Campaign financing pressures and legislator wealth by wealth inequality



Note: Estimates are differences in the change in the predicted probability of belonging to a wealth sextile at high vs. low CFP, for high wealth inequality (at the 90th percentile) compared to low wealth inequality (at the 10th percentile). The shaded area represents point-wise 95 percent confidence intervals. The shaded area is the 95 percent confidence intervals based on standard errors clustered by country-year. Estimates in panel (a) are based on an ordered logistic model and in panel (b) on logistic models with country fixed effects estimated separately for each sextile.

Figure 5: Change in campaign spending pressures from high vs. low base and legislator wealth

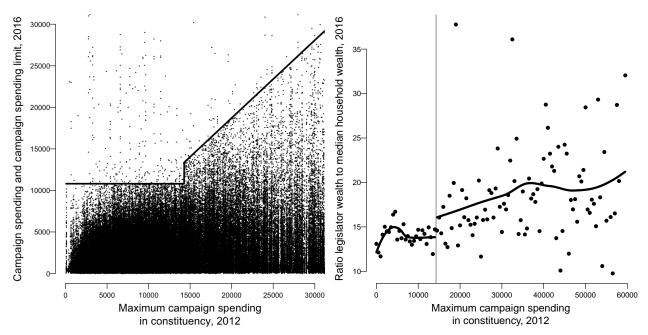


*Note*: Estimates are differences in the change in the predicted probability of belonging to each wealth sextile at high vs. medium campaign spending pressure compared to medium vs. low campaign spending pressure. The shaded area is the 95 percent confidence intervals based on standard errors clustered by country-year.

Figure 6: Discontinuity in campaign finance limits

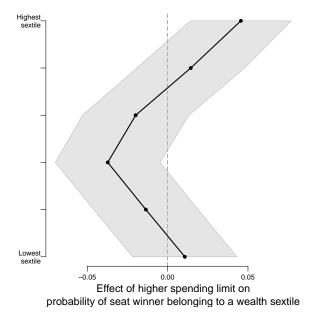
(a) Campaign spending limit and candidate spending

(b) Campaign spending limit and legislator wealth



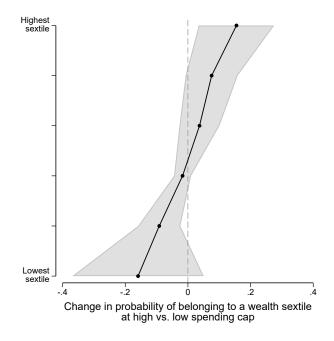
Note: Left panel: 2016 campaign spending and campaign spending limits as a function of the highest spending in the municipality in 2012. At a 2012 maximum spend of R\$14,280, the limit jumps by about 24 percent from R\$10,804 to R\$13,370. Right panel: Average ratio of legislator to median household wealth in R\$500 bins, with two separate LOESS lines to the left and right of the discontinuity (vertical line).

Figure 7: Effect of higher campaign spending limit on wealth of council members in Brazil



Note: Outcomes are dummy indicators for whether a municipal council seat is won by a member of a given wealth sextile. The running variable is the highest campaign spending in the municipality in 2012. Estimates are average treatment effects at the cutoff estimated in six separate models, using a local linear regression and a triangular kernel, robust bias-corrected standard errors, and a masspoint correction. The bandwidth is equal for all models and obtained by averaging the MSE-optimal bandwidths for the six models (h=4,491, b=6,907). Included covariates: council size fixed effects, year that wealth was calculated fixed effects.

Figure 8: Campaign financing pressures and legislator wealth in Chile



*Note*: Estimates are differences in the predicted probability of belonging to each wealth sextile at higher vs. lower financing pressures, as described in the text. The shaded area represents point-wise 95 percent confidence intervals based on standard errors clustered by district.