# Foreign Aid and Power Play Political Cycle in World Bank's Procurement Allocation

Antoine Boucher<sup>\*1</sup>, Lisa Chauvet<sup>†2,1</sup>, and Marin Ferry<sup>‡3,1</sup>

<sup>1</sup>Université Paris-Dauphine, IRD, CNRS, UMR LEDa <sup>2</sup>Université Paris 1 Panthéon-Sorbonne, CNRS, Centre d'Economie de la Sorbonne <sup>3</sup>Université Gustave Eiffel, ERUDITE (EA 437)

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This paper investigates the existence of a political cycle in the World Bank's allocation of procurement contracts. We estimate the determinants of the average amount in dollars for procurement contracts won by supplier firms for a given semester and recipient country. Our results suggest that domestic firms win larger contracts around elections in the recipient country. Additional results point to cronyism, since the domestic preference is particularly intense around elections in recipient countries where the electoral code allows for corporations to donate to candidates. We also show that foreign firms win larger contracts after an election in the recipient country, especially when foreign corporations are entitled to contribute to a candidate's electoral campaign. Finally, foreign firms win 43% larger contracts prior to an election in the supplier firm's country of origin. Further results bear strong hints of supplierto-recipient influence in procurement contract allocation, since the international political cycle is found in particular when suppliers and recipients are significant aid partners and share a colonial history.

<sup>\*</sup>antoine.boucher@dauphine.eu

 $<sup>^{\</sup>dagger} lisa. chauvet @univ-paris1.fr$ 

<sup>&</sup>lt;sup>‡</sup>marin.ferry@univ-eiffel.fr

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# 1 Introduction

As pointed out recently by an article published in *Mediapart* (a French investigative journal),<sup>1</sup> French bilateral aid has sometimes been used to the benefit of national companies. To be more precise, the Agence Française de Developpement (AFD) has reportedly favored French firms for large contracts allocated by public procurement procedures. One case in point is the 2016 granting of a  $\in$  24.4 million renovation contract for Douala Airport to French firm SOGEA-SATOM, a subsidiary of Bolloré's civil engineering firm Vinci. Mediapart's investigations found that this is not an isolated case and that French firms are very often chosen for contracts allocated by a procurement process. In this paper, we investigate whether such favoritism: 1) is also prevalent in the case of a multilateral aid agency, here the World Bank; 2) is driven by electoral prospects by examining political cycles in World Bank procurement around elections; 3) varies depending on whether the election is held in the country where the contract is performed (recipient country) or in the country of origin of the firm winning the contract (supplier country). Many examples point to a close link between the electoral cycle and World Bank contract allocation. In 2011, COLAS, French leader in road construction and part of the Bouygues conglomerate, won a World Bank procurement contract to build three bridges in Madagascar. In 2003, French firm SOGEA-SATOM won a \$7 million World Bank contract to build road and irrigation infrastructures in Mali. In 1995, Nagarjuna Limited, a large Indian public construction company, won two World Bank contracts to build roads in Tamil Nadu State. At first glance, those three examples have little in common aside from being civil works contracts in developing countries funded by the World Bank. The comparison ends there. Yet the three contracts have a further point in common: they were all signed around elections in the recipient or supplier countries.<sup>2</sup> Although those illustrations appear to be anecdotal, they lead us to our main research question: Do firms win larger World Bank procurement contracts around election time? And if so, can we find evidence of a kickback arrangement whereby part of the contract is used to fund electoral campaigns?

The potential existence of a political cycle in the awarding of World Bank procurement contracts is an important issue because it calls into question the effectiveness and efficiency of Bank interventions. Indeed, there is no guarantee that the contracting firm chosen for electoral purposes is the most suitable and efficient to perform the project financed by those contracts. Lehne et al. (2018) undertake to assess the costs of such election-related procurement and find that public road contracts awarded to politically connected firms are the most likely to never be built. Taking a more aggregated approach, Dreher et al. (2018) show that aid effectiveness tends to be reduced when aid is allocated for political purposes. Their findings conclude that the effect of aid on growth is reduced where aid is committed in years when the recipient country had a representative on the United Nations Security Council. In addition to undermining the effectiveness of World Bank interventions, a political cycle can also impair the fairness of elections. The fact that an incumbent government can use procurement to increase its campaign funds gives it an unfair advantage over other candidates, since more financial resources increase the probability of winning an election (Epstein and Franck (2007) and Rekkas (2007)).

 $<sup>^{1}\</sup> https://www.mediapart.fr/journal/international/270921/les-derives-de-l-aide-francaise-au-developpement$ 

<sup>&</sup>lt;sup>2</sup> They were allocated a year before a national election in the firms' countries of origin for contracts in Madagascar and India; and a year after an election in the recipient country for the contract in Mali.

Using both the World Bank's Contract Awards Database and the National Elections across Democracy and Autocracy (Nelda) dataset, we assess whether the allocation of World Bank procurement contracts is subject to such a political cycle. To this end, we use a gravity model with three-dimensional data (recipient countries, supplier countries, and years) in the same vein as Starosta De Waldemar and Mendes (2018) who look at the cross-country determinants of the European Union's procurement, and Dreher et al. (2019) who investigate the political economy of IFC lending.<sup>3</sup> We differentiate between domestic and international political cycles. A domestic political cycle refers to situations in which firms (either local or foreign) win larger World Bank contracts around elections in the country where the contract is performed (recipient country). An international political cycle relates to situations where foreign firms win larger World Bank contracts around elections in the firm's country of origin (supplier country). Our results support the existence of both a domestic and an international political cycle.

With respect to the domestic political cycle, we find that local firms win, on average, significantly larger World Bank contracts around election semesters in their home country (respectively 96% and 82% larger procurement contracts one semester before and during an election semester). These findings are in line with McLean (2017) and Zhang and Gutman (2015), who find a preference for local firms in World Bank procurement allocation. We add to the literature by showing that the domestic preference is particularly acute around elections. McLean (2017) also finds that foreign firms tend to benefit more from World Bank procurement, especially when their home country is a significant aid partner of the recipient country. Somewhat consistently with this finding, our results suggest that this foreign preference is particularly prominent around elections in the recipient country (foreign firms benefit on average from 63% larger contracts two semesters after an election in the recipient country). In addition, our study also highlights the existence of an international political cycle as foreign firms win on average 43% larger contracts one semester before an election in their home country (the supplier country). We then explore the mechanisms underlying both domestic and international political cycles. This investigation reveals that political environment and election characteristics matter. Indeed, political cycles are observed mainly in countries where corporate donations to electoral candidates are allowed and when the incumbent is running for re-election, thereby providing indirect evidence of cronvism.

Regarding the international political cycle alone, *i.e.* when elections are held in the foreign firm's country of origin, results suggest that such a political cycle is more likely to be observed when the firm's country of origin: (1) shares historical ties with the recipient country, (2) is connected with it via development cooperation, and (3) can easily meet with recipient countries in international organizations. We also find that foreign firms from supplier countries displaying a significant reduction in tied aid are more likely to win larger contracts around election semesters. This suggests that procurement constitutes an alternative to tied aid as it existed before the Paris Declaration and could thus be a way for developed countries to recuperate the contributions they make to the World Bank. Our paper contributes to two different strands of the political economy literature. First we add to the literature on the political economy of international organizations, which finds politically-driven distortions 1) in the allocation of aid

<sup>&</sup>lt;sup>3</sup> International Finance Corporation, which is the World Bank's window in charge of financing developing countries' private sectors.

funds by those institutions (Kaja and Werker, 2010; Dreher et al., 2019; McLean, 2017; Zhang and Gutman, 2015; Kersting and Kilby, 2016, 2019, 2021; Faye and Niehaus, 2012; Kuziemko and Werker, 2006; Dreher et al., 2009a,b) or 2) in the way these funds could be used by elites in receiving countries as shown in Djankov et al. (2008); Bjørnskov (2010) and most recently by Andersen et al. (2022) who identified an increase in financial flows from recipients to tax havens a few months after World Bank disbursements. We do so by focusing on the World Bank procurement allocation process and relating that process to elections. Second, the paper ties in with the literature on public procurement allocation, which has highlighted that firms are more likely to win public procurement contracts when they have close political connections and contribute to campaign financing (Titl and Geys, 2019; Goldman et al., 2013; Daniele and Bennedsen, 2010; Kapur and Vaishnav, 2013; Mironov and Zhuravskaya, 2016; Schoenherr, 2019; Baltrunaite, 2020). Our contribution shows that such arrangements may occur across countries when the election is held in the country of origin of a firm winning a contract abroad. It also provides an analysis of transnational influence drivers.

The rest of the paper is organized as follows: section 2 provides an overview of the literature and discusses the domestic and international political cycle mechanisms driven by elections in the recipient and supplier countries, respectively. Section 3 introduces the data used to assess the existence of a political cycle in World Bank procurement contracts. Section 4 presents the empirical strategy and the main results for both the domestic and international political cycles. Section 5 explores the channels, and section 6 concludes.

# 2 An electoral return on foreign aid?

Our main hypothesis is that firms win larger World Bank procurement contracts around election semesters, in what could be described as a political cycle and would probably involve kickback arrangements. Before describing the mechanism in detail, we need to briefly explain the World Bank procurement contract allocation process. Once the recipient's main priorities have been identified by the Country Partnership Framework, the Bank agrees to fund a project in a given place. The recipient country then chooses the firm in charge of project implementation.<sup>4</sup> After choosing the supplier, the recipient transfers the World Bank funds to the selected firm and the project can start. For the purpose of our research question, the effect of elections in recipient country r first needs to be differentiated from the effect of elections in supplier country s (the supplier firm's country of origin).

Let's first assume that an election is coming up in recipient country r and that the incumbent government is running for re-election and seeks funds for its electoral campaign. Given that the recipient government is in charge of selecting the supplier to perform the World Bank contract, it can use the allocation process to its advantage to select friendly domestic firms that will agree to fund the campaign in exchange for a procurement contract.<sup>5</sup> An alternative way for the incumbent government of r to raise electoral funds is to allocate the contract to a

<sup>&</sup>lt;sup>4</sup> Delegation to the recipient country of the choice of aid contract implementing firm has developed over time and across countries. Delegation has been the norm since the mid-2000s, but still varies from country to country depending on the quality of its institutions.

<sup>&</sup>lt;sup>5</sup> Note that securing campaign funding may not be the only reason for a recipient government to help a domestic firm win a procurement contract: other motives could be the leader's image in helping domestic firms and job creation.

foreign firm from another country s. The foreign supplier from s would hence be grateful and willing to fund the incumbent's campaign in return.

Let's now assume that an election is coming up in country s, which does not receive World Bank funds but has firms that may act as suppliers for contracts performed in recipient country r. The incumbent government here also wants to be re-elected and is consequently looking for funds. One possible way to obtain such financial support could be to help a domestic firm in supplier country s to win a World Bank procurement contract abroad, *i.e.* in country r, which is responsible for choosing the supplier firm. To this end, s could use its economic or diplomatic influence with r's government to encourage it to choose a supplier firm from s. If this pressure is effective, the selected firm will be grateful for the contract and will agree to fund the incumbent's campaign. The three different political cycles are summarized in Table 1 below.

		Elections taking place in:		
		Country receiving WB funds and choosing the firm (r)	Country of origin of foreign supplier firm	
ns the ct (s)	Local firm (firm in the recipient country)	Domestic Political Cycles ( $\mathbf{r} = \mathbf{s}$ )		
Who wi contrac	Foreign firm (firm in the non-recipient country)	Domestic Political Cycle ( $\mathbf{r} \neq \mathbf{s}$ )	International Political Cycle $(\mathbf{r} \neq \mathbf{s})$	

Table 1: Domestic and International Political Cycles: a summary

The mechanisms underlying the effect of elections on procurement allocation differ slightly depending on where the election is held. However, all the types of political cycle feature key electoral motives to choose or push for a certain firm to win a World Bank procurement contract, implying that the selected company returns the favor to the government. The three cases (outlined in Table 1) also point to a potentially sub-optimal choice of supplier firm. The chosen firm may indeed be the favorite for the incumbent's purpose, but it might not be the best to conduct the World Bank project in terms of quality of implementation or cost.

Yet, a number of assumptions are required for these political cycles to occur. The aid recipient's entirely independent choice of contractor, irrespective of allocation method, is the main assumption required for our mechanism to hold. However, the World Bank can review the choice of supplier firm and veto it if it finds any irregularities. Nevertheless, the existing literature bears out the likelihood that both political cycles exist. Focusing on World Bank civil works procurement contracts and international competitive bidding, Zhang and Gutman (2015) show that only 30% of contracts are reviewed by the World Bank. Hence this limited audit scope combined with discretionary allocation makes it feasible that there could be a distortion in procurement contract allocation.

Our hypotheses also imply a flaw in the World Bank's procurement process. It would not be the first time that World Bank funds have not been awarded in accordance with the optimal process developed by the institution and have depended on criteria that should not come into play. First, Kaja and Werker (2010) find that a country receives more World Bank projects in a year when it has a representative on the World Bank Board of Directors. Dreher et al. (2019) find similar results in the case of the International Finance Corporation. McLean (2017) and Kersting and Kilby (2021) highlight the influence of the US on the World Bank, as the US government replaces bilateral funds with multilateral funds in years when Congress is uncooperative. Findings from Kersting and Kilby (2016) even suggest faster loan disbursements before elections in the recipient country when it is politically aligned with the United States (*i.e.* when votes in the UN General Assembly are aligned with those of the US).

Another underlying assumption is the existence of a firm connection between governments and corporations, particularly in terms of funding candidates and political parties in return for procurement contracts. This kind of kickback arrangement has already been established in the literature. Titl and Geys (2019) evidence this sort of connection for public procurement contracts in the Czech Republic between 2007 and 2014. To be more precise, they find that firms donating 10% more to a political party winning (losing) power see a 0.5–0.6% increase (decrease) in the value of their public procurement contracts. Likewise, Goldman et al. (2013) identify that US companies connected to the winning (losing) party secure significantly more (fewer) procurement contracts after the election. Daniele and Bennedsen (2010) find similar results in what they describe as the world's least corrupt society: Denmark. Similar findings are also observed in Lithuania (Baltrunaite, 2020) and South Korea (Schoenherr, 2019).

Those kickback arrangements between governments and corporations are also expected to be more pronounced around election years. Kapur and Vaishnav (2013) suggest that construction firms in India experience a short-term liquidity crunch around election years, reflected by a decrease in their consumption of cement. They posit that those firms encounter this situation as they spend their cash flow to fund electoral campaigns. Mironov and Zhuravskaya (2016) observe an increase in tunneling around election years for firms with procurement contracts in Russia.<sup>6</sup> This tunneling is interpreted as an increase in corruption in the allocation of public procurement around regional election years, as cash flows channel from firms to politicians in return for procurement contracts. In short, these different results reinforce the idea that public procurement could be an object of exchange between companies and politicians in order to influence the outcome of future elections.

Focusing on the international political cycle, another key assumption is that supplier countries will use their influence with recipients in order to get what they want (in our context, having their national firms win procurement contracts abroad). Such behavior has already been observed in the existing literature. Kuziemko and Werker (2006) find that the amount of ODA received from the US and the United Nations grows significantly (by respectively 59% and 8%) in years when the recipient country has a seat on the UN Security Council. Those results suggest vote buying by developed countries from recipient countries via aid, since the effect increases during years in which key diplomatic events occur (*i.e.* when the Security Council's vote is crucial). Dreher et al. (2009a), Kersting and Kilby (2019) present a similar

 $<sup>^{6}</sup>$  Tunneling is the transfer of assets and profits out of firms for the benefit of those who control them.

pattern for World Bank aid and IMF loans as the number of projects, loans and supplemental grants received is higher in years when the recipient has a seat on the UN Security council. Taking a larger donor sample, Faye and Niehaus (2012) find that bilateral aid can be used not only to influence the recipient's vote at the UN, but also to affect the recipient's domestic election results. They show that donors give more aid to politically aligned recipients in the lead-up to competitive elections.

In keeping with the findings for votes at the UN and recipient election results, we can consider that supplier countries (particularly those in the OECD) have means of pressure that can influence the recipient country's choice of contractor. Therefore, consistent with the existing literature and above findings, there is good reason to believe that the award of procurement contracts may be biased in respect of individual and electoral prospects. We hence propose to test the following hypotheses:

**Hypothesis 1 - Domestic political cycle**: Local firms from r win larger World Bank procurement contracts around election semesters in the recipient country r.

**Hypothesis 2** - Domestic political cycle: Foreign supplier firms from country  $s \neq r$ win larger World Bank procurement contracts around election semesters in recipient country r.

**Hypothesis 3 - International political cycle**: Foreign supplier firms from country  $s \neq r$ win larger World Bank procurement contracts in country r around election semesters in their country of origin s.

# 3 World Bank procurement and election data

In line with McLean (2017) and Zhang and Gutman (2015), our paper builds on the World Bank's Contract Awards Database on major contracts awarded between 1993 and 2019.<sup>7</sup> In view of the patchiness of data for 1993 and 1994, we focus on the 1995-2019 period. The information presented is highly detailed: name of supplying firm, its country of origin (supplier country), date of contract signature, contract amount (in US\$), recipient country, contract category and allocation method are all available. These data contain information on contracts that have been reviewed and approved by the World Bank, suggesting that the identification of a policy cycle would probably underestimate this phenomenon.

This dataset reveals that the two most common procurement allocation methods for the period studied (*i.e.* 1995-2019) are Quality and Cost-Based Selection (27.9%) and International Competitive Bidding (27%). The World Bank *Procurement Regulations for Investment Project Financing Borrowers* (2016) state that Quality and Cost-Based Selection, "is a competitive process among shortlisted consulting firms under which the selection of the successful firm takes into account the quality of the proposal and the cost of the services". This process is used solely for consultancy contracts. Under the rules of International Competitive Bidding, the recipient government has to advertise the procurement opportunity. Firms from all over

 $<sup>^{7}\</sup> https://www.worldbank.org/en/projects-operations/products-and-services/brief/summary-and-detailed-borrower-procurement-reports$ 

the world can apply provided they meet the World Bank's prerequisites. This procedure is used mainly for goods and civil works contracts. The third procurement allocation method is Single-Source Selection whereby the choice of supplier is at the discretion of the recipient government. This procedure obviously lacks transparency and the World Bank's *Guidelines: Selection and Employment of Consultants* (2014) advocate using it only in exceptional circumstances. Yet, this method was used for 22% of World Bank contracts between 1995 and 2019. It was used mainly for consultancy missions, but also for some goods and civil works contracts. Finally, the fourth procurement allocation method is National Competitive Bidding (20.8%). This is similar to International Competitive Bidding with the main difference being that only firms from the recipient country can answer the call for tenders. Like its international equivalent, this method is used mainly for civil works and goods contracts. There are other procurement allocation methods (1.5%), which remain marginal and do not enter into those four main categories. Table 2 below presents the distribution of allocation methods across our sample:

	Observations	Percent	Cumulative
Quality And Cost-Based Selection	$95,\!838$	27.9	27.9
International Competitive Bidding	$93,\!212$	27.1	55.0
Single Source Selection	$77,\!275$	22.5	77.5
National Competitive Bidding	$71,\!666$	20.8	98.4
Other	$5,\!353$	1.5	100.0
Total	343,344	100.0	-

Table 2: Procurement allocation method - Descriptive Statistics

From this raw data, we calculated the average amount in US\$ won by firms from country s in year t and semester k for World Bank contracts performed in recipient country r. This is our main dependent variable.<sup>8</sup> Overall, we have 179,187 World Bank contracts won by 132,762 firms from 197 supplier countries for projects in 153 recipient countries between 1995 and 2019. The sample of recipients is made up of developing countries benefiting from at least one World Bank procurement contract during the period of study. The sample of supplier countries includes developed and developing economies whose firms won at least one World Bank procurement contract. This explains the difference in the number of observations between the two samples.

Next, we constructed a set of five variables of interest from the National Elections across Democracy and Autocracy (Nelda) dataset (Hyde and Marinov, 2012). This dataset on elections between 1945 and 2020 provides highly detailed information such as precise election date, incumbent participation, whether the election was held early or late, and type of election in a given country. The election considered may be legislative or presidential depending on whether the political system is respectively parliamentary or presidential.<sup>9</sup>

We used the election date to build the election semester variable (a dummy variable equal to one if there is an election in year t, semester k in a given country r or s). As the average

<sup>&</sup>lt;sup>8</sup> The average amount is calculated as follows: total amount in US\$ won by firms from s for contracts in country r, year t and semester k divided by the total number of contracts won by firms from s in country r, year t and semester k.

 $<sup>^{9}</sup>$  Indirect elections (*i.e.* where there is no mass voting) are not included in this dataset. Given that our mechanism may also be found in cases where elections are indirect, countries with this kind of election were added in (Source: Wikipedia).

term of office in our sample is 4.4 years, we built four additional election variables ranging from two semesters before the election to two semesters after the election. In other words, our political cycle variables range from one year prior the election to one year after the election, thereby preventing our set of dummies from overlapping.

Table 3 below presents some descriptive statistics for our main variables and for the whole sample considered. It shows that the average amount of received contracts is 45,000, with some countries receiving zero and others over 800,000,000.<sup>10</sup> It also shows that 53% of the semesters are around elections (with 11% of the semesters being election semesters), leaving 47% of the semesters outside of election periods, which thus represent our counterfactual.

	Observations	Average	Std. Dev.	Min	Max
Average Amount	1,507,924	$45,\!896.44$	$2,\!109,\!325$	0	861,000,000
Election Semesters (k-2 to k+2)	1,507,924	0.53	0.50	0	1

Table 3: Descriptive Statistics - Main Variables

# 4 Empirical strategy and main results

This section examines the three hypotheses introduced above: H1 and H2 regarding the domestic political cycle, and H3 concerning the international political cycle.

#### 4.1 Domestic political cycles

We first test whether more public contracts are awarded around election semesters in recipient countries to local (H1) or foreign firms (H2). Given the structure of the World Bank procurement data and the possibility of isolating the semester in which the contract was won, we use an econometric specification based on this precise time decomposition to include multiple fixed effects which minimize the omitted variable bias considerably. In order to first test H1, *i.e.* "Local supplier firms from recipient country r win larger World Bank procurement contracts around election semesters in r", we use the following model:

$$Procurement_{r,k,t} = \alpha + \sum_{k \in -2,+2} \beta_k Election_{r,k,t} + \omega_{r,t} + \mu_{k,t} + \varepsilon_{r,k,t}$$
(1)

where  $Procurement_{r,k,t}$  denotes the average amount of World Bank procurement won by firms from recipient country r (local firms) in semester k of year t. Variables of interest thus consist in a set of dummy variables  $\sum_{k \in -2,+2} Election_{r,k,t}$  flagging semesters around the election semester in recipient country r (*i.e.* the semester in which the election is held). More specifically, we are interested in the two semesters before and after the election, which amounts to looking at one year before and after the election. Considering the large number of zeroes in the dependent variable (coinciding with years and semesters when recipient countries did not receive World Bank procurement funds), we follow Mullahy and Norton (2022) and

<sup>&</sup>lt;sup>10</sup> The largest average amount corresponds to two observations, respectively Spanish and Brazilian firms winning civil works contracts to build the Quito Metro subway in Ecuador in 2015.

Bellemare and Wichman (2020) in choosing not to transform the dependent variable (*i.e.* average amount per contract won) as it could lead to substantial differences in elasticities, and therefore estimate specification 1 by means of Poisson Pseudo Maximum Likelihood estimators (PPML).

As election dates are generally set by the national constitution, reverse causality does not threaten the identification of a causal effect running from elections to average amounts of procurement won, *i.e.* the set of  $\beta_k$ . However, the incumbent government could still influence the date of the next election (by advancing or postponing it) to coincide more or less with World Bank procurement funding. We discuss in the robustness checks section this potential limitation to our empirical strategy and will show in the supplementary appendix that removing election for which dates might have been shifted, does not affect our main findings. However, although reverse causality is of no great concern here, our estimates might still suffer from omitted variable biases affecting the trend in the average value of procurement won around elections. To handle this potential estimation bias, we extend our specification to include a set of fixed-effects to control for: 1) time-varying factors at recipient-year level  $(\omega_{r,t})$ , 2) global events (common to all sample countries) that could affect the timing of World Bank procurement funding  $(\mu_{k,t})$ . Given the large set of fixed-effects, we employ the ppmlhdfe command developed by Correia et al. (2020) in order to reduce computation time by resorting to a procedure for multiple dimensions demeaning. This procedure leads to absorb higher dimensional fixed effects such as recipients' invariant characteristics,  $\theta_r$ , which are then included in (and thus controlled by)  $\omega_{r,t}$ . Lastly, we cluster the standard errors at the recipient  $\times$  year level to control for potential error correlation in a given recipient country within a given year, as there might be unobserved factors causing observations to be correlated at this level (such as civil protest movements, new laws, etc.).

We then build on this model to test our predictions regarding H2, *i.e.* "Foreign firms from supplier country s win larger World Bank procurement contracts around election semesters in recipient country r". However, this assumption modifies the structure of our data as they now involve another stakeholder in the relationship under study. While Equation 1 builds on the bi-dimensional panel (with its time and recipient dimensions), H2 requires supplier countries (*i.e.* the home country of the foreign firm winning the contract) to be included in the analysis.

The structure of our data therefore becomes three-dimensional (with time, recipient and supplier dimensions) consisting in a dyadic (recipient-supplier) panel dataset, which allows for the inclusion of different types of fixed effects to control for unobserved factors that might lead foreign firms from a given country (the supplier country) to win larger procurement contracts around elections in the country receiving the procurement funding (*i.e.* the recipient country).<sup>11</sup>

In view of this dyadic structure and (as with H1) a significant number of zeroes in the dependent variable, H2 is tested using a gravity model also estimated by PPML estimators proven to perform better in the estimation of such models (Tenreyro and Silva, 2006; Sun and

<sup>&</sup>lt;sup>11</sup> To be precise, the panel is made up of all recipient countries that received World Bank funding at least once during the study period, and supplier countries that had one (or more) company(ies) win a contract at least once in the same period.

Reed, 2010; Gómez-Herrera, 2013; Larch et al., 2019). This takes the following form:

$$Procurement_{s,r,k,t} = \alpha + \sum_{k \in -2,2} \beta_k Election_{r,k,t} + \delta_{s,k,t} + \rho_{s,r,t} + \varepsilon_{s,r,k,t}$$
(2)

where  $Procurement_{s,r,k,t}$  now denotes the average amount of World Bank procurement won by firms from supplier country s (foreign firms) in recipient country r during semester k of year t. The set of election semester dummy variables does not change, since we are still interested in the effect of elections in the recipient country on the average amount won by foreign companies, in contrast to Equation 1 where the focus is on local firms. Regarding the endogeneity issue, the same concerns apply as for the previous specification. However, the dyadic dimension of the data potentially inflates the risk of an omitted variable bias, leading us to modify our model by adding a different set of fixed-effects as compared to Specification 1. These control for time-varying factors at the dyadic-year level ( $\rho_{s,r,t}$ ) as well as in the supplier countries, down to the semester level ( $\delta_{s,k,t}$ ).<sup>12</sup>

Considering this new specification, estimates are then run with standard errors clustered at a level similar to that of our variable of interest (recipient × semester × year level) as suggested in Froot (1989), based on similar assumptions to those underlying the estimation of model 1. Figure 1 reports on the impact of elections in the recipient country on the respective average amount of procurement when winning companies are from the recipient country (s = r) (left-hand graph) and when winning companies are foreign ( $s \neq r$ ) (right-hand graph). The regression tables corresponding to these figures are also reported in Table S.A2 in the supplementary appendix.



Figure 1: Domestic political cycle - Effect of election in recipient countries

Notes:

Left graph: Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 5,902.  $\mathbb{R}^2$ : 0.84. Robust standard errors clustered at the recipient x year level (2,951).

**Right Graph**: Coefficients estimated with supplier x year x semester, and supplier x recipient x year fixed effects. Observations: 39,982.  $\mathbb{R}^2$ : 0.86. Robust standard errors clustered at the recipient x year x semester level (5,654).

<sup>&</sup>lt;sup>12</sup> This also captures time varying cycles or events that are common to all supplier countries.

Results suggest the existence of a domestic political cycle in the World Bank procurement allocation process. On average, local and foreign firms win respectively 78.2% and 58.9% larger contracts around elections in the recipient country. In other words, contracts won by local and foreign firms are found to increase by more than half around elections in the recipient country. Although the magnitude of coefficients is fairly similar between the two sets of results, the timing of this domestic political cycle differs depending on the firms' country of establishment. Recipient countries appear to favor (on average) their local firms (by awarding them larger government contracts) half a year before an election, as well as during the election period, while supplier countries see their multinational firms winning larger contracts abroad in the year following elections in recipient countries.

#### 4.2 International political cycle

We then explore the third mechanism that might be at play in the allocation of these procurement contracts, referred to as the international political cycle (H3). This mechanism assumes that the allocation process might be manipulated in order to serve electoral interests, this time in supplier countries, *i.e.* in countries whose domestic companies win contracts abroad. The following section thus examines whether firms from supplier country s win larger World Bank procurement contracts in recipient country r around election semesters in their country of origin s. Testing H3 calls for the definition of another model, relatively similar to Equation 2, but with some changes to our variables of interest and the set of fixed effects, thus taking the following form:

$$Procurement_{s,r,k,t} = \alpha + \sum_{k \in -2,2} \beta_k Election_{s,k,t} + \omega_{r,k,t} + \rho_{s,r,t} + \varepsilon_{s,r,k,t}$$
(3)

The main difference with this specification compared with the former specification is the set of electoral dummy variables,  $Election_{s,k,t}$  which is now based on the electoral calendar of the country of origin of the winning firms (the foreign firms from the supplier country). Another difference relates to the set of fixed effects. Since the focus is on the supplier country's political cycle,  $\delta_{s,k,t}$  from Equation 2 can be replaced with  $\omega_{r,k,t}$ , which controls for any recipient country factors that vary by semester in a given year, such as the domestic political cycle. As with the previous specifications, we challenge this specification with inconsistent election dates, providing suggestive evidence that the reverse causality issue is not so much of a concern. Only omitted variables threaten the identification of a causal effect running from election dates to the average amount of procurement contracts won by foreign companies. However, we do believe that the fine-grained set of fixed effects helps minimize such a concern.

Figure 2 below displays the estimated coefficients for our five dummy variables capturing semesters around the election semester in supplier countries, with both levels of confidence (5% and 10%) reported.<sup>13</sup>

Unlike the domestic political cycle, where foreign firms are more likely to win larger government contracts in the semesters following elections in the recipient country, the timing of the international political cycle appears to be more upstream. Winning foreign firms tend to be awarded more lucrative World Bank contracts in recipient countries as their home country

<sup>&</sup>lt;sup>13</sup> The corresponding table is available in the supplementary appendix (see Table S.A3).

draws closer to the election semester. On average, foreign firms win 43.7% larger contracts one semester before an election in their home country. Contracts won by foreign companies increase by just under 50% around elections in their home countries.

Figure 2: International political cycle - Effect of election in supplier countries



Notes: Coefficients estimated with recipient x year x semester, and supplier x recipient x year fixed effects. Observations: 41,966.  $\mathbb{R}^2$ : 0.88. Robust standard errors clustered at the supplier x year x semester level (5,818).

Overall, these results, both on national and international policy cycles, provide initial support for the three hypotheses tested, and complement previous findings on the World Bank's procurement process. It adds the dimension of electoral interests to the findings of McLean (2017) and Zhang and Gutman (2015), and also reveals potential motives behind the results of Kersting and Kilby (2016). Following the latter, whom uncover faster disbursements around elections, we test whether the above identified cycles are reinforced or attenuated with respect to the average time from project approval to contract award. Results from Table A1 in the appendix, suggest that indeed, the earlier the contract is awarded, the higher the impact of elections on the average amount earned per contract, although this seems to occur only in the context of domestic political cycles.

#### 4.3 Robustness checks

In order to ensure the existence of such political cycles (both domestic and international) in World Bank procurement, the results reported above are subjected to a series of robustness tests, the rationale and results of which are presented in details in the Supplementary Appendix. Overall, these tests show that our main results are not affected by i) more funding for procurement contracts around election semesters in recipient or supplier countries (see Figure S.A2, Tables S.A4 and S.A5), ii) the fact that some election dates could have been changed to match World Bank procurement contract award dates (see Tables S.A6, S.A7, and S.A8), nor by iii) the way we supplemented the NELDA dataset, adding information on indirect elections (see Tables S.A9, S.A10 and S.A11). Our results are also found to be robust to alternative

standard-errors clustering (see Tables S.A12 and S.A13) as well as to the sample composition as they do not seem to be influenced by potential outliers (see Figure S.A3).

In view of our main findings, one could assume that such cycles are not common in international cooperation, regardless of the form of aid considered. Others might even wonder to what extent these political cycles in World Bank procurement are not mitigated by potential omitted variables such as the annual amounts of official development assistance (ODA) that countries receive. Such a situation would lead us to different conclusions about the contribution of foreign aid to electoral interests, as it would in fact help to smooth out the political cycle of procurement. We test this view by interacting the set of semester variables around the election with the amount of ODA disbursed (from different donors) to recipient countries r in year  $t.^{14}$  Tables S.A14, S.A15, and S.A16 in the supplementary appendix suggest that such a mitigating effect is likely to be true, but in an extremely small proportion that never reverses nor absorbs the election-induced cycle on the average amount per contract won (the thresholds for reversing the effect corresponding to colossal ODA amounts).

#### 4.4 Analysis of contract heterogeneity

Next, we examine the political cycles by type of procurement allocation method. As explained above, developing countries granted World Bank procurement funds are responsible for selecting the company that will perform the contract in the country. There are four different ways of awarding this procurement: (1) International Competitive Bidding (ICB) where domestic and foreign companies compete for the contract, (2) Quality and Cost-Based Selection (QCBS) where the recipient government selects the company based on the quality of its proposal and cost, (3) Single-Source Selection (SSS) which is a type of private (over-the-counter) award (with fewer quality requirements), and (4) National Competitive Bidding (NCB) where only domestic companies are entitled to compete for the procurement contract. We first re-examine the domestic political cycle by allocation method. We run the same regressions as those presented in Figure 1, but this time focusing on contract allocation method sub-samples. Hence, we compare the probability of winning larger procurement contracts (on average) around election semesters under one of the four allocation methods to winning larger procurement contracts in semesters further away from elections.

Table A2 in the appendix displays the results. Looking first at the case where supplier firms are from the recipient country (columns (1) to (4)), results suggest that none of the four allocation methods has the advantage, leaving it unclear which process might most facilitate such arrangements between politicians and firms and might therefore be most prone to cronyism. Results are more clear-cut for the second configuration, *i.e.* where supplier firms are from abroad. Columns (5) to (7) show, quite intuitively, international competitive bidding to be the main allocation method by which supplier countries' companies win (on average) larger contracts abroad in countries holding elections in the previous two semesters. Taking further the examination of the domestic political cycle, we then repeat the exercise, but this time differentiating between procurement by main activity sector.

The World Bank finances three categories of procurement: for the supply of goods, for civil works and for consultancy services. Figure A1 in the appendix shows that local companies win

 $<sup>^{14}</sup>$  The annual amount of ODA disbursements received (expressed as  $\log({\rm ODA}+1))$  thus overlapping two semesters.

(on average) larger contracts for civil works around the election semester while foreign firms see this political cycle driven by contracts in one of the two areas other than consultancy, probably goods contracts. Furthermore, the coefficients for civil works procurement are negative and significant around the election semester, suggesting a kind of technical division of labor since such contracts are mostly allocated to local companies over the election period. These results somehow illustrate our above mentioned main assumption as these two categories of procurement are the most lucrative (see Figure S.A1 in the supplementary appendix), and would therefore be more liable to be strategically allocated to friendly companies that could easily support kickback arrangements given the larger amounts involved in these contracts.

Turning to the international political cycle, Figure A2 in the appendix suggests that supplier countries are more likely to see their multinational firms win more lucrative civil works procurement contracts in the semester before the election, which may again support the cronyism hypothesis since civil works contracts are larger (in terms of amount) than consultancy and goods procurement contracts. Similarly, and not surprisingly, the award method through which this political cycle appears to emerge is that which allows the most for international competition, namely international competitive bidding (ICB).

# 5 Channels

The above findings raise important ethical questions and seriously challenge the primary purpose of this form of aid, which is to serve recipient countries' collective interests and not individual/electoral interests, least of all in provider countries. We therefore attempt in the following section to provide more evidence on the mechanisms driving the effects found previously.

## 5.1 Political cycles for campaign financing?

The existence of a political cycle in the award of World Bank procurement contracts suggests cronyism between politicians and the supplier companies that win these contracts. However, such a claim calls for more direct evidence of on-lending arrangements between these stakeholders. Yet such an exercise inevitably has its limitations when it comes to revealing behavior that is counterproductive, unauthorized, and probably covert. We therefore endeavor to provide evidence of cronyism by refining our results based on other factors such as the political environment of both recipient and supplier countries and the international foreign aid context, which should not affect this political cycle unless it really does serve some electoral purpose.

## 5.1.1 Campaign financing where it is "allowed"

As explained above, one of the hypotheses in support of the existence of a domestic political cycle is that recipient governments select firms to help finance their election campaigns. Firms might be selected by a government in advance of upcoming elections in exchange for a commitment to fund the government's election campaign. This would create a political cycle prior to the election. Alternatively, firms might finance the recipient government's campaign in exchange for the award of a future public contract. This would create a political cycle after the election. Yet a close eye is kept on contributions made by private firms to the funding of candidates' election campaigns and the practice is even banned in many OECD countries and some emerging countries (see Figure A4 in the appendix). Although many developing, and thereby recipient, countries allow private companies (both domestic and foreign) to contribute funds to candidates' campaigns, some of them such as Mozambique, Ecuador, Uzbekistan, Egypt, Tunisia, Guinea-Bissau and Liberia prohibit such donations.<sup>15</sup> Therefore, if kickback arrangements are not one of the mechanisms underlying the political cycle in the procurement allocation process, then these countries' likelihood of obtaining larger contracts should not differ from those that allow private donations to election candidates.

Drawing on the Political Finance Database, we define two sub-samples of recipient countries: one where private donations to candidates are allowed, and the other one where such donations are banned. We then test our empirical model on these two sub-samples. Figure 3 below shows the coefficient estimates for the semesters around the election when Equations 1 (domestic awarded firms) and 2 (foreign awarded firms) of Table S.A19 are estimated for each of these two sub-samples (donations authorized or banned).

Results are clear-cut: the political cycle is only observed in countries where private donations to candidates are authorized, thus providing strong hints of cronyism in the allocation of World Bank procurement contracts around election semesters in recipient countries. In the sub-sample of countries authorizing donations to candidates, the political cycle appears before the election in the case of local firms, and after the election in the case of foreign firms. This may be due to the fact that foreign multinational companies are likely to have more cash at their disposal than local firms to finance campaigns before being awarded the World Bank procurement contract.



Figure 3: Domestic political cycle where it is "allowed"

Notes:

*Left graph*: Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 3,986 (authorized), 1,254 (banned).  $\mathbb{R}^2$ : 0.86 (authorized), 0.85 (banned). Robust standard errors clustered at the recipient x year level (1,993 authorized, 627 banned).

**Right Graph**: Coefficients estimated with supplier x year x semester, and supplier x recipient x year fixed effects. Observations: 10,410 (authorized), 22,870 (banned). R<sup>2</sup>: 0.87 (authorized), 0.88 (banned). Robust standard errors clustered at the recipient x year x semester level (1,906 authorized, 3,224 banned).

<sup>&</sup>lt;sup>15</sup> At least, such was the case in 2018 as reported by the Political Finance Database produced by the Institute for Democracy and Electoral Assistance.



### Figure 4: International political cycle where it is "allowed"

Notes: Coefficients estimated with recipient x year x semester, and supplier x recipient x year fixed effects. Observations: 23,960 (authorized), 12,084 (banned). R<sup>2</sup>: 0.89 (authorized), 0.92 (banned). Robust standard errors clustered at the supplier x year x semester level (3,658 authorized, 1,460 banned).

We then check for the existence of a similar mechanism in the international political cycle. In the same vein as in the domestic case, if politicians have a greater interest in their country's companies winning more lucrative contracts around election semesters, it is because they know that this will somehow serve their electoral goals. Consequently, we re-run Equation 3 on two sub-samples based on whether private donations to candidates are allowed or not in the supplier country, i.e. countries with at least one firm winning a contract in the recipient country. Figure 4 shows the coefficient estimates for each sub-sample. Results are once again unambiguous: the international political cycle is observed only when corporations are allowed to directly donate to candidates (in their home country). This finding points to evidence of cronyism in the allocation of World Bank procurement contracts around election semesters in supplier countries.

We complement these results by using data on politicians' public disclosure rules and practices collected by Djankov et al. (2010).<sup>16</sup> Again, according to our assumptions about the mechanisms for kick-back arrangements in the context of World Bank procurement, one could expect to see such cycles to occur in context where accountability towards taxpayers is weakly enforced. According to Djankov et al. (2010) and their findings, public disclosure can thus be considered as a good proxy for the (perceived) prevalence of corruption among politicians, as the latter is shown to decrease when disclosure of personal assets to the public helps identifying conflicts of interest as well as source of incomes. Consequently, we again divide our sample of recipient and supplier countries according to whether they have to (and do) disclose publicly their sources of income and conflicts of interest, and test our three hypothesis of political cycle

<sup>&</sup>lt;sup>16</sup> Where the politicians studied in Djankov et al. (2010) are the members of the lower house of parliament, for 175 countries.

on these sub-samples. Results of Tables A4 and A5 in the Appendix suggest that political cycle in World Bank procurement is more likely to occur in recipient countries where there is no practices or enforcement of public disclosure for politicians. This also seems to be the case when elections are taking place in the supplier country, while the timing of the cycle departs from the one observed in Figure 2.

#### 5.1.2 Campaign financing where it is "easier"

We would also expect incumbents to have more power and the networks to influence the award of public contracts in contrast to elections where incumbents do not stand for another term. We consequently split the sample into two sub-groups depending on whether the incumbent runs or not. Given that these electoral environment characteristics (campaign funding and incumbency) are exogenous to the World Bank procurement allocation process, we believe that there could be no good reason, aside from cronyism, that could explain our observation of different effects on these two sets of sub-samples. Any variation in the effect of semesters around elections on the above-defined sub-samples would therefore let the proverbial cat out of the bag by revealing strong hints of kickback arrangements. The coefficient estimates reported in Figure 5 confirm this intuition for the domestic political cycle. A larger and more persistent political cycle is observed when the incumbent is running in the next election. The timing of the domestic political cycle is in line with our previous findings, with local companies awarded (on average) larger procurement contracts in the semester prior to and during the election, while foreign firms win larger contracts during and after the election semester.

Similarly, we also test whether the effect of an election on the average amount of a procurement contract won differs depending on the incumbent's electoral prospects in the supplier country. We run Equation 3 on the same two sub-samples. Our intuition is fairly similar to what we suspected for the domestic political cycle. Incumbents in supplier countries potentially benefit from wider networks that could facilitate their interference in the procurement contract allocation process. On an international scale, we believe that this assumption makes even more sense, since incumbents are more likely to have met recipient country officials in person over the course of their previous term of office and should thus be in a better position than their electoral competitors to reach the people in charge of selecting the winning company.

Results reported in Figure 6 provide some support for the above assumptions as it can be observed that the international political cycle emerges solely when the incumbent is running for another term, thus lending support to the hypothesis regarding the need for enough connections to skew the procurement contract allocation process abroad in favor of local companies.



## Figure 5: Domestic political cycle where it is "easier"

Notes:

*Left graph*: Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 3,630 (no incumb.) 4,534 (incumb.).  $\mathbb{R}^2$ : 0.84 (no incumb.), 0.84 (incumb.). Robust standard errors clustered at the recipient x year level (1,815 (no incumb.), 2,267 (incumb.)).

**Right Graph**: Coefficients estimated with supplier x recipient x year, and supplier x year x semester fixed effects. Observations: 22,476 (no incumb.) 29,738 (incumb.).  $R^2$ : 0.88 (no incumb.), 0.87 (incumb.). Robust standard errors clustered at the recipient x year x semester level (3,474 (no incumb.) 4,340 (incumb.)).



Figure 6: International political cycle where it is "easier"

Notes: Coefficients estimated with recipient x year x semester, and supplier x recipient x year fixed effects. Observations: 19,610 (no incumb.) 32,012 (incumb.). R<sup>2</sup>: 0.90 (no incumb.), 0.89 (incumb.). Robust standard errors clustered at the supplier x year x semester level (3,344 (no incumb.) 4,340 (incumb.)).

### 5.1.3 Campaign financing where it is "needed"

Lastly, one could also expect to find such political cycles in countries and political environments where there is more of a need to stand out from the other candidates and thus for campaign financing. In a context such as autocracies (and to a lesser extent anocracies) where there is not much suspense regarding the outcome of the upcoming election, politicians would be expected to go to less trouble to tip the World Bank procurement process in favor of companies that can provide financial support to the election campaign. To test this assumption, we again divide our sample into different sub-categories by type of political system based on the Polity 2 assessment of democracy in the Polity V dataset. Table S.A23 in the appendix reports on results for the domestic political cycle regarding the average amount of procurement won by local and foreign firms depending on the recipient country's political system.

We first observe that the domestic political cycle favoring local firms around elections is stronger in democratic recipient countries, *i.e.* where the outcome of the election is more uncertain and where election candidates would therefore need funds to improve their chances of being elected. This political cycle is also observed in countries that are not fully democratic (as defined in the Polity V dataset), albeit with significance at the 10% level only. However, while recipient countries' governments appear to seek a favor in return from their local companies mostly around democratic elections, it looks to be quite a different story with procurement contracts won by foreign firms. Indeed columns (3) and (4) of Table S.A23 suggest a more pronounced domestic political cycle for foreign firms in recipient countries that are not considered as democratic and where such arrangements might be easier.

Turning then to the international political cycle, Table S.A24 in the appendix supports our initial intuition of a stronger political cycle in countries where incumbents (and other candidates) need campaign financing because of the uncertainty of the upcoming election, which is most likely to be the case in democracies as opposed to autocracies.

Still on the idea of a distortion in the allocation of World Bank procurement where such is needed, Tables S.A25 and S.A26 in the supplementary appendix display estimate results when the sample is divided depending on whether the election (in recipient and supplier countries respectively) was close or not, using the NELDA definition of a competitive election (whether the ruling party was confident or not before the election). While the results are not clear-cut for the domestic political cycle, those for the international political cycle again lend support to the above arguments and point up the fact that politicians might be quicker to skew the allocation process when they need a favor in return from the firms winning procurement contracts, which is probably more likely to be the case in a competitive election environment rather than for elections where one candidate significantly outstrips the others.

All in all, the above findings show that the allocation of the World Bank procurement contracts is liable to align with the electoral interests of the recipient and supplier countries, as both domestic and foreign companies appear to win on average larger contracts around elections in those countries, especially when private donations to candidates are allowed, when incumbents are running to stay in power and when election results are uncertain.

## 5.2 Ground for foreign firms favoritism

### 5.2.1 Offsetting the decrease in tied aid

Drawing on the findings of McLean (2015), who suggests that donors are more likely to support multilateral aid when their firms stand to gain from intervention by international organizations, the second channel we can find to explain the higher probability of winning more lucrative procurement contracts around elections concerns the trade interests of bilateral donors. Focusing on the second and third configurations, where foreign firms (on average) win larger contracts in the semesters following elections in recipient countries and in their country of origin, bilateral donors could be suspected of intervening (unofficially) in this award process by encouraging the recipient government to choose a firm from the donor country.

All sovereign states contribute to the World Bank's funds, but high-income countries contribute more than others given their greater financing capacities. Yet, although bilateral donors' contributions to the World Bank might be considered as altruistic, this view has been largely challenged by the existing literature. Indeed, while the literature has shown that the allocation of bilateral aid is to some extent driven by diplomatic interests (especially during the Cold War and War on Terror periods) and trade interests (particularly after the fall of the Soviet bloc) (Berthélemy and Tichit, 2004; Alesina and Dollar, 2000; Fleck and Kilby, 2010), it has also highlighted similar evidence regarding multilateral aid, where funds are strategically allocated to countries in keeping with the interests of the largest bilateral donors (Kuziemko and Werker, 2006; Dreher et al., 2019, 2021). Moreover, since 2005 and the Paris Declaration, most of the bilateral donors have committed to significantly reduce tied and partially tied aid, a type of development assistance that was commonplace throughout the 1970s, 1980s and 1990s (albeit starting to decline in the early 1990s). Given the academic evidence discussed above and the international context of a reduction in tied aid, it would be reasonable to assume that bilateral donors are looking for other ways to obtain returns from their official development assistance, whether provided on a bilateral or multilateral basis. Moreover, it could also be argued that a supplier country's quest for trade would more likely be served in a context where the recipient governments also have individual interests, especially electoral interests, since the above findings point to greater room for maneuver around these periods. Such a configuration would therefore lead to a win-win situation where supplier countries could obtain economic returns on foreign aid (with their firms winning the procurement bid abroad) and recipient countries could benefit from financial support for the next election.

In order to test the above assumption, we re-run our gravity model (*i.e.* Equations 2 and 3), extending the model with interaction terms between the political cycle dummy variables and a variable measuring the annual share of tied aid in the total aid committed by supplier countries (where the awarded foreign firms are from).<sup>17</sup> Column (1) of Table A6 in the appendix displays the results for the domestic political cycle (*i.e.* Equation 2). While we still observe on average larger procurement contract amounts won by foreign companies, we observe that amounts are greatly reduced (especially two semesters after the election semester) when winning firms are from countries with the largest share of tied aid in their total official development assistance. This suggests that, conversely, firms from supplier countries with a smaller share of tied aid win

<sup>&</sup>lt;sup>17</sup> Note that in order to match annual tied aid commitments with the semester dimension of our data, we report the same amount of tied aid commitments for two consecutive semesters of the same year.

larger procurement contracts around elections in recipient countries (especially two semesters after the elections).

Column (2) results in Table A6 display the findings for the international political cycle (i.e. Equation 3). They suggest that such tied aid-for-procurement substitution is also at play around election semesters in the firms' home country. To be more precise, the larger contracts won around election semesters in the supplier country are much smaller when winning firms are from countries with a large share of tied bilateral aid in their total official development assistance. In other words, firms from supplier countries that reduced the share of tied bilateral aid won even larger procurement contracts around their election semesters.

This is suggestive evidence that procurement in developing countries could be used by traditional donors to offset the loss of economic returns due to the reduction in their tied aid. In addition to substitution, this result implies that traditional donors (*i.e.* countries with the most tied aid) are likely to drive the international political cycle. The following subsections will further analyze the third configuration and suppliers' means of influence with recipient countries.

#### 5.2.2 The role of board membership

We next review other mechanisms that could drive the international political cycle (*i.e.* Equation 3). In particular, as discussed in the first sections of the paper, such a political cycle would not exist if there were no opportunities for negotiation or means of influencing the award process for the foreign companies of interest to politicians standing in the next election. In line with this idea, the above results show that the likelihood of winning a larger procurement contract increases when the incumbent in the supplier country is running for another term. This suggests that international political connections, whether direct or indirect (discussion forums in international institutions, for example), could be a way of tipping the allocation process in favor of companies from the supplier country.

World Bank Boards could be places where just such connections and influence can be used. Indeed, the literature on the political economy of foreign aid provides ample evidence that membership of international institutions is often accompanied by certain 'privileges' (Dreher et al., 2009b; Vreeland, 2011; Dreher et al., 2019). In line with this literature, it would be reasonable to assume that membership of the board of the institution financing the procurement contracts could be one of the transmission channels. Executive directors are elected or appointed (for the largest World Bank contributors) every two years, and each candidate is elected by a country or sub-group of countries<sup>18</sup> (e.g. in 2003, the elected Austrian board representative obtained the majority of votes from Austria, Belarus, Belgium, Czech Republic, Hungary, Kazakhstan, Luxembourg, Slovak Republic, Slovenia, and Turkey). Given the relatively short term of office, membership of the board would therefore provide a small window of opportunity to negotiate and arbitrate decisions in favor of the country represented. Therefore, it is tempting to think that countries not receiving World Bank funds could take advantage of this private discussion arena to tip the award of public contracts in favor of their national companies, especially if they shared their term of office with representatives of

<sup>&</sup>lt;sup>18</sup> If a country is a large contributor to the World Bank budget, its vote carries a greater weight and it can choose a director directly. If the country is not a large contributor, it cannot choose directly and has to team up with other countries in order to choose a director.

recipient countries.

We drew information from World Bank Annual Reports from 1995 to 2019 on the composition of World Bank Boards of Executive Directors. From this, we identified board membership for each country and for each year in the period of study. We then re-ran our main specification designed to capture the international political cycle (i.e. Equation 3 on a number of sub-samples: 1) one where both recipient and supplier country sat on the board of executive directors; 2) one where only the supplier country sat on the board; 3) one where only the recipient country sat on the board; and 4) one where neither recipient nor supplier country sat on the board. Table 4 below shows the results for these sub-sample estimates.

The results in the first column show a strong political cycle when both recipient and supplier country (the country from which the winning firms originate) had an elected representative on the World Bank Board of Directors in the same period of time, thus lending more weight to our hypothesis regarding the Board as a "place for arrangements". However, these large semester effects around elections are not found to be as strong in the case of other sub-sample estimates, except in column (4) where none of the stakeholders sat on the Board, which suggests that in the absence of this discussion arena, the supplier country may find other ways of tipping the award process in their favor.

	(1)	(2)	(3)	(4)			
Dep. var.:	$AverageAmount_{s,r,k,t}$						
	Recip and Supp	Just Supp	Just Recip	None			
Semester k-2 $_{s,k,t}$	0.114	-0.064	0.832	0.508			
	(0.321)	(0.119)	$(0.412)^{**}$	$(0.207)^{**}$			
Semester k-1 <sub>s k t</sub>	1.330	-0.020	0.677	0.662			
5,0,0	$(0.505)^{***}$	(0.157)	(0.437)	$(0.286)^{**}$			
Election Semester $_{s,k,t}$	0.849	0.073	0.543	0.431			
	$(0.492)^*$	(0.202)	(0.474)	(0.301)			
Semester k+1 $_{s,k,t}$	1.430	0.296	0.735	-0.257			
- 1 - 1	$(0.476)^{***}$	(0.193)	(0.459)	(0.243)			
Semester k+2 $_{s,k,t}$	1.012	0.309	0.672	-0.181			
· ·	$(0.302)^{***}$	$(0.134)^{**}$	$(0.398)^{*}$	(0.192)			
N	2,156	20,196	1,358	15,096			
$R^2$	0.89	0.90	0.86	0.91			
Recip x Year x Sem Fixed Effect	Yes	Yes	Yes	Yes			
Supp x Recip x Year Fixed Effect	Yes	Yes	Yes	Yes			
N Supp x Year x Sem (clusters)	692	1,062	992	$4,\!348$			

Table 4: International political cycle - By presence at the Board of Executive Directors

Notes: Robust standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.010.

#### 5.2.3 Foreign aid ties

Among these alternative means, historical and current aid connections may be considered as a way for supplier countries to exert influence. Identifying dyads of recipient and supplier countries by the amount of aid received and provided, respectively, we divide the entire sample into pairs of countries in which supplier countries are defined as significant aid partners of recipient countries.<sup>19</sup> Column (1) of Table A7 in the appendix displays a significant positive effect for the two semesters preceding the election in the supplier country, as in the main regressions, but that effect seems to hold mostly when recipient and supplier countries are characterized as significant aid partners.

The importance of aid partnership also emerges when looking at historical ties between countries. We interact the election variables with a dummy equal to one if the supplier-recipient pair shares a colonial history (built using the CEPII GeoDist database, Mayer and Zignago (2011)).<sup>20</sup> Table A8 in the appendix displays a significant positive effect for the two semesters preceding the election in the supplier country, especially when the supplier-recipient pair shares a colonial history. Firms from a supplier country without historical links with the recipient won on average 29% larger contracts two semesters before the election, whereas suppliers from a country sharing a colonial history with the recipient won 161% larger contracts over the same period. Given the timing of these effects, which mirror those observed when none of the stakeholders is on the World Bank Board of Executive Directors, it would appear that in the absence of a privileged position to be able to negotiate (unofficially) the selection of winning firms at the World Bank, supplier countries may be able to use their development cooperation and historical partnership to tip the award process in their favor, particularly as their elections approach.

## 6 Conclusion

Building on two- to three-dimensional models using data from the World Bank's Contract Awards Database and the National Elections across Democracy and Autocracy dataset, we put forward the existence of both a domestic and international political cycle for World Bank procurement contracts. To be more precise, local and foreign firms are found to win significantly larger World Bank contracts around election semesters in recipient countries. Further heterogeneity analysis suggests that the domestic political cycle occurs in particular when corporations (local and foreign) are allowed to donate to candidates and when the incumbent government is running for re-election. Suppliers' interests are also served by the domestic political cycle, as the latter could substitute for tied aid. In addition, foreign firms are found to win significantly larger World Bank contracts in a given recipient country one semester before an election in their country of origin, thereby suggesting an international political cycle. This international political cycle is found in particular when corporations are allowed to fund candidates, when the incumbent is running for re-election and when the elections are uncertain. The supplier-to-recipient influence is at play when both can easily meet on the World Bank Board of Directors, and when the supplier has significant economic and historical influence with the recipient.

Our results contributes to the existing literature on the political economy of international

<sup>&</sup>lt;sup>19</sup> In keeping with Frot (2009), we define pairs of recipient and supplier countries as significant aid partners when the share of foreign aid provided by supplier country s in the total amount of aid granted to recipient country r is larger than the share of supplier country s in the total amount of aid provided by all donors.

<sup>&</sup>lt;sup>20</sup> Only the main colonial empires were considered here: Belgium, France, Germany, Netherlands, Portugal, Russia, Spain and United Kingdom.

organizations. They show that development projects funded through World Bank procurement contracts are indeed likely to be used as a kickback arrangement between private companies and both recipient and supplier governments, without showing better results in terms of efficiency.<sup>21</sup> Nevertheless, our results do not reveal cronyism, but strongly suggest it. Future research on this subject should thus refine the analysis at the firm-level in order to see whether politically connected firms are indeed those which benefit the most from such domestic and international political cycles.

<sup>&</sup>lt;sup>21</sup> See Tables S.A28 and S.A29 in the supplementary appendix.

# Appendix

	(1)	(2)	(3)
	Dom. Pol.	Cycle	Int. Pol. Cycle
	Supp. $=$ Recip.	Supp	$. \neq \text{Recip.}$
Dep. var.:	$Av.Amount_{r,k,t}$	Av.A	$mount_{s,r,k,t}$
Semester k-2 $_{r,k,t}$ or $_{s,k,t}$	-0.037 (0.358)	-0.153 (0.178)	$0.156 \\ (0.107)$
Semester k-1 $_{r,k,t}$ or $_{s,k,t}$	1.153 (0.373)***	-0.082 (0.202)	0.446 (0.162)***
Election Semester $_{r,k,t}$ or $_{s,k,t}$	$0.634 \\ (0.325)^*$	$0.428 \\ (0.260)^*$	0.361 $(0.178)^{**}$
Semester k+1 $_{r,k,t}$ or $_{s,k,t}$	1.004 (0.359)***	$0.690 \\ (0.240)^{***}$	$0.374 \\ (0.160)^{**}$
Semester k+2 $_{r,k,t}$ or $_{s,k,t}$	0.618 (0.455)	0.664 $(0.197)^{***}$	0.241 (0.120)**
AverageTime $_{s,r,k,t}$ $\times$ k-2	$0.000 \\ (0.000)$	-0.000 (0.000)	$0.000 \\ (0.000)$
Average Time $_{s,r,k,t}$ $\times$ k-1	$-0.000$ $(0.000)^{**}$	$0.000 \\ (0.000)$	$0.000 \\ (0.000)$
AverageTime $_{s,r,k,t}$ × Elec.	-0.000 (0.000)	-0.000 $(0.000)^{**}$	-0.000 (0.000)
AverageTime $_{s,r,k,t}$ × k+1	$-0.000$ $(0.000)^{**}$	-0.000 $(0.000)^{***}$	-0.000 (0.000)
AverageTime $_{s,r,k,t}$ × k+2	-0.000 (0.000)	-0.000 $(0.000)^{**}$	-0.000 (0.000)
AverageTime $_{s,r,k,t}$	$0.000 \\ (0.000)$	0.001 $(0.000)^{***}$	0.001 (0.000)***
N	5,902	39,982	41,966
$\mathbb{R}^2$	0.85	0.88	0.90
Year $\times$ Sem FE	Yes	No	No
Recip $\times$ Year FE	Yes	No	No
$Supp \times Year \times Sem FE$	No	Yes	No
$\operatorname{Supp} \times \operatorname{Recip} \times \operatorname{Year} \operatorname{FE}$	No	Yes	No
$\operatorname{Kecip} \times \operatorname{Year} \times \operatorname{Sem} \operatorname{FE}$	INO	INO	Yes
$\operatorname{Supp} \times \operatorname{Recip} \times \operatorname{Year} \operatorname{FE}$	No 0.051	No	Yes
N Supp $\times$ Year (clusters)	2,951	FCFA	
N Recip $\times$ Year $\times$ Sem (clusters)		5,654	F 010
$\mathbb{N}$ Supp $\times$ Year $\times$ Sem (clusters)			5.818

Table A1:Political Cycles - Interactions with average time from project approval to contractaward

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dep. var.:		AverageAn	$nount_{r,k,t}$	$AverageAmount_{s,r,k,t}$			
		Supp. $=$	Recip.		Sup	op. $\neq$ Rec	ip.
	ICB	QCBS	SSS	NCB	ICB	QCBS	SSS
Semester k-2 $_{r,k,t}$	-0.711 $(0.310)^{**}$	$\begin{array}{c} 0.527 \\ (0.373) \end{array}$	$\begin{array}{c} 0.007 \\ (0.263) \end{array}$	$\begin{array}{c} 0.140 \\ (0.292) \end{array}$	-0.029 (0.226)	-0.063 (0.102)	-0.297 $(0.170)^*$
Semester k-1 $_{r,k,t}$	$0.625 \\ (0.437)$	$0.422 \\ (0.417)$	-0.355 (0.381)	$\begin{array}{c} 0.511 \\ (0.357) \end{array}$	0.013 (0.264)	0.033 (0.122)	0.051 (0.228)
Election Semester $_{r,k,t}$	$0.682 \\ (0.475)$	$0.574 \\ (0.448)$	-0.494 (0.412)	$0.067 \\ (0.367)$	$\begin{array}{c} 0.360 \\ (0.317) \end{array}$	$\begin{array}{c} 0.111 \\ (0.134) \end{array}$	0.079 (0.222)
Semester k+1 $_{r,k,t}$	$0.154 \\ (0.440)$	-0.248 (0.481)	$\begin{array}{c} 0.465 \\ (0.392) \end{array}$	$\begin{array}{c} 0.228 \\ (0.355) \end{array}$	$0.560 \\ (0.262)^{**}$	0.055 (0.122)	-0.241 (0.251)
Semester k+2 $_{r,k,t}$	$\begin{array}{c} 0.173 \ (0.335) \end{array}$	-0.967 $(0.434)^{**}$	$0.669 \\ (0.365)^*$	-0.103 (0.254)	$0.341 \\ (0.193)^*$	-0.165 (0.103)	-0.196 (0.221)
N	2,074	2,142	2,474	1,804	12,400	15,968	9,136
$R^2$	0.84	0.70	0.73	0.66	0.77	0.85	0.83
Year x Sem FE	Yes	Yes	Yes	Yes	No	No	No
Recip x Year FE	Yes	Yes	Yes	Yes	No	No	No
Supplier x Year x Sem. FE	No	No	No	No	Yes	Yes	Yes
Supplier x Recip x Year FE	No	No	No	No	Yes	Yes	Yes
N Supp x Year (clusters)	1,037	1,071	1,237	902	-	-	-
N Recip x Year x Sem. (clusters)	-	-	-	-	$3,\!602$	4,628	$3,\!170$

Table A2: Domestic political cycle, by allocation method - Effect of election in recipient countries

	(1)	(2)	(3)	(4)	(5)	(6)	
Dep. var.:	Cor	Contract category			Allocation method		
$AverageAmount_{s,r,k,t}$	Consultancy	Other than Consultancy	Civil Works	ICB	QCBS	SSS	
Semester k-2 $_{\boldsymbol{s},\boldsymbol{k},\boldsymbol{t}}$	-0.146 (0.072)**	$0.194 \\ (0.150)$	$\begin{array}{c} 0.773 \ (0.499) \end{array}$	$0.196 \\ (0.178)$	-0.139 (0.097)	-0.695 $(0.261)^{***}$	
Semester k-1 $_{s,k,t}$	$-0.274$ $(0.100)^{***}$	0.317 (0.187)*	1.484 (0.578)**	$0.768 \\ (0.264)^{***}$	-0.218 $(0.130)^*$	-1.203 (0.344)***	
Election Semester $_{\boldsymbol{s},\boldsymbol{k},\boldsymbol{t}}$	-0.330 $(0.111)^{***}$	-0.118 (0.204)	$\begin{array}{c} 0.447 \\ (0.595) \end{array}$	$\begin{array}{c} 0.344 \\ (0.283) \end{array}$	-0.254 $(0.134)^*$	$-0.664$ $(0.355)^*$	
Semester k+1 $_{s,k,t}$	-0.123 (0.109)	-0.042 (0.177)	$0.055 \\ (0.567)$	$\begin{array}{c} 0.217 \\ (0.255) \end{array}$	-0.066 (0.124)	$\begin{array}{c} 0.112 \\ (0.293) \end{array}$	
Semester k+2 $_{\boldsymbol{s},\boldsymbol{k},\boldsymbol{t}}$	-0.017 (0.097)	$0.180 \\ (0.148)$	$\begin{array}{c} 0.202 \\ (0.355) \end{array}$	$0.228 \\ (0.174)$	-0.003 (0.109)	$0.078 \\ (0.255)$	
N	26,116	15,248	1,460	12,104	16,016	9,432	
$R^2$	0.82	0.88	0.80	0.87	0.81	0.84	
Recip x Year x Sem FE	Yes	Yes	Yes	Yes	Yes	Yes	
Supp x Recip x Year FE	Yes	Yes	Yes	Yes	Yes	Yes	
N Supp x Year x Sem (clusters)	4,936	3,518	972	$2,\!874$	$3,\!654$	$3,\!150$	

Table A3: International Political, by contract category and allocation method

Notes: Robust standard errors in parentheses, clustered at the supplier×year×semester level. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.010.



Figure A1: Political cycle by contract category

Notes:

Left graph: Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 3,920 (consultancy), 4,078 (other than consultancy), 2,192 (civil works).  $\mathbb{R}^2$ : 0.73 (consultancy), 0.77 (other than consultancy), 0.82 (civil works). Robust standard errors clustered at the recipient x year level (1,960 consultancy, 2,039 other than consultancy, 1,096 civil works). Right Graph: Coefficients estimated with supplier x year x semester, and supplier x recipient x year fixed effects. Observations: 24,914 (consultancy), 15,306 (other than consultancy), 2,042 (civil works).  $\mathbb{R}^2$ : 0.78 (consultancy), 0.86 (other than consultancy), 0.19 (civil works). Robust standard errors clustered at the recipient x year x semester level (5,172 consultancy, 4,258 other than

consultancy, 1,526 civil works).



## Figure A2: International political cycle by contract category and allocation method

#### Notes:

Left graph: Coefficients estimated with recipient x year x semester, and supplier x recipient x year fixed effects. Observations: 26,116 (consultancy), 15,248 (other than consultancy), 1,460 (civil works).  $\mathbb{R}^2$ : 0.82 (consultancy), 0.88 (other than consultancy), 0.80 (civil works). Robust standard errors clustered at the supplier x year x semester level (4,936 consultancy, 3,518 other than consultancy, 972 civil works).

**Right Graph**: Coefficients estimated with recipient x year x semester, and supplier x recipient x year fixed effects. Observations: 12,104 (ICB), 16,016 (QCBS), 9,432 (SSS).  $\mathbb{R}^2$ : 0.87 (ICB), 0.81 (QCBS), 0.84 (SSS). Robust standard errors clustered at the supplier x year x semester level (2,874 ICB, 3,654 QCBS, 3,150 SSS).



Figure A3: Map of countries authorizing/banning corporate donations to candidate

Source: Political Finance Database

Figure A4: Map of countries where disclosure of politicians' assets is mandatory or common



Source: Djankov et al. (2010)

Dep. var.:	$AverageAmount_{r,k,t}$		Average	$Amount_{s,r,k,t}$
	Supp. =	= Recip.	Supp.	$\neq$ Recip.
Public disclosure:	Yes	No	Yes	No
Semester k-2 $_{r,k,t}$	-0.251 (0.334)	0.615 $(0.209)^{***}$	$0.471 \\ (0.270)^*$	$\begin{array}{c} 0.042 \\ (0.129) \end{array}$
Semester k-1 $_{\boldsymbol{r},\boldsymbol{k},\boldsymbol{t}}$	$0.841 \\ (0.459)^*$	$0.545 \\ (0.235)^{**}$	-0.356 (0.313)	$0.248 \\ (0.180)$
Election Semester $_{r,k,t}$	1.087 $(0.500)^{**}$	$\begin{array}{c} 0.390 \\ (0.241) \end{array}$	-0.070 (0.332)	$0.431 \\ (0.240)^*$
Semester k+1 $_{r,k,t}$	-0.133 (0.372)	$0.476 \\ (0.258)^*$	-0.154 (0.303)	0.446 (0.222)**
Semester k+2 $_{r,k,t}$	-0.861 $(0.287)^{***}$	$\begin{array}{c} 0.411 \\ (0.251) \end{array}$	-0.215 (0.258)	$0.640 \\ (0.181)^{***}$
N	3,504	2,102	39,982	29,016
$\mathbb{R}^2$	0.87	0.85	0.91	0.87
Recip. $\times$ year FE	Yes	Yes	No	No
Sem. $\times$ Year FE	Yes	Yes	No	No
Supp. $\times$ Sem. times Year FE	No	No	Yes	Yes
Supp. $\times$ Recip. $times$ Year FE	No	No	Yes	Yes
N Recip. $\times$ Year (clusters)	592	2,171		
N Recip. $\times$ Sem. times Year (clusters)			1,068	4,172

 Table A4:
 Domestic Political Cycle and Politicians' assets public disclosure

Dep. var.:	AverageAn	$nount_{s,r,k,t}$
Public Disclosure:	Yes	No
Semester k-2 $_{\boldsymbol{s},\boldsymbol{k},\boldsymbol{t}}$	$0.055 \\ (0.091)$	-0.108 (0.282)
Semester k-1 $_{s,k,t}$	$\begin{array}{c} 0.085 \ (0.136) \end{array}$	$\begin{array}{c} 0.133 \ (0.319) \end{array}$
Election Semester $_{s,k,t}$	-0.031 (0.159)	$\begin{array}{c} 0.228 \\ (0.335) \end{array}$
Semester k+1 $_{s,k,t}$	-0.278 $(0.154)^*$	$\begin{array}{c} 0.091 \\ (0.290) \end{array}$
Semester k+2 $_{s,k,t}$	-0.375 $(0.131)^{***}$	0.529 $(0.211)^{**}$
N R <sup>2</sup>	22,120 0.88	$12,224 \\ 0.91$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	No No	No No
N Supp. $\times$ Sem. $\times$ Year (clusters)	2,032	3,084

 Table A5:
 International Political Cycle and Politicians' assets public disclosure

Notes: Robust standard errors in parentheses, clustered at the supplier  $\times$  semester  $\times$  year level. \* p<0.10, \*\* p<0.05, \*\*\* p<0.010.

	(1)	(2)		
Dep. var.:	$AverageAmount_{s,r,k,t}$			
Election in	Recipient: Semester k $_{r,k,t}$	Supplier: Semester k $_{s,k,t}$		
Semester k-2 x Tied $\operatorname{Aid}_{s,t}$	0.746 (0.557)	$0.016 \\ (0.380)$		
Semester k-1 x Tied $\operatorname{Aid}_{s,t}$	$0.521 \\ (0.672)$	-1.175 (0.473)**		
Elec Semester x Tied $\operatorname{Aid}_{s,t}$	$0.448 \\ (0.787)$	-1.909 (0.570)***		
Semester k+1 x Tied $\operatorname{Aid}_{s,t}$	$0.121 \\ (0.715)$	-1.972 (0.532)***		
Semester k+2 x Tied $\operatorname{Aid}_{s,t}$	-1.508 (0.605)**	-1.838 (0.401)***		
Semester k-2	-0.161 (0.160)	$0.171 \\ (0.101)^*$		
Semester k-1	$0.031 \\ (0.198)$	0.442 (0.142)***		
Election Semester	$0.243 \\ (0.249)$	0.321 (0.158)**		
Semester k+1	$0.403 \\ (0.218)^*$	0.351 (0.143)**		
Semester k+2	0.591 $(0.178)^{***}$	0.281 $(0.101)^{***}$		
N	39,982	41,966		
$R^2$	0.86	0.88		
Supp x Year x Sem Fixed Effect	Yes	No		
Supp x Recip x Year Fixed Effect	Yes	Yes		
Recip x Year x Sem Fixed Effect	No	Yes		
N Recip x Year x Sem (clusters)	$5,\!654$	-		
N Supp x Year x Sem (clusters)	-	5,818		

Table A6: International political cycle on World Bank procurement contract - Effect of election in recipient/supplier countries, interaction with share tied aid

Notes: Robust standard errors in parentheses. Note that Tied Aid<sub>s,t</sub> is the annual share of foreign aid of supplier country *i* committed for year *t*. The variable in level (not in interaction) is therefore captured by the set of Supplier x Year fixed effects. Supplier; recipient; recipient x supplier; year x semester; supplier x year and supplier x recipient x year fixed effects are included in both columns. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.010.

Dep. var.:	$AverageAmount_{s,r,k,t}$			
	Sign. aid partner	Not sign. aid partner		
Semester k-2 $_{s,k,t}$	$0.279 \\ (0.164)^*$	$0.032 \\ (0.102)$		
Semester k-1 $_{s,k,t}$	$0.624 \\ (0.197)^{***}$	-0.098 (0.121)		
Election Semester $_{\boldsymbol{s},\boldsymbol{k},\boldsymbol{t}}$	-0.112 (0.202)	-0.136 (0.142)		
Semester k+1 $_{s,k,t}$	-0.314 (0.204)	-0.065 (0.125)		
Semester k+2 $_{s,k,t}$	-0.122 (0.175)	$0.003 \\ (0.108)$		
$\frac{N}{R^2}$	10,158 0.92	$28,782 \\ 0.89$		
Recip x Year x Sem Fixed Effect Supp x Recip x Year Fixed Effect	Yes Yes	Yes Yes		
N Supp x Year x Sem (clusters)	1,828	$5{,}538$		

Table A7: International political cycle, by significance of aid partnership - Effect of election in supplier countries

Notes: Robust standard errors in parentheses, clustered at the supplier×year×semester level. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.010.

	(1)
Dep. var.:	$(1) \\ AverageAmount_{s,r,k,t}$
Former Colony $_{s,r}$ x Semester k-2 $_{s,k,t}$	0.681 (0.296)**
Former Colony $_{s,r}$ x Semester k-1 $_{s,k,t}$	$0.981 \\ (0.377)^{***}$
Former Colony $_{s,r}$ x Election Semester $_{s,k,t}$	-0.179 (0.478)
Former Colony $_{s,r}$ x Semester k+1 $_{s,k,t}$	$0.372 \\ (0.473)$
Former Colony $_{s,r}$ x Semester k+2 $_{s,k,t}$	-0.161 (0.171)
Semester k-2 $_{s,k,t}$	$0.167 \\ (0.086)^*$
Semester k-1 $_{s,k,t}$	$0.344 \\ (0.134)^{***}$
Election Semester $_{s,k,t}$	$0.179 \\ (0.152)$
Semester k+1 $_{s,k,t}$	$0.168 \\ (0.139)$
Semester k+2 $_{s,k,t}$	$0.125 \\ (0.097)$
N	41,966
$R^2$	0.88
Recip x Year x Sem FE	Yes
Supp x Recip x Year FE	Yes
N Supp x Year x Sem (clusters)	5,818

Table A8: International Political Cycle - Interaction with former colonial history

Notes: Robust standard errors in parentheses, clustered at the supplier×year×semester level. \* p<0.10, \*\* p<0.05, \*\*\* p<0.010

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# Supplementary Appendix

# Political Cycle in World Bank's Procurement Allocation

	Election				
Firm	Recipient	Supplier			
Recipient	Domestic political cycle; local firms	-			
Supplier	Domestic political cycle; foreign firms	International political cycle			

Table S.A1: Summary of the dimension used

Figure S.A1: Density function of USD amounts per contract with respect to contract's category



Source: Authors' calculation.

Dep. Var.:	$MeanAmount_{r,k,t}$	$MeanAmount_{s,r,k,t}$		
	Supp. $=$ Recip.	Supp. $\neq$ Recip.		
Semester k-2 $_{r,k,t}$	0.275 (0.189)	-0.094 (0.140)		
Semester k-1 $_{r,k,t}$	$0.677 \\ (0.260)^{***}$	$0.079 \\ (0.170)$		
Election Semester $_{r,k,t}$	$0.599 \\ (0.266)^{**}$	$0.293 \\ (0.206)$		
Semester k+1 $_{\boldsymbol{r},\boldsymbol{k},\boldsymbol{t}}$	$0.443 \\ (0.244)^*$	$0.439 \\ (0.182)^{**}$		
Semester k+2 $_{\boldsymbol{r},\boldsymbol{k},\boldsymbol{t}}$	$0.219 \\ (0.221)$	$\begin{array}{c} 0.487 \\ (0.152)^{***} \end{array}$		
N	5,902	39,982		
$R^2$	0.84	0.86		
Supplier FE	Yes	Yes		
Recipient FE	No	Yes		
Recipient x Supp FE	No	Yes		
Year x Sem FE	Yes	Yes		
Supplier x Year FE	Yes	Yes		
Supp x Year x Sem FE	No	Yes		
Supp x Recip x Year FE	No	Yes		
N Supp x Year (clusters)	2,951	-		
N Recip x Year x Sem (clusters)	-	5,654		

Table S.A2: Domestic political cycle on World Bank procurement contract - Effect of election in recipient countries

Dep. var.:	$MeanAmount_{s,r,k,t}$
	Supplier≠Recipient
Semester k-2 $_{s,k,t}$	$0.1712 \\ (0.085)^{**}$
Semester k-1 $_{s,k,t}$	$0.3625 \ (0.128)^{***}$
Election Semester $_{s,k,t}$	$0.1707 \\ (0.146)$
Semester k+1 $_{s,k,t}$	$0.1860 \\ (0.135)$
Semester k+2 $_{s,k,t}$	$0.1247 \\ (0.094)$
N	41,966
$R^2$	0.88
Supplier Fixed Effect	Yes
Recip Fixed Effect	Yes
Recip x Supp Fixed Effect	Yes
Year x Sem Fixed Effect	Yes
Recip x Year x Sem Fixed Effect	Yes
Supp x Year Fixed Effect	Yes
Supp x Recip x Year Fixed Effect	Yes
N Supp x Year x Sem (clusters)	5,818

Table S.A3: International political cycle - Effect of election in the supplier countries

Robust standard errors in parentheses, clustered at the supplier  $\times$  year  $\times$  semester level. \* p<0.10, \*\* p<0.05, \*\*\* p<0.010

# **Robustness checks**



Figure S.A2: Total amount received by recipient countries around their elections



	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Var.:	$TA_{r,k,t}$	$NC_{r,k,t}$	$MA_{r,k,t}$	$TA_{s,r,k,t}$	$NC_{s,r,k,t}$	$MA_{s,r,k,t}$
	S	upp. = Rec	ip.	S	upp. $\neq$ Reci	ip.
Semester k-2 $_{r,t,k}$	0.294 $(0.134)^{**}$	$0.037 \\ (0.044)$	$0.275 \\ (0.189)$	-0.039 (0.144)	0.041 (0.032)	-0.094 (0.140)
Semester k-1 $_{r,t,k}$	$0.127 \\ (0.161)$	$0.004 \\ (0.056)$	0.677 $(0.260)^{***}$	$0.048 \\ (0.173)$	$0.057 \\ (0.043)$	$\begin{array}{c} 0.079 \\ (0.170) \end{array}$
Election Semester $_{r,t,k}$	$0.000 \\ (0.181)$	-0.049 (0.060)	$0.599 \\ (0.266)^{**}$	$\begin{array}{c} 0.044 \\ (0.185) \end{array}$	-0.029 (0.043)	$0.293 \\ (0.206)$
Semester k+1 $_{\boldsymbol{r},\boldsymbol{t},\boldsymbol{k}}$	-0.035 (0.170)	$-0.137$ $(0.058)^{**}$	$0.443 \\ (0.244)^*$	$0.199 \\ (0.165)$	-0.102 $(0.041)^{**}$	0.439 $(0.182)^{**}$
Semester k+2 $_{\boldsymbol{r},\boldsymbol{t},\boldsymbol{k}}$	0.001 (0.118)	$-0.094$ $(0.042)^{**}$	$0.219 \\ (0.221)$	0.346 $(0.130)^{***}$	-0.028 (0.035)	0.487 $(0.152)^{***}$
	5,902	5,902	5,902	39,982	39,982	39,982
$R^2$	0.94	0.84	0.84	0.87	0.27	0.86
Supplier FE	Yes	Yes	Yes	Yes	Yes	Yes
Recip FE	No	No	No	Yes	Yes	Yes
Recip x Supp FE	No	No	No	Yes	Yes	Yes
Year x Sem FE	Yes	Yes	Yes	Yes	Yes	Yes
Supplier x Year FE	No	No	No	Yes	Yes	Yes
Supplier x Year x Sem. FE	No	No	No	Yes	Yes	Yes
Supplier x Recip x Year FE	No	No	No	Yes	Yes	Yes
N Supp x Year (clusters)	2,951	2,951	2,951			
N Recip x Year x Sem. (clusters)				$5,\!654$	$5,\!654$	$5,\!654$

Table S.A4: Domestic political cycle on World Bank procurement contract - Effect of election in recipient countries

Robust standard errors in parentheses. TA, NC, MA stand for Total Amount of procurement (in USD), Number of Contracts, and Mean amount per contract, respectively. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.010

	(1)	(2)	(3)
Dep. Var.:	$TA_{s,k,t}$	$NC_{s,k,t}$	$MA_{s,k,t}$
Semester k-2 $_{s,t,k}$	$\begin{array}{c} 0.072\\ (0.086) \end{array}$	0.019 (0.024)	$0.171 \\ (0.085)^{**}$
Semester k-1 $_{s,t,k}$	$\begin{array}{c} 0.161 \\ (0.129) \end{array}$	$0.008 \\ (0.029)$	0.362 $(0.128)^{***}$
Election Semester $_{r,t,k}$	$0.007 \\ (0.146)$	-0.012 (0.030)	$0.171 \\ (0.146)$
Semester k+1 $_{s,t,k}$	0.019 (0.142)	-0.007 (0.029)	$0.186 \\ (0.135)$
Semester k+2 $_{s,t,k}$	$0.018 \\ (0.098)$	0.004 (0.022)	$0.125 \\ (0.094)$
N	$41,\!966$	$41,\!966$	41,966
$R^2$	0.90	0.30	0.88
Supplier Fixed Effect	Yes	Yes	Yes
Recip Fixed Effect	Yes	Yes	Yes
Recip x Supp Fixed Effect	Yes	Yes	Yes
Year x Sem Fixed Effect	Yes	Yes	Yes
Recip x Year x Sem Fixed Effect	Yes	Yes	Yes
Supp x Year Fixed Effect	Yes	Yes	Yes
Supp x Recip x Year Fixed Effect	Yes	Yes	Yes
N Supp x Year x Sem (clusters)	5,818	5,818	5,818

Table S.A5: International political cycle on World Bank procurement contract - Effect of election in supplier countries

Robust standard errors in parentheses.  $TA,\,NC,\,MA$  stand for Total Amount of procurement (in USD), Number of Contracts, and Mean amount per contract, respectively. \* p<0.10, \*\* p<0.05, \*\*\* p<0.010





Left graph: coefficients estimated with recipient, recipient x year and semester x year fixed effects. Standard errors are clustered at the recipient x year level.

*Right Graph*: coefficients estimated with supplier, recipient, supplier x recipient, year x semester, supplier x year, supplier x year x semester, and supplier x recipient x year fixed effects. Standard errors are clustered at the recipient x year x semester level.



.2

0

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Sem k-2

Sem k-1



Notes: coefficients estimated with supplier, recipient, supplier x recipient, year x semester, recipient x year x semester, supplier x year, and supplier x recipient x year fixed effects. Standard errors are clustered at the supplier x year x semester level.

Election Semester Sem k+1

Sem k+2

	Baseline	No Inconsistent
semester_minus2	0.275	0.296
	(0.189)	(0.207)
semester_minus1	0.677	0.760
	$(0.260)^{***}$	$(0.281)^{***}$
election_semester	0.599	0.694
	$(0.266)^{**}$	$(0.294)^{**}$
$semester_plus1$	0.443	0.483
	$(0.244)^*$	$(0.276)^*$
$semester_plus2$	0.219	0.301
_	(0.221)	(0.257)
_cons	14.898	14.944
	$(0.117)^{***}$	$(0.123)^{***}$
N	5902	5232
$R^2$		

Table S.A6: DPC, local firms - Dropping inconsistent election

	Baseline	No Inconsistent
semester_minus2r	-0.0944	-0.0507
	(0.140)	(0.157)
$semester\_minus1r$	0.0797	0.1647
	(0.170)	(0.191)
election_semesterr	0.2935	0.4378
	(0.206)	$(0.235)^*$
$semester_plus1r$	0.4389	0.6542
	$(0.182)^{**}$	$(0.214)^{***}$
$semester_plus2r$	0.4873	0.6900
	$(0.152)^{***}$	$(0.188)^{***}$
	10 0000	10,0100
_cons	16.3686	16.3199
	$(0.072)^{***}$	$(0.076)^{***}$
N	39982	35148
$R^2$		

Table S.A7: DPC, foreign firms - Dropping inconsistent election

	Baseline	No Inconsistent
semester_minus2	0.1712	0.1205
	$(0.085)^{**}$	(0.106)
semester_minus1	0.3625	0.3543
	$(0.128)^{***}$	$(0.141)^{**}$
election_semester	0.1707	-0.0273
	(0.146)	(0.147)
semester_plus1	0.1860	0.0675
-	(0.135)	(0.129)
semester_plus2	0.1247	0.2527
	(0.094)	$(0.108)^{**}$
_cons	16.2305	16.2892
	$(0.060)^{***}$	$(0.056)^{***}$
N	41966	33004
$R^2$		

Table S.A8: IPC - Dropping inconsistent election

Country	Election Year	Semester	Date (dd/mm)	Country	Election Year	Semester	Date (dd/mm)
Anguilla	1994	S1	16/03	Hong Kong	1994	S2	18/11
	1999	S1	04/03		1999	S2	28/11
	2000	S1	03/03		2003	S2	23/11
	2005	S1	21/02		2007	S2	18/11
	2010	S1	15/02		2011	S2	06/11
	2015	S1	22/04		2015	S2	22/11
	2020	S1	29/06		2019	S2	24/11
Cayman Islands	1996	S2	20/11	Montserrat	1996	S2	11/11
	2000	S2	08/11		2001	S1	02/04
	2005	S1	11/05		2006	S1	31/05
	2009	S1	20/05		2009	S2	08/09
	2013	S1	22/05		2014	S2	11/09
	2017	S1	24/05		2019	S2	18/11
China	1998	S1	05/03	Puerto Rico	1996	S2	05/11
	2003	S1	05/03		2000	S2	07/11
	2008	S1	05/03		2004	S2	02/11
	2013	S1	05/03		2008	S2	04/11
	2018	S1	05/03		2012	S2	06/11
Cook Islands	1999	S1	16/06		2016	S2	08/11
	2004	S2	07/09		2020	S2	03/11
	2006	S2	27/09	Somalia	2012	S2	10/09
	2010	S2	17/11		2017	S1	08/02
	2014	S2	09/07	UAE	2006	S2	16/12
	2018	S1	14/06		2011	S2	24/09
Gibraltar	1996	S1	16/06		2015	S2	03/10
	2000	S1	10/02		2019	S2	05/10
	2003	S2	28/11	Virgin Islands	1995	S1	20/02
	2007	S2	11/10		1999	S1	17/06
	2011	S2	08/12		2003	S1	16/06
	2015	S2	26/11		2007	S2	20/08
	2019	S2	17/10		2011	S2	07/11
Guam	1998	S2	03/11		2015	S1	08/06
	2002	S2	05/11		2019	S1	25/02
	2006	S2	07/11	Palestine	1996	S1	20/01
	2010	S2	02/11		2005	S1	09/01
	2014	S2	04/11				
	2018	S2	06/11				

Table S.A9: Countries not covered in NELDA, added by the authors

Source: Wikipedia

	(1)	(2)	(3)	(4)
Dep. var.:	MeanAr	$nount_{r,k,t}$	MeanAm	$ount_{s,r,k,t}$
	Supp. =	= Recip.	Supp. ≠	ERecip.
	Baseline	Without	Baseline	Without
Semester k-2 $_{r,k,t}$	$0.275 \\ (0.189)$	$0.269 \\ (0.190)$	-0.094 (0.140)	-0.070 (0.153)
Semester k-1 $_{r,k,t}$	0.677 $(0.260)^{***}$	0.713 $(0.269)^{***}$	$0.080 \\ (0.170)$	$0.167 \\ (0.174)$
Election Semester $_{r,k,t}$	0.599 $(0.266)^{**}$	$0.625 \ (0.276)^{**}$	$0.294 \\ (0.206)$	$0.152 \\ (0.182)$
Semester k+1 $_{r,k,t}$	$0.443 \\ (0.244)^*$	$0.496 \\ (0.256)^*$	0.439 $(0.182)^{**}$	0.289 $(0.144)^{**}$
Semester k+2 $_{r,k,t}$	$0.219 \\ (0.221)$	$0.265 \\ (0.237)$	0.487 $(0.152)^{***}$	$0.240 \\ (0.130)^*$
N	5,902	5,902	39,982	40,016
$R^2$	0.84	0.84	0.86	0.86
Supplier FE	Yes	Yes	Yes	Yes
Recip FE	No	No	Yes	Yes
Recip x Supp FE	No	No	Yes	Yes
Year x Sem FE	Yes	Yes	Yes	Yes
Supplier x Year FE	Yes	Yes	Yes	Yes
Supplier x Year x Sem. FE	No	No	Yes	Yes
Supplier x Recip x Year FE	No	No	Yes	Yes
N Supp x Year (clusters)	2,951	2,951	-	-
N Recip x Year x Sem. (clusters)	-	-	$5,\!654$	$5,\!686$

Table S.A10: Domestic Political Cycle - Without added elections

	(1)	(2)	
Dep. var.:	$MeanAmount_{s,r,k,t}$		
	Baseline	Without	
Semester k-2 $_{s,k,t}$	$0.171 \\ (0.085)^{**}$	$0.178 \\ (0.089)^{**}$	
Semester k-1 $_{s,k,t}$	$0.362 \\ (0.128)^{***}$	$0.210 \\ (0.122)^*$	
Election Semester $_{s,k,t}$	$\begin{array}{c} 0.171 \ (0.146) \end{array}$	$0.089 \\ (0.140)$	
Semester k+1 $_{\boldsymbol{s},\boldsymbol{k},\boldsymbol{t}}$	$\begin{array}{c} 0.186 \ (0.135) \end{array}$	$0.078 \\ (0.133)$	
Semester k+2 $_{s,k,t}$	$0.125 \\ (0.094)$	$0.036 \\ (0.106)$	
N	41,966	41,966	
$R^2$	0.88	0.88	
Supplier Fixed Effect	Yes	Yes	
Recip Fixed Effect	Yes	Yes	
Recip x Supp Fixed Effect	Yes	Yes	
Year x Sem Fixed Effect	Yes	Yes	
Recip x Year x Sem Fixed Effect	Yes	Yes	
Supp x Year Fixed Effect	Yes	Yes	
Supp x Recip x Year Fixed Effect	Yes	Yes	
N Supp x Year x Sem (clusters)	$5,\!818$	$5,\!818$	

Table S.A11: International Political Cycle - Without added elections

Standard errors in parentheses clustered at supplier, year, semester level. \* p<0.10, \*\* p<0.05, \*\*\* p<0.010

Table S.A12:	Domestic Political Cycles - two-way clustering
D	4 4 4

Dep. var.:	$AverageAmount_{r,k,t}$				
	Supp. $=$ Recip.	Supp. $\neq$ Recip.			
Semester k-2 $_{r,k,t}$	0.275	-0.094			
	(0.256)	(0.243)			
Semester k-1 <sub>r.k.t</sub>	0.677	0.080			
- ,,-	$(0.355)^*$	(0.252)			
Election Semester $r_{k,t}$	0.599	0.293			
- 33-	$(0.341)^*$	(0.329)			
Semester k+1 $_{r,k,t}$	0.443	0.439			
	(0.381)	$(0.170)^{**}$			
Semester k+2 $_{r,k,t}$	0.219	0.487			
- ,,-	(0.354)	(0.302)			
N	5,902	39,982			
$\mathbb{R}^2$	0.84	0.86			
Recip. $\times$ Year FE	Yes	No			
Sem. $\times$ Year FE	Yes	No			
Supp. $\times$ Sem. $\times$ Year FE	No	Yes			
Supp. $\times$ Recip. $\times$ Year FE	No	Yes			

Note: Robust standard errors clustered at both the recipient country and supplier country in parentheses. \*, \*\*, \*\*\* denote significance at the 10, 5, and 1% level, respectively.

Dep. var.:	$AverageAmount_{r,k,t}$
	$Supp. \neq Recip.$
Semester k-2 $_{s,k,t}$	$0.171 \\ (0.087)^{**}$
Semester k-1 $_{s,k,t}$	$0.362 \\ (0.174)^{**}$
Election Semester $_{s,k,t}$	$\begin{array}{c} 0.171 \\ (0.186) \end{array}$
Semester k+1 $_{\boldsymbol{s},\boldsymbol{k},\boldsymbol{t}}$	$0.186 \\ (0.162)$
Semester k+2 $_{\boldsymbol{s},\boldsymbol{k},\boldsymbol{t}}$	$0.125 \\ (0.141)$
N	41,966
$\mathbb{R}^2$	0.88
Recip. $\times$ Sem. $\times$ Year FE	Yes
Supp. $\times$ Recip. $\times$ Year FE	Yes

 Table S.A13:
 International Political Cycles - two-way clustering

Note: Robust standard errors clustered at both the recipient country and supplier country in parentheses. \*, \*\*, \*\*\* denote significance at the 10, 5, and 1% level, respectively.

	(1)	(2)	(3)	(4)	(5)
Dep. var.:		Av	erageAmou	$nt_{r,k,t}$	
ODA :	Baseline	All Aid	Bilateral	Multi WB	WB
Semester k-2 $_{\boldsymbol{r},\boldsymbol{k},\boldsymbol{t}}$	$\begin{array}{c} 0.275 \\ (0.189) \end{array}$	$\begin{array}{c} 0.231 \\ (0.246) \end{array}$	$0.160 \\ (0.248)$	$\begin{array}{c} 0.257 \\ (0.250) \end{array}$	$0.290 \\ (0.212)$
Semester k-1 $_{r,k,t}$	0.677 $(0.260)^{***}$	$0.650 \\ (0.312)^{**}$	$0.568 \\ (0.313)^*$	0.734 (0.314)**	0.696 $(0.277)^{**}$
Election Semester $_{r,k,t}$	$0.599 \\ (0.266)^{**}$	$0.522 \\ (0.307)^*$	$\begin{array}{c} 0.391 \\ (0.303) \end{array}$	$0.582 \\ (0.314)^*$	0.661 (0.286)**
Semester k+1 $_{r,k,t}$	$0.443 \\ (0.244)^*$	$0.550 \\ (0.304)^*$	$\begin{array}{c} 0.492 \\ (0.302) \end{array}$	$0.615 \\ (0.309)^{**}$	0.531 (0.267)**
Semester k+2 $_{r,k,t}$	$0.218 \\ (0.221)$	$0.279 \\ (0.293)$	$0.249 \\ (0.299)$	$0.285 \\ (0.295)$	$0.239 \\ (0.240)$
ODA $_{r,t}$ $\times$ Semester k-2 $_{r,k,t}$		$\begin{array}{c} 0.0001 \\ (0.000) \end{array}$	0.0001 (0.000)	$\begin{array}{c} 0.0001 \\ (0.000) \end{array}$	-0.0002 (0.001)
ODA $_{r,t}$ $\times$ Semester k-1 $_{r,k,t}$		0.0001 (0.000)	0.0001 (0.000)	-0.0001 (0.000)	-0.0003 (0.001)
ODA $_{r,t}$ $\times$ Election Semester $_{r,k,t}$		0.0001 (0.000)	0.0002 $(0.000)^{**}$	0.0001 (0.000)	-0.0009 (0.001)
ODA $_{r,t}$ $\times$ Semester k+1 $_{r,k,t}$		-0.0002 (0.000)	-0.0000 (0.000)	-0.0005 $(0.000)*$	-0.0014 $(0.001)^*$
ODA $_{r,t}$ $\times$ Semester k+2 $_{r,k,t}$		-0.0001 (0.000)	-0.0000 (0.000)	-0.0002 (0.000)	-0.0003 (0.000)
N	5,902	5,902	5,902	5,902	5,902
$\mathbb{R}^2$	0.84	0.84	0.84	0.84	0.84
Year $\times$ Sem FE	Yes	Yes	Yes	Yes	Yes
$\text{Recip} \times \text{Year FE}$	Yes	Yes	Yes	Yes	Yes
N Recip $\times$ Year (clusters)	2,951	2,951	2,951	2,951	2,951

 Table S.A14:
 Domestic Political Cycle, local firms - Interactions with aid

	(1)	(2)	(3)	(4)	(5)
Dep. var.:	$\_$ $\_$ $\_$ $\_$ $AverageAmount_{s,r,k,t}$				
ODA :	Baseline	All Aid	Bilateral	Multi WB	WB
Semester k-2 $_{\boldsymbol{r},\boldsymbol{k},\boldsymbol{t}}$	-0.094 (0.140)	0.053 (0.171)	-0.088 (0.146)	$0.028 \\ (0.190)$	$0.114 \\ (0.166)$
Semester k-1 $_{r,k,t}$	$0.080 \\ (0.170)$	$\begin{array}{c} 0.310 \\ (0.209) \end{array}$	$\begin{array}{c} 0.083 \\ (0.178) \end{array}$	$0.280 \\ (0.213)$	$0.296 \\ (0.204)$
Election Semester $_{r,k,t}$	0.293 (0.206)	$0.209 \\ (0.238)$	$\begin{array}{c} 0.300 \\ (0.216) \end{array}$	0.381 (0.237)	0.413 (0.250)
Semester k+1 $_{r,k,t}$	0.439 $(0.182)^{**}$	0.808 $(0.219)^{***}$	0.497 $(0.192)^{***}$	1.029 (0.230)***	0.520 $(0.225)^{*}$
Semester k+2 $_{r,k,t}$	0.487 $(0.152)^{***}$	0.620 $(0.217)^{***}$	$0.559 \\ (0.161)^{***}$	0.649 $(0.205)^{***}$	0.467 $(0.197)^{3}$
ODA $_{r,t}$ $\times$ Semester k-2 $_{r,k,t}$		-0.0001 (0.000)	$\begin{array}{c} 0.0001 \\ (0.000) \end{array}$	-0.0003 (0.000)	-0.001 (0.001)
ODA $_{r,t}$ $\times$ Semester k-1 $_{r,k,t}$		-0.0002 (0.000)**	-0.0002 (0.001)	-0.0004 (0.000)**	-0.001 $(0.001)^{3}$
ODA $_{r,t}$ × Election Semester $_{r,k,t}$		$\begin{array}{c} 0.0001 \\ (0.000) \end{array}$	-0.0001 (0.001)	-0.0004 (0.000)	-0.001 (0.001
ODA $_{r,t}$ $\times$ Semester k+1 $_{r,k,t}$		-0.0002 (0.000)**	-0.0016 $(0.001)^{**}$	-0.0010 (0.000)**	-0.000 (0.001
ODA $_{r,t}$ $\times$ Semester k+2 $_{r,k,t}$		-0.0001 (0.000) (0.000)	-0.0021 (0.001)** (0.000)	$\begin{array}{c} -0.0002\\(0.000)\\(0.000)\end{array}$	0.0002 (0.000 (0.000
N	39,982	39,982	39,982	39,982	39,982
R <sup>2</sup>	0.86	0.86	0.86	0.86	0.86
Supp × Year × Sem FE	Yes	Yes	Yes	Yes	Yes
$\operatorname{N}\operatorname{Recip} \times \operatorname{Year} \times \operatorname{Sem}(\operatorname{clusters})$	1es 5.654	1es 5.654	res 5,654	res 5.654	1es 5,654

 Table S.A15:
 Domestic Political Cycle, foreign firms - Interactions with aid

	(1)	(2)	(3)	(4)	(5)
Dep. var.:		Ave	erageAmoun	$t_{s,r,k,t}$	
ODA :	Baseline	All Aid	Bilateral	Multi WB	WB
Semester k-2 $_{s,k,t}$	$0.171 \\ (0.085)^{**}$	0.341 (0.103)***	0.197 $(0.088)^{**}$	0.452 (0.117)***	0.315 (0.101)***
Semester k-1 $_{\boldsymbol{s},\boldsymbol{k},\boldsymbol{t}}$	0.362 $(0.128)^{***}$	0.511 $(0.149)^{***}$	$0.396 \\ (0.134)^{***}$	0.783 $(0.182)^{***}$	0.605 $(0.156)^{***}$
Election Semester $_{s,k,t}$	$0.171 \\ (0.146)$	$0.166 \\ (0.163)$	$0.157 \\ (0.149)$	0.424 (0.198)**	$0.151 \\ (0.167)$
Semester k+1 $_{s,k,t}$	$0.186 \\ (0.135)$	0.083 (0.150)	$0.201 \\ (0.138)$	$0.368 \\ (0.187)^{**}$	$0.088 \\ (0.156)$
Semester k+2 $_{s,k,t}$	$\begin{array}{c} 0.125 \\ (0.094) \end{array}$	-0.003 (0.117)	$0.101 \\ (0.096)$	$0.136 \\ (0.127)$	-0.031 (0.108)
ODA $_{r,t}$ $\times$ Semester k-2 $_{s,k,t}$		-0.0001 (0.000)	0.0001 (0.000)	-0.0003 (0.000)	-0.0014 (0.001)**
ODA $_{r,t}$ $\times$ Semester k-1 $_{s,k,t}$		-0.0002 $(0.000)^{**}$	-0.0002 (0.001)	-0.0004 (0.000)**	-0.0016 $(0.001)^{**}$
ODA $_{r,t}$ $\times$ Election Semester $_{s,k,t}$		0.0001 (0.000)	-0.0001 (0.001)	-0.0004 (0.000)	-0.0010 (0.001)
ODA $_{r,t}$ $\times$ Semester k+1 $_{s,k,t}$		-0.0002 $(0.000)^{**}$	-0.0016 $(0.001)^{**}$	-0.0010 $(0.000)^{**}$	-0.0006 (0.001)
ODA $_{r,t}$ $\times$ Semester k+2 $_{s,k,t}$		-0.0001 (0.000)	-0.0021 $(0.001)^{**}$	-0.0002 (0.000)	$0.0002 \\ (0.000)$
N	39,982	39,982	39,982	39,982	39,982
$\mathbb{R}^2$	0.86	0.86	0.86	0.86	0.86
$\mathrm{Recip}\times\mathrm{Year}\times\mathrm{Sem}\mathrm{FE}$	Yes	Yes	Yes	Yes	Yes
$\mathrm{Supp} \times \mathrm{Recip} \times \mathrm{Year} \ \mathrm{FE}$	Yes	Yes	Yes	Yes	Yes
N Recip $\times$ Year $\times$ Sem (clusters)	$5,\!654$	$5,\!654$	$5,\!654$	$5,\!654$	$5,\!654$

 Table S.A16:
 International Political Cycle - Interactions with aid

# Allocation method and contract category

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. var.:		$MeanAmount_{r,k,t}$			$MeanAmount_{s,r,k,i}$	t
		Supp. $=$ Recip.			Supp. $\neq$ Recip.	
	Consultancy	No Consultancy	Civil Works	Consultancy	No Consultancy	Civil Works
Semester k-2 $_{\boldsymbol{r},\boldsymbol{k},\boldsymbol{t}}$	0.267 (0.218)	$\begin{array}{c} 0.371 \\ (0.258) \end{array}$	-0.153 (0.298)	$0.063 \\ (0.088)$	-0.140 (0.190)	$0.012 \\ (0.145)$
Semester k-1 $_{r,k,t}$	$0.096 \\ (0.289)$	$0.734 \\ (0.319)^{**}$	$0.896 \\ (0.444)^{**}$	$0.274 \\ (0.106)^{***}$	-0.085 (0.238)	-0.571 $(0.200)^{***}$
Election Semester $_{r,k,t}$	-0.140 (0.337)	$0.767 \\ (0.336)^{**}$	0.910 $(0.455)^{**}$	$0.182 \\ (0.113)$	$\begin{array}{c} 0.412 \\ (0.290) \end{array}$	-0.538 $(0.219)^{**}$
Semester k+1 $_{r,k,t}$	-0.551 $(0.323)^*$	$0.592 \\ (0.307)^*$	$\begin{array}{c} 0.492 \\ (0.389) \end{array}$	$0.108 \\ (0.102)$	$0.619 \\ (0.270)^{**}$	-0.261 (0.216)
Semester k+2 $_{r,k,t}$	$(0.314)^{**}$	$0.460 \\ (0.274)^*$	$0.114 \\ (0.248)$	-0.016 (0.087)	0.805 $(0.222)^{***}$	$0.004 \\ (0.173)$
N	3,920	4,078	2,192	24,914	15,306	2,042
$R^2$	0.73	0.77	0.82	0.79	0.86	0.19
Supplier FE	Yes	Yes	Yes	Yes	Yes	Yes
Recip FE	No	No	No	Yes	Yes	Yes
Recip x Supp FE	No	No	No	Yes	Yes	Yes
Year x Sem FE	Yes	Yes	Yes	Yes	Yes	Yes
Supplier x Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Supplier x Year x Sem. FE	No	No	No	Yes	Yes	Yes
Supplier x Recip x Year FE	No	No	No	Yes	Yes	Yes
N Supp x Year (clusters)	1,960	2,039	1,096	-	-	-
N Recip x Year x Sem. (clusters)	-	-	-	5,172	4,258	1,526

# Table S.A17: Domestic Political Cycle, by contract category

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. var.:	Co	ntract category		Alle	ocation me	thod
$AverageAmount_{s,r,k,t}$	Consultancy	Other than Consultancy	Civil Works	ICB	QCBS	SSS
Semester k-2 $_{\boldsymbol{s},\boldsymbol{k},\boldsymbol{t}}$	-0.146 (0.072)**	$0.194 \\ (0.150)$	$0.773 \\ (0.499)$	$0.196 \\ (0.178)$	-0.139 (0.097)	-0.695 $(0.261)^{***}$
Semester k-1 $_{s,k,t}$	$-0.274$ $(0.100)^{***}$	$0.317 \ (0.187)^*$	1.484 $(0.578)^{**}$	$0.768 \\ (0.264)^{***}$	-0.218 $(0.130)^*$	-1.203 $(0.344)^{***}$
Election Semester $_{\boldsymbol{s},\boldsymbol{k},\boldsymbol{t}}$	-0.330 $(0.111)^{***}$	-0.118 (0.204)	$\begin{array}{c} 0.447 \\ (0.595) \end{array}$	$\begin{array}{c} 0.344 \\ (0.283) \end{array}$	$-0.254$ $(0.134)^*$	$-0.664$ $(0.355)^*$
Semester k+1 $_{s,k,t}$	-0.123 (0.109)	-0.042 (0.177)	$\begin{array}{c} 0.055 \ (0.567) \end{array}$	$\begin{array}{c} 0.217 \\ (0.255) \end{array}$	-0.066 (0.124)	$\begin{array}{c} 0.112 \\ (0.293) \end{array}$
Semester k+2 $_{s,k,t}$	-0.017 (0.097)	$0.180 \\ (0.148)$	$\begin{array}{c} 0.202 \\ (0.355) \end{array}$	$0.228 \\ (0.174)$	-0.003 (0.109)	0.078 (0.255)
 	26,116	15,248	1,460	12,104	16,016	9,432
$R^2$	0.82	0.88	0.80	0.87	0.81	0.84
Recip x Year x Sem FE	Yes	Yes	Yes	Yes	Yes	Yes
Supp x Recip x Year FE	Yes	Yes	Yes	Yes	Yes	Yes
N Supp x Year x Sem (clusters)	4,936	3,518	972	2,874	$3,\!654$	$3,\!150$

 Table S.A18:
 International Political, by contract category and allocation method

Notes: Robust standard errors in parentheses, clustered at the supplier×year×semester level. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.010.

# Channels

## Firms' donation to candidates

#### Incumbent

	(1)	(2)	(3)	(4)
Dep. var.:	MeanAm	$ount_{r,k,t}$	$MeanAmount_{s,r,k,i}$	
	Supp. =	Recip.	Supp. ≠	E Recip.
	Yes	No	Yes	No
Semester k-2 $_{\boldsymbol{r},\boldsymbol{k},\boldsymbol{t}}$	$\begin{array}{c} 0.391 \\ (0.251) \end{array}$	$0.245 \\ (0.257)$	-0.075 (0.190)	$0.108 \\ (0.187)$
Semester k-1 $_{\boldsymbol{r},\boldsymbol{k},\boldsymbol{t}}$	$0.599 \\ (0.294)^{**}$	$\begin{array}{c} 0.579 \\ (0.405) \end{array}$	0.071 (0.269)	$\begin{array}{c} 0.333 \ (0.239) \end{array}$
Election Semester $_{r,k,t}$	0.711 (0.299)**	-0.045 (0.414)	0.573 $(0.278)^{**}$	$0.326 \\ (0.257)$
Semester k+1 $_{r,k,t}$	$0.705 \\ (0.300)^{**}$	-0.215 (0.449)	0.661 $(0.266)^{**}$	$0.215 \\ (0.249)$
Semester k+2 $_{r,k,t}$	$0.468 \\ (0.264)^*$	-0.622 (0.399)	0.488 $(0.216)^{**}$	$0.430 \\ (0.219)^*$
N	3,986	1,254	10,410	22,870
$R^2$	0.86	0.85	0.87	0.88
Supplier FE	Yes	Yes	Yes	Yes
Recip FE	No	No	Yes	Yes
Recip x Supp FE	No	No	Yes	Yes
Year x Sem FE	Yes	Yes	Yes	Yes
Supplier x Year FE	Yes	Yes	Yes	Yes
Supplier x Year x Sem. FE	No	No	Yes	Yes
Supplier x Recip x Year FE	No	No	Yes	Yes
N Supp x Year (clusters)	1,993	627	-	-
N Recip x Year x Sem. (clusters)	-	-	1,906	3,224

# Table S.A19: Domestic Political Cycle - Political Finance, firm donation to candidates

	(1)	(2)
Dep. var.:	MeanAr	$mount_{s,r,k,t}$
	Yes	No
Semester k-2 $_{s,k,t}$	0.447	0.039
	$(0.133)^{***}$	(0.140)
Semester k-1 $_{s,k,t}$	0.364	0.277
	$(0.156)^{**}$	(0.178)
Election Semester $_{s,k,t}$	0.047	0.138
- 5 - 5	(0.162)	(0.201)
Semester k+1 $_{s,k,t}$	0.010	0.164
-,-,-	(0.139)	(0.199)
Semester k+2 $_{s,k,t}$	-0.027	0.229
, , ,	(0.111)	(0.206)
N	23,960	12,084
$R^2$	0.89	0.92
Supplier Fixed Effect	Yes	Yes
Recip Fixed Effect	Yes	Yes
Recip x Supp Fixed Effect	Yes	Yes
Year x Sem Fixed Effect	Yes	Yes
Recip x Year x Sem Fixed Effect	Yes	Yes
Supp x Year Fixed Effect	Yes	Yes
Supp x Recip x Year Fixed Effect	Yes	Yes
N Supp x Year x Sem (clusters)	$3,\!658$	1,460

Table S.A20: International Political Cycle - Political Finance, firm donation to candidate

Standard errors in parentheses, clustered at the supplier, year, semester level \* p<0.10, \*\* p<0.05, \*\*\* p<0.010

	(1)	(2)	(3)	(4)
Dep. var.:	MeanAme	$punt_{r,k,t}$	MeanAmo	$unt_{s,r,k,t}$
	Supp. =	Recip.	Supp. $\neq$	Recip.
	No Incumbent	Incumbent	No Incumbent	Incumbent
Semester k-2 $_{r,k,t}$	0.425 (0.314)	$0.307 \\ (0.246)$	-0.256 (0.224)	$0.086 \\ (0.164)$
Semester k-1 $_{r,k,t}$	$0.516 \\ (0.356)$	$0.691 \\ (0.343)^{**}$	-0.189 (0.294)	$0.396 \ (0.205)^*$
Election Semester $_{r,k,t}$	$\begin{array}{c} 0.372 \\ (0.376) \end{array}$	$0.699 \\ (0.354)^{**}$	-0.041 (0.348)	$0.574 \\ (0.231)^{**}$
Semester k+1 $_{r,k,t}$	0.542 (0.414)	$0.564 \\ (0.330)^*$	0.474 (0.365)	0.685 $(0.255)^{***}$
Semester k+2 $_{r,k,t}$	0.673 (0.411)	$\begin{array}{c} 0.390 \\ (0.326) \end{array}$	0.976 $(0.340)^{***}$	0.673 $(0.213)^{***}$
N	3,630	4,534	22,476	29,738
$R^2$	0.84	0.84	0.88	0.87
Supplier FE	Yes	Yes	Yes	Yes
Recip FE	No	No	Yes	Yes
Recip x Supp FE	No	No	Yes	Yes
Year x Sem FE	Yes	Yes	Yes	Yes
Supplier x Year FE	Yes	Yes	Yes	Yes
Supplier x Year x Sem. FE	No	No	Yes	Yes
Supplier x Recip x Year FE	No	No	Yes	Yes
N Supp x Year (clusters)	1,815	2,267	-	-
N Recip x Year x Sem. (clusters)	-	-	3,474	4,340

Table S.A21: Domestic Political Cycle - Incumbent

	(1)	(2)		
Dep. var.:	$MeanAmount_{s,r,k,t}$			
	No Incumbent	Incumbent		
Semester k-2 $_{s,k,t}$	$0.345 \\ (0.216)$	$0.119 \\ (0.102)$		
Semester k-1 $_{s,k,t}$	$0.313 \\ (0.237)$	$0.255 \\ (0.136)^*$		
Election Semester $_{s,k,t}$	-0.160 (0.238)	$0.218 \\ (0.169)$		
Semester k+1 $_{s,k,t}$	-0.389 $(0.212)^*$	$\begin{array}{c} 0.200 \\ (0.150) \end{array}$		
Semester k-2 $_{s,k,t}$	$0.150 \\ (0.151)$	$0.015 \\ (0.102)$		
N	19,610	32,012		
$R^2$	0.90	0.89		
Supplier Fixed Effect	Yes	Yes		
Recip Fixed Effect	Yes	Yes		
Recip x Supp Fixed Effect	Yes	Yes		
Year x Sem Fixed Effect	Yes	Yes		
Recip x Year x Sem Fixed Effect	Yes	Yes		
Supp x Year Fixed Effect	Yes	Yes		
Supp x Recip x Year Fixed Effect	Yes	Yes		
N Supp x Year x Sem (clusters)	$3,\!344$	$4,\!340$		

Table S.A22: International Political Cycle - Incumbent

# Political regime

	(1)	(2)	(3)	(4)	
Dep. var.:	MeanA	$Amount_{r,k,t}$	MeanA	$mount_{s,r,k,t}$	
	Supp. $=$ Recip.		Supp. $\neq$ Recip.		
	Democracy	No democracy	Democracy	No democracy	
Semester k-2 $_{\boldsymbol{r},\boldsymbol{k},\boldsymbol{t}}$	$0.178 \\ (0.204)$	$0.458 \\ (0.238)^*$	$0.062 \\ (0.156)$	-0.038 (0.194)	
Semester k-1 $_{r,k,t}$	0.781 (0.313)**	$0.476 \\ (0.252)^*$	-0.155 (0.215)	$0.436 \\ (0.231)^*$	
Election Semester $_{r,k,t}$	0.640 $(0.322)^{**}$	$0.326 \\ (0.278)$	-0.235 (0.238)	$0.526 \\ (0.246)^{**}$	
Semester k+1 $_{\boldsymbol{r},\boldsymbol{k},\boldsymbol{t}}$	0.051 (0.244)	$0.529 \\ (0.308)^*$	-0.208 (0.221)	$0.460 \\ (0.239)^*$	
Semester k+2 $_{r,k,t}$	$-0.408$ $(0.188)^{**}$	$0.569 \\ (0.296)^*$	-0.133 (0.147)	0.593 $(0.146)^{***}$	
N	3,160	2,400	19,542	16,786	
$R^2$	0.84	0.87	0.89	0.87	
Supplier FE	Yes	Yes	Yes	Yes	
Recip FE	No	No	Yes	Yes	
Recip x Supp FE	No	No	Yes	Yes	
Year x Sem FE	Yes	Yes	Yes	Yes	
Supplier x Year FE	Yes	Yes	Yes	Yes	
Supplier x Year x Sem. FE	No	No	Yes	Yes	
Supplier x Recip x Year FE	No	No	Yes	Yes	
N Supp x Year (clusters)	1,580	1,200	-	-	
N Recip x Year x Sem. (clusters)	-	-	2,988	2,272	

Table S.A23: Domestic Political Cycle - by political regime

	(1)	(2)	
Dep. var.:	$MeanAmount_{s,r,k,t}$		
	Democracy	No democracy	
Semester k-2 $_{s,k,t}$	0.2188	-1.6545	
	$(0.087)^{11}$	$(0.520)^{++}$	
Semester k-1 $_{s,k,t}$	$0.3538 \ (0.115)^{***}$	-2.1448 $(0.613)^{***}$	
Election Semester $_{s,k,t}$	0.0818	0.2675	
	(0.131)	(0.763)	
Semester k+1 $_{s,k,t}$	0.1545	0.4206	
	(0.129)	(0.770)	
Semester k+2 $_{s,k,t}$	0.0818	0.2850	
	(0.113)	(0.453)	
N	35,324	3,956	
$R^2$	0.88	0.92	
Supplier Fixed Effect	Yes	Yes	
Recip Fixed Effect	Yes	Yes	
Recip x Supp Fixed Effect	Yes	Yes	
Year x Sem Fixed Effect	Yes	Yes	
Recip x Year x Sem Fixed Effect	Yes	Yes	
Supp x Year Fixed Effect	Yes	Yes	
Supp x Recip x Year Fixed Effect	Yes	Yes	
N Supp x Year x Sem (clusters)	$3,\!852$	$1,\!472$	

Table S.A24: International Political Cycle - by political regime

Standard errors in parentheses, clustered at the supplier, year, semester level. \* p<0.10, \*\* p<0.05, \*\*\* p<0.010

# Competitive election

	(1)	(2)	(3)	(4)
Dep. var.:	$\frac{MeanAmount_{r,k,t}}{\text{Supp.} = \text{Recip.}}$		$\frac{MeanAmount_{s,r,k,t}}{\text{Supp.} \neq \text{Recip.}}$	
	Not competitive	Competitive	Not competitive	Competitive
Semester k-2 $_{\boldsymbol{r},\boldsymbol{k},\boldsymbol{t}}$	$0.4761 \\ (0.255)^*$	0.2473 (0.248)	0.0907 (0.171)	$-0.3734$ $(0.184)^{**}$
Semester k-1 $_{r,k,t}$	$0.6500 \\ (0.295)^{**}$	$0.5220 \\ (0.288)^*$	$0.3737 \ (0.205)^*$	-0.4167 $(0.244)^*$
Election Semester $_{r,k,t}$	$0.4994 \\ (0.310)$	$0.5595 \\ (0.294)^*$	$0.6225 \ (0.262)^{**}$	-0.3167 (0.278)
Semester k+1 $_{r,k,t}$	$0.4825 \\ (0.322)$	$0.5786 \\ (0.323)^*$	0.2088 (0.243)	$0.8235 \\ (0.285)^{***}$
Semester k+2 $_{r,k,t}$	$0.4959 \\ (0.306)$	$\begin{array}{c} 0.3181 \ (0.317) \end{array}$	0.6476 $(0.213)^{***}$	$0.8258 \\ (0.271)^{***}$
N	4,412	4,538	29,252	28,090
$R^2$	0.85	0.84	0.87	0.87
Supplier FE	Yes	Yes	Yes	Yes
Recip FE	No	No	Yes	Yes
Recip x Supp FE	No	No	Yes	Yes
Year x Sem FE	Yes	Yes	Yes	Yes
Supplier x Year FE	Yes	Yes	Yes	Yes
Supplier x Year x Sem. FE	No	No	Yes	Yes
Supplier x Recip x Year FE	No	No	Yes	Yes
N Supp x Year (clusters)	2,206	2,269	-	-
N Recip x Year x Sem. (clusters)	-	-	4,224	4,318

 Table S.A25: Domestic Political Cycle - Competitive election

	(1)	(2)
Dep. var.:	MeanAmor	$unt_{s,r,k,t}$
	Not competitive	Competitive
Semester k-2 $_{s,k,t}$	-0.042	0.211
	(0.181)	$(0.099)^{**}$
Semester k-1 $_{s,k,t}$	0.175	0.346
- 1 - 1 -	(0.211)	$(0.154)^{**}$
Election Semester $s.k.t$	0.208	0.023
- ,,-	(0.286)	(0.163)
Semester k+1 $_{s,k,t}$	0.268	-0.094
	(0.263)	(0.153)
Semester k+2 $_{s,k,t}$	0.220	-0.138
- <i>p</i> - <i>p</i> -	(0.153)	(0.086)
N	21,412	34,634
$R^2$	0.89	0.89
Supplier Fixed Effect	Yes	Yes
Recip Fixed Effect	Yes	Yes
Recip x Supp Fixed Effect	Yes	Yes
Year x Sem Fixed Effect	Yes	Yes
Recip x Year x Sem Fixed Effect	Yes	Yes
Supp x Year Fixed Effect	Yes	Yes
Supp x Recip x Year Fixed Effect	Yes	Yes
N Supp x Year x Sem (clusters)	3,854	4,582
Standard errors in parentheses clustered	at the supplier year	semester level

Table S.A26: International Political Cycle - Competitive election

Standard errors in parentheses, clustered at the supplier, year, semester level. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.010

# Former colonial history

Table S.A27:	Domestic Political Cycle -	Foreign firms,	interaction	with former o	colonial history
				(1)	_

	(1)
Dep. var.:	$MeanAmount_{s,r,k,t}$
Former Colony $_{s,r}$ x Semester k-2 $_{r,k,t}$	$0.2271 \\ (0.327)$
Former Colony $_{s,r}$ x Semester k-1 $_{r,k,t}$	$\begin{array}{c} 0.3260 \\ (0.380) \end{array}$
Former Colony $_{s,r}$ x Election Semester $_{r,k,t}$	$0.8572 \\ (0.454)^*$
Former Colony $_{s,r}$ x Semester k+1 $_{r,k,t}$	$0.3118 \\ (0.423)$
Former Colony $_{s,r}$ x Semester k+2 $_{r,k,t}$	-0.3194 (0.336)
Semester k-2 $_{r,k,t}$	-0.106 (0.146)
Semester k-1 $_{r,k,t}$	$0.071 \\ (0.176)$
Election Semester $_{r,k,t}$	$0.230 \\ (0.219)$
Semester k+1 $_{r,k,t}$	$0.409 \\ (0.193)^{**}$
Semester k+2 $_{r,k,t}$	$0.496 \\ (0.159)^{***}$
Ν	39,982
$R^2$	0.86
Supplier FE	Yes
Recipient FE	Yes
Recipient x Supp FE	Yes
Year x Sem FE	Yes
Supplier x Year FE	Yes
Supp x Year x Sem FE	Yes
Supp x Recip x Year FE	Yes
N Recip x Year x Sem (clusters)	$5,\!654$

Standard errors in parentheses

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.010

# Miscellanous

	(1)	(2)
	Supp. $=$ Recip.	Supp. $\neq$ Recip.
Dep. var.:	$AverageIEG_{r,k,t}$	$AverageIEG_{s,r,k,t}$
Semester k-2 $_{r,k,t}$	-0.006	0.022
	(0.026)	(0.029)
Semester k-1 $_{r,k,t}$	-0.023	0.018
	(0.033)	(0.037)
Election Semester $_{r,k,t}$	0.034	0.010
	(0.036)	(0.040)
Semester k+1 $_{r,k,t}$	0.050	-0.040
· ) · ) ·	(0.034)	(0.037)
Semester k+2 $_{r,k,t}$	0.024	-0.022
	(0.027)	(0.029)
N	5,476	34,574
$\mathbb{R}^2$	0.08	0.13
Year $\times$ Sem FE	Yes	No
$\text{Recip} \times \text{Year FE}$	Yes	No
$Supp \times Year \times Sem FE$	No	Yes
$\mathrm{Supp}\times\mathrm{Recip}\times\mathrm{Year}\mathrm{FE}$	No	Yes
N Recip $\times$ Year (clusters)	2,738	
N Recip $\times$ Year $\times$ Sem (clusters)		5,086

Table S.A28: Domestic political cycles: average performance of projects

Dep. var.:	$AverageIEG_{s,r,k,t}$
Semester k-2 $_{s,k,t}$	0.002
	(0.024)
Semester k-1 $_{s,k,t}$	-0.021
	(0.031)
Election Semester $_{s,k,t}$	-0.041
	(0.032)
Semester k+1 $_{s,k,t}$	-0.042
	(0.030)
Semester k+2 $_{s,k,t}$	-0.039
	(0.023)
N	36,342
$\mathbb{R}^2$	0.14
$\text{Recip} \times \text{Year} \times \text{Sem FE}$	Yes
$\mathrm{Supp} \times \mathrm{Recip} \times \mathrm{Year} \ \mathrm{FE}$	Yes
N Supp $\times$ Year $\times$ Sem (clusters)	5,302

Table S.A29: International political cycles: average performance of projects