Financial Globalization and the Political Contributions of Firms: Evidence from Brazil[*]

Raphael Cunha Florida State University[†]

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Abstract: How do global capital flows affect corporate political contributions in developing countries? Scholars agree that financial globalization affects left and right parties differently, but little is known about the effect of cross-border financial flows on campaign finance. I show that contributions to left parties are more sensitive to capital flows than those to right parties. This is consistent with a model that combines ideological and access motivations, whereby firms have a preference for right parties, but global financial booms relax financing constraints and allow them not only to increase funding to capital-friendly parties, but also to diversify their portfolios towards access to policymakers across the aisle. An analysis of new firm-level data on campaign contributions in Brazilian presidential elections supports this claim. The findings document an underappreciated mechanism through which global capital flows affect financial conditions for interparty competition, raising challenges to purely domestic models of money in politics.

[*]Department of Political Science, Florida State University, Tallahassee, FL 32306 (rcunha@fsu.edu).

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1 Introduction

How do global capital flows affect corporate campaign contributions in capital-importing countries? Political scientists have traditionally studied elections as domestic phenomena whose determinants are circumscribed to national borders. However, a burgeoning research program investigates the effects of the world economy on national democratic processes (Kayser 2009; Hellwig and Samuels 2007; Leigh 2009; Tomashevskiy 2015; Ahlquist, Copelovitch, and Walter 2020). Insofar as the economy matters for elections, the growth of global financial integration through cross-border capital flows implies that external economic conditions increasingly affect domestic electoral processes. Given the influence of money in elections and how it affects interest representation, the rapid advance of financial globalization thus raises questions: Do global financial flows affect campaign finance? Do these flows differentially affect corporate contributions to left and right parties?

There is broad agreement among scholars that international capital favors right-wing over left-wing parties. Typically associated with more redistributive and interventionist policies, left parties are often punished by international financial markets with lower stock market valuations (Sattler 2013; Bechtel 2009; Leblang and Mukherjee 2005), higher interest rates on government debt (Mosley 2003; Fowler 2006; Snowberg, Wolfers, and Zitzewitz 2007), lower sovereign credit ratings (Barta and Johnston 2018), and heightened financial volatility (Leblang 2002; Brooks, Cunha, and Mosley 2022). Yet, while the partisan preferences of international capital are well documented, less is known about how financial globalization affects campaign contributions to right and left parties.

Existing theories of business political contributions make conflicting predictions about the effect of capital inflows. The ideological, or partisan, model predicts that cross-border capital inflows should bolster contributions to right-of-center parties. The model assumes that firms make contributions primarily along ideological lines, allocating campaign donations in ways that maximize the electoral chances of capital-friendly parties (Neustadtl and Clawson 1988; McMenamin 2008; McKay 2010; Walker and Rea 2014). According to the ideological model, global financial booms would thus increase the supply of capital in the domestic economy, easing firms' financing constraints and boosting corporate funding to right parties (Tomashevskiy 2015). While the existing

evidence is limited to a few developed nations, ideological cleavages do appear to matter in cases like Australia and the United Kingdom (McMenamin 2013).

Yet, except in those specific contexts where contributions fall along clear ideological lines, corporate donors are typically motivated by an interest in obtaining broad access to policymakers across the political spectrum. With an eye to securing favorable policies or access to government contracts, firms will often hedge their bets by strategically combining contributions to their preferred party as well as to opposing parties in ways that afford them access to the policymaking process regardless of who wins office (Burris 2001; Ansolabehere, Snyder, and Tripathi 2002; Brunell 2005; McMenamin 2013; Boas, Hidalgo, and Richardson 2014). In contrast to the ideological model, the access model suggests that capital inflows will not unambiguously bolster contributions to right-of-center parties. In fact, the influx of capital stemming from global financial booms allows access-motivated firms to further diversify their political portfolios through cross-party investments in access.

Beyond the binary debate on whether corporate funding is motivated by access or ideology, I show that patterns of business political contributions depend on global financial conditions. Specifically, the global financial environment affects the conditions under which firms will favor pragmatism over ideology. When global credit is scarcer, firms face tighter budget constraints and thus a harder trade-off in allocating political contributions. Because firms have a baseline preference for capital-friendly parties on the right, under tighter financial constraints they will tend to concentrate political investment on parties that are close to their ideal point in terms of policy—that is, contribution portfolios will skew right, as predicted by the partisan model.

However, changes in global financial conditions can change the cross-party distribution of corporate funding. For one, improvements in global conditions ease firms' financing constraints, creating opportunities for them to not only ramp up contributions to ideologically proximate parties, but also diversify their portfolios towards political actors across the aisle as insurance. In addition to softening the trade-off between access and ideology motivations, global booms increase firms' incentives to hedge their bets when allocating contributions, as voters become more tolerant of left parties and left-leaning policies during good economic times (Kayser 2009; Kaplan 2017; Kayser

and Grafström 2016). As a result, corporate funding will flow to right parties both in good and bad times, but left parties should only benefit during financial booms. Contributions to left parties therefore will be more sensitive to global capital flows than contributions to right parties.

I examine this hypothesis using firm-level data on campaign contributions by publicly-traded companies in Brazilian presidential elections between 1994-2014. To estimate the effect of capital inflows, I exploit variation in firms' exposure to international financial conditions, comparing the effect of global financial shocks on the political contributions of firms with access to international capital markets to those without direct access. The results show that publicly-traded firms increase overall campaign spending in response to favorable shocks to global liquidity in the period under analysis. Furthermore, global conditions have a larger effect on contributions to left parties, even after controlling for left government incumbency and the expected probability of a left victory in an election. Specifically, low global interest rates and surges in capital inflows boost contributions to left parties more so than right parties. Accordingly, contributions to the left decrease in greater proportion when global liquidity dries up. Firm allocations to left parties therefore increase as a share of their total contributions during good times and decrease during bad times.

The results have important implications for our understanding of the relationship between global economic flows and domestic political processes. Foremost, this study documents a new mechanism through which financial globalization affects some of the conditions for interparty competition in national elections. Existing scholarship identifies ways in which the international economy affects democratic processes, including effects on leader approval rates, public support for policies, and even election outcomes (Ahlquist, Copelovitch, and Walter 2020; Kayser 2009; Leigh 2009). The present findings add to this literature by showing that global finance can also have a large impact on election financing. In open economies where business contributions represent an important source of campaign funding, global capital cycles can significantly affect the volume and partisan distribution of corporate political spending, thereby affecting parties' ability to fund campaigns.

Importantly, the effect of global capital flows on firms' political contributions is empirically and analytically distinct from other domestic factors. Empirically, the analysis shows that capital inflows

affect campaign finance above and beyond the domestic business cycle. Analytically, capital flows are causally distinct because they are immune to political business cycles. Because capital flows to developing countries are driven more by global than by country-specific factors, they are largely exogenous to domestic policy choices (Bauerle Danzman, Winecoff, and Oatley 2017; Rey 2015; Forbes and Warnock 2012). While policymakers may use economic policy strategically to boost popular approval and garner support from business elites during elections, global capital cycles are independent from electoral cycles, and therefore introduce extraneous factors into the electoral process that can alter the conditions for domestic partisan competition. Such external factors may pose particular challenges for the regulation of campaign finance and raise issues of fairness in interparty competition in financially-open countries.

Finally, the findings have methodological implications for the study of money in politics. Research on campaign finance would do well to pay closer attention to the confounding effects of global capital cycles, especially when testing theories at the domestic or firm level. Most research on business contributions focuses on firm-level economic factors and country-level institutional determinants, but given current levels of global financial integration, omitting structural factors at the global level may lead to biased estimates and an incomplete understanding of these processes (Chaudoin, Milner, and Pang 2015; Oatley 2011). Furthermore, most empirical analyses have focused on developed countries. But given developing countries' greater dependence on external finance, global capital flows should have a more pronounced effect in capital-scarce, financially-open countries where corporate donations constitute a relevant source of funding. This article thus draws attention to the importance of integrating global factors as well as diverse political contexts into the study of money in politics.

2 Partisanship vs. Access Motivations in Corporate Contributions

Understanding the effect of capital flows on right and left parties requires understanding how these flows affect the balance between ideology and access motivations in firms' political contributions. Existing research focuses on partisan motivations, emphasizing the ideological affinity between cor-

porate actors and right governments. In these models, firms will use the excess funds that result from a surge in capital inflows to increase their contributions to right-wing parties (Tomashevskiy 2015). However, ideology-centered explanations tend to assume away the trade-off between partisan and access motivations faced by firms and how global liquidity conditions affect this trade-off.

Firms' political contributions follow two, often conflicting, rationales: on the one hand, firms make campaign contributions along ideological lines, as they seek to elect parties that will advance those policies that are aligned with firms' interests; on the other hand, businesses also use contributions strategically to ensure access to important political actors on either side of the aisle. Given budget constraints, firms will face a trade-off between ideology- and access-motivated contributions. The more they contribute to their preferred party, the less they are able to invest in access to policymakers across the political spectrum.

The partisan, or ideological, model of corporate contributions thus posits that firms will concentrate campaign contributions on right-of-center parties. Firms' preference for right governments reflects the inclination of these governments for pro-market and pro-business policies, including low inflation, fiscal discipline, low capital taxation (Oatley 1999; Wibbels and Arce 2003), financial openness (Quinn and Inclan 1997; Oatley 1999), secure property rights (Weymouth and Broz 2013), and an overall environment conducive to capital investment (Bechtel 2009). Conversely, firms tend to be averse to left governments, whose policies are more redistributive and interventionist in nature, including higher government spending, greater inflation tolerance, higher capital taxation, and more regulation and capital controls (Quinn and Inclan 1997; Campello 2015; Shin 2017).

Indeed, corporate contributions typically reflect a baseline preference for market- or business-friendly right parties. In the US, firms concentrate contributions on conservative candidates and the Republican Party (Walker and Rea 2014; Clawson and Neustadtl 1989; Brunell 2005). Business groups' conservative ideology explains much of the variance in the partisan allocation of contributions (Neustadtl and Clawson 1988; McKay 2010; Bonica 2013). Beyond the US, cross-national evidence shows that business political behavior tends to fall along partisan lines in contexts as varied as Australia, Germany, the UK, Brazil, and Mexico (Samuels 2001; McMenamin 2013; Story 1983).

Firms' partisan spending thus reflects the expectation that contributions to right parties will yield policies that are beneficial to business interests.

Beyond partisanship, corporate contributions can also be driven by access motivations. If, on the one hand, firms want to maximize the electoral usefulness of their funds by contributing to ideologically proximate parties, on the other, they also want to ensure broad access to policymakers and hedge against the possibility that the opposing party might be elected (Burris 2001; Ansolabehere, Snyder, and Tripathi 2002). In the access model, campaign contributions buy policymakers' time (Langbein 1986), increase policymakers' involvement in matters that are of interest to donors (Hall and Wayman 1990), grant firms the opportunity to influence policymaking through the provision of policy-relevant information (Austen-Smith 1995), and facilitate access to government contracts (Boas, Hidalgo, and Richardson 2014). In maximizing influence over policymaking, firms will choose contribution "portfolios" that do not fall exclusively along partisan lines.

Existing attempts to reconcile these often conflicting motivations have focused on firm- and industry-level factors that make some firms more access-motivated than others. I argue, however, that beyond firm-level determinants, structural liquidity conditions at the global level affect the constraints under which firms define their contribution portfolios. These structural factors determine how hard firms' ideology-access trade-off is to begin with, and thus they shift firms' allocation decisions across the board. In the next section, I specify the mechanism by which global financial conditions affect firms' partisan contributions and derive testable implications.

3 Global Financial Conditions and Corporate Contributions

How do global financial conditions affect firms' campaign spending? Do these external conditions differentially affect contributions to left and right parties? Here, I argue that favorable credit shocks in global markets ease firms' financing constraints, allowing them to increase overall spending, including political spending. Changes in global financial conditions affect the ideology-access trade-off faced by politically active firms. Under favorable liquidity conditions, firms are able to increase contributions to ideologically proximate parties, but also invest more in access to policymakers

across the aisle. As I argue below, where left parties start from a lower baseline of corporate contributions, this capital flow-induced increase in spending may even be greater for left than for right parties.

Financial openness is the critical link connecting global capital markets and firms' political spending. Particularly in capital-scarce developing countries, the removal of barriers to cross-border capital flows has enabled domestic firms to overcome local financing constraints by tapping funding sources beyond the domestic market. In these countries, capital scarcity, incomplete financial markets, and inefficient banking systems limit firms' ability to finance themselves through private credit markets (Love 2003). By improving access to foreign capital and reducing financing costs, financial liberalization opens up new financing opportunities for domestic companies (Bekaert and Harvey 2000; Harrison, Love, and McMillan 2004).

Global financial conditions will affect firms' financing constraints both through the debt and the equity channel, as described in Figure 1. In open economies, creditworthy firms can raise debt by borrowing directly from overseas banks or by issuing bonds in international capital markets. Borrowing through this channel is typically done in foreign currency. But given the additional risks, why do firms borrow in foreign currency? For one, they may resort to external creditors to obtain long-term financing when local capital markets are underdeveloped and private long-term credit is unavailable (Schmukler and Vesperoni 2001; Caprio and Demirgüç-Kunt 1998).

Furthermore, foreign creditors typically offer better terms in foreign than local currency. Besides higher transaction costs, lending in the borrower's local currency carries extra risks for creditors, as the borrowing country may inflate its way out of debt once foreigners have acquired domestic currency debt. Foreign creditors may also be unforgiving of developing countries' patchy monetary history, and thus may only be willing to lend in foreign currency or may charge a steep premium for lending in local currency (Reinhart and Rogoff 2009). Firms will thus optimize their financing terms by raising foreign debt when global interest rates drop and cutting down on foreign indebtedness when external conditions tighten (Allayannis, Brown, and Klapper 2003; Keloharju

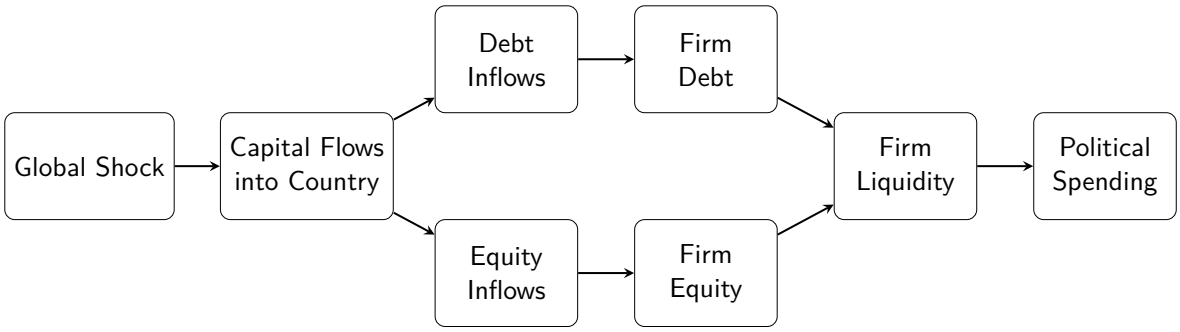

Figure 1. How global financial conditions affect corporate political spending

and Niskanen 2001).[1]

The second channel through which global financial conditions affect firm spending involves portfolio equity flows into local stock markets. Low interest rates and excess liquidity in global markets send global portfolio investors searching for higher-yield investments in riskier emerging markets. This "search for yield" leads to capital inflow surges into developing country stock markets, increasing the local supply of capital and driving down the costs of raising equity for domestic firms (Bekaert and Harvey 2000; Forbes and Warnock 2012). Taken together, global financial shocks transmitted through cross-border debt and equity flows relax domestic financing constraints for corporate actors especially in credit-scarce countries.

Global liquidity conditions should thus affect firms' overall ability to spend, including spending on political contributions. Excess liquidity in global markets allows firms to increase campaign spending, while tight liquidity conditions constrain their ability to spend. I expect an inverse relationship between global interest rates and firms' campaign contributions: low interest rates should loosen firms' financing constraints, freeing up resources for political spending, whereas high interest rates should limit campaign spending. Likewise, I expect a positive relationship between capital inflows and the volume of campaign contributions, with greater inflows leading to more contributions. Importantly, external financial shocks should affect right and left parties differently.

[1]The debt channel may also operate indirectly through the intermediation of domestic banks, as local banks may raise funds in global markets and lend these funds to creditworthy domestic businesses both in domestic and foreign currency (Mora, Neaime, and Aintablian 2013).

In addition to affecting the amount of corporate contributions, external financial conditions should also affect the cross-party distribution of campaign funds. Firms typically face an ideology-access trade-off, and that trade-off is a function of firms' budget and liquidity restrictions. Given firms' traditional preferences for right-of-center governments, corporate contributions to right parties are typically higher than contributions to left parties. Under scarce liquidity conditions, right parties' relative advantage when it comes to corporate funding should be exacerbated, as firms will allocate political spending in ways that maximize the electoral usefulness of their contributions. Given that firms expect to obtain both access to and favorable economic policy from business-friendly parties, under hard budget constraints they will tend to disproportionately donate to these parties. In other words, credit scarcity leads to firms being more strategic about seeking to elect capital-friendly parties, as competition for policies and resources becomes starker. Negative global liquidity shocks should therefore accentuate firms' ideology-access trade-off, concentrating political investment on right-of-center parties.

Conversely, positive liquidity shocks in global markets should ease this trade-off. Under softer budget and liquidity restrictions, firms are able not only to increase contributions to ideologically friendly parties, but also to diversify their political portfolios, investing in access to policymakers across the political spectrum as a form of insurance. Investing in access to the opposing party affords firms greater influence over policymaking and access to government contracts in the likelihood that a left government is elected. As such, investment in broad access to policymakers as insurance is not unlike other forms of "luxury" spending, such as advertising and R&D, which firms are more likely to engage in under abundant liquidity (Aggarwal, Meschke, and Wang 2012; Fee, Hadlock, and Pierce 2009; Brown, Martinsson, and Petersen 2012).

Besides the mechanical effect of abundant liquidity on the easing of the ideology-access trade-off, global economic booms also alter firms' incentives to invest in access as political insurance. If good economic times raise the probability of left-wing policies, then that should increase incentives for firms to insure themselves against unfavorable partisan swings. Indeed, existing research shows that left parties are more likely to be elected and to adopt policies that are more closely aligned

with left partisan preferences in the upswing of global economic cycles (Kayser 2009; Kaplan 2017; Kayser and Grafström 2016). This synchronization of international business cycles and domestic partisan swings should factor into how firms manage political risk. A higher likelihood of a left government during global booms implies that firms will not only have the financial headroom to invest in cross-party diversification but also an incentive to be on good terms with both right and left governments.

This argument thus predicts that capital inflows into developing countries will likely lead to an increase in the volume of corporate contributions. It also predicts a shift in the cross-party allocation of contributions towards left parties. In relative terms, left parties should benefit more than right parties from global financial booms where contributions to the left start from a low baseline. In fact, in contexts where the probability of a left government is high, the capital inflow-induced boost in contributions to the left may even be larger in absolute terms, as firms position themselves to navigate economic policymaking under an expected left government.

The competing, ideology-centered model predicts that right governments will benefit disproportionately from capital inflows. According to the model, firms would channel the excess liquidity provided by these inflows into contributions to right-wing, capital-friendly parties. These contrasting predictions rest on different assumptions about corporate political behavior; specifically, the salience of ideology vs. access motivations. Whether global financial booms favor contributions to the left or the right depends on how much ideology dominates access motives. The ideology model assumes that capitalists care exclusively about the alignment between business interests and party ideology. However, existing evidence shows that while firms lean right, they also strategically seek to be on good terms with actors across the political spectrum. Where firms weigh both partisan and access considerations, left parties should also benefit from capital inflows.

4 Data and Research Design

I estimate the effect of international financial shocks on political contributions using firm-level data on the campaign contributions of publicly-traded companies in Brazilian presidential elections be-

tween 1994–2014. While the question of the international economic determinants of partisan competition is relevant to the developing world broadly defined, the Brazilian case offers a suitable context for this study. First, Brazil has become increasingly integrated into global capital flows in the last forty years. While financial liberalization has provided domestic firms with access to foreign capital, it has also exposed the country to external economic shocks (Campello and Zucco 2020). Expectedly, partisan conflict over international economic policy has been at the center of Brazilian elections in the last few decades (Martínez and Santiso 2003; Campello 2015).

Moreover, business contributions have been a key source of campaign funding in Brazilian elections. In the 2010 election, for example, three-quarters of reported contributions to all levels of government came from firms. In presidential races, corporate donors can account for over 90% of total contributions (Samuels 2001; Mancuso 2015). Consistent with assumptions about the affinity between business interests and right parties, left parties historically have had limited access to corporate funds (Samuels 2001). Still, access-motivated contributions to both left and right parties have grown in importance over time (Boas, Hidalgo, and Richardson 2014; Carazza 2018). Finally, Brazil's large and complex economy is populated by firms with varying degrees of exposure to international capital markets. I exploit such cross-firm variation to estimate the effect of international financial shocks on corporate contributions.

4.1 Corporate Contributions in Brazilian Presidential Elections, 1994–2014

Brazil's 1993 law requiring candidates to report all campaign contributions helped create a rich source of data on firms' partisan electoral behavior. Brazil's electoral courts publish data on every reported contribution by corporate entities to every party and candidate in federal elections. I compiled a dataset of firm-level contributions in presidential elections from 1994 to 2014. In total, the data covers 6 election cycles over the course of 20 years. In 2016, an electoral reform banned contributions by corporate actors. The analysis thus includes all elections up to 2014, the last general election to take place before the new law took effect.

The dataset includes firms publicly listed in the Brazilian stock market in the period. While

campaign contribution data is available for all types of firms, whether publicly traded or not, the analysis focuses on listed firms for two main reasons. First, firm-level financial data is only available for publicly traded companies. Therefore, some of the central variables in the analysis, such as access to international capital markets and the relevant controls, can only be measured for publicly listed firms. Second, the broader universe of firms is extremely heterogeneous, ranging from small family-owned businesses to large multinational conglomerates. These firms are fundamentally different along several observable and unobservable dimensions, including economic fundamentals, access to international finance, policy preferences, government relations, and non-market strategies. Limiting the analysis to the target population of publicly traded firms thus ensures that the units are comparable along relevant dimensions. Compared to the broader population of contributing firms, publicly listed firms make larger contributions on average, which makes them a significant source of campaign funding (see Figure A1 in the SI). Publicly listed firms are nonetheless similar to the broader population of firms in their overall propensity to donate more to right parties than to left parties.

Contribution-revealed partisan preferences. For each election, I obtain the amount contributed by each firm to each party and candidate to construct different measures of firms' partisan preferences. I aggregate individual contributions by partisanship using a measure of party ideology based on the Brazilian Legislative Surveys (Power and Zucco 2009). The ideology scores place Brazilian parties on a left-right scale from -1 (most left) to 1 (most right). For example, the country's main left-wing party, the Workers' Party (PT), has an average score of -0.62 in the period, while the main center-right contender in the elections covered by the data, the Brazilian Social Democratic Party (PSDB), has an average score of 0.20. This party ideology measure based on legislative data has the advantage of having wide coverage across the Brazilian party system. However, because there could be differences between the ideology of the party's median legislator and the ideology of the party's presidential candidate, I also present robustness checks using an alternative measure from Baker and Greene (2011).

I begin by constructing two measures of firms' revealed preferences that capture the overall par-

tisan orientation of a firm's contribution "portfolio." The first is a volume-based measure calculated as the ideology-weighted average contribution of firm i in election year t:

$$\text{Revealed rightism (volume)}_{it} = \frac{1}{C}\sum_{c=1}^{C} \text{Ideology}_{pt} \times \text{Contribution}_{cipt}, \tag{1}$$

where $Ideology_{pt}$ is party p's ideology score on a -1 (farthest left) to 1 (farthest right) scale; and $Contribution_{cipt}$ is contribution c (for $c = 1, \ldots, C$) by firm i to party p in election t (in constant US$). This measure incorporates full information on the partisan composition of firms' contribution portfolios. It takes higher values the more a firm contributes to parties farther to the right, and lower values the more it contributes to parties farther to the left. Firms that contribute equal amounts to diametrically opposed parties receive a score of zero, as right and left contributions cancel out. The revealed rightism measure is thus a function of the size of contributions and where recipient parties fall on the ideology scale.

A potential limitation of this measure is that variation in the revealed preference score could be driven by the volume of contributions alone, even if the relative allocation of contributions by partisanship does not change. For example, a firm that increases contributions to right and left parties in equal proportion will see an increase in its contribution-revealed rightism, despite relative allocations to the left and right remaining constant. To guard against this issue, I construct a second measure of revealed partisanship—*relative contribution-revealed rightism*—that captures only relative shifts in firms' allocation of contributions:

$$\text{Revealed rightism (share)}_{it} = \sum_{c=1}^{C} \frac{\text{Ideology}_{pt} \times \text{Contribution}_{cipt}}{\text{Total Contribution}_{it}}. \tag{2}$$

Here, the *share* of a firm's contributions going to a given party is weighted by party ideology. The measure captures variation in firms' preferences toward the right (relative to the left) through relative shifts in the partisan allocation of contributions, irrespective of changes in the total amount contributed by the firm. Together, these two indicators allow for a comprehensive test of the effect of international shocks, capturing both the effect on the volume of contributions as well as on their

relative distribution across partisan lines.

Finally, I assess the effect on the left and the right separately using the sum total of a firm's contributions to each partisan category in a given election: $\left(\sum \text{Right Party}_{pt} \times \text{Contribution}_{cipt}\right)$ and $\left(\sum \text{Left Party}_{pt} \times \text{Contribution}_{cipt}\right)$, where *Right Party* and *Left Party* are dummies for party ideology where parties with a score less than zero are coded left, and right otherwise.

4.2 Comparing Firms with Varying Access to Global Capital Markets

The argument being tested here specifies both a directional hypothesis and a causal mechanism. The hypothesis is that favorable international shocks boost contributions to left parties more than right parties. The mechanism is that firms that are in a position to take advantage of global liquidity booms will use some of the accruing funds to increase political spending. To test these claims, I compare the effect of international financial shocks on the contributions of firms with access to international capital markets and those of firms with no direct access to foreign finance.

This strategy has several advantages over alternative designs. First, by analyzing firm-level variation, I can hold constant at the national level political and economic factors that would otherwise be difficult to account for in a cross-national setting. Besides attracting different amounts of capital inflows and having varying exposure to external shocks, countries display other differences that are difficult to observe or measure, including political and economic institutions, parties and party systems, corporate culture, and government-business relations. This design guards against concerns that the results might be driven by such omitted factors. Second, it allows me to directly observe firms' political behavior in response to changes in the global financial environment. An analysis of aggregate country-level outcomes would be vulnerable to problems of ecological inference and other aggregation issues that result from inferring micro-level behavior from macro-level outcomes. Finally, the design allows me to test the causal mechanism by comparing firms with varying access to international markets. By analyzing campaign contributions at the firm level, I can move beyond indirect evidence to provide a direct test of the posited mechanism.

The fact that firms are not equally exposed to international financial shocks affords me the op-

portunity to isolate the effect of interest. I use campaign donations from firms that are not directly exposed to international capital markets as a counterfactual, or control group, for comparing campaign contributions from firms that have easier access, or are otherwise highly exposed, to international capital markets. If, in response to a favorable global shock (a surge in capital inflows or a decline in interest rates), campaign contributions increase more from firms with high exposure to global markets than from firms with low exposure, we can take this relative difference in changes in contributions as an estimate of the effect of international financial shocks on campaign donations.

I estimate fixed effects models of the form:

$$Y_{it} = \delta(\text{International Financial Conditions}_t \times \text{Exposure}_i) + \gamma \mathbf{X}_{it} + \eta_i + \theta_t + \epsilon_{it}. \quad (3)$$

In this model, Y_{it} stands for the different measures of firm i's partisan contributions in year t; $\mathbf{X}_{it}$ is a vector of time-varying firm-level covariates; η_i are firm fixed effects; θ_t are year fixed effects; and ϵ_{it} is the error term. The vector of firm dummies, η_i, controls for mean differences in contribution patterns across firms, and year dummies, θ_t, control for growth in contributions common to all firms. The coefficient of interest is δ, the effect of international financial shocks on firms' political contributions. The interaction term $(\text{International Financial Conditions}_t \times \text{Exposure}_i)$ captures the comparison of the effect of international financial shocks on firms that are exposed to international capital markets to firms with low exposure, in years of favorable global conditions relative to years of unfavorable conditions. Because within-firm error correlation can produce downward-biased standard errors in designs like this one, I cluster standard errors by firm in all models.

Firm-level controls include measures of firm size (total assets and stock market capitalization), since larger firms and firms with more assets have easier access to foreign credit (Gelos 2003; Allayannis, Brown, and Klapper 2003). Likewise, I adjust for profitability (gross profits/assets) and revenues, since more profitable firms and firms with larger cash flows are more creditworthy. Finally, I adjust for firm indebtedness and solvency using measures of leverage (total debt/assets) and debt service (interest expenses/operating revenues), as these indicate firms' level of access to capital

markets and ability to repay, respectively.

Scholars may recognize this research design as being analogous to a difference-in-differences strategy. This strategy differs in two main ways from the traditional two-group, two-period difference-in-differences design. First, it moves beyond the two-period design by exploiting the occurrence of international financial shocks over multiple time periods. Second, it exploits variation in "treatment intensity" by using continuous measures of international financial shocks. The strategy thus leverages exogenous shocks over multiple time periods where the intensity of the treatment (the size of the global liquidity shock) varies over time. This multi-period design yields a weighted average of all possible two-group, two-period difference-in-differences comparisons implied in the data (Imai and Kim 2021; Goodman-Bacon 2021).[2]

International financial conditions. Exogenous shocks to the global supply of credit and liquidity affect the ability of domestic firms to finance themselves in international capital markets. Firms' decisions to borrow from international creditors depend critically on prevailing interest rates in international markets. Lower rates reduce financing costs and increase firms' demand for foreign loans, while higher rates reduce firms' willingness to borrow from foreign sources. I use the 10-year US Treasury constant maturity rate—a benchmark rate in global debt markets—as a proxy for global interest rates. Low US rates indicate favorable credit and liquidity conditions for developing country firms. They reduce the cost of borrowing and increase the supply of available credit, as global investors turn to capital-scarce economies in search of higher-yield investments. High US rates, in contrast, constrain the supply of credit for developing markets, as investors flock to higher-interest, risk-free US Treasuries. Importantly, the identification of the effect of international financial shocks on political donations rests on the fact that US interest rates are exogenous to Brazilian firms' borrowing and spending decisions. We should expect δ to be negative for the term $(\text{US Interest Rates}_t \times \text{Exposure}_i)$ if low interest rates lead creditworthy firms to increase campaign contributions.

[2]The two-way fixed effects estimator may be biased in the multi-period design when there is differential treatment timing (Cunningham 2021, 468-72). Note, however, that the treatment here is not staggered, as all treated firms experience global liquidity shocks simultaneously.

Additionally, I assess the effect of country-level capital inflows on firms' contributions. Net portfolio investment flows capture variation in the net supply of foreign credit in the domestic economy. Positive net inflows indicate positive net purchases of domestic assets by foreigners, which imply an increased availability of foreign capital in the domestic economy, whereas negative net inflows represent a diminished supply of foreign capital. To estimate the effect of capital inflows, I focus on net private external debt flows (i.e. capital inflows into private sector debt) and net portfolio equity flows (i.e. capital inflows into firms' stocks), the two channels described in Figure 1. These two types of flows explicitly capture capital inflows that finance private sector activity and thus directly affect firms' financing constraints. As with interest rates, the empirical strategy rests upon the assumption that aggregate capital inflows are exogenous to Brazilian firms' borrowing and spending decisions. This is a safe assumption given that global capital flow cycles are largely exogenous to economic policy in developing countries (Forbes and Warnock 2012; Bauerle Danzman, Winecoff, and Oatley 2017) and especially so for individual firms. If capital inflows bolster campaign spending, then we should expect a positive δ for the term $(\text{Net Capital Flow}_t \times \text{Exposure}_i)$.

Exposure to global markets: firm creditworthiness. The analysis compares the effect of global shocks on firms that have access to global capital markets to those with limited or no access. Firm creditworthiness determines their exposure to changing credit conditions in international capital markets. The easing of international financial conditions should primarily affect those firms that are able to take advantage of favorable lending terms in global markets. By the same token, those firms should be most affected by global liquidity contractions, as the latter make it costlier for firms to service foreign debt, issue new debt, and rollover existing debt in international markets.

I use firm-level credit ratings from Standard & Poor's to capture creditworthiness. A credit rating is a forward-looking determination by a credit rating agency of a firm's capacity and willingness to meet its financial commitments, whereby a higher rating indicates greater creditworthiness. I construct a time-invariant binary indicator of creditworthiness that is coded one if a firm has an "investment grade" rating (an S&P rating of BBB– or higher) in the first year of the period under analysis, and zero otherwise. Investment grade is a conventional designation that denotes that a

firm is likely enough to meet its payment obligations and is thus considered a good credit—as opposed to firms receiving a non-investment-grade, or "junk", rating, which are deemed speculative investments. The investment grade indicator therefore captures domestic firms' direct exposure to and ability to tap into global capital markets.

Note that creditworthiness varies across firms, but does not vary over time. This is a conservative choice that seeks to avoid post-treatment bias, since international financial conditions may affect the likelihood that a firm receives an investment grade rating. For the same reason, as previously mentioned, the analysis excludes firms that enter the stock market after the first period to ensure appropriate comparisons and to avoid controlling for intermediate outcomes. Still, both cross-firm and over time variation are explored in the analysis through the interaction of international financial shocks with firm-level exposure to these shocks.

To further probe the mechanism, I also distinguish between foreign currency and local currency credit ratings. I expect the effect to be larger for foreign-currency investment grade firms, which have better access to international capital markets relative to firms with only a local currency rating. For one, firms that solicit a foreign currency rating are the ones seeking direct access to foreign capital. Moreover, a foreign currency rating is a stronger signal of creditworthiness to global investors, since firms wishing to earn such a rating must meet more stringent requirements. Foreign currency ratings assess firms' capacity to meet financial obligations in foreign currency, which involve additional risks that firms that only raise capital in local currency do not face. As such, a foreign currency investment grade rating affords privileged access to global capital markets. Indeed, while 11% of Brazilian publicly-traded firms receive a local currency investment grade rating in the sampled period, only 4% are rated as investment grade in foreign currency. No firm without a local investment grade rating has a foreign currency rating. As firms with foreign currency ratings are able to borrow directly from international creditors in foreign currency, their financing conditions are most likely to be affected by changes in the global financial environment.

Ensuring balance. The validity of this research strategy rests upon the assumption that, absent the treatment (a global financial shock), the campaign contributions of creditworthy and uncredit-

worthy firms would follow the same trajectories—an assumption known as parallel trends. While this assumption cannot be directly tested, one may plausibly suspect that investment grade and non-investment grade firms may differ along certain dimensions, including propensity for political activity, in ways that may lead to non-parallel trajectories. Therefore, it is important to ensure that the treatment and control groups are comparable along relevant pre-treatment trends.

To accomplish this goal, I use entropy balancing, a reweighting method that produces treatment and control groups that are balanced in the desired dimensions (Hainmueller 2012). With entropy balancing, one specifies the moment conditions that should hold across the treatment and control groups. The algorithm then finds weights for control group observations such that the resulting weighted control group is comparable to the treatment group along those pre-specified conditions. I balance the groups of investment grade and non-investment grade firms along pre-treatment trends in firm size, indebtedness, and financial performance, which are relevant determinants of both creditworthiness and political contributions. Importantly, the two groups must also be comparable with respect to their pre-treatment campaign activity. Therefore, I reweight control group observations to achieve balance on: total assets, revenues, profitability, and leverage (total debt/assets) in the period prior to the analysis (1990–1994 averages), as well as on whether firms made any campaign contributions in 1994, the first election in the sample.

Table 1 shows that the weighted control group is virtually identical to the treatment group in terms of average assets, leverage, revenues, profitability, and campaign activity in the pre-treatment period, while the raw (unweighted) control group differs substantially in those dimensions. Given the improved comparability of the reweighted control group, the main analysis uses the balanced data to estimate the effects of interest.[3]

5 Results

Table 2 shows effect estimates of US interest rates on the different measures of firms' partisan contributions in Brazilian presidential elections, while Table 3 shows the results for the effect of capital

[3] As a robustness check, I also report results using the unweighted data; the conclusions are unchanged.

Table 1. Results of Entropy Balancing

	Treatment (Inv. Grade)		Weighted Control (Non-Inv. Grade)		Raw Control (Non-Inv. Grade)	
	μ	σ	μ	σ	μ	σ
Assets (US$ million)	5.76	14.59	5.75	6.25	0.43	1.20
Revenues (US$ million)	1.41	2.81	1.41	1.36	0.33	0.63
Profitability (%)	16.17	15.83	16.18	15.27	23.25	15.01
Leverage (%)	20.60	14.22	20.60	15.13	18.69	14.92
Contributed 1994*	0.00	0.00	0.00	0.03	0.11	0.32

*Binary indicator of whether the firm made a campaign contribution in the 1994 election.

inflows. Starting with interest rates, Columns 1 and 2 in Table 2 show estimates of the effect on the volume-based measure of contribution-revealed rightism (a weighted average of a firm's contributions, with larger weights for right parties) and the share-based measure of revealed rightism (the relative allocation of a firm's contributions by partisanship), respectively. Both estimates show that lower interest rates in global markets reduce firms' revealed rightism. The coefficients in both cases are positive and statistically significant at conventional levels, which indicates that firms' revealed rightism increases with US interest rates. In other words, low interest rates lead to a higher participation of left parties in firms' contribution portfolios.

Columns 3 and 4 confirm that this shift towards left contributions in a low interest rate environment indeed occurs through differential effects on the volume of contributions to left and right parties. The negative coefficient estimates in columns 3 and 4 indicate that a negative shock in interest rates increases contributions to both left and right parties, but the effect is 35% larger for left parties. A 1 percentage-point decrease in US interest rates increases firms' contributions to left parties by US$ 23,496 on average, while it increases contributions to right parties by US$ 17,382. For additional substantive interpretation, Table 4 provides bootstrapped confidence intervals around the difference in effects for left and right parties for a standard deviation shock in both interest rates and capital inflows. The interval estimates for the differential effect of interest rates are large but estimated with greater uncertainty than those of capital inflows, as can be seen from the fact that

Table 2. US Interest Rates and Firms' Partisan Contributions in Brazilian Presidential Elections, 1994–2014

	Dependent variable:			
	Revealed rightism (volume) (1)	*Revealed rightism (share)* (2)	*Total left contributions* (3)	*Total right contributions* (4)
US Treasury Yield × Investment Grade	6,109*** (2,207)	0.020** (0.008)	−23,353*** (8,061)	−17,079** (8,611)
Firm-Level Controls	✓	✓	✓	✓
Firm Fixed Effects	✓	✓	✓	✓
Year Fixed Effects	✓	✓	✓	✓
Observations	511	511	511	511
Firms	144	144	144	144
R^2	0.229	0.374	0.380	0.401

Table shows results of entropy-weighted fixed effects regressions of political contributions. Clustered standard errors at the firm level in parentheses. Firm-level controls included in all regressions but omitted from the table for brevity. $^{*}p < 0.10$; $^{**}p < 0.05$; $^{***}p < 0.01$.

the 95% interval includes zero. Nonetheless, the estimates in Table 2 show that global interest rates affect both the volume of firms' contributions as well as their relative allocation across left and right parties.

Table 3 shows similar estimates of the effect of capital inflows on corporate contributions. Panel (a) shows results for private external debt flows and panel (b) for portfolio equity flows. The results for the two contribution-revealed rightism measures (models 1-2 and 5-6) indicate that both types of capital inflows tend to reduce firms' revealed rightism, as the negative and statistically significant coefficients indicate. An increase in net inflows into private sector debt and equity reduces firms contributions to right parties relative to left parties, both in terms of overall volume and as a share of firms' total contributions.

As is the case with global interest rates, the effect of capital inflows on firms' revealed partisanship operates through differential effects on the volume of contributions to left and right parties. Columns 3-4 and 7-8 in Table 3 show that an increase in net inflows into private sector debt and equity bolsters campaign contributions both to left and right parties, as indicated by the positive and

statistically significant coefficients. The effect, however, is larger for left contributions. A US$ 20 billion increase in net inflows into private external debt ($\sim$1 *sd*) corresponds to an increase in firms' expected contributions of US$ 57,000 to left parties and US$ 32,400 to right parties—a boost that is 75% larger for parties on the left. Similarly, the effect of portfolio equity flows is 113% larger for contributions to the left. A US$ 14 billion increase in net purchases of domestic equity by foreigners ($\sim$1 *sd*) raises firms' expected contributions to left parties by US$ 57,800 and to right parties by US$ 27,100. The interval estimates in Table 4 are consistent with a large and statistically significant difference in the effect of capital inflows on contributions to left and right parties. These results are inconsistent with a strictly ideological model of corporate contributions whereby firms disproportionately channel additional resources to right-of-center parties. In fact, these estimates indicate stronger support for the hypothesis that excess capital inflows relax firms' ideology-access trade-off, allowing them to further diversify their political portfolios toward the left.

Placebo tests. To what extent can we attribute these effects to capital inflows as opposed to spuriously correlated trends in capital flows and firm contributions or potentially confounding external and domestic factors? I conduct two placebo tests replacing the main treatment variables of interest with *public* external debt flows and government consumption. The goal of these tests is to demonstrate that the effect does not exist when it "should not" exist. I thus use placebo variables that should not have an effect on firms' contributions, yet might plausibly produce a positive finding for spurious reasons.

Public external debt flows are useful as a placebo because they share trends and common external causes with private debt and equity flows. However, net public debt inflows should not directly affect private sector financing constraints, since the former reflect net purchases of government debt by foreigners. These funds are therefore channeled into the public sector and are not readily available to private firms; as such, they should not have an effect on firms' contributions. In addition, using government consumption as a second placebo serves to establish capital inflows as a distinct external mechanism that operates independently of and in addition to any domestic economic causes. Government consumption should not have a direct effect on corporate campaign contributions,

Table 3. Capital Inflows and Firms' Partisan Contributions in Brazilian Presidential Elections, 1994–2014

	Dependent variable:			
(a) Private External Debt	*Revealed rightism (volume)* (1)	*Revealed rightism (share)* (2)	*Total left contributions* (3)	*Total right contributions* (4)
Private Ext. Debt Flow × Investment Grade	-964.05^{**} (456.77)	-0.002^{***} (0.001)	$2{,}793^{***}$ (955)	$1{,}606^{*}$ (891)
(b) Portfolio Equity	*Revealed rightism (volume)* (5)	*Revealed rightism (share)* (6)	*Total left contributions* (7)	*Total right contributions* (8)
Portfolio Equity Flow × Investment Grade	$-1{,}285.82^{**}$ (621.16)	-0.003^{***} (0.001)	$4{,}081^{***}$ (1,226)	$1{,}969^{*}$ (1,038)
Firm-Level Controls	✓	✓	✓	✓
Firm Fixed Effects	✓	✓	✓	✓
Year Fixed Effects	✓	✓	✓	✓
Observations	511	511	511	511
Firms	144	144	144	144

Table shows results of entropy-weighted fixed effects regressions of political contributions. Panel (a) shows effect estimates of private external debt flows and panel (b) of portfolio equity flows. Clustered standard errors at the firm level in parentheses. Firm-level controls included in all regressions but omitted from the table for brevity. $^{*}p < 0.10$; $^{**}p < 0.05$; $^{***}p < 0.01$.

yet it could plausibly be spuriously correlated with firms' political spending given the pro-cyclical nature of Brazilian fiscal policy (Carneiro and Garrido 2015). A null finding for this placebo would increase confidence in the international financing mechanism by ruling out the possibility that the estimated effects of capital inflows are merely proxying for domestic business cycles.

The results of both placebo tests offer reassurance. Table 5 shows estimates for the effect of public debt flows and government consumption on all measures of firms' partisan contributions. There is no evidence that either placebo variable affects how much firms contribute to right and left parties or the relative distribution of these contributions. These null findings bolster the credibility of the original effect estimates and lend additional confidence to the posited mechanism. They show that corporate campaign contributions respond to capital inflows into the private sector but not to capital

Table 4. Substantive Effect of Global Financial Conditions on Contributions to Left and Right Parties

	Increase in contributions to...			
Shock...	*Left*	*Right*	*Left − Right*	*95% CI**
1 *SD decrease* in the US Treasury yield	37,347	27,313	10,034	(−2,475; 35,271)
1 *SD increase* in private ext. debt flows	53,303	30,649	22,653	(1,298; 77,276)
1 *SD increase* in portfolio equity flows	57,139	27,565	29,574	(3,098; 67,429)

Notes: Contributions in constant 2010 US$. *Confidence interval for the difference between left and right contributions from 1,000 bootstrapped samples.

Table 5. Placebo Tests: Public External Debt Flows, Government Consumption, and Firms' Contributions

	Dependent variable:			
	Revealed rightism (volume) (1)	*Revealed rightism (share)* (2)	*Total left contributions* (3)	*Total right contributions* (4)
Placebo 1				
Public Ext. Debt Flow ×	−203.15	−0.0005	1,388	1,619
Investment Grade	(250.50)	(0.0005)	(868)	(1,342)
Placebo 2				
Govt. Consumption ×	5,484.024	0.009	−8,305.142	101.237
Investment Grade	(3,763.937)	(0.006)	(6,452.994)	(6,161.344)
Firm-Level Controls	✓	✓	✓	✓
Firm Fixed Effects	✓	✓	✓	✓
Year Fixed Effects	✓	✓	✓	✓
Observations	511	511	511	511
Firms	144	144	144	144

Table shows results of entropy-weighted fixed effects regressions of political contributions. The binary dependent variables indicate whether or not a firm made a contribution to left and right parties. Clustered standard errors at the firm level in parentheses. Firm-level controls included in all regressions but omitted from the table for brevity. $^{*}p < 0.10$; $^{**}p < 0.05$; $^{***}p < 0.01$.

inflows into the public sector, and that the campaign finance mechanism has a distinct international component to it that cannot be reduced simply to domestic economic conditions.

Mechanism 1: effect on firm indebtedness. To further probe the mechanism, I examine the effect of global conditions on firm indebtedness. If global financial shocks lead to higher campaign

spending by way of easier access to financing, then favorable liquidity conditions should lead to higher firm indebtedness, as described in Figure 1. I estimate the effect of US interest rates and capital inflows on firms' total debt, as well as short- and long-term debt. While these tests do not amount to a full mediation analysis, they provide important evidence for additional observable implications of the theory.

Table 6 shows estimates for the effect of US interest rates, private external debt flows, and portfolio equity flows on the three measures of firm debt. Note that testing whether portfolio equity flows affect firm indebtedness serves as a placebo test, since net purchases of equity should not directly affect firms' debt level. Indeed, the relationship may even be negative, given that debt and equity are often substitutes, as firms receiving an equity injection may forego additional debt.

The results show that international interest rates and debt flows affect the level of firm indebtedness in the expected direction. Both interest rates and debt flows have a discernible effect on total debt. Moreover, the evidence is stronger for short-term debt, thus suggesting that the observed effect on total debt is likely driven by an increase in firms' short-term borrowing in response to favorable global conditions. Importantly, I find no evidence that equity flows affect firm indebtedness, which further reinforces the evidence for the debt mechanism according to the logic of the placebo test.

Mechanism 2: foreign currency investment grade firms. As an additional test of the mechanism, I estimate the effect of global financial shocks on the subset of firms with a foreign currency investment grade credit rating. I expect the effect of global shocks to be more pronounced for foreign currency investment grade firms, which have better access to international capital markets relative to firms with only a local currency rating. As previously discussed, foreign currency ratings have more stringent criteria, as firms wishing to finance themselves in foreign currency must bear additional risks that firms that use local currency financing do not face, foremost of which is exchange rate risk.

The results, reported in Tables A3 and A4 of the Supplementary Information, confirm that the effects are larger and estimated with greater precision when using foreign currency ratings as the

Table 6. Mechanism: US Interest Rates, Capital Inflows, and Firm Debt

	Dependent variable:		
	Total debt	*Short-term debt*	*Long-term debt*
	(1)	(2)	(3)
US Treasury Yield × Inv. Grade	-1.212^{**}	-1.112^{***}	-0.101
	(0.492)	(0.418)	(0.316)
	(4)	(5)	(6)
Private Ext. Debt Flow × Inv. Grade	0.045^{*}	0.036^{***}	0.009
	(0.027)	(0.011)	(0.023)
	(7)	(8)	(9)
Portfolio Equity Flow × Inv. Grade	-0.064	-0.062	-0.002
	(0.063)	(0.039)	(0.032)
Firm-Level Controls	✓	✓	✓
Firm Fixed Effects	✓	✓	✓
Year Fixed Effects	✓	✓	✓
Observations	611	611	611
Firms	148	148	148

Table shows results of entropy-weighted fixed effects regressions of firm debt. Clustered standard errors at the firm level in parentheses. Firm-level controls included in all regressions but omitted from the table for brevity. $^{*}p < 0.10$; $^{**}p < 0.05$; $^{***}p < 0.01$.

treatment exposure variable. The effect estimates are larger for all three types of financial shocks (US interest rates, private external debt flows, and portfolio equity flows) and all outcome measures. These additional results provide further evidence that the effect of global conditions on campaign contributions operate through the firm financing channel. Most importantly, the difference in the effects on left and right parties is even starker when looking only at foreign currency investment grade firms, which supports the hypothesis that left parties benefit relatively more from global liquidity booms.

6 Alternative Explanations and Robustness Checks

A competing mechanism that could potentially affect inferences about the effect of capital inflows is that access-motivated firms have incentives to fund whichever party is expected to win the election, regardless of international financial conditions. This could confound the results because global liquidity cycles have partly overlapped with partisan cycles in Brazil in the period under analysis, with left governments often coinciding with global liquidity booms. This competing explanation would thus suggest that firms would fund left parties when the left has a good chance of winning. Similarly, it could be likely that firms that have benefitted from left incumbents' policies might be invested in maximizing the incumbent's chances of reelection, in which case left incumbency could be an additional confounder.

To account for these competing mechanisms, I estimate additional models that control for the likelihood of a left victory, left incumbency, and electoral closeness. Using pre-electoral polling data, the expected probability of a left victory in a given presidential election can be calculated as (Alesina, Roubini, and Cohen 1997; Bechtel 2009):

$$\Pr(\text{Left})_t = \Phi\left(\frac{V_t^L + \pi^L d - 50}{\sigma^L \sqrt{d}}\right), \tag{4}$$

where Φ is the cumulative standard normal distribution, V_t^L is the left's share of the two-party pre-electoral polling at time t, d is the number of days until the election, π^L is the sample mean of daily changes in the left's polling, and σ^L is the sample standard deviation of daily changes in the polls. For each election included in the sample, I use daily polling data to calculate the average probability of a left win over the period of thirty days before the election.

Table 7 shows results for models of the effect of US interest rates, private debt flows, and portfolio equity flows on total left and right contributions, controlling for the probability of a left win. Because the latter is firm-invariant, the models do not include year fixed effects. I replace the year fixed effects with variables that capture common external shocks: US interest rates, global commodity prices, and global risk aversion measured by the VIX index.

Table 7. Alternative Explanation: Contributions and the Expected Probability of Left Victory

	US Treasury Yield		Private Debt Flows		Equity Flows	
	Left contrib. (1)	*Right contrib.* (2)	*Left contrib.* (3)	*Right contrib.* (4)	*Left contrib.* (5)	*Right contrib.* (6)
US Treasury Yield × Investment Grade	−23,159***	−16,946*				
	(7,895)	(8,661)				
Private Ext. Debt Flow × Investment Grade			2,788***	1,645**		
			(851)	(722)		
Portfolio Equity Flow Investment Grade					4,124***	1,999*
					(1,205)	(1,060)
US Treasury Yield	46,992***	20,920	33,386**	11,542	−4,896	−6,582
	(17,667)	(13,052)	(15,209)	(13,477)	(12,394)	(15,266)
Pr(Left)	61,582**	2,307	81,729**	14,201	18,769	−18,428
	(30,339)	(30,132)	(36,498)	(28,912)	(25,209)	(32,530)
Commodity Prices	2,226***	1,300**	1,103	667	−197	177
	(828)	(611)	(724)	(529)	(613)	(546)
VIX	4,963**	2,947	3,786**	2,310	−761	273
	(2,056)	(1,853)	(1,915)	(1,846)	(1,451)	(1,917)
Firm Fixed Effects	✓	✓	✓	✓	✓	✓
Firm-Level Controls	✓	✓	✓	✓	✓	✓
Observations	511	511	511	511	511	511
Firms	144	144	144	144	144	144
R^2	0.376	0.399	0.392	0.403	0.385	0.397

Table shows results of entropy-weighted fixed effects regressions of political contributions. The dependent variables are total left and right contributions. Clustered standard errors at the firm level in parentheses. Firm-level controls included in all regressions but omitted from the table for brevity. $^{*}p < 0.10$; $^{**}p < 0.05$; $^{***}p < 0.01$.

These results confirm the intuition that firms are more likely to contribute to the left when a left government is likely to be elected. The coefficient on Pr(Left) in models 1 and 3 are large and statistically significant at the 5% level. Moreover, there is no evidence that Pr(Left) affects contributions to the right. These results are consistent with a model that combines both ideology and access

motivations, as business contributions to the right are largely stable and insensitive to the party in power, while contributions to the left are driven by firms' desire to be on good terms with left governments only when they are likely to come to power. Substantively, a one-standard-deviation increase in the probability of a left win ($\Delta = 0.47$) increases firms' contributions on average by US$ 28,943 (model 1) to US$ 38,412 (model 3). These effect sizes are of the same order of magnitude as the above reported effects for international financial shocks.

Importantly, after controlling for the expected probability of a left win, the estimated effects of international financial conditions remain virtually identical to the main estimates reported in Tables 2 and 3. The conclusions also hold after controlling for left incumbency and electoral closeness, as shown in Tables A6 and A7. Taken together, the results lend strong support for the relative importance of the access model of corporate contributions in the Brazilian case. Corporate funding for the left responds to left incumbency and the likelihood of a left victory in presidential elections, as predicted by the access model. Over and above those factors, capital inflows lead to an increase in the relative importance of access-motivated contributions to left parties relative to right parties.

As an additional robustness check, I further account for sector of activity, since firms in sectors that are highly regulated or that rely heavily on government contracts are more likely to be access-motivated. To the extent that left governments tend to favor more government intervention, firms in certain sectors may have a greater propensity to curry favor with left parties to obtain favorable regulation and special access to contracts. To account for differences in sector-based incentives, I use entropy re-weighting to achieve balance on the sectoral composition of the treatment and control groups using *Economatica*'s sector classification. The conclusions are the same after these adjustments (Tables A8 and A9). Finally, I test an alternative measure of party ideology from Baker and Greene (2011) without substantive changes in the results. All results for the robustness checks appear in the Supplementary Information.

7 Conclusion

How do global capital flows affect firms' campaign contributions? This study shows that global capital cycles can have large effects on corporate funding for election campaigns, with differential effects on left and right parties. Firm-level evidence from Brazilian presidential elections shows that business contributions to left parties are more sensitive to global financial conditions than contributions to right parties, the latter being largely inelastic to capital inflows. Left parties receive a larger boost in corporate contributions when there is excess liquidity in global markets, but also experience greater losses when global financial conditions turn unfavorable. This is consistent with a model where firms have a baseline preference for right-of-center parties, but will diversify their contribution portfolios when financial constraints are loosened. The results show that global financial conditions affect both the total volume as well as the cross-party distribution of contributions above and beyond factors like incumbency, the anticipated victory of a left party, and political business cycles.

The theory and findings have several implications for scholarship on money, politics, and globalization. First, the results provide empirical microfoundations for the relationship between financial globalization and the financial conditions for partisan competition in national elections. In particular, they identify a link between capital inflows, corporate finance, and campaign funding. For those studying elections from a domestic perspective, this study joins the growing chorus of scholars that draw attention to the effects of external economic conditions on democratic processes. Given that most research on business political contributions focuses on firm- and country-level factors, these results suggest caution in omitting potentially confounding structural factors at the global level. Research on money and politics would therefore benefit from carefully incorporating firms' position in the global financial system into models of corporate political action, including campaign finance and lobbying.

Second, the findings add to our understanding of the differential constraints that globalization imposes on left and right parties. Existing work suggests that poor international economic conditions can hinder the electoral chances of left parties or exacerbate the market's punishment

of traditional left policies (Kayser 2009; Campello 2015; Brooks, Cunha, and Mosley 2022). The present findings suggest that left parties may face yet another external constraint in the form of greater scarcity of corporate funding during hard economic times. While the results indicate that global financial booms have bolstered contributions to the left in Brazil, they do not imply that left parties have been net beneficiaries of financial liberalization. Left parties can benefit from favorable international conditions, but they also appear to lose more than right parties from poor global conditions.

Finally, this article illustrates the importance of broadening the scope of existing research on financial globalization and corporate political behavior. Political scientists often argue that economic globalization empowers corporate actors, but there is still little scientific documentation of that relationship beyond the developed world. Outside of data-rich developed economy settings, there have been few opportunities to directly observe firm-level political behavior, especially in the context of campaign finance. Admittedly, integrating developing countries into comparative research on money and politics can be a non-trivial challenge, given the diversity of electoral institutions and campaign finance legislation, as well as differences in government transparency and the overall quality of the information environment in different countries. But given developing countries' dependence on external finance, we should expect global capital flows to have a pronounced effect, particularly in countries characterized by capital scarcity, financial openness, and a significant participation of corporate actors in funding election campaigns. Broadening the scope of this research program would allow globalization scholarship to investigate more systematically the interactions between the global economy, domestic institutions, and firm behavior.

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