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

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## Abstract

This paper examines the existence of political cycles in the awarding of World Bank procurement contracts around elections. We consider elections in the home country of the firms that win the contracts, whether that country is the recipient of the aid project or another supplier country. Our findings indicate that domestic firms are more likely to secure larger contracts around elections in the recipient country, particularly when corporate donations to candidates are allowed. Additionally, the results show an increase in the size of contracts awarded to foreign firms ahead of elections in their home countries, suggesting a cross-border political cycle. This political cycle appears to be driven by cases where strong aid partnerships and historical colonial ties exist between the supplier and recipient countries.

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# 1 Introduction

Global estimates suggest that public procurement currently accounts for 10 to 15% of the world's GDP, with substantial variations across countries, contingent upon their levels of development (Bosio et al., 2022). Yet, whether in the context of developed or developing countries, numerous studies have already brought to light challenges pertaining to the allocation and utilization of public procurement. Discernible trends in corruption have been documented across diverse locations and time periods (Hellman et al., 2000; Søreide, 2002; Ferwerda et al., 2017; Decarolis et al., 2020), arising from collusion (Coviello and Gagliarducci, 2017), nepotism (Titl et al., 2021; Kawai and Nakabayashi, 2022), manipulation (Palguta and Pertold, 2017), and ultimately contributing to inefficiency (Dal Bó and Rossi, 2007; Wolfram et al., 2023). This substantial body of evidence suggests that, in the absence of robust regulatory and monitoring mechanisms, public procurement becomes all the more coveted as it enables involved entities to pursue individual agendas, which, on the governmental side, often manifest as political (Kapur and Vaishnav, 2013; Mironov and Zhuravskaya, 2016; Titl and Geys, 2019; Baltrunaite, 2020).

Multilateral aid organizations also heavily rely on public procurement to allocate foreign aid. Drawing on the specific example of the World Bank, we inquire whether its allocation of procurement contracts is influenced by political cycles, similar to those observed in national public procurement. Around 10 billion US dollars are spent each year by the World Bank to contract firms to implement aid projects in developing countries.[1] 60% of this amount is won by firms originating from the receiving country where the aid project is implemented, while the remaining 40% is allocated to firms from other countries, 62% of which are from developed economies. While donors have committed to improve their aid allocation practices since the Paris Declaration in 2005, tilting the awarding process of World Bank procurement contracts may come as a strategy to get an economic and political return on foreign aid. Distortions may be particularly prevalent in times of elections in the country of origin of the winning firms, be it the recipient country in which the aid project is implemented or any other supplier country.

Consequently, we investigate whether firms win larger World Bank procurement contracts around elections in their home country. We consider two configurations: a domestic political cycle where local firms win larger contracts around elections in the country where the contract is performed (the recipient country), and a cross-border political cycle where foreign firms win larger World Bank contracts around elections in their country of origin (the supplier country), with the procurement still being implemented in the recipient country.

The World Bank context is notable for several reasons. First, the institution has significantly increased its reliance on public procurement delegation to aid recipients,

[1] The World Bank's Contract Awards Database: https://www.worldbank.org/en/projects-operations/products-and-services/brief/summary-and-detailed-borrower-procurement-reports

which became standard practice in the mid-2000s.[2] Second, the World Bank has recurrently emphasized its integrity in financing activities, bolstering transparency policies in the fight against corruption. In 2007, it adopted a new anti-corruption strategy, endorsing the widespread use of indicators to assess fraud and corruption levels for each financed project. Despite the seemingly lower vulnerability to misappropriation in World Bank-funded procurement, empirical studies suggest that aid flows from the institution have not been entirely immune to fraudulent uses. For instance, Andersen et al. (2022) demonstrate a significant correlation between World Bank's disbursements and bank deposits from recipients countries to tax havens while Dreher et al. (2019), among others, highlight how allocation is distorted by the interests of donor countries sitting at the board of the World Bank.

Political cycles in the awarding of contracts would reveal potential manipulation of World Bank financing, despite *a priori* sound supervision, and may call into question the effectiveness of the Bank's interventions. Indeed, there is no guarantee that the contracting firm chosen for electoral purposes is the most efficient to perform the project financed by those contracts. Lehne et al. (2018) assess the costs of election-related procurement and find that politically connected firms are more likely to receive public road contracts that ultimately go unbuilt. Taking a more aggregated approach, Dreher et al. (2018) show that aid effectiveness tends to be reduced when aid is allocated for political purposes, particularly when aid is committed in years when the recipient country had a representative on the United Nations Security Council. Furthermore, a political cycle can also compromise the fairness of elections due to increased financial resources, which can enhance the likelihood of winning an election (Epstein and Franck, 2007; Rekkas, 2007). Indeed, the ability of an incumbent government to utilize procurement to raise its campaign funds or enhance its public image through favoring local industry and supporting domestic employment provides it with an unfair advantage over other candidates.

Using 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 political cycles. To this end, we use multi-dimensional panel models (with recipient countries, supplier countries, and semesters-years dimensions), in line with 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 International Finance Corporation (IFC)[3] lending.

Results from Poisson pseudo-maximum likelihood estimators models provide evidence of both domestic and cross-border political cycles. We find that local firms win, on average, significantly larger World Bank contracts around election semesters in their home country with procurement contracts being 96% larger one semester before, and

[2] Procurement delegation refers to the practice of delegating the selection of contractors to the government of the recipient country.

[3] IFC is the World Bank's arm responsible for financing the private sector of developing countries.

82% larger during an election semester. Foreign firms also win on average 43% larger contracts one semester before an election in their home country, suggesting a cross-border political cycle. To address endogeneity concerns, we include a large set fixed effects, and test the robustness of the results by excluding elections where dates may have been adjusted to align with World Bank procurement contract awards.

We then explore the rationales that may explain the domestic and cross-border political cycles. This investigation highlights the importance of political environment and election characteristics. Indeed, both political cycles are predominantly observed in recipient and supplier countries that allow corporate donations to electoral candidates. Furthermore, these political cycles seem to be more pronounced when election outcomes are uncertain, such as in competitive elections, or when polls are unfavorable to the incumbent, which also represent contexts where additional campaign funding or actions that influence voters' perceptions of the candidates could have significant impacts on the ballot box results. In addition to these political features, we also acknowledge the influence of economic factors on these political cycles, particularly their exacerbation in the presence of rising unemployment in countries approaching upcoming elections. The reason might be that competing candidates may influence the allocation of large World Bank procurement in favor of companies from their own homeland as a mean to demonstrate their capacity to tackle unemployment and provide tangible evidence to voters of their commitment to reducing joblessness.

Lastly, we examine situations in which political cycles are more likely to emerge. We explore the role of incumbency and find that political cycles are stronger when an incumbent is running. Regarding the cross-border political cycle, *i.e.* when elections are held in the foreign firm's country of origin, results also suggest that such a political cycle is more likely to be observed when the firm's country of origin: (1) shares historical ties with recipient countries, (2) is a significant aid partner of recipient countries, and (3) can easily meet with recipient countries in international organizations. In addition, we find that foreign firms from supplier countries displaying a significant reduction in tied aid – aid that is contractually bounded to be spent on specific markets, usually the donors' and their trade partners – are more likely to win larger contracts around election semesters. This suggests that distortions in the allocation of procurement may serve as an alternative to tied aid as it existed before the commitment by donors to fight against this practice as part of the Paris Declaration. Hence, these distortions could provide developed countries with a means to get some returns on the contributions they make to the World Bank, even more when they approach national elections. Overall, these results indicate that, despite oversight, World Bank-funded projects can be exploited for electoral purposes. Some conditions for such distortions are identified, providing policy recommendations for improved monitoring and control.

These findings offer new insights into the literature, which has highlighted various sources of distortions in the *allocation of World Bank aid projects*. For example, Kaja and Werker (2010) find that a country receives more World Bank projects in a year

where it has a representative on the World Bank Board of Directors. Dreher et al. (2019) find similar results in the case of the IFC. 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 their votes in the UN General Assembly are aligned with those of the US. However, less is known on the *allocation of procurement contracts* financed by the World Bank. McLean (2017) and Zhang and Gutman (2015) find a preference for local firms in World Bank procurement allocation. McLean (2017) also shows that companies originating from donor countries that provide significant amounts of bilateral aid tend to be more likely to win these World Bank contracts.

Our findings on domestic political cycles complement the work of McLean (2017) and Zhang and Gutman (2015), who identify a preference for local firms in World Bank procurement allocation. We extend the literature by showing how domestic preference becomes particularly acute around elections. Our primary contribution lies in presenting compelling evidence of a cross-border political cycle and identifying the conditions under which this cycle is most likely to emerge. While earlier studies such as Kersting and Kilby (2021) have emphasized the influence of US political dynamics on the World Bank, our work adds to the literature by uncovering how political cycles in supplier countries can influence World Bank procurement allocations in favor of foreign firms. Specifically, we highlight the role of historical ties, aid partnerships, and interactions in the Bank's board meetings as key factors that facilitate this cross-border political cycle. In doing so, we provide a new perspective on how electoral timing in donor countries can affect procurement outcomes, even when the projects are implemented abroad. This insight complements previous research, which has primarily focused on recipient countries.

The rest of the paper is organized as follows: Section 2 discusses the domestic and cross-border political cycle mechanisms driven by elections in the recipient and supplier countries, respectively. Section 3 introduces the data. Section 4 presents the empirical strategy and the main results for both the domestic and cross-border political cycles. Section 5 and 6 delve into the motivations and pressure tactics that could influence the allocation process, respectively. Section 7 concludes.

## 2 Electoral returns on World Bank procurement?

Whether firms secure larger World Bank procurement contracts around election periods in their home countries may be motivated by various factors, including campaign financing, kickback arrangements, or efforts to enhance candidates' public image. But before delving into these motivations, it is essential to provide a brief overview of the allocation process for World Bank procurement contracts. 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.[4] After selecting the supplier firm, the recipient country transfers the World Bank funds to the chosen 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 us first assume that an election is coming up in recipient country $r$ and that the incumbent government is running for re-election and seeks to maximize its likelihood of winning the upcoming election. Considering that the recipient government is responsible for choosing the supplier to execute the World Bank contract, it may utilize the allocation process strategically to favor domestic firms that are friendly to the government. The government may have two distinct motivations to do so: (1) domestic firms willing to finance the government's campaign in exchange for a procurement contract could be favored (*motivation #1*); (2) the allocation of contracts could present a timely opportunity for competing candidates, particularly the incumbent, to demonstrate their support for the national industry and their capacity to generate employment, hence help them gain voters favor and support (*motivation #2*). This causal chain of events as well as the potential motivations are summarized in Figure A1 in the appendix.

Let us 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 (*motivation #1*) and/or wants to enhance its public image towards voters (*motivation #2*). One possible way to obtain such financial support or to improve public image 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 on $r$'s government to encourage it to choose a supplier firm from $s$. These motivations and cross-border relationships are summarized in Figure A2 in the appendix.

Both types of political cycle feature key electoral motives to select or push for a certain firm to win a World Bank procurement contract, implying that the chosen company returns the favor to the government. However, as exposed in Figures A1 and A2, two aspects distinguish the domestic from the cross-border political cycle. First, the cross-border political cycle necessarily implies some form of pressure from the supplier country to the recipient country. In some contexts these pressures may be more likely to occur, for example when strong aid dependence or historical alliances exist. Second, the cross-border political cycle could involve a competing explanation: firms in supplier countries facing an upcoming election may diversify their portfolio of contracts abroad to deal with the uncertainty inherent to electoral periods. The increase in the value of contracts around elections in a supplier country could then be explained by firms insurance to risk strategy rather then by government electoral objectives. This is described

[4] 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.

as *motivation #3* in Figure A2.

A number of assumptions are required for these political cycles to occur. The aid recipient's independent choice of contractor 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, 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 coupled with discretionary allocation makes it possible that there could be distortions in procurement contract allocation. Another underlying assumption is the existence of a strong connection between governments and corporations, especially regarding funding for candidates and political parties in exchange 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 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.[5] 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 suggest that public procurement could be an object of exchange between companies and politicians in order to influence the outcome of future elections. However, whether this phenomenon occurs in the context of a supranational funder with robust oversight mechanisms remains an open question.

Focusing on the cross-border political cycle, another key assumption is that supplier countries will use their influence over aid recipients to have their national firms selected for procurement contracts abroad. Similar behavior has already been observed in other settings. 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

[5] Tunneling is the transfer of assets and profits out of firms for the benefit of those who control them.

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 pattern for World Bank aid and IMF loans as the number of projects, loans and grants received is higher in years when the recipient has a seat on the UN Security council. Taking a larger sample of donors, 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.

These literatures suggest that procurement allocation may be influenced by individual and electoral considerations, and thus 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 - Cross-border 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 Data

## 3.1 World Bank Procurement Characteristics

Our study leverages the World Bank's Contract Awards Database, which covers major contracts awarded during the period from 1993 to 2019.[6] In view of the data patchiness for 1993 and 1994, our analysis is confined to the years 1995 to 2019. This dataset provides highly detailed information, including the name of supplying firm, its country of origin (supplier country), the date of contract signature, the contract amount (in US$), the recipient country, the contract category and the allocation method. Furthermore, these data consider exclusively information on contracts reviewed and approved by the World Bank, implying that any identified political cycle is likely underestimated.

World bank procurements are predominantly allocated by the IBRD (63.4% of funded contracts), followed by the IDA (33.7%). The remaining contracts funded by various Trust Funds constitute 2.8% of the total (see Figure A3 in the appendix). These contracts mainly cover three categories of sectoral activities, namely civil works (often large infrastructures projects that can be divided in smaller contracts), which account for the largest amount over all World Bank procurement; goods and related services contracts, which represent the second largest category; and consultancy services. Figure A4 displays temporal distribution of total amounts by category of contracts.

As previously mentioned, the government of the country where the contract is to be implemented is responsible for selecting the contractor, and can do so through various al-

[6] https://www.worldbank.org/en/projects-operations/products-and-services/brief/summary-and-detailed-borrower-procurement-reports

location procedures. During the period studied, 71.5% of total amounts were allocated by International Competitive Bidding where the recipient government must advertise the procurement opportunity, allowing firms worldwide to apply if they meet the World Bank's prerequisites. This procedure is primarily used for goods and civil works contracts. National Competitive Bidding (12.5% of total amounts) is similar, but only firms from the recipient country can respond to the tender. This method is also mainly used for civil works and goods contracts. The third procurement allocation method is Quality and Cost-Based Selection (10.9% of total amounts). According to the *World Bank Procurement Regulations for Investment Project Financing Borrowers* (2016), 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 method is used exclusively for consultancy contracts. The fourth method is the Single Source Selection (4.7%), where the choice of supplier is at the recipient government's discretion. This procedure lacks transparency, and the World Bank's *Guidelines: Selection and Employment of Consultants* (2014) recommends its use only in exceptional circumstances. Despite this, it was was used for 22% of World Bank contracts between 1995 and 2019, but on small amounts, primarily for consultancy missions. Other procurement methods (0.3%) are marginal and do not fall into these four main categories. Figure A5 displays temporal distribution of total amounts by allocation methods. Both Figures A4 and A5 show that the ICB allocation method and civil work type of contracts make most of the procurement funds.

Examining the number of contracts, with a focus on local versus foreign firms (*i.e.* firms respectively from recipient ($r$) and supplier ($s$) countries), approximately three-quarters of procurement contracts are secured by firms based in the recipient country (cf. Table 1) as shown in McLean (2017). This share decreases slightly for goods procurement and when tenders are opened to international competition (ICB), due to the broader pool of potential foreign suppliers. Conversely, most of civil work procurement contracts are won and implemented by local firms (from the receiving country). Local firms secured 93% of the civil works contract, representing 65% of the total allocated amount, indicating that foreign firms tend to win larger contracts in civil works. For the 5% most expensive civil works contracts, the share of local firms drops to 67%, and further to 52% for the top 1% most expensive contracts.

## 3.2 Average Amount Per Contract

Our econometric analysis uses as dependent variable the average amount in US$ won by firms from country $s$ in year $t$ and semester $k$[7] for World Bank contracts performed in recipient country $r$. At first sight, one might argue that what truly matters in the distortion of the allocation process is the total amount of money that election runners can divert to serve their own agendas. Yet, an increase in the total amount can be achieved through either an increase in number of contracts won or an increase in the

[7] Corresponding to the signature date of the contract.

Table 1: Racing for procurement: Local vs. Foreign firms

| | Type of contract | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | All | | Consultancy | | Goods | | Civil Works | |
| | Obs. | % | Obs. | % | Obs. | % | Obs. | % |
| Local | 252,752 | 73.61 | 106,649 | 71.42 | 67,881 | 68.27 | 73,107 | 92.29 |
| Foreign | 90,592 | 26.39 | 43,880 | 28.58 | 31,546 | 31.73 | 6,105 | 7.71 |
| **Total** | 343,344 | 100 | 150,529 | 100 | 99,427 | 100 | 79,212 | 100 |
| | Allocation method | | | | | | | |
| | QCBS | | ICB | | SSS | | NCB | |
| | Obs. | % | Obs. | % | Obs. | % | Obs. | % |
| Local | 62,309 | 71.42 | 59,774 | 68.27 | 58,886 | 78.97 | 71,226 | 100 |
| Foreign | 31,053 | 28.58 | 32,288 | 31.73 | 15,147 | 21.03 | 0 | 0 |
| **Total** | 93,362 | 100 | 92,062 | 100 | 72,033 | 100 | 71,226 | 100 |

*Notes*: Number of contracts. Procurement database, authors' computation. The sum of categories and methods does not exactly match the total since some contracts could not be classified in these categories.

average amount per contract (or a bit of both). In the context of the cross-border political cycle, we argue that intervening in the allocation process of more lucrative contracts would incur lower transaction costs compared to attempting to secure a higher number of contracts for their national firms abroad, regardless of their value. In the domestic political cycle, determining the optimal strategy to adopt is less straightforward. There are benefits for election runners, particularly the incumbent, associated with local firms winning numerous contracts regardless of their magnitude as securing World Bank procurement for the domestic economy could enhance its public image. However, this would still entail negotiating on multiple contracts to ensure selection of local firms, ultimately resulting in higher transaction costs. For these reasons, we proceed with the analysis using the average amount[8] as the dependent variable and present robustness checks with the total amount as the dependent variable.

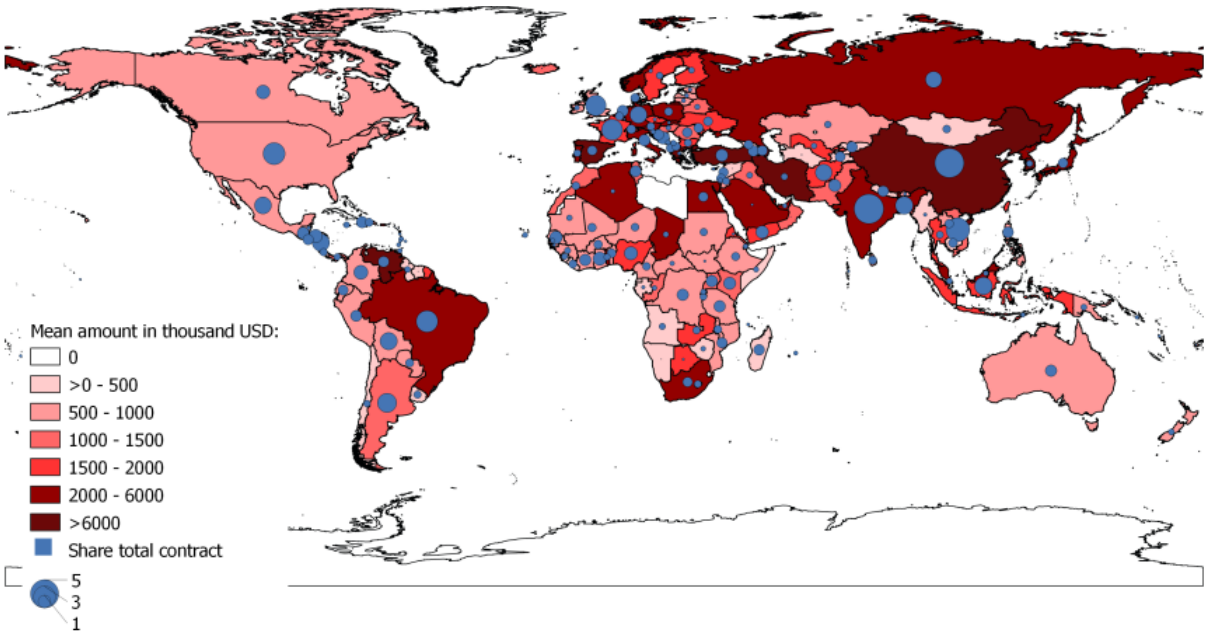
Overall, we have 179,187 World Bank contracts won by 132,762 firms from 197 supplier countries for projects in 153 recipient countries between 1995 and 2019. The sample of recipients consists of developing countries that benefited from at least one World Bank procurement contract during the study period. The sample of supplier countries includes developed and developing economies whose firms won at least one World Bank procurement contract. This results in two panel databases: a two-dimensional panel (recipient-time level) with 7,888 observations, and a three-dimensional panel (at the recipient-supplier-time level *i.e.* when recipient and supplier countries differ) with 1,543,760 observations.

Figure 1 shows that a significant portion of contracts (blue circles) is awarded to firms

[8] 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 $k$.

from China (the largest provider of winning firms),[9] India, other emerging countries such as Brazil, Argentina, Vietnam, and traditional donors (USA, UK, France, Germany). The spatial distribution of the average contract amount (red gradient) reveals that the largest contracts are won by firms from China, Turkey, Iran, Venezuela, and several European countries (including Spain, Greece, and Switzerland). China's dominance in procurement statistics raises concerns about the influence of outlier countries on our results. However, we show that our findings remain robust to sample dependence tests.

Figure 1: Spatial distribution of World Bank contracts won by companies




*Notes* Mean amount in thousand USD won on World Bank contracts by firms from the reported country. Share total contract categories: $\geq 5\%$ of total number of contracts financed by the World Bank, $\geq 3\%$, $\geq 1\%$.

## 3.3 National Elections

Election data come from the National Elections across Democracy and Autocracy (Nelda) dataset (Hyde and Marinov, 2012). This dataset covers elections from 1945 to 2020, providing detailed information such as precise election dates, 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 parliamentary or presidential, respectively.[10] We utilize the election date to first create an election semester variable (a dummy variable equal to one if there

[9] Of which firms have won 19% of all the World Bank funding for procurement over 1995-2019, but increasingly so, ending up with 27% at the end of the period.

[10] Indirect elections 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).

is an election in year $t$, semester $k$ in a given country $r$ or $s$). We chose the semester rather than the annual dimension because it allows us to control for country-year fixed effects, thereby addressing potential confounding factors at such level.[11] Given that the average term of office in our sample is 4.4 years (with 78% of countries having either a four or five year term of office),[12] we define four additional election variables ranging from two semesters before the election to two semesters after the election. This decision prevents the potential overlap between mandates and ensures adequate within-country temporal variation (*i.e.* semesters around and outside elections). Figures A7 and A8 in the Appendix illustrate the timeline for four- and five-year mandates.

Table 2 presents descriptive statistics for several procurement variables, including the dependent variable (in bold) for the entire sample, distinguishing between election and non-election periods. The average contract amount is $52,235 around election semesters[13] and $36,696 outside this period. Overall, the average procurement contract amount is approximately $45,000, with some countries receiving no contracts and others over $800,000,000.[14] The number of contracts remains relatively stable during both periods, while the total amount won by firms is higher during elections. While all measures relating to public procurement are more significant during election semester compared to outside election periods, the discrepancy is most notable in the case of the average contract amounts.

Table 2: Procurement variables - Around vs. Outside elections

| | Elec. Semesters (k-2 to k+2) | | Outside Elec. (realm) | | Difference |
|---|---|---|---|---|---|
| | Observations | Mean | Observations | Mean | p-value |
| **Average Amount** | **5,425** | **52,235** | **4,751** | **36,696** | **0.001** |
| Number Contracts | 5,425 | 18.6 | 4,751 | 16.8 | 0.006 |
| Total Amount | 5,425 | 28,796,086 | 4,751 | 23,189,106 | 0.008 |

*Notes*: Two-dimensional panel dataset (supplier, year, and semester), authors' computation.

# 4 Empirical strategy and main results

## 4.1 Domestic political cycle

We first investigate whether larger procurement contracts are awarded to local firms around election semesters in recipient countries (H1). As explained above, 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

[11] Adopting lower-dimension timing would result in a larger number of observations, potentially inflating results significance.

[12] See Figure A6 in the Appendix.

[13] In both recipient and supplier countries.

[14] The largest average amount corresponds to Spanish and Brazilian firms winning civil works contracts to build the Quito Metro subway in Ecuador in 2015.

on this precise time decomposition to include country-year and sector-year fixed effects which minimizes the omitted variable bias. In order to 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, which relies solely on the recipient-time dimension of our database:

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

where $Procurement_{r,k,t}$ denotes the average amount of World Bank procurement contracts won by firms from recipient country $r$ (local firms) in semester $k$ of year $t$ (in which the contract was signed). Variables of interest consist in the 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 semester. 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 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 Equation (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 with World Bank procurement funding. We discuss in the robustness checks section this potential limitation and show in the supplementary appendix that removing elections for which dates might have been shifted does not affect our main findings. But estimates could still be exposed to omitted variable biases affecting the trend in the average value of procurement won around elections. To handle this potential bias, the specification includes a set of fixed-effects that controls for: 1) time-varying factors at recipient-year level ($\omega_{r,t}$); 2) global events common to all countries that could affect the timing of World Bank procurement funding ($\mu_{k,t}$). As a consequence, $\beta_k$ captures the average difference in mean amount of procurement contracts won in a given semester $k$ around election in year $t$ of country $r$ with respect to their value when they are won out of election periods, either in the same country or in other countries.

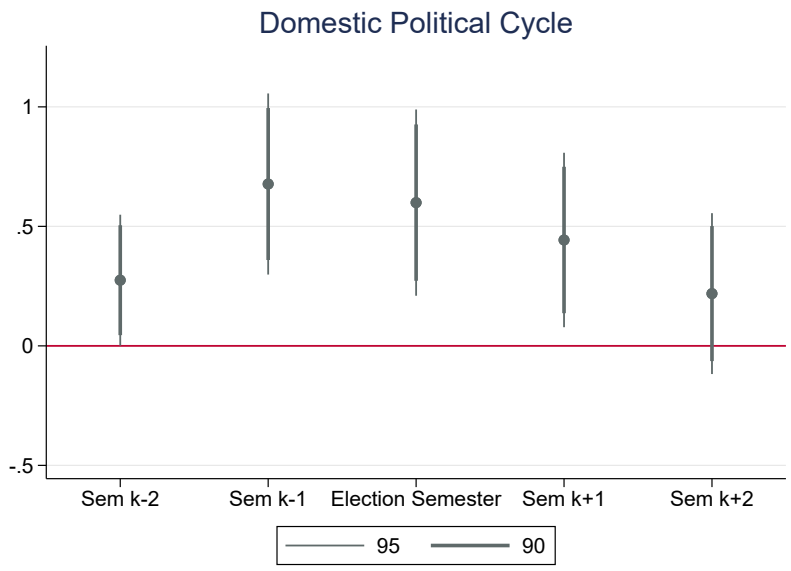
Given the large set of fixed-effects, we employ the `ppmlhdfe` command developed by Correia et al. (2020) which builds on a procedure for multiple dimensions demeaning.[15] Lastly, we cluster the standard errors at the recipient × year level to control for potential

[15] This leads to absorb higher dimensional fixed effects such as recipients' invariant characteristics or common year-varying factors which are then included in, and thus controlled for through the inclusion of $\omega_{r,t}$ and $\mu_{k,t}$, respectively.

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.). Figure 2 reports the effect of elections in the recipient country on the average amount of procurement when winning companies are from the recipient country. Regressions corresponding to these figures are reported in Table S.A2 in the supplementary appendix.

Results suggest the existence of a domestic political cycle in the World Bank procurement allocation process. On average, recipient countries see their local firms winning 78.2% larger contracts around their elections. In other words, contracts won by local firms are found to increase by more than half around elections in the recipient country. In addition, results suggest that recipient countries appear to favor (on average) their local firms half a year before an election, as well as during the election period and the following semester. Note that this political cycle does not appear to be driven by larger allocations of World Bank procurement funding in years preceding elections, as shown by Figure A9 in the Appendix.

Figure 2: Effect of elections in recipient countries




*Notes*: Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 5,902. $R^2$: 0.84. Robust standard errors clustered at the recipient x year level (2,951).

## 4.2 Cross-border political cycle

We then explore the second type of political cycle that might be at play in the allocation of these procurement contracts, referred to as the cross-border political cycle (H2). We thus examine whether firms from supplier country $s$ are awarded with larger World Bank procurement contracts in recipient country $r$ around election semesters in their country of origin $s$. Testing hypothesis H2 necessitates the formulation of another model.

The structure of our data 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 their country of origin (*i.e.* the supplier country). A three-dimensional panel also allows us to explore the mechanisms behind this cross-border political cycle by using the heterogeneity of the recipient-supplier dyads. In view of this dyadic structure and (as with H1) a significant number of zeroes in the dependent variable, Equation (2) is also estimated by PPML estimators proven to perform better in the estimation of models with more than two dimensions (Tenreyro and Silva, 2006; Sun and Reed, 2010; Gómez-Herrera, 2013; Larch et al., 2019). This takes the following form, relatively similar to Equation (1), but with some changes to the set of fixed effects:

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

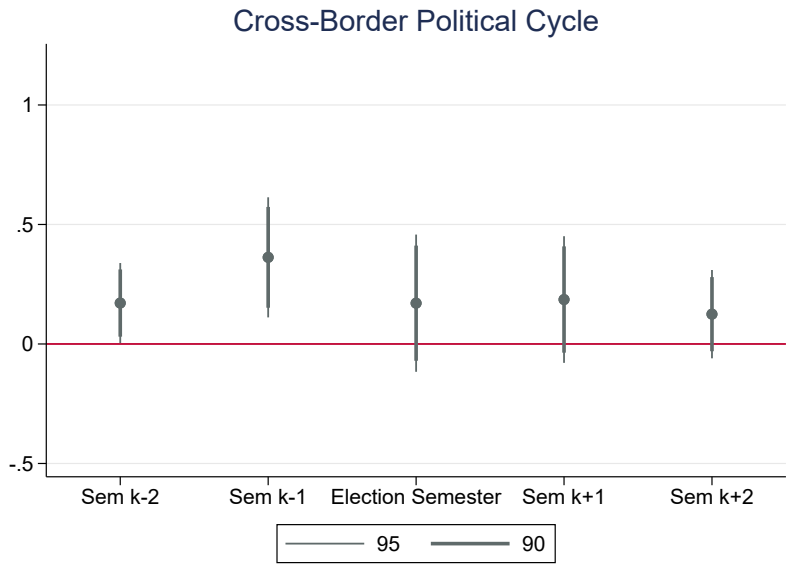
The main difference compared with the former specification is the set of electoral dummy variables, $Election_{s,k,t}$ which is now based on the electoral calendar of the country of origin of the winning firms (the foreign firms from the supplier country). Another difference relates to the set of fixed effects. Since the focus is on the supplier country's political cycle, $\omega_{r,t}$ from Equation 1 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. Furthermore, we extend this specification by incorporating a time-varying dyad fixed effect at the annual level, denoted as $\rho_{s,r,t}$. This additional component captures annual phenomena common to supplier countries, and accounts for the contribution of both time-varying and structural characteristics of each dyad. As for domestic political cycles, $\beta_k$ capture the difference in contract mean amount in and out election periods, either in the same country $s$ and in other supplier countries. As with the previous specifications, we challenge in the robustness section this specification with inconsistent election dates, providing suggestive evidence that the reverse causality issue is not so much of a concern. Omitted variables may still threaten the identification of a causal effect of election periods on the average amount of procurement contracts won by foreign companies. However, even if it cannot be completely ruled out, the fine-grained set of fixed effects helps minimize such a concern.

Figure 3 reports the estimated coefficients for the five dummy variables capturing semesters around the election in supplier countries.The corresponding regression is available in the supplementary appendix (see Table S.A2). Foreign firms tend to be awarded on average more lucrative World Bank contracts in recipient countries as their home country draws closer to the election semester. On average, foreign firms win 43.7% larger contracts one semester before an election in their home country.

Overall, these results on domestic and cross-border political cycles provide suggestive evidence for the two hypotheses tested and complement previous findings on the

World Bank's procurement process. They add the electoral calendar dimension to the findings of McLean (2017) and Zhang and Gutman (2015), suggesting potential political motivations behind the results of Kersting and Kilby (2016).

Figure 3: Effect of elections in supplier countries




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

## 4.3 Robustness checks

In what follows, we test the robustness of these results. First, Equations 1 and 2 are re-estimated using the total amount received instead of the average amount per contract. Distortions in the allocation of procurement around elections may indeed affect the total amount of all contracts received by firms from countries where elections take place, either through an increase in the average amount per contract (our main result) or through an increase in the number of contracts won. Tables S.A3, S.A4, and S.A5 suggest little evidence of domestic and cross-border political cycles when the total amount is used as dependent variable. This tends to confirm that allocating on average larger contracts may be more cost-effective for governments than allocating more contracts around elections.

Second, we examine whether the results are robust to dropping elections which dates could have been changed to match World Bank procurement contract award dates (see Tables S.A6 and S.A7). Results are slightly less significant when these cases are dropped, but remain consistent with the baseline. We also check the robustness of the results when election cases that we added to the dataset to account for indirect elections (see Table S.A8) are dropped from the sample. Results presented in Tables S.A9 and S.A10 also align with the baseline estimations.

Third, we examine different specifications. Our results seem to be robust to alternative standard-errors clustering (see Table S.A11), as well as to the inclusion in the regression of the electoral variables simultaneously for the recipient countries and the supplier countries (see Table S.A12).

Finally, we examine the robustness of the results to sample composition. Figure S.A2 shows that results are robust to removing one country at a time, as well as to extending the time frame from one semester, either before or after the election (Figures S.A3 and S.A4).

## 4.4 Heterogeneity analysis

Following Kersting and Kilby (2016), who found faster disbursements around elections in recipient countries, especially when aligned with US votes in the UN, we first examine whether the cycles identified in the baseline model are different depending on the time from project approval to contract award. Smaller duration of the period between approval and award denotes potential acceleration of the process for electoral purposes. Results from Figures A10 are in line with Kersting and Kilby (2016) and show that expedited contracts (on average) are more prone to political cycles, with this effect diminishing as the time from the approval to award increases. This effect is mainly observed in the context of domestic political cycles, particularly during the two semesters surrounding an election.

The existing literature suggests that public procurement allocation is often distorted for political or private interests. But since the procurement contracts under study are financed by an aid donor and are subject to a tight supervision of the process, the allocation may be less exposed to the distortions evidenced in the literature. In other words, despite the evidence of a political cycle in World Bank procurement contracts, this political cycle may be mitigated by the fact that the countries are aid recipients. Such a situation would lead us to different conclusions about the contribution of foreign aid to electoral distortions, as aid 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 annual amounts of official development assistance (ODA) disbursed from all donors to recipient countries $r$ in year $t$.[16] Tables S.A14 and S.A15 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).

Next, we examine whether some types of procurement allocation method are more prone to political cycles. As explained above, developing countries granted World Bank procurement funds are responsible for selecting the company that will perform the contract in the country, which can be done in four different ways: (1) International Compet-

[16] The annual amount of ODA disbursements received (expressed as log(ODA+1)) thus overlapping two semesters.

itive Bidding (ICB), (2) Quality and Cost-Based Selection (QCBS), (3) Single-Source Selection (SSS), and (4) National Competitive Bidding (NCB).[17] We first re-examine the domestic political cycle by allocation method and run the same regressions as those presented in Figure 2, but reconstructing the average amount per contract for each allocation method separately.

Looking at the Figure A11 in the appendix reporting estimates of the domestic political cycle, results suggest that none of the four allocation methods has the advantage, leaving it unclear which process might be most prone to foster political cycle. Results are more clear-cut for cross-border political cycles. Quite intuitively, Figure A11 shows that international competitive bidding is the main allocation method by which supplier countries' companies win (on average) larger contracts abroad, as they get closer from their home country's elections. Procurement contracts secured through the two other allocation methods appear to be smaller, on average, around election periods as compared to situations outside of elections.

We then repeat the exercise, but this time differentiating between procurement by main categories. The World Bank finances three categories of procurement: for the supply of goods, for civil works and for consultancy services. Again, the dependent variable is reconstructed for each category of procurement, separately. Left graph of Figure A12 in the appendix shows that local companies win on average larger contracts for civil works around the election semester in the recipient country. The timing of the effect closely matches the one of the main regression. Moreover, one can observe that the political cycle persists for up to two semesters after the election when considering contracts not designated for consultancy purposes. While the coefficient for civil works contracts in the second semester following the election semester is non-significant, it is plausible that this positive and significant effect could be influenced by goods provision procurement, which constitutes lucrative contracts (see Figure S.A1 in the supplementary appendix). Conversely, the impact of consultancy procurement on the domestic political cycle diminishes, as this type of contract typically remains smaller on average than those focused on goods provision or civil works. These two categories of procurement are the most lucrative, and hence may be more likely to be strategically allocated to friendly companies that could potentially support campaign financing or be visible and improve public image of governments. These types of contracts are also more likely to generate a significant number of jobs due to their substantial amounts. Turning to the cross-border political cycle, right graph in Figure A12 suggests that supplier countries are also more likely to see their multinational firms win more lucrative civil works procurement contracts in the semester before the election, which may again support our hypotheses since civil works contracts are larger (in terms of amount) than consultancy and goods procurement contracts.

[17] In ICB domestic and foreign companies compete for the contract, in QCBS the recipient government selects the company based on the quality of its proposal and cost, SSS is a type of private (over-the-counter) award (with fewer quality requirements), and in (NCB) only domestic companies are entitled to compete for the procurement contract.

# 5 Why? Exploration of the rationale for political cycles in World Bank procurement

The existence of political cycles in the award of World Bank procurement contracts may imply collusion between politicians and winning supplier companies, as depicted in Figures A1 and A2. In what follows we explore the different motivations that may explain these political cycles. Yet this exercise inevitably has its limitations when it comes to revealing behavior that is probably covert and distorts competition. This section aims to provide indirect evidence on the motivations driving these political cycles by refining our findings in light of the political and economic contexts of both recipient and supplier nations.

## 5.1 Motivation #1: Political cycles for campaign financing?

As explained above, one of the mechanism 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 chosen by a government ahead of upcoming elections in return for pledging financial support to 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 A13 in the appendix). Although many developing 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.[18] Therefore, if campaign financing is 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 (on average) from those that allow private donations to election candidates.

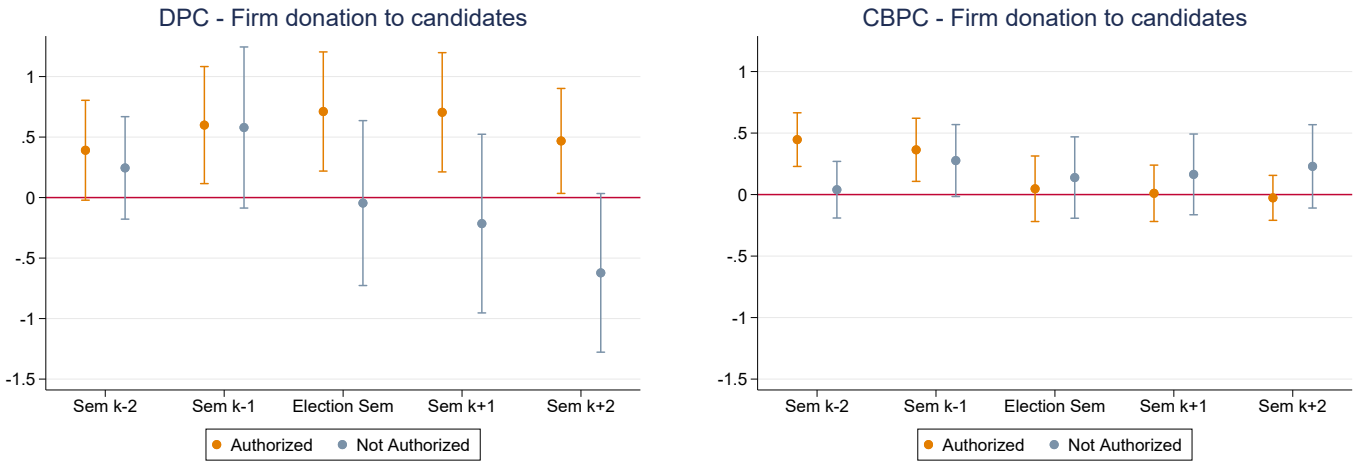
Drawing on the Political Finance Database, we define two sub-samples of countries: one where private donations to candidates are allowed, and the other one where such donations are banned. We then test our empirical model on these two sub-samples. Figure 4 below shows the coefficient estimates for the semesters around the election when Equations 1 (domestic political cycle) and 2 (cross-border political cycle) are estimated for each of these two sub-samples (donations authorized or banned).

Both political cycles (domestic and cross-border) seem to be only observed in countries where private donations to candidates are authorized, thus providing indirect evidence of cronyism in the allocation of World Bank procurement contracts around election semesters in recipient and supplier countries. In the sub-sample of countries that allow

[18] It was the situation in 2018 as reported by the Political Finance Database produced by the Institute for Democracy and Electoral Assistance.

donations to candidates, the political cycle manifests around the election period in the case of local firms and elections in recipient countries. However, for foreign firms, the political cycle occurs before elections (as observed in the baseline results) when the elections are taking place in their country of origin.

Figure 4: Political cycle where firm donation to candidates is authorized




*Notes*: Table S.A19 in the supplementary appendix shows the results of the estimates.
***Left graph***: Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 3,986 (authorized), 1,254 (banned). $R^2$: 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 recipient x year x semester, and supplier x recipient x year fixed effects. Observations: 23,960 (authorized), 12,084 (banned). $R^2$: 0.89 (authorized), 0.92 (banned). Robust standard errors clustered at the supplier x year x semester level (3,658 authorized, 1,460 banned).

## 5.2 Motivation #2: Political cycles to boost public image?

In addition to campaign financing, another factor that may account for the occurrence of these political cycles is the potential benefits that new public contracts could bestow in shaping voters' perceptions of candidates' competencies and capacities to stimulate economic activity. The awarding of significant World Bank procurement contracts to domestic companies just prior to elections could prompt candidates, particularly the incumbent, to highlight their contribution, notably through the economic policies they have implemented thus far, to bolster the international competitiveness of national firms.

As a result, we can anticipate that these political cycles are likely to manifest predominantly in elections where there is a necessity to bolster the public image. The improvement in the public image that incumbent candidates may gain from witnessing their national firms winning larger procurement contracts could potentially translate into additional job creation over the short to medium term. As a result, these political cycles may be more likely to emerge in situations of escalating unemployment, especially prior to the election. In order to test this hypothesis, we retrieve annual figures for unemployment rates for both recipient and supplier countries and extend our specification 1 and

2 with interaction terms between dummy variables denoting semesters around election and the annual unemployment rate. Results are reported in Table S.A20 in supplementary appendix. They indicate that political cycles, whether domestic or cross-border, are observed in the presence of increasing unemployment in countries where the election is being held. This phenomenon is particularly evident during the election semester in the recipient countries and two semesters before the election when it concerns elections taking place in the countries of origin of the supplying firms.

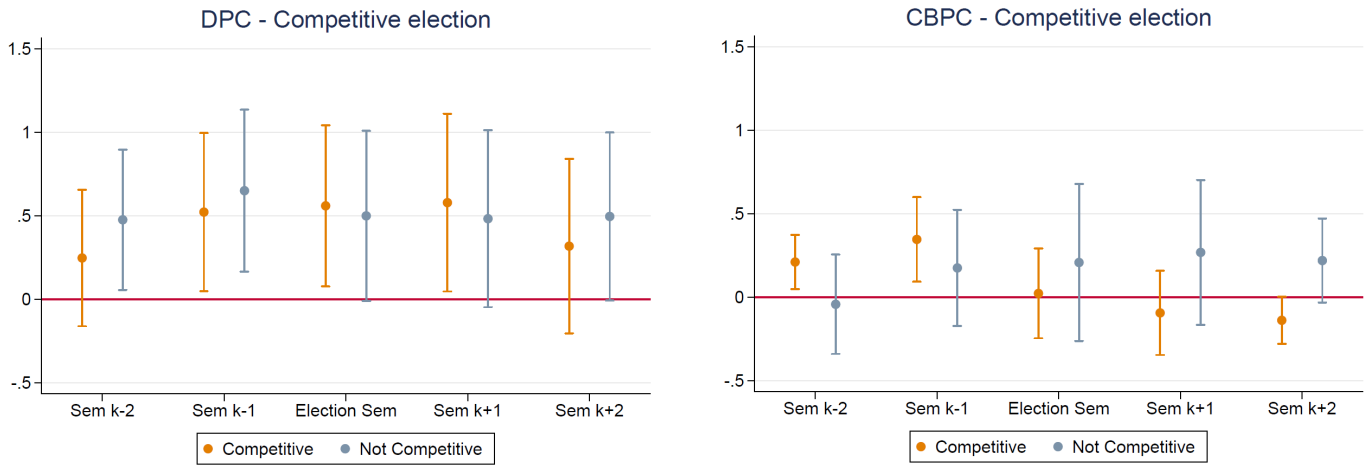
The need to improve public image may also be more central in regimes with a competitive electoral process *i.e.* in countries and political environments where there is more of a need to stand out from the other candidates. In a context such as autocracies where there is not much suspense regarding the 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 or foster domestic employment. To test this assumption, we divide our sample into different subcategories by type of political system based on the Polity 2 assessment of democracy from the Polity V dataset. Table S.A21 in the supplementary appendix reports results for both the domestic and cross-border political cycles depending on the recipient and supplier 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. Turning then to the cross-border political cycle, Table S.A21 also supports our initial intuition of a stronger political cycle in countries where candidates are exposed to the uncertainty of the upcoming election, which is most likely to be the case in democracies than autocracies.

In line with the idea of distorting the allocation of World Bank procurement where elections are more competitive, Figure 5 displays 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.[19] While the results suggest the presence a domestic political cycle in both sub-samples, the cross-border political cycle appears to be primarily driven by the sub-sample of competitive elections. This finding highlights that politicians may be more inclined to manipulate the allocation process when they face the need to restore or enhance their public image, a scenario that is more likely to occur in a competitive election environment as opposed to elections where one candidate significantly outstrips the others.

In line with the previous results, we also examine whether the political cycles are more likely when pre-election polls are not favorable to the incumbent candidate. The NELDA database provides this information, allowing us to partition our main sample into two sub-samples based on whether the elections were linked to unfavorable polls

[19] Defined as whether the ruling party was confident or not before the election.

Figure 5: Political cycles in competitive elections

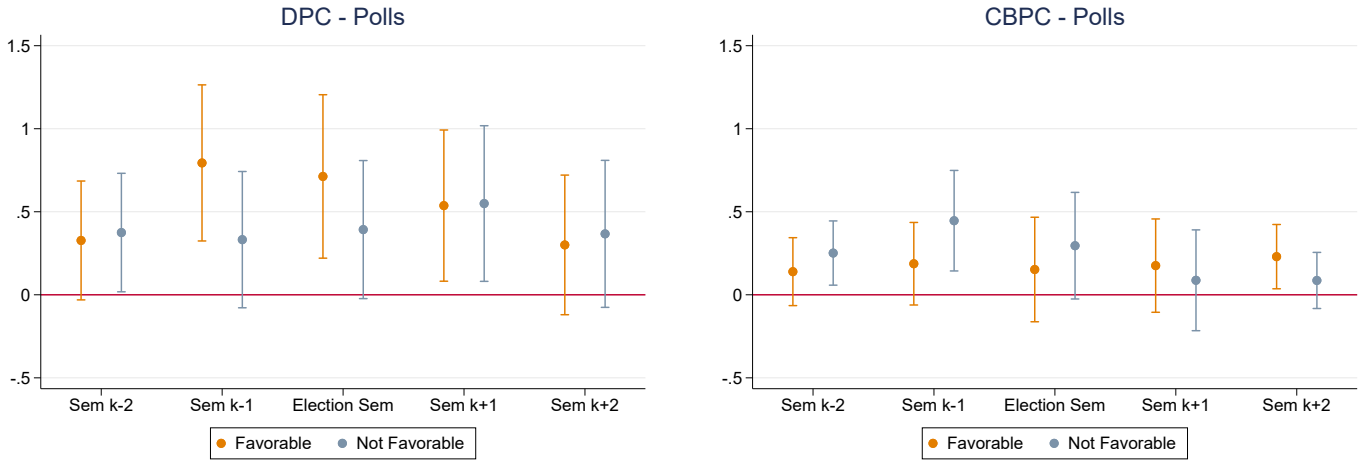



*Notes*: The corresponding Table S.A22 is in the supplementary appendix.
***Left graph***: Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 4,538 (competitive), 4,412 (not competitive). $R^2$: 0.84 (competitive), 0.85 (not competitive). Robust standard errors clustered at the recipient x year level ( 2,269 competitive, 2,206 not competitive).
***Right Graph***: Coefficients estimated with recipient x year x semester and supplier x recipient x year fixed effects. Observations: 34,634 (competitive), 21,412 (not competitive). $R^2$: 0.89 (competitive), 0.89 (not competitive). Robust standard errors clustered at the supplier x year x semester level (4,582 competitive, 3,854 not competitive).

for the incumbent prior to the election. Figures 6 below displays the results. Regarding the domestic political cycle, results are quite unexpected as it seems to occur primarily in context where prior-election polls are favorable to the incumbent. However, shifting attention to the cross-border political cycle, one can notice that this cycle appears mostly when polls are unfavorable to incumbent in the country of origin of foreign firms winning World Bank procurement abroad.

The latter results - when elections are competitive and polls unfavorable to the incumbent - may however give rise to another explanation. In the case of a cross-border political cycle, firms facing an election with an undecided outcome may deal with this uncertainty by diversifying their activity towards foreign countries. Winning World Bank procurement contracts abroad may then be a way for firms facing competitive elections at home to address such uncertainty. This rationale for a cross-border political cycle is exposed as *motivation #3* in Figure A2. Yet, it is difficult to disentangle between the two interpretations of the results (public image vs uncertainty). We suggest that the understanding of the motivations behind the emergence of these political cycles should be considered with caution and further explored in future works.

Figure 6: Political cycle where public image is deteriorated




***Left graph***: Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 5,208 (favorable), 5,066 (not favorable). $R^2$: 0.85 (favorable), 0.84 (not favorable). Robust standard errors clustered at the recipient x year level (2,604 favorable, 2,533 not favorable).
***Right Graph***: Coefficients estimated with recipient x year x semester, and supplier x recipient x year fixed effects. Observations: 29,232 (favorable), 30,004 (not favorable). $R^2$: 0.89 (favorable), 0.90 (not favorable). Robust standard errors clustered at the supplier x year x semester level (4,732 favorable, 4,722 not favorable).

# 6 How? Suggestive evidence on pressure tactics to tip the allocation process

Whatever the motivations outlined above, the political cycles can only emerge if there are means of influencing the World Bank's procurement allocation process. This section therefore focuses on these potential levers and attempts to assess their contribution to the achievement of such political cycles.

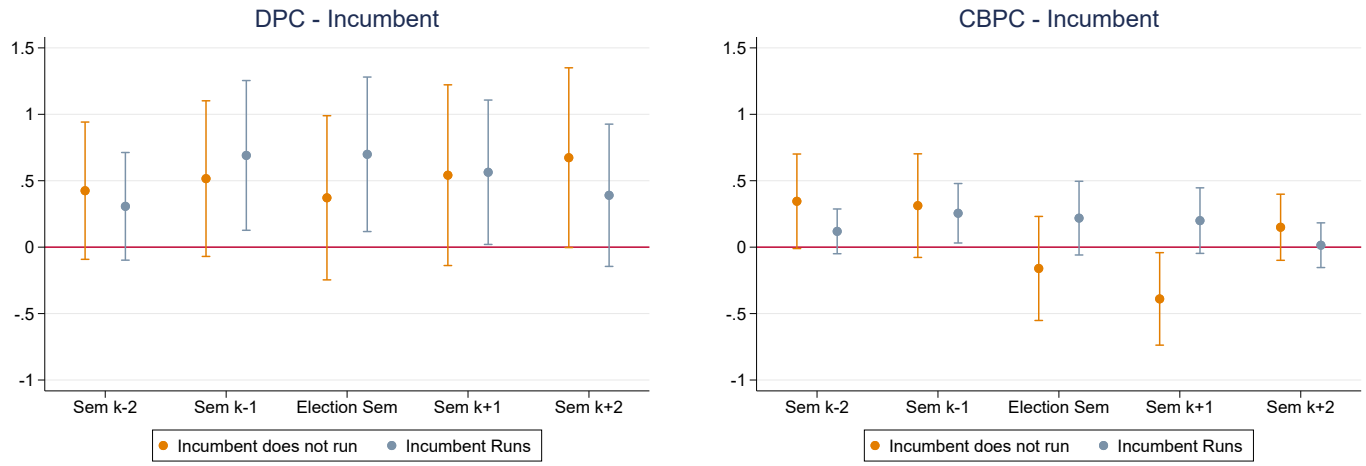
## 6.1 Political networks: the advantage of incumbency

One would first 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. The coefficient estimates reported in Figure 7 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.

Similarly, we also test whether the effect of an election on the average amount of a procurement contract won differs depending on the incumbent running in the supplier country. We run Equation 2 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 7 provide some support for the above assumptions as the election variable is significant only for semester $k-1$ and when the incumbent is running for another term. This finding supports to the hypothesis that sufficient political connections are necessary to influence the allocation process abroad in favor of local companies.

Figure 7: Political cycle where the incumbent is running




*Notes*: Table S.A23 in the supplementary appendix shows the results of the estimates.
***Left graph***: Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 3,630 (no incumb.) 4,534 (incumb.). $R^2$: 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 recipient x year x semester, and supplier x recipient x year fixed effects. Observations: 19,610 (no incumb.) 32,012 (incumb.). $R^2$: 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.)).

## 6.2 Aid and colonial ties: the power of close partnerships

An important difference between the domestic and cross-border political cycles is that the latter implies some international pressure from government officials in the supplier countries on those in the recipient countries. In what follows, we investigate means of influence that could drive the cross-border political cycle (*i.e.* Equation 2). 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.[20] Column (1) of Table A1 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 only 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 (using the CEPII GeoDist database, Mayer and Zignago (2011)).[21] Table A2 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 these results, it thus appears that 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.

Additionally, while all sovereign states contribute to the World Bank's funds, 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),[22] 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.[23] Moreover, since 2005 and the Paris Declaration, most of the bilateral donors have committed to significantly reduce tied aid, a type of development assistance that was commonplace throughout the 1970s, 1980s and 1990s. Given the academic evidence discussed above and the international context of a reduction in tied aid, bilateral donors may have looked for other ways to obtain returns from their official development assistance, whether provided on a bilateral or multilateral basis. Distortions in the allocation of World Bank procurement contracts may therefore substitute for tied aid, and hence be more prevalent when the share of tied aid is smaller.

In order to test the above assumption, we re-run Equation 2, extending the model

[20] 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 worldwide by all donors.

[21] Only the main colonial empires were considered here: Belgium, France, Germany, Netherlands, Portugal, Russia, Spain and United Kingdom.

[22] Alesina and Dollar (2000); Berthélemy and Tichit (2004); Fleck and Kilby (2010)

[23] Kuziemko and Werker (2006); Dreher et al. (2019, 2021)

with interaction terms between the election semester 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).[24] Results in Table A3 suggest that such tied aid-for-procurement substitution is at play around election semesters in the firms' home country: the political cycle around elections in the country of origin of the winning firms is mitigated when the share of tied aid of this country is larger. 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 cross-border political cycle.

## 6.3 Board memberships: the importance of high-level meetings

Lastly, such a political cycle would be unlikely if there were no opportunities for negotiation or means of influencing the award process through international pressures. In line with this idea, the above results show that the likelihood of winning larger procurement contracts 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 also constitute a way of tipping the allocation process in favor of companies from the supplier country.

World Bank Boards could be places where such connections and influence could emerge. Indeed, the literature on the political economy of foreign aid provides evidence that membership of international institutions is often accompanied by certain benefits (Dreher et al., 2009b; Vreeland, 2011; Dreher et al., 2019). In line with this literature, we explore whether 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.[25] 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, 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 recipient countries. We extract

[24] In order to match annual tied aid commitments with the semester dimension of the data, we report the same amount of tied aid commitments for two consecutive semesters of the same year.

[25] 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 (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).

information from World Bank Annual Reports from 1995 to 2019 on the composition of World Bank Boards of Executive Directors. From this, we identify 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 cross-border political cycle (*i.e.* Equation 2) on various sub-samples: 1) one where both recipient and supplier countries 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 3 below shows the results for these sub-sample estimates.

Table 3: Cross-border political cycle - By presence at the Board of Executive Directors

| Dep. var.: | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| | $AverageAmount_{s,r,k,t}$ | | | |
| | Recip & 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 $_{s,k,t}$ | 1.330 | -0.020 | 0.677 | 0.662 |
| | (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 |
| | (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 |

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

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 where arrangements can emerge. 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. This suggests that in the absence of this discussion arena, the supplier country may find other ways of tipping the award process in their favor, as evidenced by previous results on historical ties and significant aid partnership. The latter is again supported by results of Figure A14 in the appendix, where we specifically differentiate countries that are not board members together, according

to the importance of their aid relationship.

# Conclusion

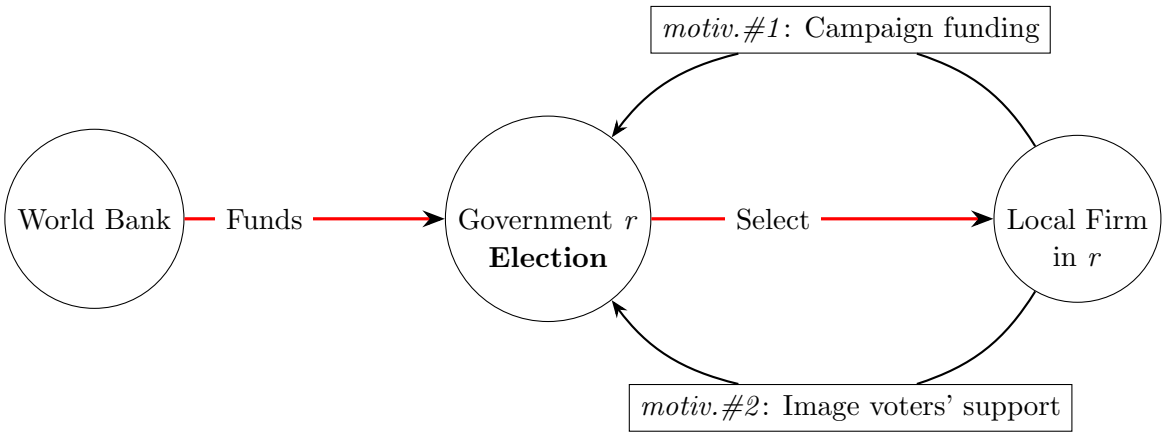
Building on multi-dimensional panel models using data from the World Bank's Contract Awards Database and the National Elections across Democracy and Autocracy dataset, we explore the existence of both domestic and cross-border political cycles for World Bank procurement contracts. Local firms are found to win significantly larger World Bank contracts around election semesters in recipient countries. Further heterogeneity analysis suggests that this domestic political cycle occurs in particular when local firms are allowed to donate to candidates and when the incumbent government is running for re-election. 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 a cross-border political cycle. This cross-border political cycle manifests primarily when corporations are allowed to fund candidates at home, when the incumbent is running for re-election and when the election outcome is uncertain. The supplier-to-recipient influence seems to be at play when both can easily meet on the World Bank Board of Directors, and when the supplier has significant economic and historical influence over the recipient.

Our results contribute to the existing literature on the political economy of international organizations. They indicate that development projects financed through World Bank procurement contracts, despite oversight mechanisms and the lack of electoral agenda of the funding organization, may be prone to being utilized as a tool between private companies and both recipient and supplier governments to serve electoral interests. These findings can also provide guidance on policies for monitoring and controlling the allocation of public procurement contracts by the World Bank, as they help identify the political and economic conditions under which such distortions are, according to our results, most likely to occur.

Future research on this topic could refine the analysis at the firm level to determine whether politically connected firms are indeed the primary beneficiaries of both domestic and cross-border political cycles. Additionally, our study does not provide insight into why the World Bank is unable to effectively address such distortions. While our results highlight these distortions, further research is essential to identify both the available methods for addressing them and the obstacles encountered by the institution in mitigating them.

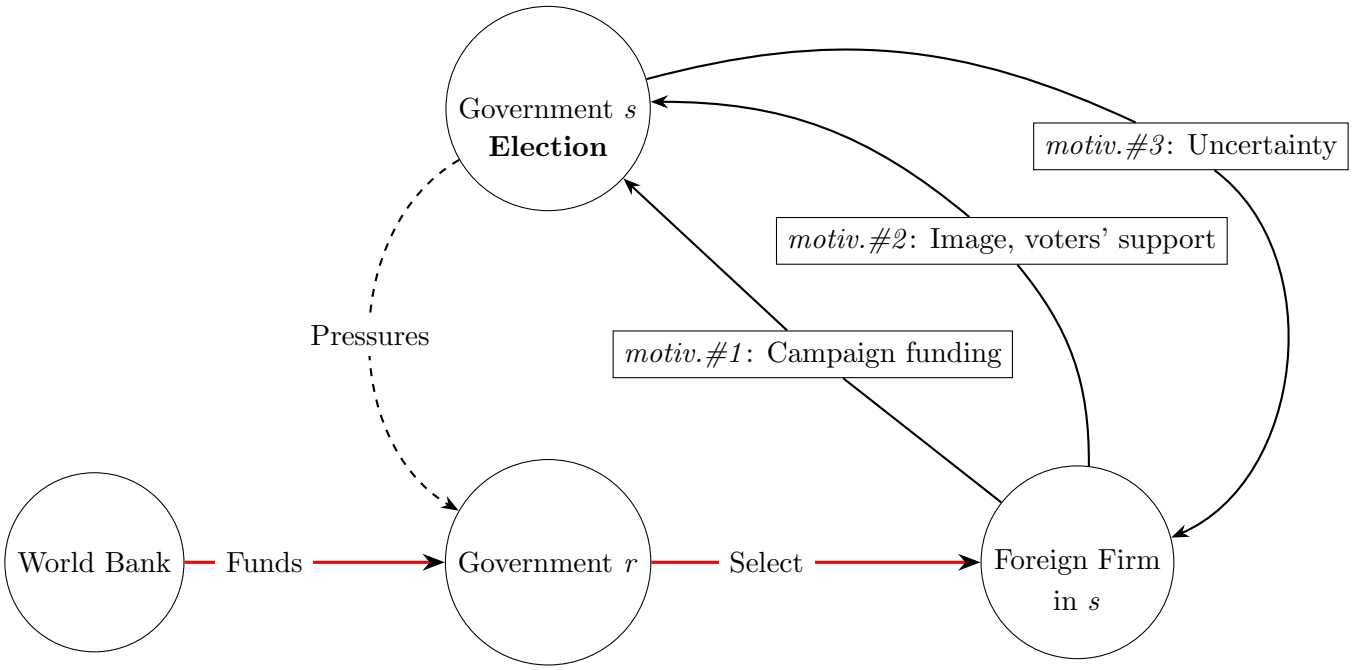
# Appendix

Figure A1: Domestic Political Cycle



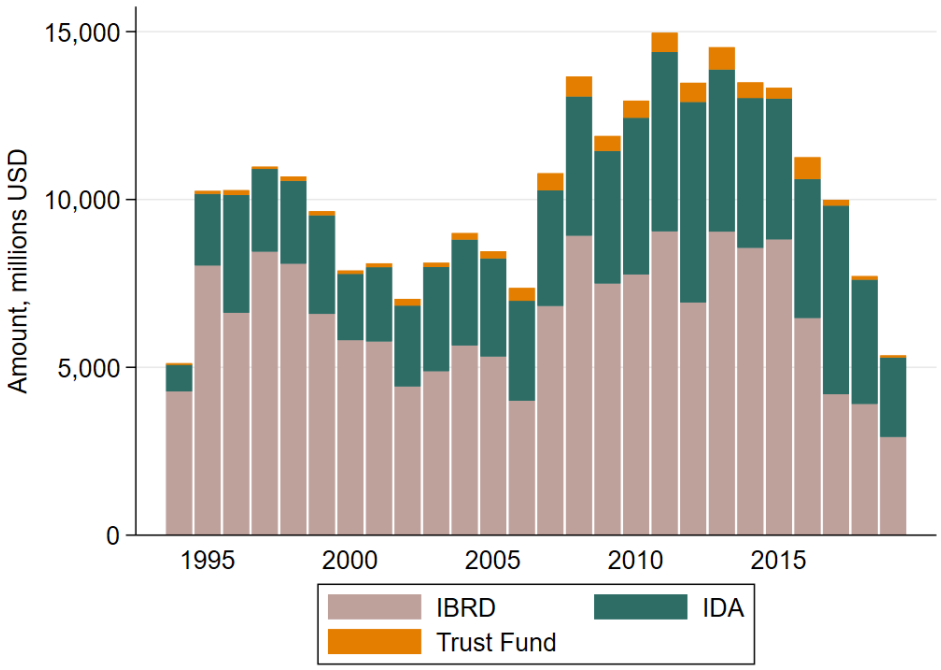

*Note*: Allocation and selection processes are indicated by the red arrows, while the black arrows describe the motivations at work in the political cycle.

Figure A2: Cross-Border Political Cycle



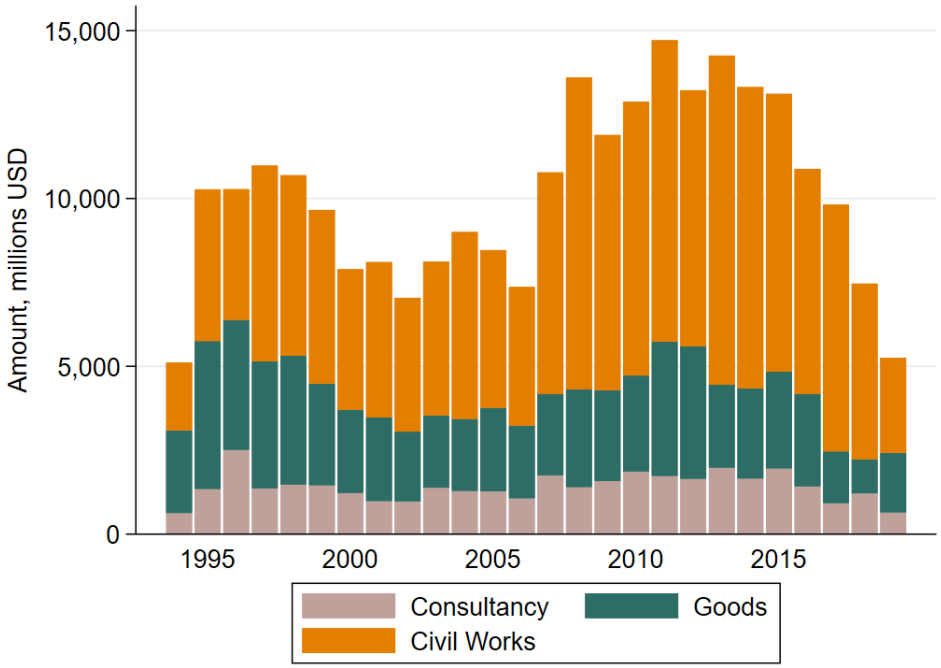

*Note*: Allocation and selection processes are indicated by the red arrows, while the black arrows describe the motivations at work in the political cycle. Dotted arrows represent transnational means of influence.

Figure A3: Amount by agreement type



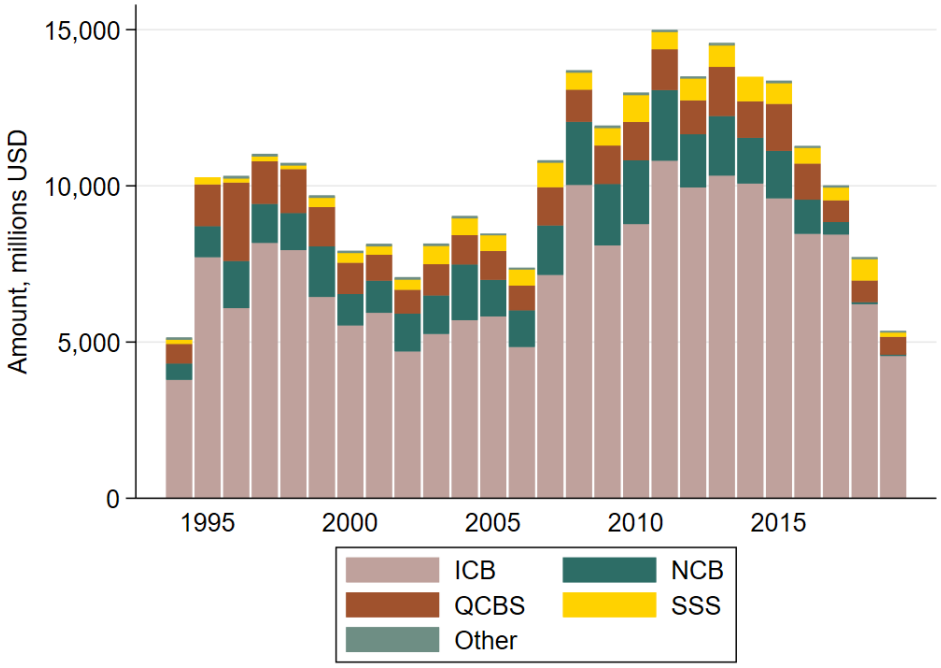

*Source*: World Bank's Contract Awards Database. Authors' calculation.

Figure A4: Amount by contract category



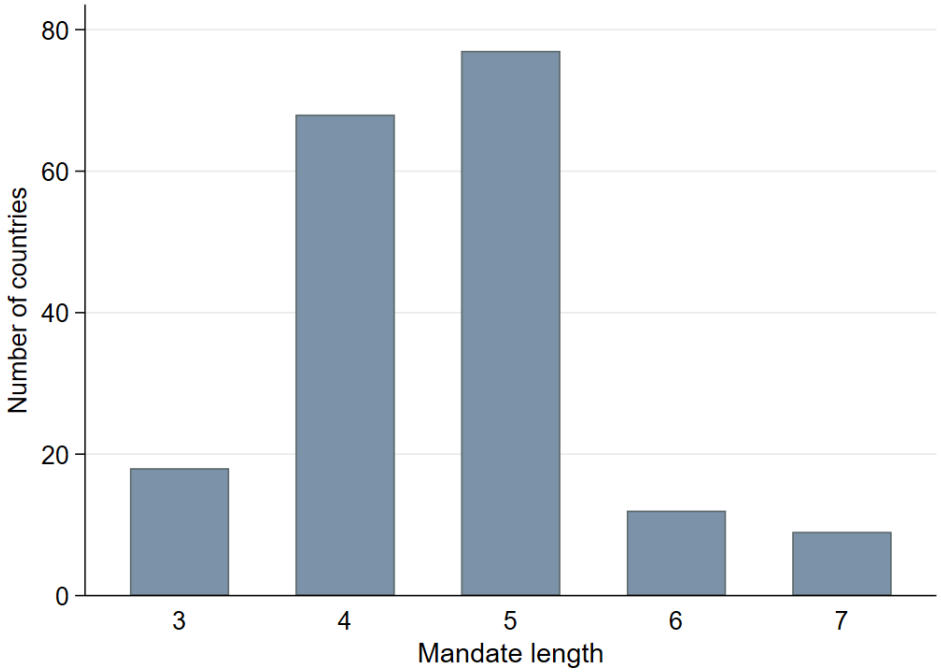

*Source*: World Bank's Contract Awards Database. Authors' calculation.

Figure A5: Amount by procurement method




*Source*: World Bank's Contract Awards Database. Authors' calculation.

Figure A6: Distribution of mandate's length




*Source*: Authors' calculation using NELDA dataset.

Figure A7: Timeline of election semesters (for a four-year mandate)

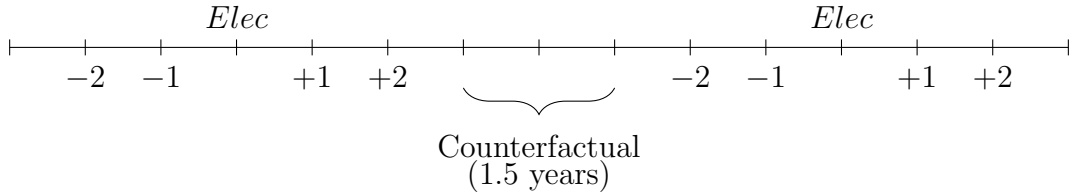



Figure A8: Timeline of election semesters (for a five-year mandate)

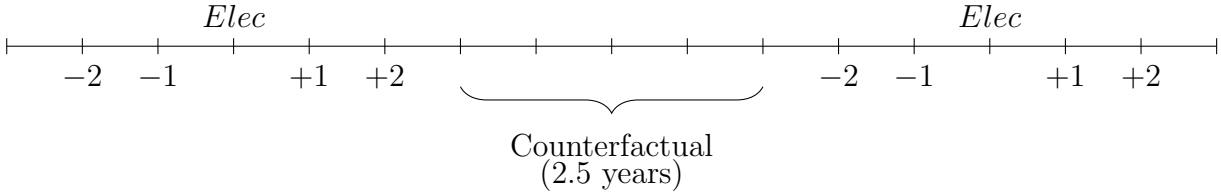
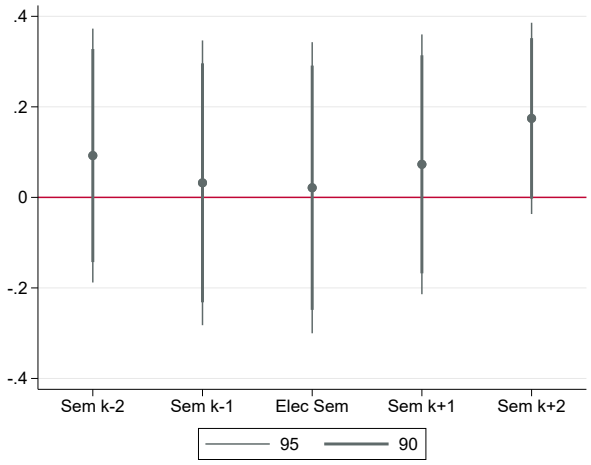
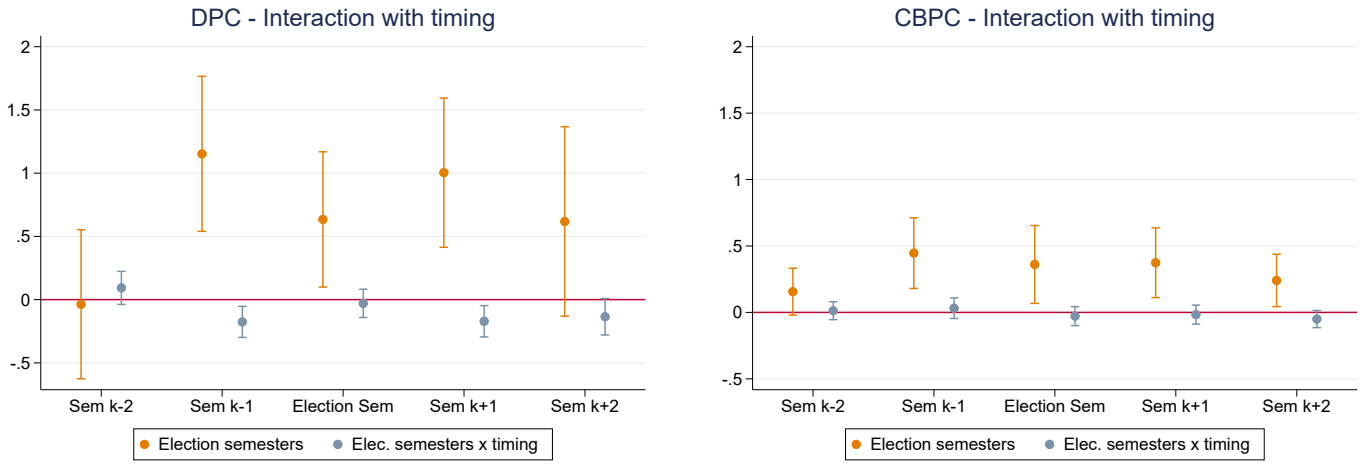


Figure A9: Impact of recipients' election on procurement received



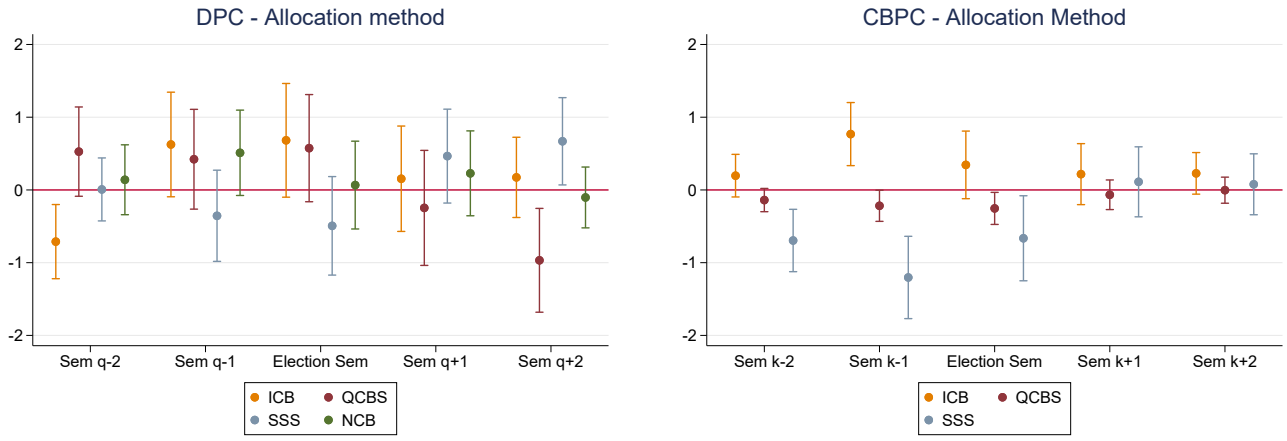

*Notes*: We collapsed all the World Bank procurement contracts amounts, either won by foreign or domestic firms, at the recipient year semester level and estimate the following model: $Proc\_Amounts_{r,k,t} = \sum_{k\in-2,+2} \beta_k Election_{r,k,t} + \omega_{r,t} + \mu_{k,t} + \epsilon_{r,k,t}$. Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 6,290. $R^2$: 0.91. Robust standard errors are clustered at the recipient x year level (3,145).

Figure A10: Interaction of political cycles with the duration of contract award (from contract approval to contract award)



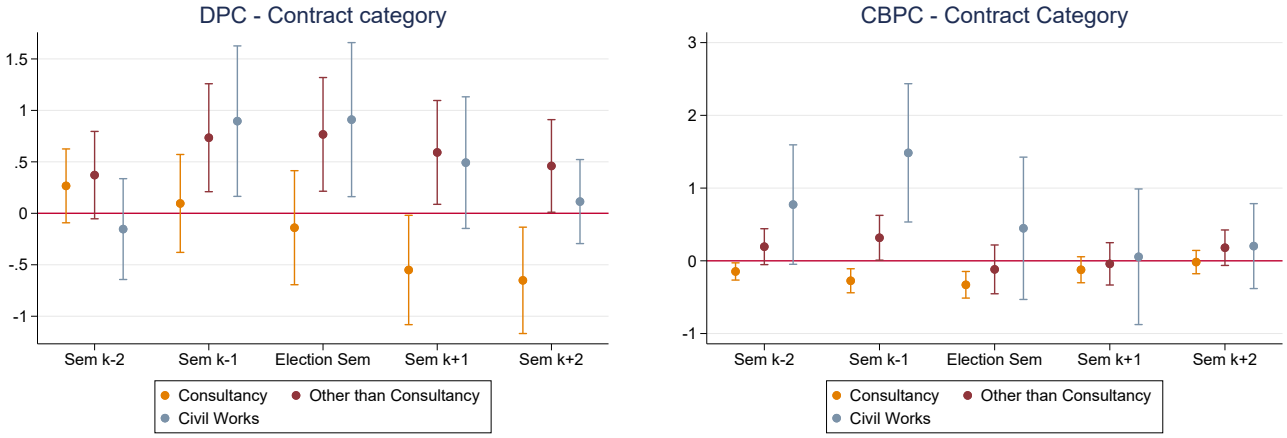

*Notes*: Table S.A13 in the supplementary appendix shows the results of the estimates.
***Left graph***: Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 5,902. $R^2$: 0.85. Robust standard errors clustered at the recipient x year level (2,951).
***Right Graph***: Coefficients estimated with supplier x year x semester, and supplier x recipient x year fixed effects. Observations: 41,966. $R^2$: 0.90. Robust standard errors clustered at the recipient x year x semester level (5,818).

Figure A11: Political cycles by allocation method



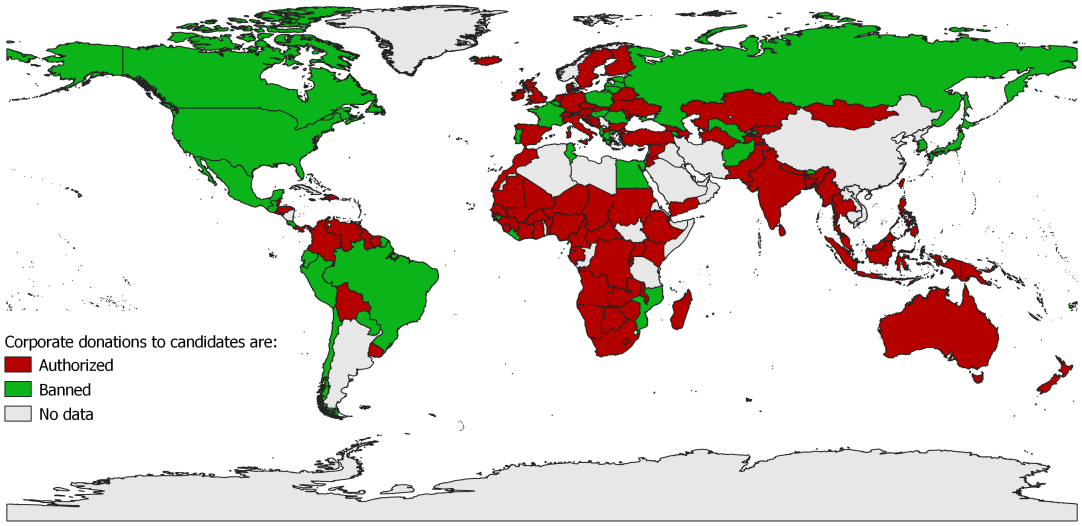

*Notes*: Tables S.A16 in the supplementary appendix show the results of the estimates.
***Left graph***: Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 2,074 (ICB), 2,142 (QCBS), 2,474 (SSS), 1,804 (NCB). $R^2$: 0.84 (ICB), 0.70 (QCBS), 0.73 (SSS), 0.66 (NCB). Robust standard errors clustered at the recipient x year level (1,037 ICB, 1,071 QCBS, 1,237 SSS, 902 NCB). See Table S.A16 in the supplementary appendix for detailed regression table.
***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). $R^2$: 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). See Table S.A16 in the supplementary appendix for detailed regression table.

Figure A12: Political cycles by contract category



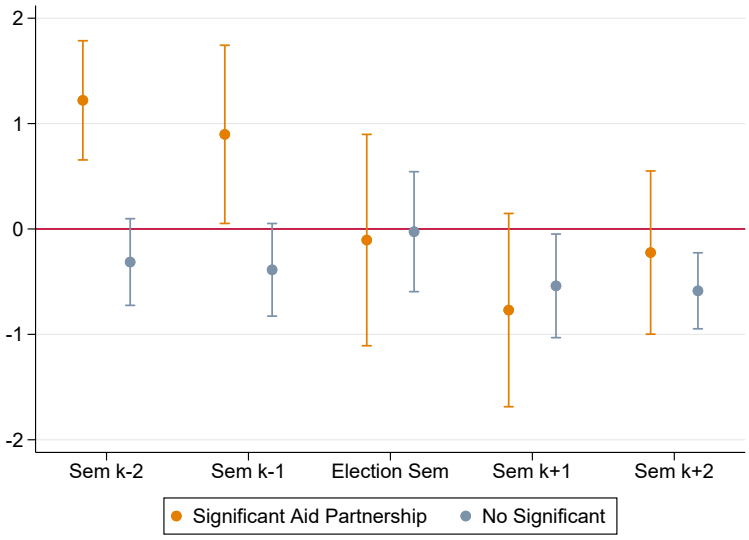

*Notes*: Tables S.A17 and S.A18 in the supplementary appendix show the results of the estimates.
***Left graph***: Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 3,920 (consultancy), 4,078 (other than consultancy), 2,192 (civil works). $R^2$: 0.73 (consultancy), 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). See Table S.A17 in the supplementary appendix for detailed regression table.
***Right 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). $R^2$: 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). See Table S.A18 in the supplementary appendix for detailed regression table.

Figure A13: Map of countries authorizing/banning corporate donations to candidate




*Source*: Political Finance Database

Figure A14: CBPC - Suppliers and Recipients not at the board, by aid partnership status




*Notes*: Observations: 2,104 (sign. partnership), 10,926 (no sign.). $R^2$: 0.95 (sign. partnership), 0.89 (no sign.). Robust standard errors clustered at the supplier x year x semester level (954 sign. partnership, 4,014 no sign.).

Table A1: CBPC - by significance of aid partnership

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

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

Table A2: CBPC - Interaction with former colonial history

| Dep. var.: | $AverageAmount_{s,r,k,t}$ |
|---|---|
| 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 |

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

Table A3: CBPC - Interaction with share tied aid

| Dep. var.: | $AverageAmount_{s,r,k,t}$ |
|---|---|
| Election in | Supplier: Semester k $_{s,k,t}$ |
| Semester k-2 x Tied Aid$_{s,t}$ | 0.016 |
| | (0.380) |
| Semester k-1 x Tied Aid$_{s,t}$ | -1.175 |
| | (0.473)** |
| Elec Semester x Tied Aid$_{s,t}$ | -1.909 |
| | (0.570)*** |
| Semester k+1 x Tied Aid$_{s,t}$ | -1.972 |
| | (0.532)*** |
| Semester k+2 x Tied Aid$_{s,t}$ | -1.838 |
| | (0.401)*** |
| Semester k-2 | 0.171 |
| | (0.101)* |
| Semester k-1 | 0.442 |
| | (0.142)*** |
| Election Semester | 0.321 |
| | (0.158)** |
| Semester k+1 | 0.351 |
| | (0.143)** |
| Semester k+2 | 0.281 |
| | (0.101)*** |
| $N$ | 41,966 |
| $R^2$ | 0.88 |
| Supp. x Recip. x Year Fixed Effect | Yes |
| Recip. x Year x Sem. Fixed Effect | Yes |
| N Supp. x Year x Sem. (clusters) | 5,818 |

*Notes*: Robust standard errors in parentheses, clustered at the supplier×year×semester level. Note that Tied Aid$_{s,t}$ 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 recipient x Year fixed effects. Recipient x year x semester; and supplier x recipient x year fixed effects are included. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$.

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

**Supplementary Appendix**

## Contents

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# 1 Statistics and main regressions

Our study aims to empirically assess whether the allocation of World Bank procurement contracts follows one or more of the political cycles summarized in Table S.A1 below. As a reminder, this study tests three configurations of a political cycle, each of them calling for different stakeholders. The first one (H1) assumes that elections in recipient countries tend to favor local firms for the allocation of procurement contracts. The second one (H2) makes the hypothesis that foreign firms are more likely to win larger contracts in recipient countries when their home country (i.e. supplier countries) is getting close to elections.

Table S.A1: Summary of the political cycles under review

| | **Election** | |
|---|---|---|
| **Firm** | *Recipient* | *Supplier* |
| *Recipient* | Domestic political cycle (DPC); local firms | - |
| *Supplier* | | Cross-border political cycle (IPC) |

Figure S.A1: Distribution of contract's category, in USD amounts (authors' calculation)

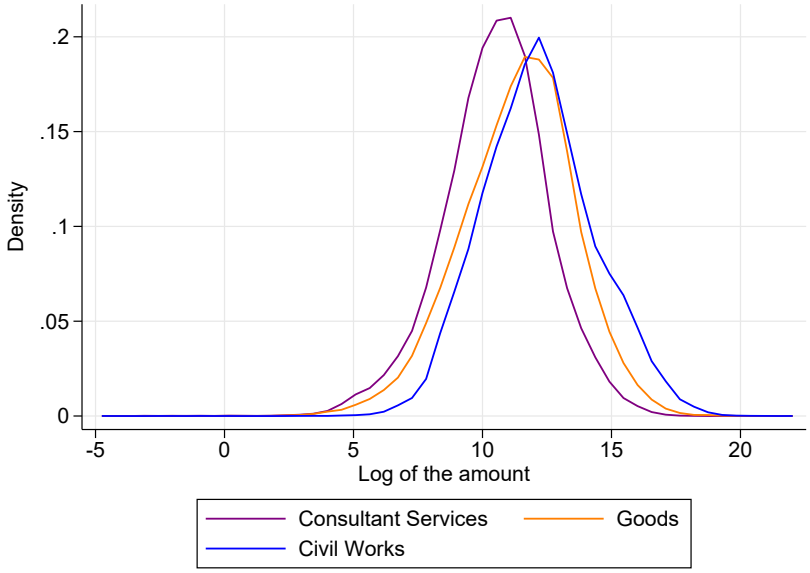


Figure S.A1 above reports the distribution of procurement (expressed in USD) by category of contracts. As one can easily notice, larger contracts are those dedicated to civil works. Infrastructure constructions are logically more expensive than service contracts which (in some cases) consist of small/short-term consultancy missions.

We next report Table S.A2 displaying estimate results of our main regressions corresponding to Figure 4 and 5 from the core manuscript, respectively. As explained in the manuscript, results suggest that the award of World Bank procurement contracts follows each of the above detailed political cycles since recipient countries tend to allocate larger contracts to both local firms around election semesters, as supplier countries do when they face upcoming elections (i.e. see their foreign firms winning larger contracts in recipient countries).

Table S.A2: Main regressions

| Dep. Var.: | $AverageAmount_{r,k,t}$ | $AverageAmount_{s,r,k,t}$ |
|---|---|---|
| | Local firms | Foreign firms |
| **Elections in**: | Recipient countries Semester$_{r,k,t}$ | Supplier countries Semester$_{s,k,t}$ |
| Semester k-2 | 0.275 | 0.171 |
| | (0.189) | (0.085)** |
| Semester k-1 | 0.677 | 0.362 |
| | (0.260)*** | (0.128)*** |
| Election Semester | 0.599 | 0.171 |
| | (0.266)** | (0.146) |
| Semester k+1 | 0.443 | 0.186 |
| | (0.244)* | (0.135) |
| Semester k+2 | 0.219 | 0.125 |
| | (0.221) | (0.094) |
| $N$ | 5,902 | 41,966 |
| $R^2$ | 0.84 | 0.88 |
| Year x Sem. FE | Yes | No |
| Recip. x Year FE | Yes | No |
| Recip. x Year x Sem. FE | No | Yes |
| Supp. x Recip. x Year FE | No | Yes |
| N Recip. x Year (clusters) | 2,951 | - |
| N Supp. x Year x Sem. (clusters) | - | 5,818 |

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

# 2 Robustness checks

## 2.1 Alternative dependent variable

The overall set of findings in the main text, suggests a bias towards firms from countries (both recipients and suppliers) approaching election periods, at the expense of those from countries outside the election period. However, as discussed in the main text, one may question the selection of the average amount per contract won as dependent variable in favor of the total amount won. Nevertheless, in the context of the cross-border political cycle where the identification strategy relies on a three-dimensional setting, utilizing the total amounts as the dependent variable implies examining whether foreign companies, as their home country approaches an election, manage to secure the majority of procurement amounts funded by the World Bank in a given recipient country. Hence, one might reasonably argue that such strategy would entail significant bargaining costs for the supplier country seeking to secure the majority of the World Bank funding for its own firms in a particular recipient country. We thus argue that it would be more effective for foreign governments approaching elections to concentrate their efforts on influencing the allocation process of larger World Bank procurement contracts allocated to recipient countries, rather than intervening in numerous smaller contracts. Prioritizing larger contracts would require fewer interventions and efforts from the home country government in influencing the allocation process. The same rationale could apply to domestic political cycles, although one might also consider that dispersing the majority of World Bank funds among their national firms could be a viable strategy for enhancing the public image of election runners.

Despite the various arguments supporting the use of the average amount of procurement contracts as the dependent variable, we nonetheless subject all of our results (the main findings as well as sub-samples and interaction terms' estimates) to the use of total amounts won as the dependent variable. Results are summarized in Table S.A3 for the domestic political cycle and in Tables S.A4 and S.A5 for the cross-border political cycle.

Regarding the domestic political cycle, even though the estimated cycle does not follow a bell-shaped pattern as with the average amount as the dependent variable, estimates nevertheless indicate that domestic firms secure more procurement funds two semesters before the election of their home country. Heterogeneity results also indicate that this effect is mostly observed in recipient countries where donations to candidates are authorized. These results thus support our narrative in the main text and also shed light on one of the mechanisms through which such a political cycle might be conducted, namely, election financing. The rest of the heterogeneity analysis does not suggest clear transmission channels, especially with respect to the competitiveness of the election, trends in polls, or incumbency. However, we observed that election semesters in countries with high levels of unemployment tend to be associated with larger amounts won by domestic firms in their recipient country, consistent with estimates from the main text.

Table S.A3: Total amount as dependent variable: Summary DPC

| Semester: | k-2 | k-1 | k | k+1 | k+2 | N |
|---|---|---|---|---|---|---|
| Coefficients' estimate: | | | | | | |
| Baseline | 0.294 | 0.127 | 0.000 | -0.035 | 0.001 | 5,902 |
| | (0.134)** | (0.161) | (0.181) | (0.170) | (0.118) | |
| **Sub-sample estimates** | | | | | | |
| Donation to candidates | | | | | | |
| Authorized | 0.272 | 0.042 | 0.072 | 0.118 | -0.049 | 3,986 |
| | (0.109)** | (0.158) | (0.164) | (0.154) | (0.118) | |
| Banned | 0.227 | 0.313 | -0.121 | -0.000 | -0.151 | 1,254 |
| | (0.147) | (0.257) | (0.308) | (0.307) | (0.155) | |
| Competitive Election | | | | | | |
| Yes | 0.359 | 0.159 | 0.161 | 0.013 | 0.069 | 4,538 |
| | (0.174)** | (0.187) | (0.195) | (0.201) | (0.132) | |
| No | 0.319 | 0.214 | -0.055 | -0.049 | -0.064 | 4,412 |
| | (0.0181)* | (0.205) | (0.234) | (0.198) | (0.147) | |
| Polls | | | | | | |
| Favorable | 0.359 | 0.240 | 0.104 | 0.102 | -0.032 | 5,208 |
| | (0.166)** | (0.183) | (0.205) | (0.180) | (0.133) | |
| Not Favorable | 0.312 | 0.082 | 0.046 | -0.064 | 0.042 | 5,066 |
| | (0.145)** | (0.167) | (0.175) | (0.189) | (0.122) | |
| Incumbent | | | | | | |
| Yes | 0.352 | 0.260 | -0.040 | -0.034 | -0.168 | 4,534 |
| | (0.155)** | (0.158) | (0.192) | (0.179) | (0.137) | |
| No | 0.563 | 0.378 | 0.233 | 0.110 | 0.067 | 3,630 |
| | (0.228)** | (0.222)* | (0.208) | (0.195) | (0.126) | |
| **Full sample with interaction terms** | | | | | | |
| Timing | | | | | | 5,902 |
| in level | -0.129 | 0.375 | 0.153 | 0.085 | -0.087 | |
| | (0.227) | (0.255) | (0.284) | (0.264) | (0.239) | |
| interaction terms | 0.105 | -0.078 | -0.051 | -0.041 | 0.018 | |
| | (0.060)* | (0.059) | (0.061) | (0.057) | (0.056) | |
| Unemployment | | | | | | 5,718 |
| in level | 0.189 | -0.186 | -0.423 | -0.299 | -0.151 | |
| | (0.194) | (0.248) | (0.257)* | (0.238) | (0.178) | |
| interaction terms | 0.013 | 0.046 | 0.059 | 0.035 | 0.021 | |
| | (0.021) | (0.032) | (0.029)** | (0.026) | (0.017) | |

Table S.A4: Total amount as dependent variable: Summary CBPC

| Semester: | k-2 | k-1 | k | k+1 | k+2 | N |
|---|---|---|---|---|---|---|
| Coefficients' estimate: | | | | | | |
| Baseline | 0.072 | 0.161 | 0.007 | 0.020 | 0.018 | 41,966 |
| | (0.086) | (0.129) | (0.146) | (0.142) | (0.098) | |
| **Sub-sample estimates** | | | | | | |
| Donation to candidates | | | | | | |
| Authorized | 0.358 | 0.235 | -0.051 | -0.152 | -0.126 | 23,960 |
| | (0.130)*** | (0.140)* | (0.150) | (0.152) | (0.114) | |
| Banned | 0.085 | 0.255 | 0.182 | 0.185 | 0.198 | 12,084 |
| | (0.155) | (0.189) | (0.229) | (0.227) | (0.217) | |
| Competitive Election | | | | | | |
| Yes | 0.242 | 0.241 | -0.004 | -0.090 | -0.173* | 34,634 |
| | (0.096)** | (0.142)* | (0.154) | (0.152) | (0.097) | |
| No | -0.412 | -0.312 | -0.188 | -0.094 | 0.120 | 21,412 |
| | (0.188)** | (0.221) | (0.284) | (0.278) | (0.156) | |
| Polls | | | | | | |
| Favorable | -0.091 | -0.143 | -0.152 | -0.114 | 0.041 | 29,232 |
| | (0.121) | (0.148) | (0.176) | (0.166) | (0.119) | |
| Not Favorable | 0.271 | 0.394 | 0.277 | 0.159 | 0.111 | 30,004 |
| | (0.120)** | (0.178)** | (0.193) | (0.193) | (0.117) | |
| Incument | | | | | | |
| Yes | 0.080 | 0.156 | 0.092 | 0.097 | 0.012 | 32,012 |
| | (0.097) | (0.122) | (0.144) | (0.135) | (0.100) | |
| No | 0.267 | -0.005 | -0.380 | -0.610 | 0.060 | 19,610 |
| | (0.224) | (0.242) | (0.257) | (0.258)** | (0.161) | |
| Significant aid partner | | | | | | |
| Yes | 0.272 | 0.472 | 0.083 | -0.433 | 0.011 | 10,158 |
| | (0.163)* | (0.216)** | (0.228) | (0.222)* | (0.203) | |
| No | 0.203 | -0.351 | -0.449 | -0.232 | -0.272 | 12,506 |
| | (0.128) | (0.188)* | (0.225)** | (0.231) | (0.225) | |
| Board membership | | | | | | |
| Recip. & Supp. | -0.080 | 0.784 | 0.591 | 0.963 | 0.693 | 2,156 |
| | (0.245) | (0.420)* | (0.440) | (0.425)** | (0.313)** | |
| Supp. only | -0.075 | -0.143 | -0.234 | -0.099 | -0.009 | 20,196 |
| | (0.145) | (0.158) | (0.479) | (0.170) | (0.126) | |
| Recip. only | 0.546 | 0.040 | 0.522 | 0.706 | 0.726 | 1,358 |
| | (0.350) | (0.433) | (0.479) | (0.475) | (0.394)* | |
| None | 0.418 | 0.674 | 0.584 | 0.027 | -0.061 | 15,906 |
| | (0.182)** | (0.254)*** | (0.297)** | (0.251) | (0.191) | |
| None at the board | | | | | | |
| Sig. aid partner | 1.013 | 1.009 | 0.576 | -0.174 | 0.265 | 2,104 |
| | (0.339)*** | (0.561)* | (0.739) | (0.668) | (0.500) | |
| Not Sig. aid partner | -0.261 | -0.355 | 0.189 | -0.346 | -0.511 | 10,926 |
| | (0.244) | (0.280) | (0.358) | (0.308) | (0.213)** | |

Table S.A5: Total amount as dependent variable: Summary CBPC (continued)

| Semester: | k-2 | k-1 | k | k+1 | k+2 | N |
|---|---|---|---|---|---|---|
| Coefficients' estimate: | | | | | | |
| **Full sample with interaction terms** | | | | | | |
| Timing | | | | | | 41,966 |
| in level | 0.048 | 0.271 | 0.186 | 0.308 | 0.162 | |
| | (0.109) | (0.153)* | (0.167) | (0.157)** | (0.124) | |
| interaction terms | 0.007 | 0.017 | -0.006 | -0.075 | -0.063 | |
| | (0.041) | (0.041) | (0.042) | (0.045)* | (0.044) | |
| Unemployment | | | | | | 41,820 |
| in level | -0.427 | -0.162 | -0.575 | -0.306 | 0.186 | |
| | (0.192)** | (0.212) | (0.220)*** | (0.209) | (0.161) | |
| interaction terms | 0.069 | 0.037 | 0.076 | 0.044 | -0.022 | |
| | (0.025)*** | (0.025) | (0.026)*** | (0.026)* | (0.017) | |
| Former Colony | | | | | | 41,966 |
| in level | 0.073 | 0.143 | 0.012 | -0.004 | 0.016 | |
| | (0.086) | (0.136) | (0.153) | (0.148) | (0.103) | |
| interaction terms | 0.675 | 0.948 | 0.147 | 0.547 | -0.161 | |
| | (0.314)** | (0.371)** | (0.402) | (0.387) | (0.199) | |
| Tied aid | | | | | | 41,966 |
| in level | 0.030 | 0.236 | 0.155 | 0.200 | 0.172 | |
| | (0.101) | (0.142)* | (0.157) | (0.151) | (0.107) | |
| interaction terms | 0.312 | -1.243 | -1.903 | -2.127 | -1.877 | |
| | (0.312) | (0.461)*** | (0.555)*** | (0.562)*** | (0.400)*** | |

Turning to the examination of the cross-border political cycle, coefficients associated with one and two semesters before the elections, which were previously positive and significant when the average amount was used as dependent variable, now exhibit a drastic loss of statistical significance, albeit they remain positive. Nonetheless, sub-sample results and those derived from models incorporating interaction terms corroborate to some extent our earlier findings. Specifically, the findings presented in Table S.A4 indicate that foreign companies tend to secure more procurement funds in recipient countries one and two semesters before an election in their home country, particularly in contexts where private donations to candidates are permitted. Similar trends are observed in situations where polls are unfavorable to the incumbent or when elections are competitive. Additionally, results pertaining to heterogeneity regarding significant aid partnership between supplier and recipient countries align closely with those obtained using average amounts as the dependent variable. Similarly, the findings outlined in Table S.A5 further support our narrative concerning the cross-border political cycle, which again tend to be observed when supplier countries exhibits higher unemployment rates, share colonial ties with recipient countries, or experience a significant decline in tied aid.

## 2.2 Removing inconsistent elections

Besides the exogenous allocation of World Bank funding for procurement contracts, our empirical specification aiming to identify a causal impact running from elections to the average amount of procurement contracts won also builds on the absence of reverse causality in this relationship. This argument is based primarily on the rather fixed nature of the electoral calendar, which is in most of the countries studied defined by their national constitutions. Yet, one could still believe that in the prospect of upcoming elections, some governments could be tempted to tilt the electoral calendar in order to make it match with World Bank procurement funding, essentially in the context of the domestic political cycle. Indeed, it is hard to believe that a country X would try to deviate from its original electoral calendar in order to make it match with the World Bank procurement funding in a country Y. In order to remove such doubt surrounding the existence of a domestic political cycle, we remove from the sample elections flagged as inconsistent by the NELDA database (i.e. elections that happened earlier or later than expected). Results reported in Tables S.A6 and S.A7 below do not seem to be affected by these particular observations as they remain in line with our core results.

Table S.A6: DPC - Dropping inconsistent election

| Dep. var.: | (1) | (2) |
|---|---|---|
| | $AverageAmount_{r,k,t}$ | |
| | Baseline | No Inconsistent |
| Semester k-2 $_{r,k,t}$ | 0.275 | 0.296 |
| | (0.189) | (0.207) |
| Semester k-1 $_{r,k,t}$ | 0.677 | 0.760 |
| | (0.260)*** | (0.281)*** |
| Election Semester $_{r,k,t}$ | 0.599 | 0.694 |
| | (0.266)** | (0.294)** |
| Semester k+1 $_{r,k,t}$ | 0.443 | 0.483 |
| | (0.244)* | (0.276)* |
| Semester k+2 $_{r,k,t}$ | 0.218 | 0.301 |
| | (0.221) | (0.257) |
| $N$ | 5,902 | 5,232 |
| Year x Sem. Fixed Effect | Yes | Yes |
| Recip x Year Fixed Effect | Yes | Yes |
| N Supp. x Year x Sem. (clusters) | 2,951 | 2,616 |

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

Table S.A7: CBPC - Dropping inconsistent election

| Dep. var.: | (1) | (2) |
|---|---|---|
| | $AverageAmount_{s,r,k,t}$ | |
| | Baseline | No Inconsistent |
| Semester k-$2_{s,k,t}$ | 0.171 | 0.120 |
| | (0.085)** | (0.106) |
| Semester k-$1_{s,k,t}$ | 0.362 | 0.354 |
| | (0.128)*** | (0.141)** |
| Election Semester$_{s,k,t}$ | 0.171 | -0.027 |
| | (0.146) | (0.147) |
| Semester k+$1_{s,k,t}$ | 0.186 | 0.067 |
| | (0.135) | (0.129) |
| Semester k+$2_{s,k,t}$ | 0.125 | 0.252 |
| | (0.094) | (0.108)** |
| $N$ | 41,966 | 33,004 |
| Recip. x Year x Sem. Fixed Effect | Yes | Yes |
| Supp. x Recip. x Year Fixed Effect | Yes | Yes |

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

## 2.3 Treatment of NELDA's missing elections

When gathering information on election dates, some of the countries that either saw one of their firms winning a World Bank procurement (i.e. supplier countries) or received World Bank procurement funding (i.e. recipient countries) were missing from the NELDA database. We therefore decided to complete the missing information on election dates by collecting it directly from Wikipedia (cross-checking the information with official releases or newspaper articles). Table S.A8 below reports election dates for countries and elections not included in the NELDA database.

Table S.A8: NELDA missings, added by the authors

| 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 | | | | |

Source: Wikipedia

Yet, to ensure that our main results are not driven by these adding, we report results of our main specifications on a restricted sample excluding the added elections. Tables S.A9 and S.A10 below display the results which remain aligned with our core findings.

Table S.A9: DPC - Without added elections

| | (1) | (2) |
|---|---|---|
| Dep. var.: | $AverageAmount_{r,k,t}$ | |
| | Local firms | |
| | Baseline | Without |
| Semester k-2 $_{r,k,t}$ | 0.275 | 0.269 |
| | (0.189) | (0.190) |
| Semester k-1 $_{r,k,t}$ | 0.677 | 0.713 |
| | (0.260)*** | (0.269)*** |
| Election Semester $_{r,k,t}$ | 0.599 | 0.625 |
| | (0.266)** | (0.276)** |
| Semester k+1 $_{r,k,t}$ | 0.443 | 0.496 |
| | (0.244)* | (0.256)* |
| Semester k+2 $_{r,k,t}$ | 0.219 | 0.265 |
| | (0.221) | (0.237) |
| $N$ | 5,902 | 5,902 |
| $R^2$ | 0.84 | 0.84 |
| Year x Sem. FE | Yes | Yes |
| Recip. x Year FE | Yes | Yes |
| N Supp. x Year (clusters) | 2,951 | 2,951 |

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

Table S.A10: CBPC - Without added elections

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

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

## 2.4 Alternative clustering of standard errors

As suggested by Moulton (1990) and Froot (1989), the results presented and discussed in the main text are all obtained after correcting for potential heteroskedasticity in our variable of interest, *i.e.* the semesters of the election years in the supplier or recipient countries, for a given year.

This correction is motivated by the concern that, for the domestic political cycle, the economic and political environment in recipient countries in an important year such as the election year may lead to correlated observations (fueling unconditional heteroskedasticity), especially if recipient countries benefit from World Bank contracts in that year. The same rationale applies when focusing on foreign firms with respect to election calendar in supplier countries.

However, it could also be suggested that the countries in the sample do not change much in the short term, which would lead to the view that the factors that may influence the correlation between observations are more structural than cyclical. To challenge our results to this different assumptions, we re-estimate the two main specifications, changing the level at which standard

errors are clustered. For the domestic political cycle, focusing on local winning firms, we switch for two-way clustering at the recipient and year levels. Results are reported in Tables S.A11, column (1). With respect to the cross-border political cycle, we suggest clustering standard errors at the supplier, year, and semester levels. Table S.A11 dis, column (2) displays the results.

Overall, our main findings do not seem to be much altered as coefficients associated with political cycle in World Bank procurement remain statistically significant, albeit the level of significance decreases, particularly for the domestic political cycle).

Table S.A11: Main regressions - multiple-way clustering

| Dep. Var.: | $AverageAmount_{r,k,t}$ | $AverageAmount_{s,r,k,t}$ |
|---|---|---|
| | Local firms | Foreign firms |
| **Elections in**: | Recipient countries Semester$_{r,k,t}$ | Supplier countries Semester$_{s,k,t}$ |
| Semester k-2 | 0.275 | 0.171 |
| | (0.256) | (0.087)** |
| Semester k-1 | 0.677 | 0.362 |
| | (0.355)* | (0.174)** |
| Election Semester | 0.599 | 0.171 |
| | (0.341)* | (0.186) |
| Semester k+1 | 0.443 | 0.186 |
| | (0.381) | (0.162)** |
| Semester k+2 | 0.219 | 0.125 |
| | (0.354) | (0.141) |
| N | 5,902 | 41,966 |
| $R^2$ | 0.84 | 0.86 |
| Year × Sem. FE | Yes | No |
| Recip. × Year FE | Yes | No |
| Recip. × Sem. × Year FE | No | Yes |
| Supp. × Recip. × Year FE | No | Yes |
| N Recip. (clusters) | 150 | - |
| N Supp. (clusters) | - | 187 |
| N Year (clusters) | 26 | 26 |
| N Semester (clusters) | - | 2 |

Note: Robust standard errors in parentheses, two-way clustered at both the recipient country and supplier country in column (1) and three-way clustered at the recipient, year and semester levels in column (2). *, **, *** denote significance at the 10, 5, and 1% level, respectively.

Table S.A12: DPC and CBPC simultaneously

| | Dom. Pol. Cycle | Cross-Border Pol. Cycle | Simultaneously |
|---|---|---|---|
| Dep. Var.: | $AverageAmount_{r,k,t}$ | $AverageAmount_{s,r,k,t}$ | $AverageAmount_{s,r,k,t}$ |
| Semester k-2 | 0.274 | 0.171 | -0.061 |
| | (0.140)** | (0.085)** | (0.103) |
| Semester k-1 | 0.677 | 0.362 | 0.299 |
| | (0.193)*** | (0.128)*** | (0.148)** |
| Election Semester | 0.599 | 0.170 | 0.219 |
| | (0.199)*** | (0.146) | (0.182) |
| Semester k+1 | 0.443 | 0.186 | 0.081 |
| | (0.186)** | (0.135) | (0.183) |
| Semester k+2 | 0.218 | 0.124 | 0.120 |
| | (0.172) | (0.094) | (0.127) |
| $N$ | 5,902 | 41,966 | 44,534 |
| $R^2$ | 0.84 | 0.88 | 0.79 |
| Year x Sem FE | Yes | No | Yes |
| Recip x Year FE | Yes | No | No |
| Recip x Year x Sem FE | No | Yes | No |
| Supp x Recip x Year FE | No | Yes | Yes |
| N Recip x Year (clusters) | 2,951 | - | - |
| N Supp x Year x Sem (clusters) | - | 5,818 | 5,996 |

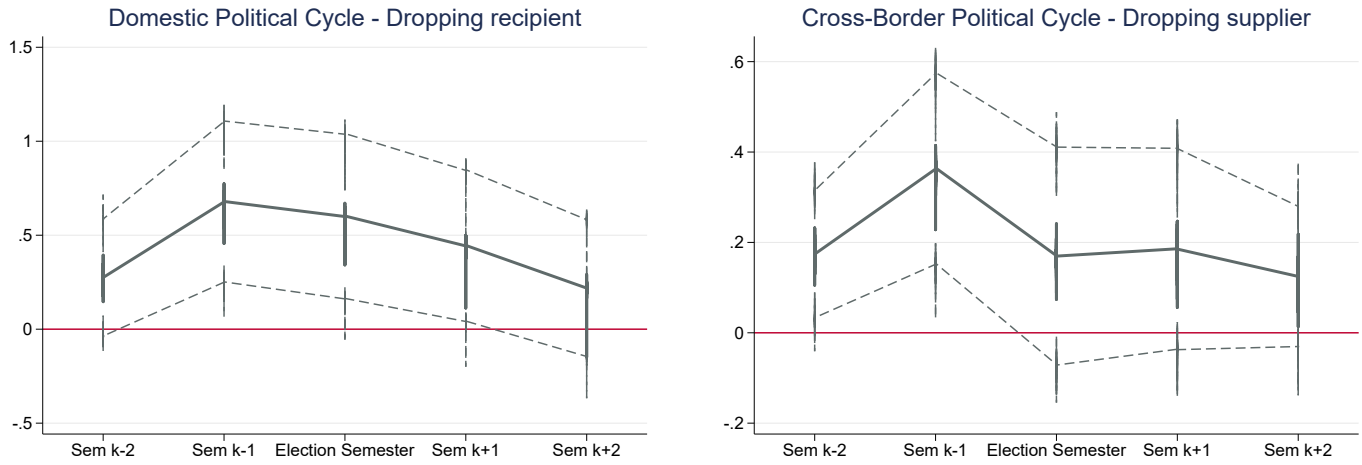
*Notes*: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

## 2.5 Sample sensitivity

In what follows we challenge the robustness of our results to the composition of our sample. More specifically, we re-run our main specifications by removing one country at a time from the sample to ensure that our results are not influenced by a specific recipient or supplier country. Figure S.A2 displays coefficient estimates of the domestic political cycle when we alternately remove one recipient country at a time. One can notice that the coefficient associated with one semester before the election semester remains statistically significant at the 5% level when focusing on the average amount of contracts won by local firms.

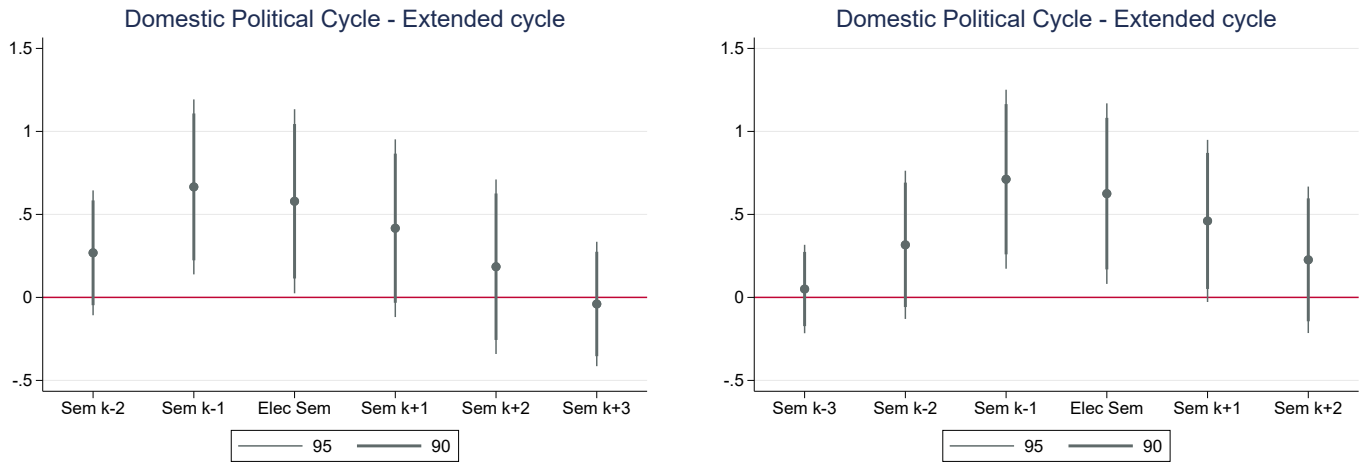
The exercise is then replicated for the cross-border political cycle. The results also support the existence of a true average effect of the election in the supplier countries on the average amount of contracts won by foreign firms, since the coefficient associated with one semester before the election in the supplier country holds significantly at the 5% level, regardless of which country is removed from the estimation.

Figure S.A2: Political Cycles - Checking for Outliers



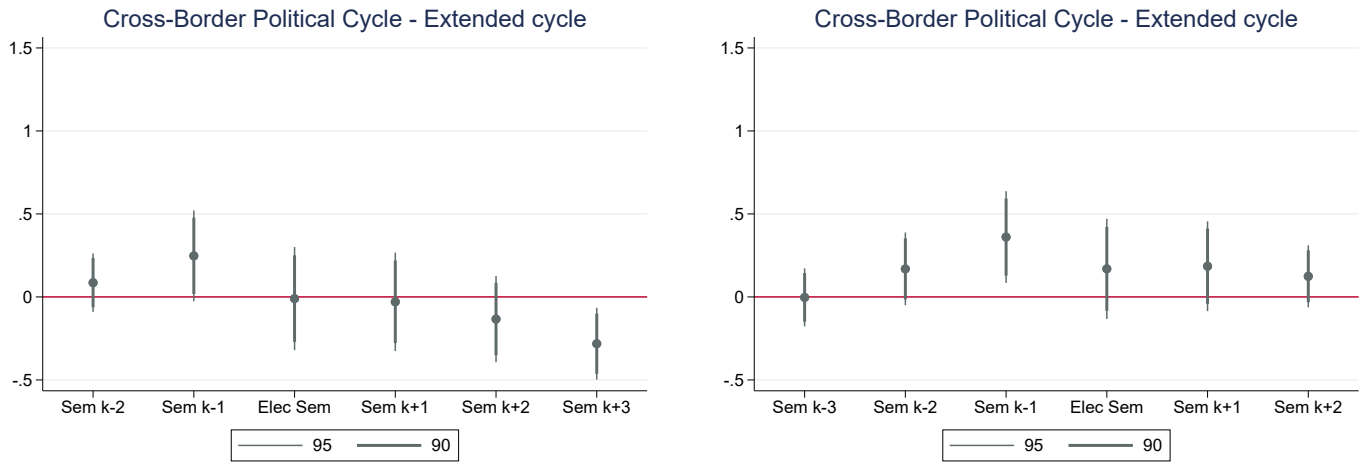

*Notes*:
***Left graph***: Coefficients estimated with recipient x year and semester x year fixed effects. Robust standard errors are clustered at the recipient x year level.
***Right Graph***: Coefficients estimated with recipient x year x semester, and supplier x recipient x year fixed effects. Robust standard errors are clustered at the supplier x year x semester level.

Figure S.A3: DPC - Extending the time frame




*Notes*:
***Left & Right graphs***: Coefficients estimated with recipient x year and semester x year fixed effects. Observations: 5,902. $R^2$: 0.84. Robust standard errors are clustered at the recipient x year level (2,951).

Figure S.A4: CBPC - Extending the time frame




*Notes*:
***Left & Right graphs***: Coefficients estimated with recipient x year x semester, and supplier x recipient x year fixed effects. Observations: 41,966. $R^2$: 0.88. Robust standard errors are clustered at the supplier x year x semester level (5,818).

## 2.6 Omitted variables

Table S.A13: Interaction with mean timing

| Dep. Var.: | $AverageAmount_{r,k,t}$ | $AverageAmount_{s,r,k,t}$ |
|---|---|---|
| | Local firms | Foreign firms |
| **Elections in**: | Recipient countries Semester$_{r,k,t}$ | Supplier countries Semester$_{s,k,t}$ |
| Semester k-2 $_{r,t,k}$ or $_{s,t,k}$ | -0.037 | 0.156 |
| | (0.358) | (0.107) |
| Semester k-1 $_{r,t,k}$ or $_{s,t,k}$ | 1.153 | 0.446 |
| | (0.373)*** | (0.162)*** |
| Election Semester $_{r,t,k}$ or $_{s,t,k}$ | 0.634 | 0.361 |
| | (0.325)* | (0.178)** |
| Semester k+1 $_{r,t,k}$ or $_{s,t,k}$ | 1.004 | 0.374 |
| | (0.359)*** | (0.160)** |
| Semester k+2 $_{r,t,k}$ or $_{s,t,k}$ | 0.618 | 0.241 |
| | (0.455) | (0.120)** |
| Mean Timing $_{s,t,k}$ | 0.063 | 0.394 |
| | (0.045) | (0.030)*** |
| Mean Timing $_{s,r,t,k}$ x k-2 | 0.093 | 0.013 |
| | (0.079) | (0.041) |
| Mean Timing $_{s,r,t,k}$ x k-1 | -0.176 | 0.032 |
| | (0.075)** | (0.047) |
| Mean Timing $_{s,r,t,k}$ x Elec | -0.030 | -0.028 |
| | (0.068) | (0.043) |
| Mean Timing $_{s,r,t,k}$ x k+1 | -0.171 | -0.016 |
| | (0.075)** | (0.044) |
| Mean Timing $_{s,r,t,k}$ x k+2 | -0.135 | -0.050 |
| | (0.088) | (0.039) |
| $N$ | 5,902 | 41,966 |
| $R^2$ | 0.85 | 0.90 |
| Recipient x Year FE | Yes | Yes |
| Year x Sem FE | Yes | No |
| Recip x Year x Sem FE | No | Yes |
| Supp x Recip x Year FE | No | Yes |
| N Recip x Year (clusters) | 2,951 | |
| N Supp x Year x Sem (clusters) | | 5,818 |

Robust standard errors in parentheses, clustered at the level reported in each column.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

Table S.A14: DPC - Interactions with aid

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

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

Table S.A15: CBPC - 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 $_{s,k,t}$ | 0.171 | 0.341 | 0.197 | 0.452 | 0.315 |
| | (0.085)** | (0.103)*** | (0.088)** | (0.117)*** | (0.101)*** |
| Semester k-1 $_{s,k,t}$ | 0.362 | 0.511 | 0.396 | 0.783 | 0.605 |
| | (0.128)*** | (0.149)*** | (0.134)*** | (0.182)*** | (0.156)*** |
| Election Semester $_{s,k,t}$ | 0.171 | 0.166 | 0.157 | 0.424 | 0.151 |
| | (0.146) | (0.163) | (0.149) | (0.198)** | (0.167) |
| Semester k+1 $_{s,k,t}$ | 0.186 | 0.083 | 0.201 | 0.368 | 0.088 |
| | (0.135) | (0.150) | (0.138) | (0.187)** | (0.156) |
| Semester k+2 $_{s,k,t}$ | 0.125 | -0.003 | 0.101 | 0.136 | -0.031 |
| | (0.094) | (0.117) | (0.096) | (0.127) | (0.108) |
| ODA $_{r,t}$ × Semester k-2 $_{s,k,t}$ | | -0.0001 | 0.0001 | -0.0003 | -0.0014 |
| | | (0.000) | (0.000) | (0.000) | (0.001)** |
| ODA $_{r,t}$ × Semester k-1 $_{s,k,t}$ | | -0.0002 | -0.0002 | -0.0004 | -0.0016 |
| | | (0.000)** | (0.001) | (0.000)** | (0.001)** |
| ODA $_{r,t}$ × Election Semester $_{s,k,t}$ | | 0.0001 | -0.0001 | -0.0004 | -0.0010 |
| | | (0.000) | (0.001) | (0.000) | (0.001) |
| ODA $_{r,t}$ × Semester k+1 $_{s,k,t}$ | | -0.0002 | -0.0016 | -0.0010 | -0.0006 |
| | | (0.000)** | (0.001)** | (0.000)** | (0.001) |
| ODA $_{r,t}$ × Semester k+2 $_{s,k,t}$ | | -0.0001 | -0.0021 | -0.0002 | 0.0002 |
| | | (0.000) | (0.001)** | (0.000) | (0.000) |
| $N$ | 39,982 | 39,982 | 39,982 | 39,982 | 39,982 |
| $R^2$ | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Recip. × Year × Sem. FE | Yes | Yes | Yes | Yes | Yes |
| Supp. × Recip. × Year FE | Yes | Yes | Yes | Yes | Yes |
| N Recip. × Year × Sem. (clusters) | 5,654 | 5,654 | 5,654 | 5,654 | 5,654 |

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

# 3 Allocation method and contract category

Tables S.A16, S.A17 and S.A18 display estimates of the domestic and cross-border political cycles when decomposing the sample according to the allocation method and the contract category, respectively. Results are discussed in the core text of the article and reported in Figures A1 and A2 in the appendix of the manuscript.

Table S.A16: Political cycles by allocation method

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|---|---|---|---|---|---|---|---|
| Dep. var.: | $AverageAmount_{r,k,t}$ | | | | $AverageAmount_{s,r,k,t}$ | | |
| | Local firms | | | | Foreign firms | | |
| | ICB | QCBS | SSS | NCB | ICB | QCBS | SSS |
| Semester k-2 | -0.711 | 0.527 | 0.007 | 0.140 | 0.196 | -0.139 | -0.695 |
| | (0.310)** | (0.373) | (0.263) | (0.292) | (0.178) | (0.097) | (0.261)*** |
| Semester k-1 | 0.625 | 0.422 | -0.355 | 0.511 | 0.768 | -0.218 | -1.2023 |
| | (0.437) | (0.417) | (0.381) | (0.357) | (0.264)*** | (0.130)* | (0.344)*** |
| Election Semester | 0.682 | 0.574 | -0.494 | 0.067 | 0.344 | -0.254 | 0.664 |
| | (0.475) | (0.448) | (0.412) | (0.367) | (0.283) | (0.134)* | (0.355)* |
| Semester k+1 | 0.154 | -0.248 | 0.465 | 0.228 | 0.217 | -0.066 | 0.112 |
| | (0.440) | (0.481) | (0.392) | (0.355) | (0.255) | (0.124) | (0.293) |
| Semester k+2 | 0.173 | -0.967 | 0.669 | -0.103 | 0.228 | -0.003 | 0.078 |
| | (0.335) | (0.434)** | (0.365)* | (0.254) | (0.174) | (0.109) | (0.255) |
| $N$ | 2,074 | 2,142 | 2,474 | 1,804 | 12,104 | 16,016 | 9,432 |
| $R^2$ | 0.84 | 0.70 | 0.73 | 0.66 | 0.87 | 0.81 | 0.84 |
| Year x Sem. FE | Yes | Yes | Yes | Yes | No | No | No |
| Recip. x Year FE | Yes | Yes | Yes | Yes | No | No | No |
| Recip. x Year x Sem. FE | No | No | No | No | Yes | Yes | Yes |
| Supp. 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 Supp. x Year x Sem. (clusters) | | | | | 2,874 | 3,654 | 3,150 |

*Notes*: Robust standard errors in parentheses, clustered at the level reported in the Table. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$.

Table S.A17: DPC by contract category

| | (1) | (2) | (3) |
|---|---|---|---|
| Dep. var.: | $AverageAmount_{r,k,t}$ | | |
| | Local firms | | |
| | Consultancy | Other than Consultancy | Civil Works |
| Semester k-2 $_{r,k,t}$ | 0.267 | 0.371 | -0.153 |
| | (0.218) | (0.258) | (0.298) |
| Semester k-1 $_{r,k,t}$ | 0.096 | 0.734 | 0.896 |
| | (0.289) | (0.319)** | (0.444)** |
| Election Semester $_{r,k,t}$ | -0.140 | 0.767 | 0.910 |
| | (0.337) | (0.336)** | (0.455)** |
| Semester k+1 $_{r,k,t}$ | -0.551 | 0.592 | 0.492 |
| | (0.323)* | (0.307)* | (0.389) |
| Semester k+2 $_{r,k,t}$ | -0.651 | 0.460 | 0.114 |
| | (0.314)** | (0.274)* | (0.248) |
| $N$ | 3,920 | 4,078 | 2,192 |
| $R^2$ | 0.73 | 0.77 | 0.82 |
| Year x Sem. FE | Yes | Yes | Yes |
| Recip. x Year FE | Yes | Yes | Yes |
| N Supp. x Year (clusters) | 1,960 | 2,039 | 1,096 |

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

Table S.A18: CBPC by contract category

| | (1) | (2) | (3) |
|---|---|---|---|
| Dep. var.: | $AverageAmount_{s,r,k,t}$ | | |
| | Foreign firms | | |
| | Consultancy | Other than Consultancy | Civil Works |
| Semester k-2 $_{s,k,t}$ | -0.146 | 0.194 | 0.773 |
| | (0.072)** | (0.150) | (0.499) |
| Semester k-1 $_{s,k,t}$ | -0.274 | 0.317 | 1.484 |
| | (0.100)*** | (0.187)* | (0.578)** |
| Election Semester $_{s,k,t}$ | -0.330 | -0.118 | 0.447 |
| | (0.111)*** | (0.204) | (0.595) |
| Semester k+1 $_{s,k,t}$ | -0.123 | -0.042 | 0.055 |
| | (0.109) | (0.177) | (0.567) |
| Semester k+2 $_{s,k,t}$ | -0.017 | 0.180 | 0.202 |
| | (0.097) | (0.148) | (0.355) |
| $N$ | 26,116 | 15,248 | 1,460 |
| $R^2$ | 0.82 | 0.88 | 0.80 |
| Recip. x Year x Sem FE | Yes | Yes | Yes |
| Supp. x Recip. x Year FE | Yes | Yes | Yes |
| N Supp. x Year x Sem. (clusters) | 4,936 | 3,518 | 972 |

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

# 4 Channels: suggestive evidence

## 4.1 Firms' donation to candidates

Tables S.A19 displays estimates of the domestic and cross-border political cycles when decomposing the sample according to the possibility for candidates from these countries to receive donations from private companies. Results are discussed in the core text of the article and reported in Figure 5 in the appendix of the manuscript.

Table S.A19: Political Cycles - Corporate donations to candidates

| Dep. Var.: | $AverageAmount_{r,k,t}$ | | $AverageAmount_{s,r,k,t}$ | |
|---|---|---|---|---|
| | Local firms | | Foreign firms | |
| **Elections in**: | Recipient countries Semester$_{r,k,t}$ | | Supplier countries Semester$_{s,k,t}$ | |
| Donation authorized: | Yes | No | Yes | No |
| Semester k-2 | 0.391 | 0.245 | 0.447 | 0.039 |
| | (0.251) | (0.257) | (0.133)*** | (0.140) |
| Semester k-1 | 0.599 | 0.579 | 0.364 | 0.277 |
| | (0.294)** | (0.405) | (0.156)** | (0.178) |
| Election Semester | 0.711 | -0.045 | 0.047 | 0.138 |
| | (0.299)** | (0.414) | (0.162) | (0.201) |
| Semester k+1 | 0.705 | -0.215 | 0.010 | 0.164 |
| | (0.300)** | (0.449) | (0.139) | (0.199) |
| Semester k+2 | 0.468 | -0.622 | -0.027 | 0.229 |
| | (0.264)* | (0.399) | (0.111) | (0.206) |
| $N$ | 3,986 | 1,254 | 23,960 | 12,084 |
| $R^2$ | 0.86 | 0.85 | 0.87 | 0.88 |
| Year x Sem. FE | Yes | Yes | No | No |
| Recip. x Year FE | Yes | Yes | No | No |
| Recip. x Year x Sem. FE | No | No | Yes | Yes |
| Supp. x Recip. x Year FE | No | No | Yes | Yes |
| N Supp. x Year (clusters) | 1,993 | 627 | - | - |
| N Supp. x Year x Sem. (clusters) | - | - | 3,658 | 1,460 |

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

## 4.2 Unemployment

Tables S.A20 displays estimates of the domestic and cross-border political cycles when including interaction terms between the various dummy variables capturing political cycle and the extent of unemployment in the election country recorded for the year $t$. Results are discussed in the core text of the article but not reported in the appendix.

Table S.A20: Political Cycles - interaction with unemployment

| Dep. Var.: | $AverageAmount_{r,k,t}$ | $AverageAmount_{s,r,k,t}$ |
|---|---|---|
| | Local firms | Foreign firms |
| **Elections in**: | Recipient countries Semester$_{r,k,t}$ | Supplier countries Semester$_{s,k,t}$ |
| Semester k-2 x Unemployt | 0.007 | 0.066 |
| | (0.028) | (0.021)*** |
| Semester k-1 x Unemployt | 0.082 | 0.034 |
| | (0.044)* | (0.023) |
| Election Semester x Unemployt | 0.139 | 0.046 |
| | (0.040)*** | (0.024)* |
| Semester k+1 x Unemployt | 0.059 | 0.031 |
| | (0.033)* | (0.024) |
| Semester k+2 x Unemployt | 0.058 | -0.027 |
| | (0.023)** | (0.017) |
| Semester k-2 | 0.206 | -0.312 |
| | (0.338) | (0.170)* |
| Semester k-1 | -0.060 | 0.085 |
| | (0.392) | (0.212) |
| Election Semester | -0.663 | -0.189 |
| | (0.361)* | (0.237) |
| Semester k+1 | -0.136 | -0.046 |
| | (0.342) | (0.221) |
| Semester k+2 | -0.344 | 0.332 |
| | (0.218) | (0.165)** |
| $N$ | 5,718 | 41,820 |
| $R^2$ | 0.85 | 0.88 |
| Year x Sem. FE | Yes | No |
| Recip. x Year FE | Yes | No |
| Recip. x Year x Sem. FE | No | Yes |
| Supp. x Recip. x Year FE | No | Yes |
| N Recip. x Year (clusters) | 2,859 | - |
| N Supp. x Year x Sem. (clusters) | - | 5,720 |

*Notes*: Robust standard errors in parentheses, clustered at the level reported in each column. Note that **Unemployt** is the annual unemployment rate of recipient and supplier country $i$ committed for year $t$, in estimates of domestic and cross-border political cycles, respectively. The variable in level (not in interaction) is therefore captured by the set of Recip. x Year in the domestic political cycle regression and by Supplier x recipient x Year fixed effects in the estimates of the cross-border political cycle. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

## 4.3 Political regime

Tables S.A21 displays estimates of the domestic and cross-border political cycles when decomposing the sample according to the extent of democracy in recipient or supplier countries. The distinction between democratic and non-democratic countries builds on their ranking in the polity V dataset (polity2 index). Results are discussed in the core text of the article but not reported in the appendix.

Table S.A21: Political Cycles - Political regime

| Dep. Var.: | $AverageAmount_{r,k,t}$ | | $AverageAmount_{s,r,k,t}$ | |
|---|---|---|---|---|
| | Local firms | | Foreign firms | |
| **Elections in**: | Recipient countries Semester$_{r,k,t}$ | | Supplier countries Semester$_{s,k,t}$ | |
| | Democracy | No Democ. | Democracy | No Democ. |
| Semester k-2 | 0.178 | 0.458 | 0.219 | -1.654 |
| | (0.204) | (0.238)* | (0.087)** | (0.520)*** |
| Semester k-1 | 0.781 | 0.476 | 0.354 | -2.145 |
| | (0.313)** | (0.252)* | (0.115)*** | (0.613)*** |
| Election Semester | 0.640 | 0.326 | 0.082 | 0.267 |
| | (0.322)** | (0.278) | (0.131) | (0.763) |
| Semester k+1 | 0.051 | 0.529 | 0.154 | 0.421 |
| | (0.244) | (0.308)* | (0.129) | (0.770) |
| Semester k+2 | -0.408 | 0.569 | 0.082 | 0.285 |
| | (0.188)** | (0.296)* | (0.113) | (0.453) |
| $N$ | 3,160 | 2,400 | 35,324 | 3,956 |
| $R^2$ | 0.84 | 0.87 | 0.88 | 0.92 |
| Year x Sem. FE | Yes | Yes | No | No |
| Recip. x Year FE | Yes | Yes | No | No |
| Recip. x Year x Sem. FE | No | No | Yes | Yes |
| Supp. x Recip. x Year FE | No | No | Yes | Yes |
| N Supp x Year (clusters) | 1,580 | 1,200 | - | - |
| N Supp. x Year x Sem. (clusters) | - | - | 3,852 | 1,472 |

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

## 4.4 Competitive election

As for the above tables, Tables S.A22 reports estimates of the domestic and cross-border political cycles when decomposing the sample according to the degree of competitiveness of elections in recipient or supplier countries, based on the NELDA definition of a competitive election. Results are discussed in the core text of the article but not reported in the appendix.

Table S.A22: Political Cyles - Competitive election

| Dep. Var.: | $AverageAmount_{r,k,t}$ | | $AverageAmount_{s,r,k,t}$ | |
|---|---|---|---|---|
| | Local firms | | Foreign firms | |
| **Elections in**: | Recipient countries Semester$_{r,k,t}$ | | Supplier countries Semester$_{s,k,t}$ | |
| | Not competitive | Competitive. | Not competitive | Competitive |
| Semester k-2 | 0.476 | 0.247 | -0.042 | 0.211 |
| | (0.255)* | (0.248) | (0.181) | (0.099)** |
| Semester k-1 | 0.650 | 0.522 | 0.175 | 0.346 |
| | (0.295)** | (0.288)* | (0.211) | (0.154)** |
| Election Semester | 0.499 | 0.559 | 0.208 | 0.023 |
| | (0.310) | (0.294)* | (0.286) | (0.163) |
| Semester k+1 | 0.482 | 0.578 | 0.268 | -0.094 |
| | (0.322) | (0.323)* | (0.263) | (0.153) |
| Semester k+2 | 0.496 | 0.318 | 0.220 | -0.138 |
| | (0.306) | (0.317) | (0.153) | (0.086) |
| $N$ | 4,412 | 4,538 | 21,412 | 34,634 |
| $R^2$ | 0.85 | 0.84 | 0.89 | 0.89 |
| Year x Sem. FE | Yes | Yes | No | No |
| Recip. x Year FE | Yes | Yes | No | No |
| Recip. x Year x Sem. FE | No | No | Yes | Yes |
| Supp. x Recip. x Year FE | No | No | Yes | Yes |
| N Supp. x Year (clusters) | 2,206 | 2,269 | - | - |
| N Supp. x Year x Sem. (clusters) | - | - | 3,854 | 4,582 |

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

## 4.5 Incumbent

Tables S.A23 displays estimates of the domestic and cross-border political cycles when decomposing the sample according to whether the incumbent (from either recipient or supplier countries) is running for another mandate. Results are discussed in the core text of the article and reported in Figure 6 in the appendix of the manuscript.

Table S.A23: Political Cylces - Incumbency

| Dep. Var.: | $AverageAmount_{r,k,t}$ | | $AverageAmount_{s,r,k,t}$ | |
|---|---|---|---|---|
| | Local firms | | Foreign firms | |
| **Elections in**: | Recipient countries Semester$_{r,k,t}$ | | Supplier countries Semester$_{s,k,t}$ | |
| | No Incumbent | Incumbent | No Incumbent | Incumbent |
| Semester k-2 | 0.425 | 0.307 | 0.345 | 0.119 |
| | (0.314) | (0.246) | (0.216) | (0.102) |
| Semester k-1 | 0.516 | 0.691 | 0.313 | 0.255 |
| | (0.356) | (0.343)** | (0.237) | (0.136)* |
| Election Semester | 0.372 | 0.699 | -0.160 | 0.218 |
| | (0.376) | (0.354)** | (0.238) | (0.169) |
| Semester k+1 | 0.542 | 0.564 | -0.389 | 0.200 |
| | (0.414) | (0.330)* | (0.212) * | (0.150) |
| Semester k+2 | 0.673 | 0.390 | 0.150 | 0.015 |
| | (0.411) | (0.326) | (0.151) | (0.102) |
| $N$ | 3,630 | 4,534 | 19,610 | 32,012 |
| $R^2$ | 0.84 | 0.84 | 0.90 | 0.89 |
| Year x Sem. FE | Yes | Yes | No | No |
| Recip. x Year FE | Yes | Yes | No | No |
| Recip. x Year x Sem. FE | No | No | Yes | Yes |
| Supp. x Recip. x Year FE | No | No | Yes | Yes |
| N Supp. x Year (clusters) | 1,815 | 2,267 | - | - |
| N Supp. x Year x Sem. (clusters) | - | - | 3,344 | 4,340 |

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

# References

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