

Agency independence, campaign contributions, and favouritism in US federal government contracting ^{*}

Mihály Fazekas,[†]Romain Ferrali,[‡]and Johannes Wachs[§]

April 14, 2022

Abstract

The impacts of money in US politics have long been debated. Building on principal-agent models, we test whether and to what degree companies' political donations lead to their favoured treatment in federal procurement. We expect the impact of donations on favouritism to vary by the strength of control by political principals over their bureaucratic agents. We compile a comprehensive dataset of published federal contracts and registered campaign contributions for 2004-2015. We develop risk indices capturing tendering practices and outcomes likely characterised by favouritism. Using fixed effects regressions, matching, and regression discontinuity analyses, we find that a large increase in donations from 10,000 USD to 5 million USD increases favouritism risks by about 1/4th standard deviation. These effects are largely partisan, with firms donating to the party that holds the presidency showing higher risk. Donations influence favouritism risks most in less independent agencies: the same donation increases the risk of favouritism by an additional 1/3rd standard deviation in agencies least insulated from politics. Exploiting sign-off thresholds, we demonstrate that donating contractors are subject to less scrutiny by political appointees.

Keywords: Corruption, Favouritism, Public Procurement, Campaign Contributions, Bureaucracy

11,146 words

^{*}The authors would like to express their gratitude to numerous colleagues who have commented on earlier versions of this draft, in particular Adam Ramey, Agnes Batory, Carl Dahlstrom, Charles Cameron, Christopher Yukins, David E. Lewis, Gemma Dipoppa, Gergo Toth, Gianmarco Daniele, and Steven Scooner. In addition, we are also grateful to participants for their insightful and stimulating comments in lunchtime seminars at the Central European University and George Washington University. Romain Ferrali gratefully acknowledges financial support from the French National Research Agency Grant ANR-17-EURE-0020 and the Excellence Initiative of Aix-Marseille University - A*MIDEX.

[†]Central European University

[‡]Aix Marseille Univ, CNRS, AMSE, Marseille, France

[§]Vienna Uni. of Econ. and Business, Complexity Science Hub Vienna

1 Introduction

The 2018 Federal Budget Bill (Appendix, Budget of the U.S. Government, Fiscal Year 2018, 728 (a)) states that “*None of the funds made available in this or any other Act may be used to recommend or require any entity submitting an offer for a Federal contract to disclose any of the following information as a condition of submitting the offer: (1) Any payment consisting of a contribution, expenditure, independent expenditure, or disbursement for an electioneering communication . . .*” Such language makes it hard to ignore the suspicion that the legislators intend to hide the links between companies’ campaign contributions and the federal contracts they win. This suspicion is even more disturbing given numerous scandals of favouritism and corruption in federal contracting linked to campaign contributions and other forms of influencing high-level decision makers. A case in point is a 300 million USD contract to assist in the reconstruction of Puerto Rico’s electricity grid awarded to a company with only 2 full-time employees,¹ owned by an individual who gave significant financial support to the Trump presidential campaign.²

The potentially democracy-distorting effects of money in elections have long been debated, in particular in the US, in the courts, the media, and in the scholarly record (Ansolabehere, de Figueiredo and Snyder, 2003). For instance, we know that compared to non-donating firms, donating firms receive more favourable sentences when facing legal issues (Fulmer and Knill, 2013) and have significant influence on legislation (McKay, 2018). There is now mounting evidence that companies donating to federal election campaigns win more contracts (Witko, 2011; Bromberg, 2014). What is still unclear are the mechanisms by which politicians might influence the procurement process in favor of their donors, given the key role independent bureaucrats play in the process. While findings that government suppliers hiring politicians and top appointees receive preferential treatment suggest pathways of political influence in procurement (Goldman, Rocholl and So, 2013), little is known about the conditions such influence is most effective.

In other words, what the US scholarly literature has not yet examined in sufficient empirical detail is how politicians benefiting from donations can actually steer federal contracts to donating firms and whether favoritism is conditional on bureaucratic features such as independence of the spending agencies. The analysis closest to ours by Witko (2011) examines the amount of contracts won as a result of donations, but not the institutional conditions facilitating such outcomes. Some evidence on the politicisation of agency spending suggests there is substantial variation across federal agencies and offices (Gordon, 2011). Extensive research from both high- and low-integrity countries reveals that partisan favouritism and corrupt contracting crucially depend on non-meritocratic and non-independent bureaucracies to allocate contracts to cronies (Boas, Hidalgo and

¹<https://www.reuters.com/article/us%2Dusa%2Dpuertorico%2Dpower/puerto%2Drico%2Dwhitfish%2Ddefend%2Dcontroversial%2Dpower%2Dcontract%2DidUSKBN1CU020>

²https://en.wikipedia.org/wiki/Whitefish_Energy

Richardson, 2014; Broms, Dahlström and Fazekas, 2019; Charron et al., 2017). With extensive political control of government bureaucracies at hand, politicians can make sure that tenders are tailored to their connected companies who, in turn, do not have to compete for contracts on a level playing field (David-Barrett and Fazekas, 2019). Taken together, it is quite possible but untested that US federal spending is biased by political donations, and that this effect is mediated by agency insulation from politics.

To fill this gap in the literature, we explore how political donations can lead to favouritism in contract allocation in the US, and ask following research question:

How do political party contributions bias the award of US federal government contracts favouring donating firms?

We conceptualise this analytical problem using a Principal-Agent framework, considering interactions between permanent bureaucrats on the one hand, and elected politicians and their bureaucratic appointees on the other. We combine two unique datasets to test our hypotheses. First, we collect and clean data on federal contracting payments from the official government website covering years 2004 to 2015.³ Second, we match individual donations in Bonica’s (2016) political contributors dataset to suppliers of goods and services to the federal government.

Answering our research question requires examining the impact of federal contractors’ political donations on whether a federal contract was awarded under circumstances that suggest favouritism (e.g. non-competitive tendering procedures, or lack of actual contenders in formally competitive tenders). Hence, our dependent variable is defined at the contract level: using factor analysis, we derive an indicator of favouritism construed as a latent dimension from seven individual risk factors that each are *weakly* suggestive of favouritism (we carefully validate our measure, and show that our findings are robust to considering simpler indicators of favouritism following prior literature). Our main independent variable captures donations from federal contractor donations to political parties and election campaigns of individual candidates.

Finding exogenous sources of variation in political donations is a challenge. Previous research has, to a large extent, sacrificed external validity for internal validity by leveraging local, small scale natural experiments as sources of exogenous variation in political donations. This paper takes an alternative route: we make global claims and leverage the universe of federal contracts over a long period of time. Doing so allows us to take advantage of the granularity of the data to make narrowly defined comparisons using a wide range of fixed effects. Our main specification uses fixed effects to compare contracts over the same congressional term, awarded by the same agency in the same state, for the same product category, leaving little room for unobserved confounders. Additionally, our results are largely unchanged across a range of robustness checks, for instance when tested on a smaller matched sample of contracts. Finally, as public procurement regula-

³<https://www.usaspending.gov/>

tions require different levels of involvement of political appointees depending on the value of the contract, we leverage these discontinuities to show that donor firms are favoured through the politicisation of agencies.

We report four core findings. First, we replicate Witko's (2011) finding that donating companies tend to win a higher total contract value, using a larger sample with a better specified dependent variable. Second, substantial donations to federal campaigns increase the likelihood of favouritism in contract allocation: donations going from 1,000 USD to 5 million USD increases favouritism risks by about 1/3rd standard deviation (higher values indicate a higher risk of favouritism). Third, we also find that the impact is rather partisan, that is the observed average impact of donations largely owes to donations to the president's party, with donations to the opposition being less effective. Fourth, crucially for understanding the bureaucratic dynamics that enable favouritism in contracting, the impact of donations on contracting risks is considerably larger where the contract is awarded by more politicised federal agencies. Specifically, contracts won by firms making large donations to the president's party (2.9 million USD or more) have 1/3rd standard deviation greater favouritism risk when the awarding agency is a less independent executive department, compared to more politically insulated parts of the public administration. Examining a key mechanism underlying our findings, we find that contracts awarded to donor firms show comparatively more favouritism when a political appointee is involved in the process compared to non-donors.

Compared to past studies in public administration and political science we make three contributions to the literature. First, we refine theories of principal-agent relationships in government contracting (Waterman and Meier, 1998), investigating the situation when the principal is unprincipled, that is it furthers the private interests of donating firms rather than the public or its voters. In such situations, the goal conflict between principals (elected politicians) and agents (independent bureaucrats) represents a key safeguard for integrity in government contracting. Second, we expand on the literature discussing political influences on US federal contracting (Witko, 2011) and bureaucratic responsiveness to political stimuli (Dahlström, Fazekas and Lewis, 2021). We find that politicians benefiting from extensive corporate donations are able to influence tendering terms and bid evaluation to the degree that specific donating firms benefit directly. This requires a depth of influence on budget execution which ought to worry the American public. Third, we refine the rich literature on the politics of presidential appointments and the impacts of politicising the federal bureaucracy (Hollibaugh, 2014). We demonstrate that a key mechanism linking political donations to contracting processes and outcomes goes through political appointees interfering in the contracting process in favour of donating firms (this finding complements recent evidence on the impact of agency structure (Krause and Zarit, 2022)). While our effect sizes are modest on average, they become substantial when a highly politically-engaged company (i.e. a large donor) meets a highly

politicised federal bureaucracy. This suggests that there should be significant returns to improving bureaucratic insulation in selected federal offices, both in terms of improving outcomes and moderating the corrupting effect of money in politics.

2 Theory

2.1 Political favouritism and campaign donations

Let us first define the two core concepts this article investigates: political campaign donations and political favouritism in government contracting (for an in-depth conceptual overview, see Fazekas and Cingolani, 2017). Political campaign donations in electoral democracies refer to the “(legal and illegal) financing of [...] electoral campaigns (in particular, campaigns by candidates and political parties, but also by third parties)” (Falguera, Jones and Ohman, 2014, p. 2). Such financing can take many forms such as monetary transfers or in-kind support (e.g. renting out a company venue to campaign events for a nominal price). Campaign donations may pass through a diversity of channels, many of which can be used to hide the link between sender and recipient. For example, if laws preclude direct donations by corporations, their employees could offer individual donations instead.

Favouritism in government contracting⁴ is a phenomenon distinct from various forms of corruption discussed in the literature such as bribery or bureaucratic corruption (Heidenheimer and Johnston, 2001; Johnston, 1996). In the context of government contracting and campaign donations, high-level government favouritism is what plays a central role, rather than isolated instances of low-level bribery (Fazekas, Tóth and King, 2016; OECD, 2007). Hence, we define high-level corruption or *favouritism in public procurement* as *the allocation and performance of public procurement contracts by bending prior explicit rules and principles of good public procurement in order to benefit a closed network while denying access to all others* (Mungiu-Pippidi, 2015). The goal of such favouritism is to steer the contract to the favoured bidder without detection, often recurrently and in an institutionalised fashion (World Bank, 2009). This can be done, for example, by avoiding competition (e.g. unjustified sole sourcing) or favouring a certain bidder (e.g. tailoring specifications to a particular company) (Fazekas and Kocsis, 2020). Many transactions designated as favouritism by this definition may be considered legal by current federal laws. In other words, such actions break the spirit rather than the letter of the law.

Favouritism in government contracting in return for campaign donations is best conceptualised as an exchange of favours between private actors (companies) and public actors (politicians) on a regular, institutionalised basis (della Porta and Vannucci, 1999).

⁴We use the terms government contracting, public procurement or public tendering interchangeably throughout this article.

Favours from private to public actors can take the form of money or in-kind benefits, while favours from public to private actors consist of preferential treatment in public procurement tenders and contract execution (OECD, 2017). To grant access to government contracts, candidates for public office must win elections – a risky endeavour that requires considerable financial resources –, and use their public powers in favour of donating companies – an activity which is subject to bureaucratic controls. To make the whole enterprise profitable, companies need to extract rents from government contracts, either by charging above-market rates, or by delivering below-market quantity or quality. Rents and their flows need to remain secret, hence the frequent use of secrecy jurisdictions for bank transactions and company registration (Shaxson and Christensen, 2014). Elite groups managing regular, institutionalised favour exchanges must have developed effective means of enforcing deals over many months, even years, making the exchange of campaign donations for government contracts very complex, hence hard to pin down precisely. The involved payments often belong to a broader scheme rather than a direct one-to-one exchange (Witko, 2011).

2.2 Public procurement with a dishonest principal: theory and testable predictions

Contracting by the US federal government is a highly regulated administrative process whereby federal agencies and their offices purchase goods and services ranging from school meals to military equipment (Schooner, Nash and O’Brian-Bakey, 2013). It is subject to profound political influences and pressures in spite of the preeminent role played by independent bureaucracies (Brunjes, 2019). Much of the public administration scholarship on US federal contracting looks at the various effects of bureaucratic decisions such as transaction costs of contracting, competition, or value for money, while paying less attention to political pressures and biases (Petersen et al., 2019; Brunjes, 2020; Girth and Lopez, 2019).

Among dominant theoretical perspectives on contracting, the principal-agent framework is particularly suited to analyze how political influences may impact federal contracting. The approach analyzes an asymmetric relationship between a principal (the politician) and an agent (the bureaucrat). In the approach, the principal wishes to govern the actions of the agent, knowing that (1) the principal has incomplete control over the agent, and (2) the principal and the agent may have different goals. The approach typically assumes that the principal is honest, while the agent may have diverging interests, such as favouring a suboptimal firm (e.g., Brunjes, 2020; Girth and Lopez, 2019). This assumption is most appropriate when the analysis focuses on which policies may best prevent dishonest agents from engaging in favouritism.

In order to model the impact of political influences on federal contracting, we suppose

instead, following Witko (2011), that the principal is dishonest, and wishes to reward a client (donor) firm. Within the existing regulatory framework, the principal thus wants to prevent honest agents from awarding the contract to another firm than the client, be it the optimal firm (if the agent is honest), or another firm (if the agent is dishonest, but disagrees with the principal over which firm to favor).

The principal's goal of rewarding a donor firm translates into more proximate goals for each stage of the procurement process, which we will leverage when constructing our measure of favouritism. Once it is decided to procure a product, the procurement process can be divided into 3 stages: (1) preparation and tendering; (2) contract award; and (3) contract implementation. The first stage requires that decisions are made regarding product specifications, the expected experience and qualities of the supplier and the format of the tender, such as whether to use an open auction format. At this stage, a dishonest politician is interested in creating a monopoly position or resource dependence (Malatesta and Smith, 2011), favouring the donating bidder (client) by for example defining overly specific products to purchase. Conversely, an honest politician would want to follow federal contracting rules mandating open competition or a trusted relationship with a well-performing contractor (Brunjes, 2020). After submission, during the second, contract award stage, bids are assessed for eligibility (i.e. whether they fulfill the conditions for participating in the tender) and eligible bids are ranked to select the winning bidder and to contract it. At this stage, a dishonest politician would want to put pressure on contracting officers to favourably assess the bid submitted by the donating firm (client). Conversely, an honest politician would want bureaucrats to impartially assess all bids strictly following contracting terms and legal prescriptions. During the third, contract implementation stage, the buyer receives the goods and services from the contracted supplier, while contract modifications, such as increasing contract value, may also occur (Petersen et al., 2019). This is the stage where a dishonest politician would aim for lenient verification of delivery quality and quantity or favourable terms for modifying the contract. Conversely, an honest politician would want bureaucrats to minimize deviations from the agreed contracting terms, safeguarding the satisfactory completion of the contract.

This setup immediately yields our first testable prediction. Since dishonest principals wish to reward donor firms while honest principals neither want to punish nor reward such firms, and since politicians have a modicum of control over bureaucrats (Gordon, 2011), firms should increase their chances of being favoured by donating to any political party. In other words, donations act as a generic "entry ticket" to the political class and their informal networks (Witko, 2011). It allows the company to pull the strings in diverse ways, leading to preferential treatment potentially at any stage of the procurement cycle. Particularly in the highly fragmented US political system, even politicians from the minority party may be able to influence spending decisions of key committees and have a

range of contacts and pressure points on the federal bureaucracy which confer benefit to their donors. Hence, any donation, whether going to a particular race for the presidency or Congress, or to the party holding majority or minority in Congress has some degree of influence over the favoured treatment of bidding firms (Bromberg, 2014). For example, interviewees of Bromberg (2014) noted instances in which, “*A company who is competing will write their Senator or their Representative and will say “Any support you can get me” and we will generally get an inquiry letter stating, “We understand they’ve applied, we want to make sure you give them all the fair treatment.”*” Such a broad and arguably rather blunt hypothesis does not preclude that the quantity of donations matters. That is to say, a company has to be noticed by the political elite to be able to build and use connections: small donations might matter less or not at all compared to large donations. Hence, we hypothesize:

Hypothesis 1. By donating to any political party, the company increases its chance of being favoured in federal contracting.

A crucial parameter in the principal’s ability to achieve her goal is her degree of control over the agent: the greater the ability of (corrupt) politicians to control contracting officers, the more likely that favouritism arises. In the context of public procurement, US federal bureaucrats are governed by multiple principals. On the one hand the executive acts in this role through political appointees. On the other hand Congress may define budget appropriations that could lead to favouring specific companies. For instance, it is possible to allocate spending to specific products like a particular military kit.

Our theory sidesteps Congressional control over the bureaucracy, and focuses only on executive control for two reasons. First, an extant literature has shown that political appointees are an effective mechanism for political principals to govern the actions of bureaucrats (Lewis, 2010). In the context of public procurement, political appointees may influence contracting processes and outcomes in subtle ways (Dahlström, Fazekas and Lewis, 2021). Political appointees sitting in top agency positions can have a variety of indirect means for influencing contracting officers throughout the whole tendering cycle. This can happen informally whereby bureaucrats understand implicit political preferences and aim to implement them creating a goal congruence between politicians and bureaucrats (Witko, 2011). For example, an appointee can speak highly of a particular firm during a coffee break making it clear that the career contracting official’s advancement in the agency would be favourably viewed if that particular firm would receive its “fair share”. Moreover, appointees in programmatic positions can influence the tender preparation stage by defining product specifications or bidder experience requirements which likely lead to contract award to a donating firm (e.g. requesting the purchase of an aircraft only produced by one company). In addition, appointees in procurement positions can influence multiple phases of the procurement process. During the tender

preparation phase, approval from political appointees is typically needed for exceptional non-competitive procedures for high-value tenders. This implies that an appointee can directly use its sign-off role to steer the contract to a donating firm. At this stage, the tendering terms and assessment criteria can also be influenced in ways that subtly favour a particular company, for example by requiring specific experience only one company has, or setting up the scoring weights to match that company's strengths.

Second, given that the incumbent tends to hold small majorities in Congress and that party discipline is low, the conditions for Congress to routinely influence the procurement process seem daunting.⁵ As such, we relegate the examination of Congressional influence over the procurement process to further research.

Exploring the consequences of executive control over the bureaucracy leads us to formulate two additional hypotheses. First, because the executive exerts control over the bureaucracy, donating to the incumbent party should be more effective than donating to the opposition. Indeed, the literature on the US emphasises the partisan nature of companies' political influence and the importance of being connected to holders of key government posts such as the presidency rather than connections to the opposition (Boas, Hidalgo and Richardson, 2014; Goldman, Rocholl and So, 2013). As such, donations to the president's party are likely to influence the president himself as both Republican and Democratic parties are highly institutionalised organisations that use campaign contributions strategically (Schleiter and Voznaya, 2018). As such:

Hypothesis 2. By donating to the party in power, the company increases its chance of being favoured in federal contracting more than by donating to the opposition.

Second, if political appointees are indeed a key mechanism of executive control over the procurement process, then federal agencies that are less insulated from the president should be more amenable to manipulation. More independent agencies mostly enjoy more freedom over staffing decisions (Hollibaugh, 2014), but may also enjoy more independence over policy-making, notably in budgeting (Selin, 2015). Our reasoning is best illustrated by a scandal analysed by Gordon (2011), in which a White House official briefed political appointees at a federal agency, the General Services Administration (GSA), suggesting they should use agency resources for political ends. Crucially for our understanding of this mechanism, only one of GSA's branches, the Public Buildings Service, responded to the clear political guidance. This is the part of GSA which sees a higher proportion of senior political appointees, with two of its three most senior positions filled with appointees at the time. We argue that the depth of political appointees' penetration into agencies determines the degree of influence of party donations on agency decisions such

⁵Congress might be able to exert control over the procurement process indirectly, through the veto power it exerts on the nomination of political appointees. Lacking detailed data on the appointment processes, we are unable to explore in detail the interaction between presidential and congressional appointee approvals.

as contracting design and outcomes (Dahlström, Fazekas and Lewis, 2021). Hence, we hypothesize:

Hypothesis 3. By donating to the party in power, the company increases its chance of being favoured in federal contracting especially when agency independence is low.

Note finally that the depth of political appointees’ penetration into an agency is likely the most important determinant of the principal’s ability to influence the procurement process. Indeed, as public procurement is tightly regulated in the US (Schooner, Nash and O’Brian-Bakey, 2013), with largely uniform standards across the federal government, political principals are arguably not able to leverage variation in regulations across agencies ⁶. Similarly, the overall accountability framework, including audit requirements, judicial review, or civil society oversight, is also largely the same across federal agencies ⁷. As such, of the three main areas of procurement capture – legislation, accountability framework, and implementation, – variation in the extent to which implementation is politicised should be the key area of interest (David-Barrett and Fazekas, 2019).

3 Data, indicators and methods

3.1 Data

3.1.1 Contract data

We collected transaction level data on federal contracts⁸ from [usaspending.gov](https://www.usaspending.gov), the US government’s online repository of federal spending, containing virtually all federal contracts in the United States from 2004-2015, inclusive. The source dataset reports individual ”actions” on contracts, such as payments, or modifications of the completion date. We aggregated these actions to the contract level, using the contract’s unique identifier, totalling more than 2.1 million contracts. We consider the first instance of an identifier as the canonical source for information regarding the corresponding contract. The federal contracting database includes information on all contracts above a mandatory reporting threshold (\$25,000 for most of our period) awarded by federal agencies regulated by the Federal Acquisition Regulation (FAR).⁹ We followed the protocol outlined in other works on public procurement for data cleaning and coding (see Charron et al., 2017; Dávid-Barrett et al., 2017). This allows for a relatively clean comparison with

⁶There are some agency-specific regulations such as for the Department of Defence. We control for these by using agency-office fixed effects.

⁷Again, the existing agency-specific variation in rules is removed by our agency-office fixed effects.

⁸This includes so-called indefinite delivery vehicles that are, in essence, multi-year rolling contracts.

⁹There are a number of legally mandated exceptions and exchanges with domain experts that suggest that administrative error may bias the database to a small degree. Nevertheless, we assess that our claim to complete representation of federal purchasing is adequate. For information on the Federal Acquisition Regulation see <https://www.acquisition.gov/browsefar>.

research on procurement corruption and favouritism in other contexts. To avoid excessive noise from less competitive markets common in low value procurement, the analysis is conducted only on high-value contracts, that is above \$180,000.¹⁰ This is the monetary threshold for World Trade Organisation Government Procurement Agreement¹¹ rules (i.e. internationally competitive public procurement). This restriction cuts our sample size to a little under half a million contracts.

We extracted and aggregated the following records for each transaction made in the context of a contract.

- Sum of dollars obligated – the sum of all dollars transferred from buyer to supplier.
- Date the contract was signed.
- Place of contract’s performance.
- The estimated total value of the contract per the first transaction.
- The buyer’s office and agency identifier, and whether the GSA ran the procurement.
- The supplier’s Dun and Bradstreet (DUNS) number and name, and the DUNS number and name of its parent company, if listed.
- The registered location of the supplier.
- The detailed Product Service Code (PSC) of the contract, capturing broadly the type of good or service provided by the contract.
- Tender advertisement: whether the contracting opportunity was listed on FedBizOpps, the online portal for advertising business opportunities from the federal government.
- The procedure type used to award the contract.
- The number of bidders submitting offers to supply the contract.
- The number and type of modifications made during the course of the performance of the contract.
- The pricing type of the contract; that is, whether it was a fixed or a cost-plus contract, or used another pricing formula.

¹⁰Visual inspection revealed no indication of gaming around this threshold suggesting that our chosen sample adequately approximates the true full population of federal contracts above \$180,000.

¹¹<https://e-gpa.wto.org/en/ThresholdNotification/FrontPage>

We use four fields in our data to identify a supplier: the listed Dun and Bradstreet DUNS number, the supplier’s parent company’s DUNS number, and the listed names of the supplier and parent company. As a single entity doing business in the US can have multiple DUNS numbers, we link all entities with the same name and sharing either a DUNS or parent company DUNS number. Given a collection of linked DUNS numbers associated to the same entity, we use the most frequent DUNS number as the canonical record. We record a dictionary of company names and DUNS numbers associated with a canonical DUNS number for later use in matching with debarment data and campaign contributions.

3.1.2 Matching vendors to political contributions

We also collected and matched campaign contributions data to the contracting dataset. The Database on Ideology, Money in Politics, and Elections (DIME) includes campaign contributions from individuals and legal entities from 1979 to 2014 to candidates for federal office in the United States as well as to political party organisations (such as the Democratic and Republican national committees), grouped by congressional term (Bonica, 2016). Data on contributions from individuals includes two fields for an individual’s employer.

We used standard text processing methods (lowercasing, removing punctuation, removing business entity suffixes such as “Inc.” or “Ltd.”) on these names and linked them to contract supplier names (also processed) associated to contracts via DUNS numbers, as discussed above. Our matching procedure looks up each company name appearing on a campaign contribution in a list of all company aliases generated from the contracting data. This increases our method’s robustness to alternative representations of companies in contribution data. For each supplier, we record the sum of their contributions to Republican and Democratic campaigns in each two-year congressional period from January 2003 to December 2014.

At the contract level we note the supplier’s total contributions to both parties in the current and previous congressional terms. For example, for a supplier winning a contract in October 2011 we record the donations made by employees of the company to Republicans and Democrats from January 2009 to January 2011 as previous term donations, and donations made to either party between January 2011 and January 2013 as current term donations.

While political donations recorded in the data come from individuals (note that company donations are largely opaque in the US), it is companies who benefit from government contracts. Hence, we argue that individual donations are a suitable proxy for company political alignment and represent a major channel through which companies seek political favours in the US. We sum all individual donations to a party on the com-

pany level and show that large donations are what matter. These underpin our argument because it is likely that individual donations are aligned with the company’s political preferences and unobserved political party financing, especially when the total value of individual donations is large. High value donations are most likely to come from top officials in the company defining the company’s approach towards the government. Nevertheless, we do acknowledge that using the sum of individual donations as a proxy for company political financing may bias our estimates. As such, we show below that about half of the companies in our sample only donate to one party increasing our confidence in the individual donations proxy. Moreover, our findings remain robust to the exclusion of companies who donate to both parties (Online Appendix C.6).

3.2 Indicators

3.2.1 Favouritism Risk Index

Our data do not directly record instances of favouritism in the procurement process. To circumvent this problem, we construct the Favouritism Risk Index (FRI), an index that captures the *risk* of favouritism underlying the award of a contract by a federal agency to a company. To do so, we select a series of binary risk indicators that each capture deviations from standard competitive tendering at each stage of the tendering process (i.e., design, award, execution). We then aggregate these indicators into a composite index, the FRI. Finally, we verify the validity of our construct by comparing it to available measures of corruption or favouritism.

We do not claim that, taken individually, the risk indicators we consider necessarily signal favouritism. However, we argue that the concurrent presence of many such risk indicators captures an underlying risk of favouritism.

In the remainder of this section, we first describe the risk indicators we selected. We then describe the procedure we use to aggregate those into a composite index, the FRI. We finally describe how we validate the FRI.

We select 7 elementary indicators that indicate deviations from standard competitive tendering at various stages of the tendering process, using an extensive review of the literature (Klasnja, 2016; Lewis-Faupel et al., 2016; Fazekas and Kocsis, 2020). Our binary indicators are the following:

1. *Single bidding*: whether the contract was awarded in a tender where only one company bid. Favouring a company by artificially eliminating its competitors (e.g. by tailoring the terms in nuanced ways to the favoured company) is likely to result in only one bid submitted on an otherwise competitive market (recall, we restricted the sample to high-value internationally competitive tenders according to WTO rules).

2. *No publication*: whether the tendering opportunity was not announced on FedBizOpps,¹² the federal government’s online platform for contracting opportunities. As companies know about contract opportunities, simply avoiding the publication of the call for tenders makes it easier to avoid competition from non-favoured companies. Permission to by-pass FedBizOpps is granted by contracting agency officials (Manuel, 2011).
3. *Non-competitive procedure type*: whether the contract was awarded in a fully open and competitive procedure. If a contract is awarded by a procedure which is not fully open and competitive, for example by direct award, it is comparatively much easier to favour one company over others.¹³
4. *Non-open solicitation type*: whether the contract is awarded in a procedure type which minimises buyer discretion such as sealed bid auction. When a contract is directly negotiated with a supplier or only a simplified quote is asked from a pre-selected contractor or group of contractors, it is easier to set terms allowing the supplier to earn extra profit margins, that is reap benefits of a favoured position.¹⁴
5. *Contract Modifications*: whether the contract undergoes modification post-award. Post-award modifications can be used to extract rents by changing conditions of performance, for instance time to delivery, quality, or even price.¹⁵
6. *Supplier tax haven registration*: whether the supplier (typical country of origin in our supplier groups as described above) is registered in a tax-haven as defined by the Tax Justice Network’s scoring of banking and corporate registry transparency (Tax Justice Network, 2013). When excessive profits are earned and some of them are channeled back to politicians, secrecy is paramount, hence using at least one tax haven registered company in the supplier’s ownership network facilitates favouritism in government contracting.
7. *Supplier debarred*: whether the supplier (or any of its linked entities in our supplier groups as described above) has appeared on the official debarment list of the Office of Federal Contract Compliance Programs in our observation period. Debarment

¹²<https://www.fbo.gov/>

¹³The following procedure types were considered as non-competitive (FPDS-NP database codes in parentheses): Not Available for Competition (B), Not Competed (C), Follow On to Competed Action (E), Not Competed under SAP,(G), Competitive Delivery Order (CDO), Non-Competitive Delivery Order (NDO)

¹⁴The following solicitation types were coded as competition-restricting (FPDS-NP database codes in parentheses): Alternative Sources (AS), Simplified Acquisition (SP1), and Only One Source (SSS).

¹⁵Specifically, we coded a contract as modified if any modifications marked with FPDS-NP codes A (“Additional Work”) or B (“Supplemental Agreement for work within scope”) appear in the contract history. These two modification types are the most common and flexible ways to modify contracts with a potential effect on the profit made from them, without requiring significant additional justifications.

is often made on the basis of falsifying information, bribery, or colluding with public buyers to manipulate competition. Hence, debarment may signal the proven incidence of favouring a particular supplier/vendor across a longer time-period.

It is easy to see that, taken individually, the above risk indicators do not necessarily signal favouritism. This is immediately evidenced by the fact that some components, such as single bidding and contract modification are relatively frequent (Figure 1). Indeed, such risk factors may stem from a range of legitimate reasons such as product complexity and specificity (i.e. the requirements of the buyer permitting only one company to bid, see Brunjes, 2020), or compelling urgency (i.e. bureaucratic error leading to tight project timeline necessitating a quick, noncompetitive award), or unanticipated shocks prompting delays and increases in cost at the execution stage. As such, we argue that, while taken individually, no component of the FRI necessarily indicates favouritism *per se*, the concurrent presence of many red flags captures an underlying risk of favouritism.

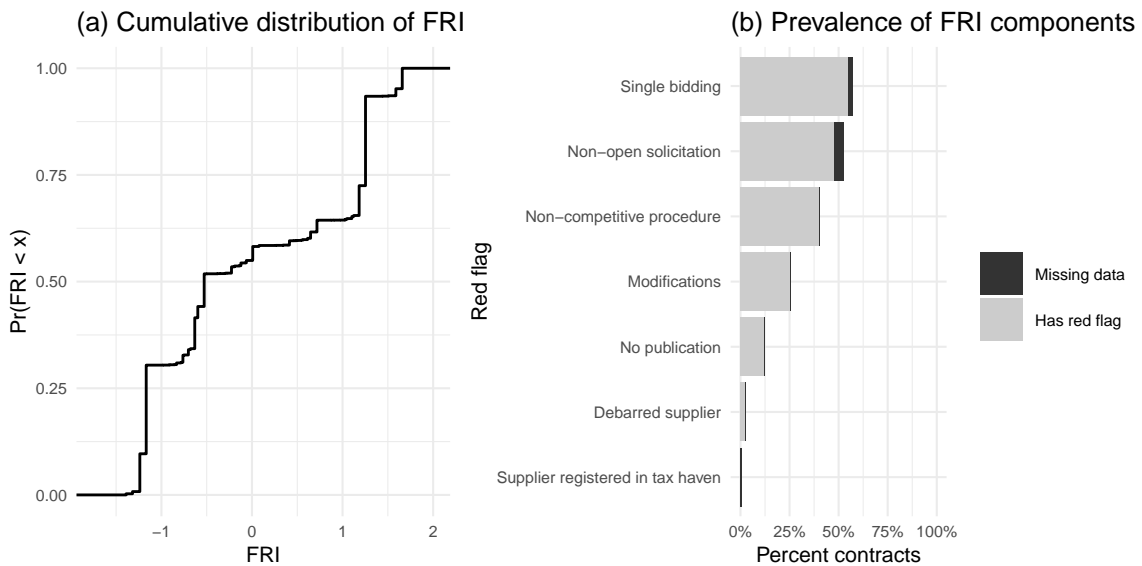


Figure 1: Descriptive statistics about the FRI

Aggregating those binary indicators into a composite index is not straightforward. As argued above, taken individually, each of our seven indicator is a weak signal of favouritism. On top of that, it is unclear how those indicators interact with one another. They may act as complements, implying that more risk factors signal more favouritism. They may also act as substitutes, whereby some forms of favouritism make others unnecessary (e.g. if the contract is awarded without competition there is no point manipulating the scoring criteria).

In light of these challenges, we turn to factor analysis in order to aggregate those binary indicators into a composite index. Since corruption is best characterised as a latent dimension influencing the variation of all corruption strategies throughout the

procurement cycle – that is our 7 elementary risk indicators –, factor analysis is a natural way of exploiting such variation.¹⁶ We use the weighted composite score based on factor loadings as the main dependent variable in the subsequent analysis. Exploratory factor analysis results, reported in Online Appendix A, suggest that one dimension best captures the underlying variance, with up to three factors also potentially acceptable (Online Appendix A, Figure A1).

We use the weights from our one-factor specification to define what we will call the “Favouritism Risk Index” (FRI - adapting the terminology from different composite scores in the literature such as Corruption Risk Index (CRI)). Figure 1 shows the distribution of the FRI, as well as the prevalence of each of its individual components. We prefer this specification because it is most parsimonious and most coherent conceptually. Indeed, the factor loadings from this specification capture manipulation of both the tendering and award phases, with large weights on non-publication of call for tenders, non-competitive procedure, non-open solicitation, and single bidding (Online Appendix A, Table A5)¹⁷. This formulation of the FRI also closely aligns with our hypothesized impact mechanism going through political appointees in federal agencies who can more readily manipulate tendering and award; whereas they have less control over contract implementation which is often decentralised across the country.

We check the validity of our construct in several ways. First, we show that it is consistent with results in the most relevant literature on the US and comparable OECD countries. Second, we show micro-level validity based on the indicators’ fit with theoretical predictions regarding corruption in US public procurement. Third, we show that it correlates with available data on corruption perceptions in the US. Finally, we show that our main results are robust to alternative constructions of the index.

First, previous work on political influence in government contracting in the US and Europe demonstrates that high-level actors in government do interfere in the contracting process for political purposes. Most relevant is Gordon’s (2011) study of the George W. Bush administration’s presentation to representatives from the GSA, a large government buyer of goods and services, urging them to channel extra spending to targeted congressional districts held by at-risk Republican incumbents. Gordon’s findings indicate that this pressure from above resulted in a significant increase in the dollars obligated by the agency in those districts, but no increase in the number of contracts awarded. Gordon also noted that single bidder contracts were significantly more likely to see an increase in dollars obligated during the period in question while multiple bidder contracts remained

¹⁶Due to the binary nature of our risk indicators, our estimation uses exploratory factor analysis (minimum residual solution) with tetrachoric correlations.

¹⁷Weights are very small and negative for modifications, suggesting that post award manipulation is complementary to tender and award manipulation. Weights are also small and negative for supplier risk indicators, debarment and tax haven registration, again suggesting that these manipulation strategies are complementary.

unmoved. Similarly, research from Sweden, Italy and selected Central and Eastern European countries have used such indicators to study corruption (Broms, Dahlström and Fazekas, 2019; Coviello and Gagliarducci, 2017; Fazekas and King, 2019; Wachs et al., 2019). Crucially, such corruption proxies do perform well in countries with comparable levels of public sector integrity in Europe (Charron et al., 2017).

Second, micro-level validity of the proposed proxies can be tested by exploiting the input-output relationships among them. That is, we expect single bidding to be an outcome predicted by risk factors of the tendering process while it is also expected to be positively associated with risks of later stages in the procurement process such as contract execution. Simple regressions confirm our expectations that single bidding is predicted by no publication, non-competitive procedure, non-open solicitation procedure, and subsequent modifications (effect direction is negative for the latter, suggesting that post award modifications are a complementary strategy to capturing the tendering process) (Online Appendix A, Table A2). This replicates comparable findings for EU countries (Fazekas and Kocsis, 2020). Also in line with comparable European results, tax haven registered firms are more likely to win single bid contracts. Finally, company debarment is the most straightforward risk indicator we could identify as it rests on a concluded legal case.

Third, the validity of FRI is further supported by its association with survey-based perceptions indicators. Three existing measurements of perceived high-level corruption risk and favouritism in US states can be used for validity testing: i) Corruption in American States Survey of reporters (2014);¹⁸ ii) a survey of State House reporters measuring corruption in state governments (1999) (Boylan and Long, 2003), and iii) GALLUP Perception of Corruption survey aggregated to the state level (2006-2014) (Brezzi and Ramirez, 2016). Simple bivariate correlations are confirmatory for all three sources, albeit not particularly strong, ranging around 0.2-0.3 which is hardly surprising given the expected disconnect between favouritism in US states and the federal agencies based in those states (Online Appendix A, Table A4).

Fourth, we verify that our results are robust to alternative constructions of the FRI. We first define as favouritism contracts that had a single bidder and were awarded through a non-competitive procedure (Dahlström, Fazekas and Lewis, 2021). Second, we use a simple sum of all seven binary indicators (Fazekas and Kocsis, 2020). Third, we use the first factor of our three-factors specification. Those three measures of favouritism risk strongly correlate with one another, as well as with our preferred specification of the FRI (binary linear correlation coefficients of 0.84-0.98) (see Online Appendix A, Table A3 for correlations, and Online Appendix C.8 for results).

¹⁸<https://ethics.harvard.edu/blog/measuring-illegal-and-legal-corruption-american-states-some-results-safra>

3.2.2 Campaign contributions

We define several variants of the donations variable. We consider the sum of political donations by the firm in the current and previous congressional terms, relative to the contract signing date. We also create a dummy variable for whether the supplier has donated at all during that period. We track the political party controlling the White House and construct similar measures of donations to the majority and the opposition, to test whether contributions to the party in power increases risks more than donations to the party not in power.

3.2.3 Agency independence

We measure agency politicisation by tracking agencies' structural insulation from political inference (Selin, 2015). Following Dahlström et al. (2021), agencies are categorised from most to least politicised into i) Executive Departments (not separate bureaus); ii) Executive Departments (distinct bureaus); iii) Independent Administrations (agencies structured similar to executive departments but not part of the cabinet); and iv) Independent Commissions and Regulatory Commissions. While structural independence has been static in our observation period, it is directly relevant to the main impact mechanism postulated by our theory. Independent Commissions and Regulatory Commissions, e.g. the Federal Reserve Board which is among the most independents, are the least likely to have political appointees determine agency contracting in detail. In the below analysis, we use a coarsened 2-category version (i+ii vs iii+iv) to keep the interacted regression tables tractable. We also report the full, 4-category version as robustness test (Online Appendix C.7).

3.3 Methods

Assessing whether political donations *cause* favouritism in public procurement is challenging. Natural experiments in this setting are rare. Large firms are highly strategic actors that scarcely make donations as-if-randomly. Furthermore, rules surrounding federal donations are largely uniform over the period and industries studied, preventing us from leveraging discontinuities around regulatory change. Most credible correlates of political donations likely also have a direct effect on favouritism, making the use of instrumental variables difficult. One approach taken by some in this field focuses on close elections where assignment is quasi-random, hence a regression discontinuity design can be applied (Brogaard, Denes and Duchin, 2016). While these approaches are strong on internal validity, we question their external validity in our particular context as there are relatively few and highly idiosyncratic close Congressional races in the US, narrowing down the sample drastically (i.e. moving from hundreds of thousands of observations to

a couple of hundreds). Instead, our approach takes advantage of the breadth of the data by making very narrow comparisons using a range of fixed effects, and supplement these with a wide array of robustness checks. Nevertheless, as will be shown, our results are largely congruent with prior research using an RDD approach.

Before testing our three main hypotheses, we check whether politically connected firms receive higher procurement income than non-politically connected firms, especially when donations are made to the incumbent. Checking that our data echoes the finding that donor firms are awarded a higher total contract value (Witko, 2011)¹⁹ is an important prerequisite, for this underpins important issues of selection. Indeed, suppose that politically connected firms are awarded contracts on a less transparent basis (i.e. suppose that hypotheses 1 to 3 hold), but that those same firms are awarded less contract value overall. Then, it is unclear whether those politically connected firms actually benefit from political favours. As such, clear-cut results should either have that (i) hypotheses 1 to 3 are verified and politically connected firms are awarded more revenue than non-connected firms, or (ii) that those same hypotheses are not verified and politically connected firms are awarded no more revenue. We finally test whether our purported mechanism underlying hypotheses 1 to 3; namely, that political appointees tend to favor politically connected firms. The remainder of this section describes our approach in further details.

To assess whether politically connected firms receive higher procurement revenue, we aggregate our data at the firm and congressional term level, and consider the total value of contracts awarded to the firm over the period. We examine whether firms that donate more receive more revenue. Specifically, for firm i over congressional term t , we examine the following specification, estimated using Ordinary Least Squares (OLS):

$$\log(\text{revenue}_{it}) = \alpha_i + \beta \text{donation}_{it} + \gamma_1 \log(\text{revenue}_{i,t-1}) + \gamma_2 \log(\text{revenue}_{i,t-1})^2 \epsilon_{it}, \quad (1)$$

with revenue_{it} the total revenue from contracts awarded to firm i during congressional term t (since the distributions of revenues and donations have long tails, we consider their log-transformations), α_i a firm-level fixed effect, and ϵ_{it} and error term. The variable donation_{it} refers to the donations effected by firm i during congressional term t . We examine several ways of constructing this variable. We first consider a binary variable that equals 1 if firm i made any donation during term t , estimating the effect of making any donation on revenue. We then estimate separately the effect of large vs. small donations. Our second approach uses the log of the total donation value made over the period. However, since donating companies are few (14% of company-congressional terms) and presumably qualitatively different from non-donating companies, estimating

¹⁹Please note that Witko (2011) uses number of contracts won to proxy total value of contracts won. We correct this deficiency by using total contract value won as dependent variable.

separately the effect of large vs. small donations needs to focus exclusively on donating companies. As such, our modelling strategy includes log-donations and models non-donating companies explicitly by maintaining the donation dummy. This specification allows estimating the (log-)linear effect of donations, focusing exclusively on donating companies. Finally, we split the total amount of donations into a categorical variable separating no and low-value donations (our reference category) from intermediate and large donations.²⁰ Using supplier-level fixed effects, this specification compares, *for a given firm*, time periods in which the firm donated to time periods in which it did not. While this addresses concerns related to cross-firm heterogeneity, there might still be confounders that are correlated with time. As such, we also control flexibly for lagged log-revenue, allowing for non-monotonic effects using a quadratic term. As a robustness check (reported in Online Appendix C), we also examine whether our results are robust to introducing a congressional term fixed effect α_t . Since donations are aggregated by congressional term, we cluster standard errors at the firm and congressional term levels.

We then devote the bulk of our effort to testing our main hypotheses. Since the previous step of our analysis established how much contract value firms are awarded, we then look into how these contracts look like, *conditional on having been awarded*. This allows for taking advantage of the granularity of our data and conduct analyses at the contract level. We address concerns related to omitted variable bias (OVB) by controlling for important features of contracts, including their value, and using a wide range of fixed-effects to make comparisons within very narrow units in which there is little room for OVB. Specifically, we use buyer (buying office within the federal agency), state of contract performance, main industry of the purchased products (defined as the second level of the product code) and year of contract award fixed-effects. In other words, the effect of political donations on the risk of favouritism is identified by the variation within each public buying entity’s contracting activities with a range of different suppliers in a specific place, industry, and congressional term. Making such narrow comparisons renders the assumption of no omitted confounders more credible while preserving variance both within and across suppliers. Our main specification, estimated using OLS, reads as follows:

$$\text{FRI}_{cijst} = \alpha_j + \alpha_s + \alpha_m + \alpha_t + \beta \text{donation}_{it} + x_c' \gamma + \epsilon_{cijst} \quad (2)$$

where FRI_{cijst} is the favouritism risk of contract c between firm i and contracting office j in state s , industry m , and congressional term t . The variable donation_{it} is defined as in equation 1. The vector x_c contains individual controls including contract value, whether procurement was run by the General Services Administration (GSA),

²⁰We derive the thresholds used to construct these three categories from the data. See Online Appendix B for further details.

whether procurement concerned a commercial item, and contract type, a variable that distinguishes between fixed-price, cost-plus, and other (the reference category) types of contracts. GSA-run procurement and commercial item purchases have somewhat different rules around competitive contracting. Similarly, fixed-price and cost-plus contracts impose different kinds of restrictions on payments from buyer to supplier during contract implementation. Controlling for these factors allows us to focus on the administrative choices made within given regulatory frameworks. Finally, the terms α_j , α_s , α_m , and α_t are the vectors of fixed effects for contracting office, state, industry, and congressional term, respectively. Since firm donations are aggregated by congressional term, we cluster the error term, ϵ_{cijst} , by firm and congressional term. We estimate this model using OLS. Note that we do not use a panel data set-up as we conduct the analysis on the contract level which is the most fine-grained level where our analysis is feasible.

We amend this specification to test for Hypotheses 2 and 3. When testing Hypothesis 2, we split donations according to the recipient party (Democrat/Republican), to examine whether donations targeted the incumbent or the challenger. For Hypothesis 3, we interact donations with agency insulation categories.

Our preferred specification (equation 2) leaves two concerns unaddressed. First, our estimates might be affected by reverse causality; that is, the fact that a high FRI leads to high levels of political donations. Worries about reverse causality should be largely alleviated by the fact that there is a time lag between making donations and receiving federal contracts. Furthermore, the empirical possibility that our estimates capture the joint effect of donations on favoritism and of favoritism on donations is not too problematic for our theory. This is because our theory posits that there may be a circle of donations-contracts-donations among a tight-knit business and political elite.

Second, some unobserved firm-level confounders might both affect the firm's amount of political donations and the extent to which it is favoured (i.e. its contracts have a high FRI score). Given our extensive range of fixed effects, the only remaining source of confounding is firm-level characteristics. We address the issue first by re-estimating our preferred specification on a matched sample constructed using Coarsened Exact Matching²¹ (Iacus, King and Porro, 2012) (Online Appendix C.2), and second by controlling for lagged firm revenue as proxied by the sum of contract values awarded over the previous congressional term (Online Appendix C.3).²²

We perform a range of additional robustness checks. We re-estimate our models using a sample that excludes defence agencies as the defence industry, its political engage-

²¹ We match contracts based on value, congressional term, state of performance, and contracting office.

²²Our proxy for lagged firm revenue (i.e., the sum of contract values awarded over the previous congressional term) is admittedly poor. It underestimates true firm revenue, especially for those companies that do not rely heavily on public contracts. This is especially problematic since those companies are also presumably those who donate less. Since this specification heightens the risk of multicollinearity, we use lagged revenue to decrease such risk, and do not include it in our main specification.

ment and its industry structure shaped by government purchasing decisions may bias results (Online Appendix C.4). We also re-estimate our models excluding services and R&D contracts in order to ascertain that our results are not driven by complex contracts that are heavily tailored to a supplier, and are hence less amenable to first-price bidding procedures (Online Appendix C.5) (Girth and Lopez, 2019). Nevertheless, in highly technical fields such as IT, or healthcare machinery, initial product design choices can bake favouritism into the tender from the outset, making the formal tendering process look completely regular (cf "resource dependence" (Malatesta and Smith, 2011)). We also restrict our sample to firms donating only to one of the parties (Online Appendix C.6). Recall, our measure of donations uses donations by individuals (see section 3.1.2) instead of donations by companies themselves. When we re-estimate our models and focus on one-sided companies, that is companies whose donations to one party are one order of magnitude larger than donations to the other party, we restrict the sample to those companies where the true, unobserved company political financing most strongly correlates with observed individual donations (i.e. it is unlikely that a company's employees give many large donations to one party while the company benefits from policies of and connections to another party). Finally, we examine the effect of donations to three alternative constructions of the FRI (Online Appendix C.8). First, whether the auction had a single bidder and used a non-competitive procedure, suggesting purposeful manipulation of the tendering process to the benefit of a favoured company stronger. Second, a simple average of the 7 components of the FRI. Third, the first factor of a three factors specification (see section 3.2 for a discussion).

In the final step of the analysis, we examine the main mechanism underlying our findings: are politically connected firms favored by political appointees? To do so, we leverage a threshold in procurement procedures which requires that contracts above \$12.5 millions using non-competitive procedures be subjected to additional scrutiny by a high-ranking agency official. This high-ranking official tends to be a political appointee (Manuel, 2011).

This setting resembles an RD design, with an important caveat. Similar to the RD design, the setting features a threshold (\$12.5 millions) above which contracts are likely to be reviewed by a political appointee. We expect that review by a political appointee reduces favouritism for non-politically connected firms, and will have no impact on politically connected firms.

This setting violates an important assumption of the RD design; namely, that there is no sorting around the threshold. Indeed, we hypothesise that political appointees not only subject politically connected firms to less scrutiny, but also introduce distortions at the contract design stage, using their influence to inflate budgets so that the contract lands above the threshold. As such, we should expect that politically connected firms are awarded disproportionately many contracts immediately above the \$12.5m threshold.

First, similar to Daniele and Dipoppa (2019), we investigate whether donor firms

indeed sort to the right of the threshold and non-donor firms do not, using a bunching approach (Kleven and Waseem, 2013). We consider the distribution of contracts around the threshold, fitting a high-order polynomial. We examine whether there is sorting by looking into deviations from this polynomial to the right of the threshold for politically connected firms only. In other words, we construct a histogram over the range of contract values using a large number of small, equal-sized intervals v , both for donor firms ($d = 1$) and non-donor firms ($d = 0$).²³ We obtain, for each interval v , the count n_{dv} that counts the number of awarded contracts whose value falls within the bin for both donor and non-donor firms. We examine whether there is a significant deviation from this polynomial for contracts whose value lies within the interval $I = [\$12.5\text{m}, \$13\text{m}]$. This amounts to estimating the following model, using OLS:

$$n_{dv} = \sum_{k=0}^n \alpha_{dk} v^k + \beta_d 1\{v \in I\} + \epsilon_{dv}, \quad (3)$$

with the α_{dk} terms fitting a polynomial of order n to the distribution,²⁴ and the term β_d capturing deviations from this polynomial. We expect $\beta_1 > 0$ and $\beta_0 < \beta_1$, capturing sorting among donor firms and less sorting among non-donor firms.

Second, we investigate whether contracts to the right of the discontinuity exhibit higher FRI, only for donating firms. To do so, we employ the standard RDD approach, and estimate models separately for donating and non-donating firms. Of course, given that the assumptions underlying RDD are violated by sorting, these estimates cannot be given a causal interpretation. In other words, we cannot claim that higher scrutiny *causes* increases in the FRI for donor firms, since those firms sorted above the threshold.

Finally, we ascertain that our results are, at least partially, driven by political appointees by considering another threshold in contractual value (\$650k). Above this threshold, requests for non-competitive procedures are submitted to additional scrutiny, but this scrutiny is typically not performed by political appointees (Manuel, 2011). We repeat the analysis we conducted for the \$12.5m threshold,²⁵ but expect donor and non-donor firms to display similar behaviours.

²³Specifically, we consider contracts whose value ranges between \$5m and \$20m, and construct bins of width \$25k.

²⁴We use a polynomial of order $n = 7$.

²⁵For the model in equation 3, we consider contracts of value ranging from \$100k to \$1.5m, with bins of width \$2.5k, and an interval $I = [\$645\text{k}, \$650\text{k}]$.

4 Results

4.1 Impact of donations on firms' procurement revenue

We first show that our data reproduces a well-known pattern (Witko, 2011); namely, that donating firms are awarded higher total contract value (Table 1). We estimate three specifications of the model in equation 1. Donating firms received higher procurement revenue, irrespective of whether we separate donating firms from non-donating firms (model 1), a continuous specification of donations value (model 2), or a categorical specification that takes small to no donations as the reference category (model 3). In Online Appendix C.1, we show that results extend to separating donations to the majority and donations to the opposition (Table A7): donations to the majority have a slightly higher effect on revenue than donations to the opposition, although results are not always statistically significant. We also show that both results are robust to adding congressional term fixed effects (Tables A8 and A9).

	log(revenue) _t		
	(1)	(2)	(3)
Donation dummy	4.608 (0.000)	-0.674 (0.095)	
Log donation		0.641 (0.001)	
Med. donation			3.980 (0.001)
Lrg. donation			7.309 (0.007)
log(revenue) _{t-1}	-0.562 (0.000)	-0.560 (0.000)	-0.574 (0.000)
log(revenue) _{t-1} ²	0.010 (0.035)	0.010 (0.034)	0.011 (0.028)
Num.Obs.	99 961	99 961	99 961
R2	0.545	0.546	0.538

Table 1: **Effect of donations on supplier revenue.** Political donations increase firm revenue (model 1). Larger donations increase firm revenue more (models 2, 3). All models include supplier fixed effects. p-values clustered at the supplier and congressional term levels in parenthesis.

4.2 Main results: impact of donations on the risk of favouritism

Having shown that donor firms receive more revenue through public procurement, we now evaluate hypotheses 1 to 3. Hypothesis 1 contends that firms' political party donations increase their risks of favouritism in federal contracting. Specifying our main model

similarly to our test of the effect of donations on revenue (equation 2), we show that this hypothesis is supported by data (Table 2). Donating any amount to any political party increases the FRI by about 0.04 standard deviation.

	Favouritism Risk Index (FRI)		
	(1)	(2)	(3)
Donation dummy	0.042 (0.087)	-0.301 (0.001)	
Log donation		0.032 (0.001)	
Med. donation			0.065 (0.042)
Lrg. donation			0.278 (0.001)
Log contract value	-0.070 (0.000)	-0.071 (0.000)	-0.071 (0.000)
GSA-run procurement	-0.422 (0.152)	-0.418 (0.154)	-0.419 (0.154)
Commercial item	-0.005 (0.834)	-0.005 (0.833)	-0.005 (0.849)
Fixed-price contract	0.180 (0.123)	0.179 (0.123)	0.179 (0.123)
Cost-plus contract	0.129 (0.300)	0.125 (0.310)	0.125 (0.309)
Num.Obs.	440 987	440 987	440 987
R2	0.316	0.317	0.317

Table 2: **Effect of donations on FRI (H1)**. Political donations increase the FRI (model 1). Larger donations increase the FRI more (models 2, 3). All models include contracting office, state, industry, and congressional term fixed effects. p-values clustered at the supplier and congressional term levels in parenthesis.

Models 2 and 3 in Table 2 examine the effect of large donations. Figure 2 depicts the marginal effect of donations, derived from our continuous specification (model 2). We find that donations over \$11,400 start to have a positive overall impact with risks increasing as donations increase. As such, a large increase in donations going from \$1k to \$5m increases the FRI score by 0.27 standard deviation. Model 3 further investigates potential non-linearities in the effect of donations, using a categorical specification that separates small donations from intermediate and large donations. We used the \$1,140 threshold for defining small donations, and considered a range of upper thresholds, picking the smallest value such that large donations have an effect that is significantly different from intermediate donations (see Online Appendix B for details). Using a value of \$5.6m to define large donations, we find that, compared to small donations, these large donations increase the FRI by 0.28 standard deviation. Robustness tests further confirm these

findings, on matched samples, excluding defence contracts, excluding services and R&D contracts, only including donor firms donating to one of the parties, and considering alternative dependent variables (single-bidding and non-competitive procedures; simple average of the 7 red flags; and factor 1 of the 3 factor solution).

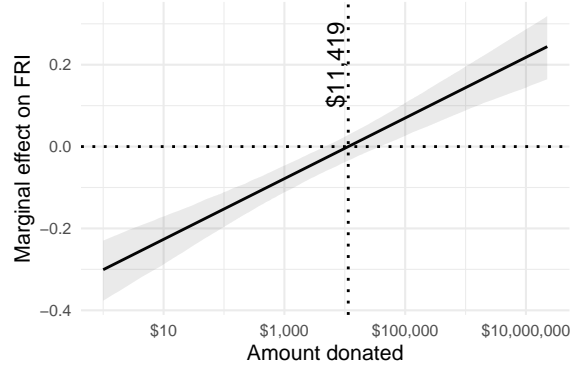


Figure 2: **Marginal effect of donations on FRI (H1)**. Higher donations lead to higher increases of the FRI. The shaded area represents the 95% confidence interval clustered at the congressional term and supplier levels. This figure is constructed from model (2), Table 2

Overall, combining results on revenue with results on hypothesis 1 shows that selection goes in the expected direction: not only donor firms are awarded more revenue through contracts, they also display higher risk of favouritism. However, while statistically significant, the identified effects are relatively small which may owe to the fact that average effects are diluted by pooling donations to the governing majority with donations to the opposition and to losing candidates.

To test these arguments, we explore hypothesis 2, which states that the risk of a company being favoured in federal contracting increases more if it donated to the party in power rather than to the opposition. We zoom in on the party that controls the presidency, since the President has extensive appointment and budgeting powers in the main spending agencies, representing a major impact channel as outlined in the theory section. Considering who controls Congress would make the analysis intractable due to how power is shared among different actors and how party discipline may break down due to individual motivations.

	Favouritism Risk Index (FRI)			
	(1)	(2)	(3)	(4)
Donation dummy	-0.102 (0.010)		-0.161 (0.003)	
Log donation to majority (β_1)	0.017 (0.006)		0.011 (0.033)	
Log donation to opp. (β_2)			0.013 (0.001)	
Intermediate donation to majority (β_1)		0.030 (0.252)		0.007 (0.818)
Large donation to majority (β_3)		0.288 (0.000)		0.210 (0.028)
Intermediate donation to opposition (β_2)				0.031 (0.155)
Large donation to opposition (β_4)				0.089 (0.364)
Log contract value	-0.071 (0.000)	-0.071 (0.000)	-0.071 (0.000)	-0.071 (0.000)
GSA-run procurement	-0.419 (0.153)	-0.420 (0.153)	-0.418 (0.154)	-0.419 (0.154)
Commercial item	-0.005 (0.826)	-0.005 (0.851)	-0.005 (0.836)	-0.005 (0.854)
Fixed-price contract	0.180 (0.122)	0.179 (0.123)	0.179 (0.123)	0.179 (0.123)
Cost-plus contract	0.127 (0.303)	0.127 (0.303)	0.125 (0.309)	0.126 (0.305)
Num.Obs.	440 987	440 987	440 987	440 987
R2	0.317	0.317	0.317	0.317
$H_0 : \beta_1 - \beta_2 = 0$			0.221 (0.658)	0.352 (0.579)
$H_0 : \beta_3 - \beta_4 = 0$				0.612 (0.470)

Table 3: **Effect of donations on FRI by party (H2)**. The marginal effect of donations to the majority on the FRI is slightly higher than the marginal effect of any donation (models 1 and 2 vs. models 2 and 3, Table 2). Donations to the majority have a slightly higher effect on the FRI than donations to the opposition, although differences are not statistically significant (models 3 and 4, with corresponding F statistics and p-values reported in the rows that begin with H_0). Models include contracting office, state, industry, and congressional term fixed effects. p-values clustered at the supplier and congressional term levels in parenthesis.

Table 3 shows support for Hypothesis 2, albeit only large donations seem to make a difference. Building on the previous results, we look at two variants of the donation predictor: i) logarithm of the company's total donations to the governing party and the opposition, and ii) three categories of the donation distribution (small, intermediate, and

large donation values – using cut-points defined through a similar process as for pooled donations (Online Appendix B). The continuous effect of donations to the party holding the presidency is positive and significant in both models 1 and 3, albeit donations to the opposition have a comparable effect in model 3. However, turning to the categorical variant of the donation predictor reveals that high value donations have a positive significant impact of substantial size. Donating a large amount to the party holding the presidency increases risks by 0.21 standard deviation while large donations to the opposition have no significant effect on FRI. Moreover, robustness tests are largely confirmatory. Taking into consideration results on hypothesis 1 and that large donations to the president’s party lead to a higher risk of favouritism in federal contracting (Table 2, model 3), we suggest that most of the observed impacts, albeit not all, owes to donations to those holding power. This result support our interpretation that political appointees may facilitate favouritism in federal contracting.

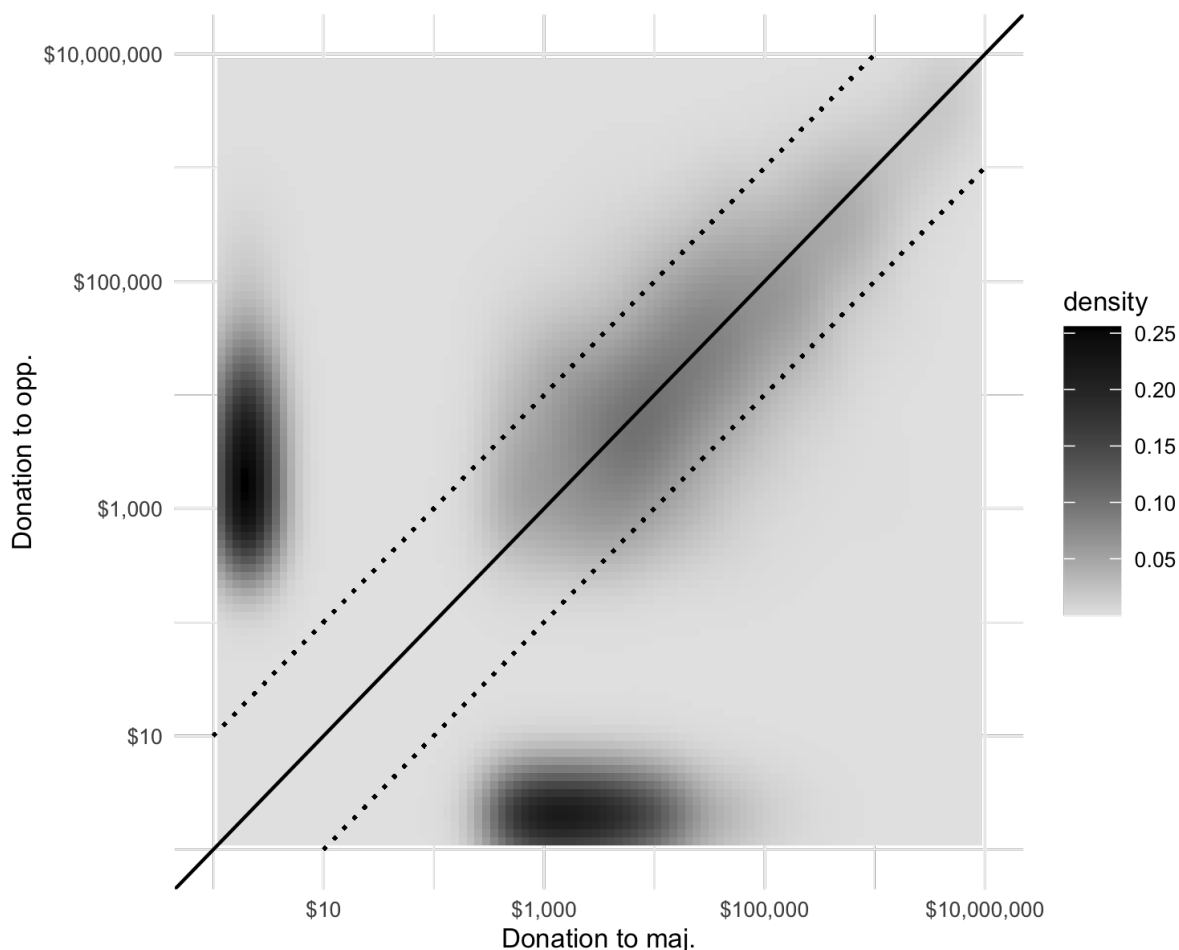


Figure 3: **Density of donations to majority and opposition.** About 50% firms donate exclusively to the majority or the opposition. The remaining 50% donates equally to both majority and opposition. The region between the dotted lines corresponds to donations to one party is within a $\pm 10\%$ range of donations to the other party, while the black line corresponds to donations that are equal for both parties.

That large donations to the majority increase the risk of favouritism while the same donations to the opposition do not has important implications when considering how firms make donations. Figure 3 examines the distribution of donations to the majority and the opposition, and reveals two types of firms: about 50% only donates to one party, while the other 50% of firms donates rather equally to both parties with few of them donating very large amounts. Yet, results from Table 3 show that firms get rewarded for large donations to the party in power and do not seem to be punished for donating to the opposition. As such, despite the highly partisan nature of US politics, donations exercise a much less divisive impact on firms' treatment in federal tenders. Furthermore, these findings directly align with extant results using an RDD approach, which show that firms donating to winning candidates in close elections are 1.6 to 1.9% more likely to win non-competitive contracts (Brogaard, Denes and Duchin, 2016).

We now turn to hypothesis 3, which states that firms' political campaign donations increase their risk of being favoured in federal contracting particularly when the awarding agency is the least insulated from politics. To measure firms' donation activities, we draw on the variants introduced in hypotheses 1 and 2. Specifically, we consider total donations as well as donations to the party that controls the presidency, and we also look at a continuous measure of donations as well as a categorical variant using the same cut-points as before. We measure agency politicisation as a structural feature with high (i.e. executive departments) and low politicisation (i.e. independent agencies) categories. A more detailed, 4-categories scale is used as a robustness test in Online Appendix C.7, Table A23.

	Favouritism Risk Index (FRI)				
	(1)	(2)	(3)	(4)	(5)
Donation dummy	-0.079 (0.051)	-0.297 (0.001)		-0.099 (0.010)	
Donation dummy × Cabinet/Exec. dep.	0.131 (0.006)				
Log donation		0.020 (0.007)			
Log donation × Cabinet/Exec. dep.		0.013 (0.007)			
Log donation to majority				0.001 (0.827)	
Log donation to majority × Cabinet/Exec. dep.				0.016 (0.005)	
Med. donation			-0.080 (0.076)		
Lrg. donation			0.039 (0.767)		
Med. donation × Cabinet/Exec. dep.			0.156 (0.005)		
Lrg. donation × Cabinet/Exec. dep.			0.250 (0.134)		
Intermediate donation to majority					-0.094 (0.061)
Large donation to majority					-0.022 (0.859)
Med. donation to maj. × Cabinet/Exec. dep.					0.134 (0.010)
Lrg. donation to maj. × Cabinet/Exec. dep.					0.324 (0.056)
Cabinet/Exec. dep.	-0.120 (0.111)	-0.122 (0.106)	-0.116 (0.121)	-0.122 (0.105)	-0.119 (0.115)
Log contract value	-0.070 (0.000)	-0.071 (0.000)	-0.071 (0.000)	-0.070 (0.000)	-0.071 (0.000)
GSA-run procurement	-0.421 (0.145)	-0.418 (0.147)	-0.418 (0.147)	-0.419 (0.146)	-0.419 (0.146)
Commercial item	-0.006 (0.796)	-0.006 (0.796)	-0.006 (0.817)	-0.007 (0.787)	-0.006 (0.813)
Fixed-price contract	0.181 (0.112)	0.179 (0.112)	0.179 (0.112)	0.180 (0.111)	0.179 (0.112)
Cost-plus contract	0.134 (0.269)	0.130 (0.277)	0.130 (0.276)	0.132 (0.270)	0.132 (0.270)
Num.Obs.	427 748	427 748	427 748	427 748	427 748
R2	0.316	0.317	0.317	0.317	0.317

Table 4: **Interaction effects between agency politicisation and donations on FRI (H3)**. Political donations impact FRI more when they target more politicised agencies. All models include contracting office, state, industry, and congressional term fixed effects. p-values clustered at the supplier and congressional term levels in parenthesis.

Table 4 shows strong support for hypothesis 3: all specifications reveal a positive interaction between donations and agency politicisation, especially when donations go to the party of the president, indicating that donations have a larger impact on FRI when

the awarding agency is more politicised. Figure 4 gives a graphical representation of the more detailed, 4-category effect magnitudes using estimates from model 2 in Table A23, which uses pooled, continuous donations. In the most politicised agencies, executive departments (Not Bureau), the impact of donations is about 2.5 times larger than in the least politicised agencies, Independent Commissions and Regulatory Commissions (Figure 4). Looking at donations to the president’s party versus any party, effect size differences support hypothesis 3: large donations (over \$2.9 million) increase favouritism risks by 0.32 standard deviation – considerably larger increase than large donations to any party (0.25 s.d.)²⁶. All robustness tests are confirmatory.

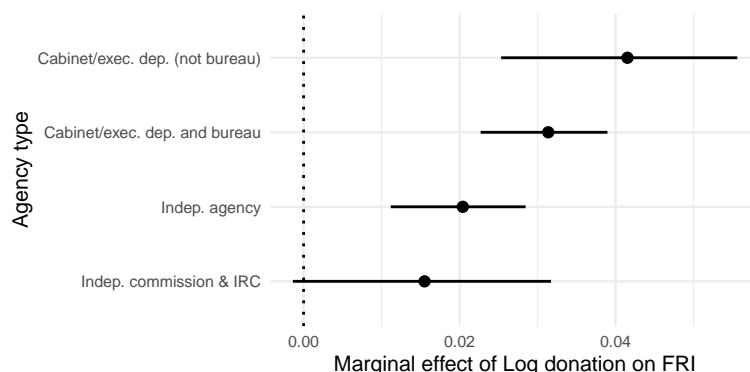


Figure 4: **Marginal effect of donations on favouritism by agency politicisation.** Political donations lead to higher levels of FRI when contracts are awarded in more politicised agencies. The figure is constructed using estimates from Model 2, Table A23. Bars represent 95% confidence intervals clustered at the supplier and congressional term levels.

Considering our results pertaining to hypothesis 3 in the context of the two previous hypotheses, we can conclude that the biggest influence of political donations on favouring donor firms arises when all necessary ingredients are in the right place: the donation is large enough to be noticeable for politicians, it goes to the holders of government power, and contracts are awarded in an agency which is sufficiently packed with political appointees to execute favouritistic decisions.

²⁶Note that since these specifications include purchasing office fixed effects, those interaction effects cannot be attributed to cross-office differences in the levels of FRI.

4.3 Main mechanism: political appointees' discretion

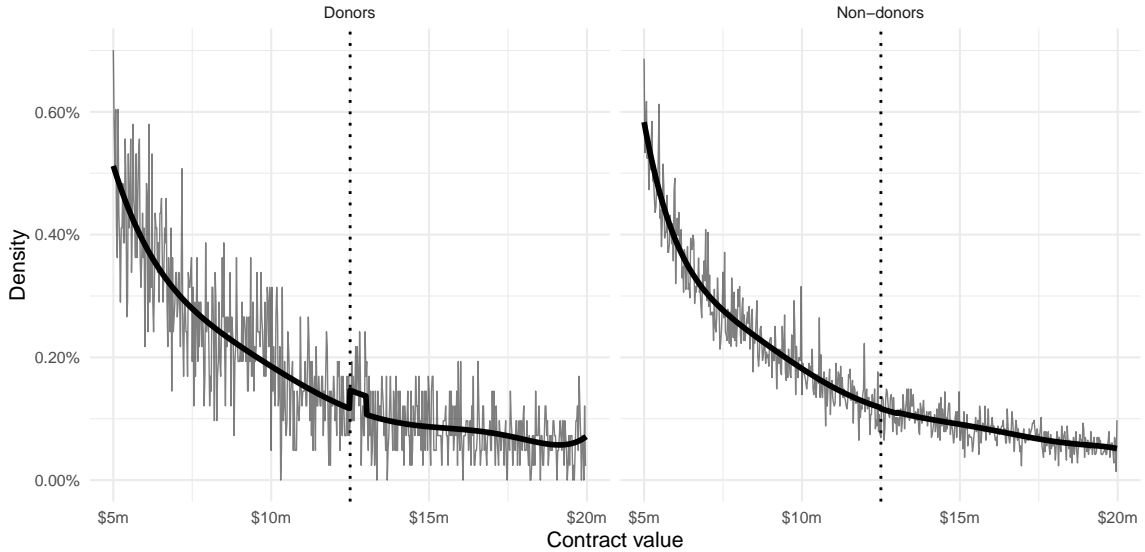


Figure 5: **Sorting around the procurement threshold.** Donor firms sort to the right of the \$12.5m procurement threshold, while non-donor firms do not. The dotted line represents the \$12.5m threshold, the thin line represents the distribution of contracts, and the thick line a polynomial fit of said distribution, as per equation 3. Estimates are derived from model 3 in Table 5.

We now investigate the main mechanism underlying hypotheses 2 and 3, that is political appointees utilizing their discretion in favour of donor firms. This can happen when a political appointee puts pressure on contracting officers to estimate project budget so that a sign-off from the appointee is required. This is most likely to happen just above the threshold where a few thousand dollars can make a difference for approving rights while the small increase in project budget looks ordinary. If the appointee succeeds in influencing the planned budget of the tender, he/she can use his/her powers to approve a non-competitive procedure or any other process feature facilitating contract award to the donor firm. This implies that donor firms should be unusually likely to win just above the threshold and that FRI should be comparatively higher in the affected contracts.

As discussed in section 3.3, we first consider the distribution of contracts around the \$12.5m threshold, where contracts above this value are typically subjected to additional scrutiny by a political appointee. Figure 5 shows graphical evidence of sorting in contracts awarded to donor companies, but not for non-donors. Indeed, the left panel displays a large kink to the right of the \$12.5m threshold, which is not visible in the right panel. Table 5 examines this statistically, both for our threshold of interest and for the comparison threshold of \$650m. While the coefficient β_0 is never statistically different from zero, the coefficient γ_1 is positive and significant when considering the upper threshold (models 3 and 4), indicating bunching to the right of the threshold for donor firms

only. Correspondingly, the sum $\gamma_0 + \gamma_1$, which equals the coefficient β_1 in equation 3 is also statistically different from zero. Overall, this provides evidence of distortions at the contract design stage in favor of politically connected firms, underpinning our theory.

	(1)	(2)	(3)	(4)
Donor (β_1)	0.000 00 (0.991 62)	0.000 00 (0.975 09)	-0.000 01 (0.699 75)	-0.000 02 (0.649 02)
In bunching interval	0.000 04 (0.948 11)	0.000 03 (0.958 55)	-0.000 02 (0.885 71)	-0.000 01 (0.929 23)
Donor \times in bunching interval (β_2)	0.000 12 (0.887 25)	0.000 34 (0.673 53)	0.000 32 (0.055 11)	0.000 45 (0.023 65)
Num.Obs.	1120	1120	1200	1200
R2	0.873	0.884	0.849	0.794
Threshold	\$650k	\$650k	\$12.5m	\$12.5m
Donor	any	mid-high	any	mid-high
$H_0 : \beta_1 + \beta_2 = 0$	0.071 (0.791)	0.420 (0.517)	6.612 (0.010)	9.706 (0.002)

Table 5: **Bunching models.** This table reports estimates of the model in equation 3, omitting the parameters for the polynomial fit. We vary the threshold under consideration and the definition of a donor, considering, in turn, any donation to the party that holds the presidency, or intermediate and high donations to that party. The row H_0 reports the F-statistic and corresponding p-values for the test $\beta_1 + \beta_2 = 0$. See section 3.3 for additional details about estimation. There is evidence of sorting to the right of the upper threshold for donor firms.

Having shown that donor firms are more likely to be awarded contracts that put them under the scrutiny of political appointees, we now show that political appointees tend to subject those firms to relatively less scrutiny. Table 6 shows RDD estimates around the threshold of interest and the comparison threshold. We find that moving to the right of the comparison threshold decreases FRI by about one third standard deviation for both donor and non-donor firms. This indicates that around this threshold, higher scrutiny decreases the of risk favouritism. For the threshold of interest, higher scrutiny decreases FRI by 0.09 standard deviation for non-donor firms, consistent with the expectation of increased scrutiny, but has no effect for donor firms. This suggests that political appointees tend to submit donor firms to comparatively less scrutiny than non-donor firms which further supports our conclusions regarding the role of appointees in agencies of different degrees of insulation from politics (Table 4 on hypothesis 3)

Additional results suggest that political appointees favor politically relevant donors that is those who donate medium to large amounts (Online Appendix D, Table A33). When we also consider donor firms which made small donations to the party holding the presidency, we find no significant drop in FRI for both donor and non-donor firms around the \$12.5m threshold, suggesting that political appointees are likely to exercise

favouritism when it politically matters.

	Low threshold (\$650k)			High threshold (\$12.5m)		
	Pooled	Donor	Non-Donor	Pooled	Donor	Non-Donor
Estimate	-0.323 (0.000)	-0.212 (0.010)	-0.329 (0.000)	-0.080 (0.114)	-0.024 (0.882)	-0.090 (0.098)
Bandwidth (k\$)	[-45; 542]	[-106; 2,718]	[-47; 562]	[-2,749; 116,239]	[-2,534; 223,427]	[-2,530; 132,211]
<i>N</i>	422,362	28,701	393,661	151,470	12,185	139,285

Table 6: **Effect of higher scrutiny on the FRI.** Higher scrutiny decreases the FRI for both donor and non-donor firms around the low threshold. Around the high threshold, higher scrutiny decreases the FRI for non-donor firms only. This table reports RDD estimates using an asymmetric, mean-squared-error optimal bandwidth, in order to accommodate the left-skew in the contract value distribution. Donors are defined as firms having made medium to large donations to the party that holds the presidency. Robust p-values in parenthesis.

We conduct a series of robustness checks in Online Appendix D. We then show that results are also robust to using different bandwidths (Figure A3), and that, as expected, results largely go away when considering different thresholds (Figure A4).

5 Conclusion

We hope to have contributed to the long-standing debate on the impacts of money in US politics with novel evidence on how campaign contributions may induce favouritism in federal contracting. Based on a principal-agent model, we hypothesized that company donations’ impact on favouritism is strongest when political principals have a strong grip over their bureaucratic agents, in particular through appointees. To test our hypotheses, we combined a new, extensive dataset on published federal contracts with registered campaign contributions for 2004-2015. Addressing the perennial challenge in the field, that is measuring favouritism, we developed a proxy indicator specific to federal contracting, using factor analysis which captures a host of strategies employed by public buyers to favour firms, such as non-competitive procedure types. In the absence of random assignment or quasi random natural experiment, we developed an elaborate regression model with an extensive range of fixed effects accounting for many unobserved confounders: buyer (buying office within the agency), as well as state of contract performance, main industry of the purchased products, and congressional term of contract award fixed-effects. We also run matching estimations.

We find supporting evidence for our hypotheses, especially confirming that favouritism is highest when political principals have a strong control over their bureaucratic agents. On average, company donations somewhat increase the risk of favouritism in government contracting, while big donations to the party of the president substantially increase these risks, especially when the awarding agency is highly politicised (i.e. least insulated from

the president). Specifically, we find that a large increase in donations to any party going from 10 thousands USD to 5 million USD increase our favouritism risk score (FRI) by 0.28 standard deviation. The effects are largely partisan; that is, donating to the governing party has a larger impact. Company donations can influence favouritism risks most when the federal agency is deeply penetrated by political appointees: large donations to the president's party (\$2.9m or more) add 0.43 standard deviation FRI compared to small donations. Considering our findings on how favouritism, campaign donations, and agency politicisation interact we can point out that the biggest influence of political donations on favouring donor firms arises when all necessary ingredients are in the right place: the donation is large enough to be noticed by politicians, it goes to power holders, and contracts are awarded in an agency which is weakly equipped to withstand political pressure. We also trace the main impact channel going through political appointees in the federal bureaucracy. Looking at a contract value threshold of 12.5 million USD, above which the chance of a political appointee's involvement in contracting decisions increases, reveals that donors are both more likely to be just above the threshold and they are also subject to comparatively less scrutiny. Specifically, non-donor's risk of favouritism decreases by 0.09 standard deviation while the risks remain flat for donors across the threshold.

Our analysis has limitations which future research should address. First, we investigated the degrees of independence from the president and the role played by presidential appointees without sufficient theoretical and empirical space to the varied and influential role Congress plays in appointments. The interplay between the Presidency, Congress and agencies in the politics of appointments has been shown to have a substantial impact on agency outcomes (Hollibaugh, 2014). Second, we could only consider a narrow dimension of agency independence, that is independence from the president, without sufficient discussion of independence from politics more broadly (Selin, 2015). Investigating the different dimensions and aspects of agency independence could further enrich our analysis of favouritism in agency contracting. Third, we had comparatively less data on contract implementation as opposed to tendering and contract award phases. As the post-award phase is crucial for contracting outcomes as well as favouritism (Petersen et al., 2019), its more in-depth analysis represents a potentially fruitful future extension.

In spite of their limitations, clear policy lessons can be drawn from our findings. When political party finance reform is not possible or when the evidence points out that it is ineffectual (Fazekas and Cingolani, 2017), traditional bureaucratic reform may limit the corrupting effect of money in politics. Weber is alive and well. Increasing the insulation of procurement officials from political pressure, supporting their professionalisation, and monitoring risk indicators would likely limit the capacity of any president or political party to favour firms who donated to their campaigns through federal contracting (Charron et al., 2017).

References

- Ansolabehere, Stephen, John M de Figueiredo and James M Snyder. 2003. “Why Is There so Little Money in U.S. Politics?” *The Journal of Economic Perspectives* 17(1):105–130.
- Boas, Taylor C., F. Daniel Hidalgo and Neal P. Richardson. 2014. “The Spoils of Victory: Campaign Donations and Government Contracts in Brazil.” *Journal of Politics* 76(2):415–429.
- Bonica, Adam. 2016. “Database on Ideology, Money in Politics, and Elections: Public version 2.0 [Computer file].”.
- Boylan, Richard T and Cheryl X Long. 2003. “Measuring Public Corruption in the American States: A Survey of State House Reporters.” *State Politics & Policy Quarterly* 3(4):420–438.
- Brezzi, M and M Diaz Ramirez. 2016. “Building subjective well-being indicators at the subnational level: A preliminary assessment in OECD regions.”.
- Brogaard, Jonathan, Matthew Denes and Ran Duchin. 2016. “Political Influence and Government Investment: Evidence from Contract-Level Data.”.
- Bromberg, Daniel. 2014. “Can Vendors Buy Influence? The Relationship Between Campaign Contributions and Government Contracts.” *International Journal of Public Administration* 37(9):556–567.
- Broms, Rasmus, Carl Dahlström and Mihály Fazekas. 2019. “Political Competition and Public Procurement Outcomes.” *Comparative Political Studies* av.online.
- Brunjes, Benjamin M. 2019. “Reducing risk and leveraging markets: The impact of financial structure on federal contractor performance.” *Journal of Strategic Contracting and Negotiation* 4(1-2):6—29.
- Brunjes, Benjamin M. 2020. “Competition and Federal Contractor Performance.” *Journal of Public Administration Research and Theory* 30(2):202–219.
URL: <https://doi.org/10.1093/jopart/muz027>
- Charron, Nicholas, Carl Dahlström, Mihaly Fazekas and Victor Lapuente. 2017. “Careers, Connections, and Corruption Risks: Investigating the Impact of Bureaucratic Meritocracy on Public Procurement Processes.” *The Journal of Politics* 79(1):89–104.
- Coviello, Decio and Stefano Gagliarducci. 2017. “Tenure in Office and Public Procurement.” *American Economic Journal: Economic Policy* 9(3):59–105.

- Dahlström, Carl, Mihály Fazekas and David E. Lewis. 2021. “Partisan Procurement: Contracting with the United States Federal Government, 2003–2015.” *American Journal of Political Science* n/a(n/a).
URL: <https://onlinelibrary.wiley.com/doi/abs/10.1111/ajps.12574>
- Daniele, Gianmarco and Gemma Dipoppa. 2019. “Doing Business Below the Line: Screening, Mafias and Public Funds.” *BAFFI CAREFIN Centre Research Paper No. 2018-98*. Available at SSRN .
- David-Barrett, Elizabeth and Mihály Fazekas. 2019. “Grand corruption and government change: an analysis of partisan favoritism in public procurement.” *European Journal on Criminal Policy and Research* .
URL: <https://doi.org/10.1007/s10610-019-09416-4>
- Dávid-Barrett, Elizabeth, Mihály Fazekas, Olli Hellmann, Lili Márk and Ciara McCorley. 2017. “Controlling Corruption in Development Aid: New Evidence from Contract-Level Data.”
- della Porta, Donatella and Alberto Vannucci. 1999. *Corrupt Exchanges. Actors, Resources, Mechanisms of Political Corruption*. New York: Aldine de Gruyter.
- Falguera, Elin, Samuel Jones and Magnus Ohman, eds. 2014. *Funding of Political Parties and Election Campaigns. A Handbook on Political Finance*. Stockholm: International Institute for Democracy and Electoral Assistance.
- Fazekas, Mihály and Gábor Kocsis. 2020. “Uncovering High-Level Corruption: Cross-National Corruption Proxies Using Government Contracting Data.” *British Journal of Political Science* 50(1):155–164.
- Fazekas, Mihály, István János Tóth and Lawrence Peter King. 2016. “An Objective Corruption Risk Index Using Public Procurement Data.” *European Journal of Criminal Policy and Research* 22(3):369–397.
- Fazekas, Mihály and Lawrence Peter King. 2019. “Perils of development funding? The tale of EU Funds and grand corruption in Central and Eastern Europe.” *Regulation and Governance* 13(3):405–430.
- Fazekas, Mihály and Luciana Cingolani. 2017. “Breaking the Cycle? How (Not) to Use Political Finance Regulations to Counter Public Procurement Corruption.” *Slavonic and East European Review* 95(1).
- Fulmer, Sarah and April M. Knill. 2013. Political Contributions and the Severity of Government Enforcement. In *AFA 2013 San Diego Meetings Paper*. San Diego: .

- Girth, Amanda M. and Lauren E. Lopez. 2019. "Contract Design, Complexity, and Incentives: Evidence From U.S. Federal Agencies." *The American Review of Public Administration* 49(3):325–337.
URL: <https://doi.org/10.1177/0275074018787558>
- Goldman, Eitan, Jörg Rocholl and Jongil So. 2013. "Politically Connected Boards of Directors and The Allocation of Procurement Contracts." *Review of Finance* 17(5):1617–1648.
- Gordon, Sanford C. 2011. "Politicizing agency spending authority: Lessons from a Bush-era scandal." *American Political Science Review* 105(04):717–734.
- Heidenheimer, Arnold J and Michael Johnston, eds. 2001. *Political Corruption: Concepts and Contexts*. New Brunswick, NJ: Transaction Publishers.
- Hollibaugh, Gary E., Jr. 2014. "Naïve Cronyism and Neutral Competence: Patronage, Performance, and Policy Agreement in Executive Appointments." *Journal of Public Administration Research and Theory* 25(2):341–372.
URL: <https://doi.org/10.1093/jopart/muu016>
- Iacus, Stefano M, Gary King and Giuseppe Porro. 2012. "Causal Inference without Balance Checking : Coarsened Exact Matching." *Political analysis* 20(1):1–24.
- Johnston, Michael. 1996. "The search for definitions: the vitality of politics and the issue of corruption." *International Social Science Journal* 48(149):321–335.
- Klasnja, Marko. 2016. "Corruption and the Incumbency Disadvantage: Theory and Evidence." *Journal of Politics* 77(4):928–942.
- Kleven, Henrik J. and Mazhar Waseem. 2013. "Using Notches to Uncover Optimization Frictions and Structural Elasticities: Theory and Evidence from Pakistan." *The Quarterly Journal of Economics* 128(2).
- Krause, George A. and Matthew Zarit. 2022. "Selling Out? Contingent Politicization and Contracting Risk in U.S. Federal Procurements, 2001–2016." *Journal of Political Institutions and Political Economy* 2(4):509–535.
URL: <http://dx.doi.org/10.1561/113.00000047>
- Lewis, David E. 2010. *The Politics of Presidential Appointments: Political Control and Bureaucratic Performance*. Princeton, NJ: Princeton University Press.
- Lewis-Faupel, Sean, Yusuf Neggers, Benjamin A Olken and Rohini Pande. 2016. "Can Electronic Procurement Improve Infrastructure Provision? Evidence from Public Works in India and Indonesia." *American Economic Journal: Economic Policy* 8(3):258–283.

- Malatesta, Deanna and Craig R. Smith. 2011. “Resource Dependence, Alternative Supply Sources, and the Design of Formal Contracts.” *Public Administration Review* 71(4):608–617.
URL: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1540-6210.2011.02392.x>
- Manuel, Kate M. 2011. Competition in Federal Contracting: An Overview of the Legal Requirements. Technical report Congressional Research Service Washington DC: .
- McKay, Amy Melissa. 2018. “Fundraising for Favors? Linking Lobbyist-Hosted Fundraisers to Legislative Benefits.” *Political Research Quarterly* .
- Mungiu-Pippidi, Alina. 2015. *The Quest for Good Governance. How Societies Develop Control of Corruption*. Cambridge, UK: Cambridge University Press.
- OECD. 2007. *Integrity in Public Procurement. Good Practice from A to Z*. Paris: OECD.
- OECD. 2017. *Preventing Policy Capture. Integrity in Public Decision Making*. Paris: OECD.
- Petersen, Ole Helby, Erik Baekkeskov, Matthew Potoski and Trevor L. Brown. 2019. “Measuring and Managing Ex Ante Transaction Costs in Public Sector Contracting.” *Public Administration Review* 79(5):641–650.
URL: <https://onlinelibrary.wiley.com/doi/abs/10.1111/puar.13048>
- Schleiter, Petra and Alisa Voznaya. 2018. “Party System Institutionalization, Accountability and Governmental Corruption.” *British Journal of Political Science* 48(2):315–342.
- Schooner, Steven L, Ralph C Nash and Karen O’Brian-Bakey. 2013. *The Government Contracts Reference Book: A Comprehensive Guide to the Language of Procurement*. 4th ed. Riverwoods, IL: CCH.
- Selin, Jennifer L. 2015. “What Makes an Agency Independent?” *American Journal of Political Science* 59(4):971–987.
- Shaxson, Nicholas and John Christensen. 2014. *The Finance Curse. How Oversized Financial Centres Attack Democracy and Corrupt Economies*. Chesham, UK: Tax Justice Network.
- Tax Justice Network. 2013. Financial Secrecy Index 2013. Methodology. Technical report Tax Justice Network Chesham, UK: .
- Wachs, Johannes, Taha Yasseri, Balázs Lengyel and János Kertész. 2019. “Social capital predicts corruption risk in towns.” *Royal Society Open Science* 6(4).

- Waterman, Richard W. and Kenneth J. Meier. 1998. "Principal-Agent Models: An Expansion?" *Journal of Public Administration Research and Theory* 8(2):173–202.
URL: <https://doi.org/10.1093/oxfordjournals.jpart.a024377>
- Witko, Christopher. 2011. "Campaign contributions, access, and government contracting." *Journal of Public Administration Research and Theory* 23(2):457–494.
- World Bank. 2009. *Fraud and Corruption. Awareness Handbook*. Washington DC: World Bank.

Online Appendix for

Agency independence, campaign contributions, and favouritism in US federal government contracting

Mihály Fazekas,¹ Romain Ferrali,² and Johannes Wachs³

¹Central European University

²Aix-Marseille School of Economics

³Vienna Uni. of Econ. and Business, Complexity Science Hub Vienna

A Descriptive statistics and FRI validity tests

Statistic	N	Mean	St. Dev.	Min	Max
Single bidding	463,889	0.560	0.496	0	1
FRI	440,987	-0.000	1.079	-3.541	1.659
Contract value (log)	475,459	13.169	1.485	11.513	23.457
Donation dummy	475,459	0.141	0.348	0	1
Donation (log)	475,459	1.512	3.892	0.000	16.931

Table A1: Sample descriptive statistics

	Single bidding				
	(1)	(2)	(3)	(4)	(5)
No publication of call for tenders	0.166 (0.000)				0.057 (0.000)
Non-competitive procedure type		0.647 (0.000)			0.625 (0.000)
Non-open solicitation type			0.413 (0.000)		0.029 (0.000)
Modifications				-0.025 (0.000)	-0.011 (0.000)
Log contract value	-0.025 (0.000)	-0.014 (0.000)	-0.006 (0.000)	-0.024 (0.000)	-0.011 (0.000)
Num.Obs.	463 889	463 889	443 123	463 889	443 123
R2	0.271	0.558	0.376	0.263	0.557

Table A2: **Linear Probability Model Results on Contract Level, 2004–15.** As expected, no public call for tenders, contracts awarded using a non-competitive procedure or non-open solicitation are more likely to see a single bidder (models 1 to 3). Contracts awarded through single bidding are less likely to show modifications (model 4). These models use the same set of control variables and FEs as our main specification.

	FRI 1	FRI 2	FRI 3	FRI 4	FRI 5	FRI 6	FRI 7	FRI 1+3	Avg.	Fct. 1/3	Fct. 1/1
FRI 1 - Single bidding											
FRI 2 - No publication of call for tenders	0.108 (0.000)										
FRI 3 - Non-competitive procedure	0.699 (0.000)	0.107 (0.000)									
FRI 4 - Non-open solicitation	0.462 (0.000)	0.169 (0.000)	0.606 (0.000)								
FRI 5 - Contract modifications	-0.006 (0.000)	-0.040 (0.000)	0.022 (0.000)	-0.084 (0.000)							
FRI 6 - Tax haven registration	-0.010 (0.000)	0.005 (0.000)	-0.010 (0.000)	-0.003 (0.029)	0.007 (0.000)						
FRI 7 - Debarred supplier	-0.004 (0.010)	-0.007 (0.000)	0.002 (0.097)	-0.014 (0.000)	0.010 (0.000)	0.020 (0.000)					
FRI 1+3	0.724 (0.000)	0.113 (0.000)	0.980 (0.000)	0.608 (0.000)	0.019 (0.000)	-0.011 (0.000)	-0.002 (0.209)				
Average	0.778 (0.000)	0.354 (0.000)	0.832 (0.000)	0.737 (0.000)	0.280 (0.000)	0.024 (0.000)	0.110 (0.000)	0.836 (0.000)			
Factor 1/3	0.855 (0.000)	0.174 (0.000)	0.956 (0.000)	0.667 (0.000)	0.058 (0.000)	-0.060 (0.000)	0.019 (0.000)	0.953 (0.000)	0.924 (0.000)		
FRI = Factor 1/1	0.819 (0.000)	0.264 (0.000)	0.937 (0.000)	0.752 (0.000)	-0.044 (0.000)	-0.085 (0.000)	-0.029 (0.000)	0.934 (0.000)	0.918 (0.000)	0.983 (0.000)	

Table A3: Bivariate correlations of FRI components. Rows 8 to 11 report alternative specifications of the FRI. p-values in parenthesis.

	FRI	FRI (2014)	GALLUP	CASSR 1	CASSR 2	BL 1	BL 2
FRI (2006-2014)							
FRI (2014)	0.873 (0.000)						
GALLUP - perception of corruption	0.050 (0.725)	0.174 (0.222)					
CASSR 1 - illegal corruption	0.327 (0.023)	0.270 (0.063)	0.171 (0.245)				
CASSR 2 - legal corruption	0.301 (0.036)	0.276 (0.055)	0.333 (0.019)	0.634 (0.000)			
BL 1 - perceived state ranking	0.343 (0.018)	0.300 (0.041)	0.267 (0.070)	0.588 (0.000)	0.458 (0.001)		
BL 2 - index	0.168 (0.259)	0.118 (0.429)	0.141 (0.343)	0.534 (0.000)	0.517 (0.000)	0.852 (0.000)	

Table A4: **Bivariate correlations on the state-level cross-section data using average scores for perceptions and objective risk indicators (2006-2014), N=51.** This table provides suggestive state-level, cross sectional evidence supporting the validity of the selected corruption risk indicators. Sources: Gallup, Corruption in American States Survey of Reporters (CASSR), Boylan and Long survey (BL). p-values in parenthesis.

Non Graphical Solutions to Scree Test

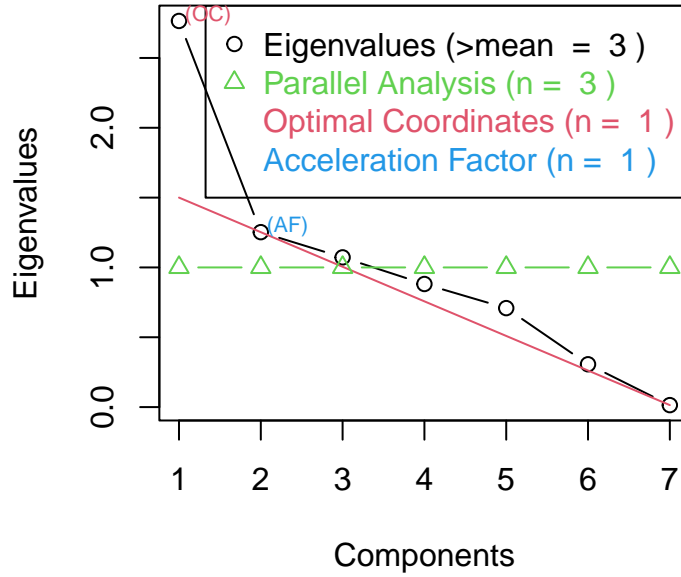


Figure A1: **Scree plot.** Analysis of the optimal number of components. This figure suggests that either 1 or 3 components are optimal depending on the decision rule applied.

	Fct. 1/1	Fct. 1/3	Fct. 2/3	Fct. 3/3
FRI 1 - Single bidding	0.884	0.893	0.015	-0.009
FRI 2 - No publication of call for tenders	0.284	-0.136	0.494	0.057
FRI 3 - Non-competitive procedure	1.011	0.975	0.054	-0.011
FRI 4 - Non-open solicitation	0.812	0.186	0.796	0.011
FRI 5 - Contract modifications	-0.048	0.356	-0.443	0.091
FRI 6 - Tax haven registration	-0.092	-0.009	0.008	0.997
FRI 7 - Debared supplier	-0.031	0.134	-0.151	0.246

Table A5: Factor loadings for 1-factor and 3-factors specifications.

B Defining donation value thresholds

We saw (model 2, Table 2) that larger donations have a larger effect on FRI scores. We use that increasing effect to split the distribution of donation values into three categories. Model 1 in Table 2 tells us that, on average, the effect of donating any money at all has an insignificant effect on FRI scores. The continuous specification in model 2 tells us that donating any money at all has a negative effect on FRI scores, but that higher-value donations increase the FRI-score. Suspecting that is an artifact of the continuous specification, we define low-value donations as the donations that have a negative-to-null

effect on FRI scores.

With d_j a binary indicator that equals 1 if company j donated any money and p_j the amount donated, the specification in model 2 reads

$$\text{FRI}_{ijkmt} = \alpha d_j + \beta \log(p_j) + x_i' \gamma + \delta_j + \delta_k + \delta_s + \delta_m + \delta_t + \epsilon_{ijkmt}$$

The threshold p_1 for low-value donations solves $\alpha + \beta \log(p_1) = 0$. This implies

$$p_1 = \exp\left(-\frac{\alpha}{\beta}\right)$$

Plugging-in point estimates from model 2, we obtain that p_1 is about \$8,548.

Similarly, we define the threshold for high-value donations p_2 as the threshold for which donations have a significantly larger effect on FRI-scores. To do so, we reestimate our main specification using, instead of continuous donations, a discrete version that uses low-value donations defined using p_1 as a reference category and try out a series of values for p_2 , using quantiles of the distribution of donated amounts. Figure 3 shows the results, for thresholds of ranging from .5 to .9. We select a threshold of .9, the smallest cutpoint such that both intermediate and large donations have a significant effect on the FRI, and the effect of large donations is significantly higher than that of intermediate donations.

We use a similar procedure to define thresholds in donations to the majority and opposition. To do so, we use the same procedure, but consider donations to the majority instead of overall donations. We use model 1 in Table 3 to derive the lower threshold, and vary the definition of the upper threshold in model 2 Table 3 using the same range of thresholds.

Table A6 reports our results.

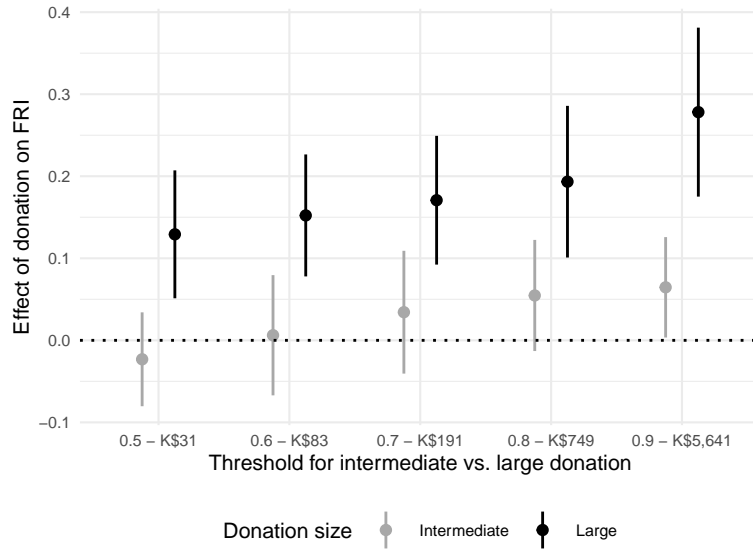


Figure A2: **Effect of intermediate vs. large donations on FRI for various threshold values.** Increasingly high thresholds give increasingly high effect sizes. We use a threshold corresponding to the 90th percentile of donation values; that is, we consider donations above \$5,6m to be large. Bars are 95% confidence intervals clustered at the congressional term and supplier levels.

	All	To majority
Small-Medium	\$11,418	\$469
Medium-Large	\$5,640,807	\$2,901,566

Table A6: Thresholds in donations

C Robustness checks

C.1 Additional results on revenue

	log(revenue) _t			
	(1)	(2)	(3)	(4)
Donation dummy	0.090 (0.119)		-0.020 (0.766)	
Log donation to majority (β_1)	0.020 (0.143)		0.027 (0.106)	
Med. donation to majority (β_1)		0.128 (0.251)		0.134 (0.227)
Log donation to opposition (β_2)			0.016 (0.192)	
Med. donation to opposition (β_2)				0.109 (0.190)
Lrg. donation to opposition (β_4)				-0.385 (0.553)
log(revenue) _{t-1}	0.186 (0.014)	0.186 (0.014)	0.186 (0.014)	0.186 (0.014)
log(revenue) _{t-1} ²	-0.012 (0.020)	-0.012 (0.020)	-0.012 (0.020)	-0.012 (0.020)
Num.Obs.	83 798	83 798	83 798	83 798
R2	0.761	0.760	0.761	0.760
$H_0 : \beta_1 - \beta_2 = 0$			1.634 (0.270)	0.151 (0.717)
$H_0 : \beta_3 - \beta_4 = 0$				0.491 (0.522)

Table A7: **Effect of donations on supplier revenue by party.** Although not statistically significant, donations to the majority correlate with higher supplier revenue. Furthermore, donations to the majority have a slightly higher effect on the FRI than donations to the opposition, although differences are not statistically significant (models 3 and 4, with corresponding F statistics and significance stars reported in the rows that begin with H_0). All models include supplier fixed effects. p-values clustered at the supplier and congressional term levels in parenthesis.

	log(revenue) _t		
	(1)	(2)	(3)
Donation dummy	4.735 (0.000)	-0.934 (0.064)	
Log donation		0.688 (0.000)	
Med. donation			4.180 (0.000)
Lrg. donation			6.928 (0.005)
log(revenue) _{t-1}	-0.509 (0.001)	-0.508 (0.001)	-0.523 (0.001)
log(revenue) _{t-1} ²	0.008 (0.086)	0.008 (0.083)	0.009 (0.072)
Num.Obs.	99 961	99 961	99 961
R2	0.565	0.567	0.558

Table A8: **Robustness checks for revenue.** This table reproduces Table 1 in the main text but includes congressional term fixed effects. Results are largely robust to such fixed effects.

	log(revenue) _t			
	(1)	(2)	(3)	(4)
Donation dummy	0.056 (0.139)		-0.029 (0.633)	
Log donation to majority (β_1)	0.013 (0.126)		0.019 (0.063)	
Med. donation to majority (β_1)		0.076 (0.253)		0.080 (0.226)
Log donation to opposition (β_2)			0.012 (0.144)	
Med. donation to opposition (β_2)				0.077 (0.178)
Lrg. donation to opposition (β_4)				-0.271 (0.645)
log(revenue) _{t-1}	0.179 (0.028)	0.179 (0.029)	0.179 (0.028)	0.179 (0.029)
log(revenue) _{t-1} ²	-0.012 (0.034)	-0.012 (0.034)	-0.012 (0.034)	-0.012 (0.034)
Num.Obs.	83 798	83 798	83 798	83 798
R2	0.765	0.765	0.765	0.765
$H_0 : \beta_1 - \beta_2 = 0$			0.988 (0.376)	0.004 (0.955)
$H_0 : \beta_3 - \beta_4 = 0$				0.308 (0.608)

Table A9: **Robustness checks for revenue by party.** This table reproduces Table A7 but includes congressional term fixed effects. Results are largely robust to such fixed effects.

C.2 Matching estimates

	Favouritism Risk Index (FRI)			
	(1)	(2)	(3)	(4)
Donation dummy	0.042 (0.087)	0.044 (0.089)		
Med. donation			0.065 (0.042)	0.112 (0.020)
Lrg. donation			0.278 (0.001)	0.205 (0.011)
Log contract value	-0.070 (0.000)	-0.054 (0.000)	-0.071 (0.000)	-0.036 (0.029)
GSA-run procurement	-0.422 (0.152)	-0.381 (0.213)	-0.419 (0.154)	-0.634 (0.058)
Commercial item	-0.005 (0.834)	0.070 (0.043)	-0.005 (0.849)	0.095 (0.058)
Fixed-price contract	0.180 (0.123)	0.131 (0.297)	0.179 (0.123)	0.028 (0.833)
Cost-plus contract	0.129 (0.300)	0.087 (0.508)	0.125 (0.309)	0.026 (0.869)
Num.Obs.	440 987	137 498	440 987	10 502
R2	0.316	0.333	0.317	0.374
Matched sample	-	✓	-	✓

Table A10: **Effect of donations on FRI - Matched sample (H1)**. Results are robust to using a matched sample constructed using Coarsened Exact Matching (CEM). Models 2 and 4 report the specifications from Table 2 re-estimated on a matched sample (see footnote 21 for details about the construction of this sample). The specifications on the entire sample are reproduced in columns 1 and 3 for comparison. All models include contracting office, state, industry, and congressional term fixed effects. p-values clustered at the supplier and congressional term levels in parenthesis.

C.3 Controlling for lagged revenue

	Favouritism Risk Index (FRI)		
	(1)	(2)	(3)
Donation dummy	-0.018 (0.379)	-0.203 (0.006)	
Log donation		0.018 (0.016)	
Med. donation			-0.003 (0.909)
Lrg. donation			0.120 (0.033)
Log contract value	-0.078 (0.000)	-0.078 (0.000)	-0.078 (0.000)
GSA-run procurement	-0.548 (0.089)	-0.547 (0.089)	-0.547 (0.089)
Commercial item	0.006 (0.801)	0.005 (0.824)	0.006 (0.811)
Fixed-price contract	0.208 (0.116)	0.207 (0.116)	0.207 (0.116)
Cost-plus contract	0.140 (0.317)	0.138 (0.319)	0.138 (0.319)
Log(revenue _{t-1})	0.030 (0.000)	0.028 (0.000)	0.027 (0.001)
Num.Obs.	343 275	343 275	343 275
R2	0.339	0.339	0.339

Table A11: **Robustness checks for H1.** This table reproduces Table 2 in the main text but controls for company lagged revenue. Results are largely robust controlling for lagged revenue.

	Favouritism Risk Index (FRI)			
	(1)	(2)	(3)	(4)
Donation dummy	-0.094 (0.025)		-0.126 (0.015)	
Log donation to majority (β_1)	0.009 (0.071)		0.006 (0.165)	
Log donation to opp. (β_2)			0.007 (0.003)	
Intermediate donation to majority (β_1)		-0.023 (0.377)		-0.020 (0.474)
Large donation to majority (β_3)		0.127 (0.012)		0.127 (0.026)
Intermediate donation to opposition (β_2)				-0.005 (0.737)
Large donation to opposition (β_4)				0.001 (0.994)
Log contract value	-0.078 (0.000)	-0.078 (0.000)	-0.078 (0.000)	-0.078 (0.000)
GSA-run procurement	-0.547 (0.089)	-0.548 (0.089)	-0.547 (0.089)	-0.548 (0.089)
Commercial item	0.005 (0.823)	0.006 (0.804)	0.005 (0.824)	0.006 (0.805)
Fixed-price contract	0.207 (0.116)	0.207 (0.116)	0.207 (0.116)	0.207 (0.116)
Cost-plus contract	0.139 (0.316)	0.139 (0.317)	0.138 (0.319)	0.139 (0.316)
Log(revenue _{t-1})	0.028 (0.000)	0.028 (0.001)	0.028 (0.000)	0.028 (0.001)
Num.Obs.	343 275	343 275	343 275	343 275
R2	0.339	0.339	0.339	0.339
$H_0 : \beta_1 - \beta_2 = 0$			0.057 (0.824)	0.221 (0.663)
$H_0 : \beta_3 - \beta_4 = 0$				1.623 (0.272)

Table A12: **Robustness checks for H2.** This table reproduces Table 3 in the main text but controls for company lagged revenue. Results are largely robust controlling for lagged revenue.

	Favouritism Risk Index (FRI)				
	(1)	(2)	(3)	(4)	(5)
Donation dummy	-0.137 (0.022)	-0.199 (0.006)		-0.093 (0.025)	
Donation dummy \times Cabinet/Exec. dep.	0.124 (0.020)				
Log donation		0.005 (0.354)			
Log donation \times Cabinet/Exec. dep.		0.013 (0.015)			
Log donation to majority				-0.007 (0.243)	
Log donation to majority \times Cabinet/Exec. dep.				0.016 (0.012)	
Med. donation			-0.150 (0.019)		
Lrg. donation			-0.086 (0.547)		
Med. donation \times Cabinet/Exec. dep.			0.154 (0.012)		
Lrg. donation \times Cabinet/Exec. dep.			0.209 (0.215)		
Intermediate donation to majority					-0.158 (0.024)
Large donation to majority					-0.134 (0.364)
Med. donation to maj. \times Cabinet/Exec. dep.					0.142 (0.017)
Lrg. donation to maj. \times Cabinet/Exec. dep.					0.268 (0.128)
Cabinet/Exec. dep.	-0.137 (0.134)	-0.139 (0.128)	-0.134 (0.143)	-0.140 (0.125)	-0.138 (0.132)
Log contract value	-0.078 (0.000)	-0.077 (0.000)	-0.077 (0.000)	-0.077 (0.000)	-0.077 (0.000)
GSA-run procurement	-0.547 (0.085)	-0.547 (0.085)	-0.547 (0.085)	-0.547 (0.084)	-0.548 (0.084)
Commercial item	0.005 (0.827)	0.004 (0.851)	0.005 (0.831)	0.004 (0.853)	0.005 (0.832)
Fixed-price contract	0.207 (0.108)	0.206 (0.108)	0.206 (0.108)	0.207 (0.108)	0.206 (0.108)
Cost-plus contract	0.144 (0.289)	0.142 (0.291)	0.142 (0.290)	0.143 (0.288)	0.143 (0.288)
Log(revenue _{t-1})	0.031 (0.000)	0.028 (0.000)	0.028 (0.001)	0.029 (0.000)	0.029 (0.001)
Num.Obs.	332 756	332 756	332 756	332 756	332 756
R2	0.339	0.339	0.339	0.339	0.339

Table A13: **Robustness checks for H3.** This table reproduces Table 4 in the main text but controls for company lagged revenue. Results are largely robust controlling for lagged revenue.

C.4 Removing defence contracts

	Favouritism Risk Index (FRI)		
	(1)	(2)	(3)
Donation dummy	0.007 (0.763)	-0.258 (0.008)	
Log donation		0.025 (0.010)	
Med. donation			0.038 (0.189)
Lrg. donation			0.198 (0.050)
Log contract value	-0.105 (0.000)	-0.105 (0.000)	-0.105 (0.000)
GSA-run procurement	-0.135 (0.695)	-0.132 (0.701)	-0.131 (0.702)
Commercial item	-0.050 (0.101)	-0.050 (0.102)	-0.050 (0.102)
Fixed-price contract	0.161 (0.367)	0.159 (0.370)	0.159 (0.369)
Cost-plus contract	0.136 (0.458)	0.134 (0.462)	0.134 (0.463)
Num.Obs.	179 990	179 990	179 990
R2	0.352	0.353	0.353

Table A14: **Robustness checks for H1.** This table reproduces Table 2 in the main text but excludes all defense agencies' contracts. Results are largely robust to removing these contracts.

	Favouritism Risk Index (FRI)			
	(1)	(2)	(3)	(4)
Donation dummy	-0.098 (0.051)		-0.145 (0.011)	
Log donation to majority (β_1)	0.012 (0.077)		0.008 (0.276)	
Log donation to opp. (β_2)			0.010 (0.019)	
Intermediate donation to majority (β_1)		0.006 (0.816)		-0.021 (0.582)
Large donation to majority (β_3)		0.193 (0.047)		0.014 (0.868)
Intermediate donation to opposition (β_2)				0.035 (0.224)
Large donation to opposition (β_4)				0.205 (0.099)
Log contract value	-0.105 (0.000)	-0.105 (0.000)	-0.105 (0.000)	-0.105 (0.000)
GSA-run procurement	-0.133 (0.699)	-0.133 (0.699)	-0.132 (0.700)	-0.133 (0.699)
Commercial item	-0.050 (0.104)	-0.050 (0.102)	-0.050 (0.104)	-0.050 (0.101)
Fixed-price contract	0.160 (0.368)	0.160 (0.367)	0.160 (0.369)	0.160 (0.368)
Cost-plus contract	0.135 (0.458)	0.135 (0.458)	0.134 (0.461)	0.134 (0.460)
Num.Obs.	179 990	179 990	179 990	179 990
R2	0.353	0.353	0.353	0.353
$H_0 : \beta_1 - \beta_2 = 0$			0.079 (0.790)	0.953 (0.374)
$H_0 : \beta_3 - \beta_4 = 0$				1.299 (0.306)

Table A15: **Robustness checks for H2.** This table reproduces Table 3 in the main text but excludes all defense agencies' contracts. Results are largely robust to removing these contracts.

	Favouritism Risk Index (FRI)				
	(1)	(2)	(3)	(4)	(5)
Donation dummy	-0.070 (0.062)	-0.250 (0.007)		-0.093 (0.041)	
Donation dummy × Cabinet/Exec. dep.	0.097 (0.024)				
Log donation		0.017 (0.030)			
Log donation × Cabinet/Exec. dep.		0.010 (0.018)			
Log donation to majority				0.002 (0.741)	
Log donation to majority × Cabinet/Exec. dep.				0.013 (0.016)	
Med. donation			-0.065 (0.113)		
Lrg. donation			0.033 (0.793)		
Med. donation × Cabinet/Exec. dep.			0.126 (0.012)		
Lrg. donation × Cabinet/Exec. dep.			0.230 (0.140)		
Intermediate donation to majority					-0.079 (0.085)
Large donation to majority					-0.019 (0.877)
Med. donation to maj. × Cabinet/Exec. dep.					0.106 (0.029)
Lrg. donation to maj. × Cabinet/Exec. dep.					0.288 (0.089)
Cabinet/Exec. dep.	-0.146 (0.084)	-0.149 (0.079)	-0.145 (0.088)	-0.149 (0.080)	-0.147 (0.085)
Log contract value	-0.105 (0.000)	-0.105 (0.000)	-0.105 (0.000)	-0.105 (0.000)	-0.105 (0.000)
GSA-run procurement	-0.122 (0.720)	-0.119 (0.726)	-0.118 (0.727)	-0.120 (0.723)	-0.120 (0.724)
Commercial item	-0.054 (0.072)	-0.054 (0.072)	-0.054 (0.073)	-0.053 (0.073)	-0.054 (0.072)
Fixed-price contract	0.150 (0.396)	0.148 (0.400)	0.149 (0.398)	0.149 (0.397)	0.149 (0.397)
Cost-plus contract	0.140 (0.444)	0.139 (0.447)	0.139 (0.447)	0.140 (0.442)	0.140 (0.443)
Num.Obs.	170 967	170 967	170 967	170 967	170 967
R2	0.360	0.360	0.360	0.360	0.360

Table A16: **Robustness checks for H3.** This table reproduces Table 4 in the main text but excludes all defense agencies' contracts. Results are largely robust to removing these contracts.

C.5 Focusing on less complex contracts

	Favouritism Risk Index (FRI)		
	(1)	(2)	(3)
Donation dummy	0.089 (0.005)	-0.230 (0.003)	
Log donation		0.030 (0.001)	
Med. donation			0.109 (0.004)
Lrg. donation			0.309 (0.000)
Log contract value	-0.003 (0.636)	-0.004 (0.533)	-0.004 (0.583)
GSA-run procurement	-0.458 (0.044)	-0.454 (0.045)	-0.456 (0.044)
Commercial item	-0.016 (0.674)	-0.015 (0.690)	-0.015 (0.697)
Fixed-price contract	0.050 (0.542)	0.049 (0.545)	0.048 (0.551)
Cost-plus contract	0.093 (0.259)	0.079 (0.313)	0.077 (0.320)
Num.Obs.	201 429	201 429	201 429
R2	0.345	0.346	0.346

Table A17: **Robustness checks for H1.** This table reproduces Table 2 in the main text but excludes more complex contracts (services and R&D). Results are largely robust to considering less complex contracts.

	Favouritism Risk Index (FRI)			
	(1)	(2)	(3)	(4)
Donation dummy	-0.034 (0.151)		-0.103 (0.017)	
Log donation to majority (β_1)	0.015 (0.003)		0.009 (0.012)	
Log donation to opp. (β_2)			0.014 (0.001)	
Intermediate donation to majority (β_1)		0.077 (0.021)		0.026 (0.266)
Large donation to majority (β_3)		0.316 (0.000)		0.176 (0.041)
Intermediate donation to opposition (β_2)				0.068 (0.005)
Large donation to opposition (β_4)				0.158 (0.112)
Log contract value	-0.003 (0.561)	-0.004 (0.563)	-0.004 (0.528)	-0.004 (0.543)
GSA-run procurement	-0.455 (0.044)	-0.456 (0.044)	-0.454 (0.045)	-0.455 (0.045)
Commercial item	-0.016 (0.674)	-0.015 (0.700)	-0.015 (0.690)	-0.014 (0.709)
Fixed-price contract	0.050 (0.542)	0.049 (0.545)	0.049 (0.541)	0.048 (0.548)
Cost-plus contract	0.084 (0.288)	0.079 (0.315)	0.080 (0.305)	0.078 (0.318)
Num.Obs.	201 429	201 429	201 429	201 429
R2	0.346	0.346	0.346	0.346
$H_0 : \beta_1 - \beta_2 = 0$			5.502 (0.066)	2.268 (0.192)
$H_0 : \beta_3 - \beta_4 = 0$				0.016 (0.905)

Table A18: **Robustness checks for H2.** This table reproduces Table 3 in the main text but excludes more complex contracts (services and R&D). Results are largely robust to considering less complex contracts.

	Favouritism Risk Index (FRI)				
	(1)	(2)	(3)	(4)	(5)
Donation dummy	0.006 (0.906)	-0.227 (0.003)		-0.031 (0.176)	
Donation dummy \times Cabinet/Exec. dep.	0.087 (0.113)				
Log donation		0.021 (0.006)			
Log donation \times Cabinet/Exec. dep.		0.009 (0.087)			
Log donation to majority				0.002 (0.705)	
Log donation to majority \times Cabinet/Exec. dep.				0.013 (0.048)	
Med. donation			-0.014 (0.764)		
Lrg. donation			0.102 (0.748)		
Med. donation \times Cabinet/Exec. dep.			0.128 (0.027)		
Lrg. donation \times Cabinet/Exec. dep.			0.210 (0.528)		
Intermediate donation to majority					-0.011 (0.852)
Large donation to majority					0.043 (0.888)
Med. donation to maj. \times Cabinet/Exec. dep.					0.092 (0.153)
Lrg. donation to maj. \times Cabinet/Exec. dep.					0.278 (0.400)
Cabinet/Exec. dep.	0.111 (0.449)	0.108 (0.460)	0.112 (0.435)	0.105 (0.464)	0.111 (0.447)
Log contract value	-0.003 (0.661)	-0.004 (0.559)	-0.004 (0.577)	-0.003 (0.587)	-0.004 (0.570)
GSA-run procurement	-0.457 (0.042)	-0.454 (0.042)	-0.455 (0.042)	-0.455 (0.042)	-0.456 (0.042)
Commercial item	-0.017 (0.657)	-0.016 (0.672)	-0.016 (0.680)	-0.017 (0.656)	-0.016 (0.683)
Fixed-price contract	0.041 (0.614)	0.040 (0.620)	0.039 (0.627)	0.041 (0.615)	0.040 (0.621)
Cost-plus contract	0.094 (0.245)	0.080 (0.294)	0.078 (0.304)	0.085 (0.268)	0.079 (0.298)
Num.Obs.	198 547	198 547	198 547	198 547	198 547
R2	0.347	0.348	0.348	0.347	0.347

Table A19: **Robustness checks for H3.** This table reproduces Table 4 in the main text but takes excludes more complex contracts (services and R&D). Results are largely robust to considering less complex contracts.

C.6 Focusing on one-sided donors

	Favouritism Risk Index (FRI)		
	(1)	(2)	(3)
Donation dummy	-0.028 (0.170)	-0.197 (0.023)	
Log donation		0.020 (0.037)	
Med. donation			0.029 (0.316)
Log contract value	-0.074 (0.000)	-0.074 (0.000)	-0.074 (0.000)
GSA-run procurement	-0.428 (0.148)	-0.428 (0.149)	-0.427 (0.149)
Commercial item	-0.008 (0.733)	-0.008 (0.731)	-0.008 (0.737)
Fixed-price contract	0.186 (0.117)	0.185 (0.118)	0.185 (0.118)
Cost-plus contract	0.152 (0.240)	0.151 (0.242)	0.151 (0.242)
Num.Obs.	404 472	404 472	404 472
R2	0.317	0.317	0.317

Table A20: **Robustness checks for H1.** This table reproduces Table 2 in the main text but considers only one-sided donors (i.e. donors whose donations to one party are at least one order of magnitude larger than donations to the other party). Results are somewhat robust to considering one-sided donors.

	Favouritism Risk Index (FRI)			
	(1)	(2)	(3)	(4)
Donation dummy	-0.047 (0.202)		-0.119 (0.020)	
Log donation to majority (β_1)	0.004 (0.388)		0.008 (0.109)	
Log donation to opp. (β_2)			0.010 (0.001)	
Intermediate donation to majority (β_1)		-0.023 (0.173)		-0.023 (0.180)
Intermediate donation to opposition (β_2)				0.003 (0.924)
Log contract value	-0.074 (0.000)	-0.074 (0.000)	-0.074 (0.000)	-0.074 (0.000)
GSA-run procurement	-0.428 (0.148)	-0.428 (0.148)	-0.428 (0.149)	-0.428 (0.149)
Commercial item	-0.008 (0.731)	-0.008 (0.736)	-0.008 (0.732)	-0.008 (0.736)
Fixed-price contract	0.186 (0.117)	0.186 (0.117)	0.185 (0.118)	0.186 (0.118)
Cost-plus contract	0.152 (0.240)	0.152 (0.240)	0.151 (0.243)	0.152 (0.241)
Num.Obs.	404 472	404 472	404 472	404 472
R2	0.317	0.317	0.317	0.317
$H_0 : \beta_1 - \beta_2 = 0$			0.304 (0.605)	0.587 (0.478)

Table A21: **Robustness checks for H2.** This table reproduces Table 3 in the main text but considers only one-sided donors (i.e. donors whose donations to one party are at least one order of magnitude larger than donations to the other party). Results are somewhat robust to considering one-sided donors.

	Favouritism Risk Index (FRI)				
	(1)	(2)	(3)	(4)	(5)
Donation dummy	-0.094 (0.044)	-0.198 (0.020)		-0.046 (0.203)	
Donation dummy × Cabinet/Exec. dep.	0.070 (0.073)				
Log donation		0.013 (0.104)			
Log donation × Cabinet/Exec. dep.		0.007 (0.067)			
Log donation to majority				-0.008 (0.076)	
Log donation to majority × Cabinet/Exec. dep.				0.013 (0.011)	
Med. donation			-0.020 (0.620)		
Med. donation × Cabinet/Exec. dep.			0.050 (0.229)		
Intermediate donation to majority					-0.133 (0.003)
Med. donation to maj. × Cabinet/Exec. dep.					0.116 (0.007)
Cabinet/Exec. dep.	-0.123 (0.084)	-0.123 (0.084)	-0.121 (0.091)	-0.123 (0.085)	-0.123 (0.085)
Log contract value	-0.074 (0.000)	-0.074 (0.000)	-0.074 (0.000)	-0.074 (0.000)	-0.074 (0.000)
GSA-run procurement	-0.426 (0.143)	-0.426 (0.143)	-0.425 (0.144)	-0.426 (0.143)	-0.426 (0.143)
Commercial item	-0.009 (0.706)	-0.009 (0.705)	-0.009 (0.713)	-0.009 (0.704)	-0.009 (0.708)
Fixed-price contract	0.186 (0.106)	0.186 (0.106)	0.186 (0.106)	0.186 (0.106)	0.186 (0.106)
Cost-plus contract	0.157 (0.214)	0.156 (0.216)	0.156 (0.216)	0.157 (0.214)	0.157 (0.214)
Num.Obs.	392 376	392 376	392 376	392 376	392 376
R2	0.317	0.317	0.317	0.317	0.317

Table A22: **Robustness checks for H3.** This table reproduces Table 4 in the main text but considers only one-sided donors (i.e. donors whose donations to one party are at least one order of magnitude larger than donations to the other party). Results are somewhat robust to considering one-sided donors.

C.7 Unpacking agency independence categories

	Favouritism Risk Index (FRI)				
	(1)	(2)	(3)	(4)	(5)
Donation dummy	-0.135 (0.110)	-0.294 (0.001)		-0.100 (0.011)	
Donation dummy × Indep. agency	0.065 (0.428)				
Donation dummy × Cabinet/Exec. dep. and bureau	0.174 (0.053)				
Donation dummy × Cabinet/Exec. dep. (not bureau)	0.296 (0.007)				
Log donation		0.016 (0.131)			
Log donation × Indep. agency		0.005 (0.544)			
Log donation × Cabinet/Exec. dep. and bureau		0.016 (0.071)			
Log donation × Cabinet/Exec. dep. (not bureau)		0.026 (0.014)			
Log donation to majority				-0.004 (0.712)	
Med. donation			-0.121 (0.297)		
Lrg. donation			-0.059 (0.776)		
Med. donation × Indep. agency			0.050 (0.688)		
Lrg. donation × Indep. agency			0.107 (0.493)		
Med. donation × Cabinet/Exec. dep. and bureau			0.180 (0.150)		
Lrg. donation × Cabinet/Exec. dep. and bureau			0.341 (0.150)		
Med. donation × Cabinet/Exec. dep. (not bureau)			0.327 (0.017)		
Lrg. donation × Cabinet/Exec. dep. (not bureau)			0.414 (0.105)		
Intermediate donation to majority					-0.150 (0.156)
Large donation to majority					-0.176 (0.517)
Med. donation to maj. × Indep. agency					0.065 (0.507)
Lrg. donation to maj. × Indep. agency					0.175 (0.460)
Med. donation to maj. × Cabinet/Exec. dep. and bureau					0.175 (0.085)
Lrg. donation to maj. × Cabinet/Exec. dep. and bureau					0.472 (0.117)
Med. donation to maj. × Cabinet/Exec. dep. (not bureau)					0.308 (0.007)
Lrg. donation to maj. × Cabinet/Exec. dep. (not bureau)					0.540 (0.086)
Indep. agency	0.448 (0.014)	0.448 (0.013)	0.449 (0.015)	0.449 (0.013)	0.446 (0.014)
Cabinet/Exec. dep. and bureau	0.027 (0.595)	0.026 (0.606)	0.034 (0.513)	0.026 (0.606)	0.028 (0.588)
Cabinet/Exec. dep. (not bureau)	0.266 (0.008)	0.263 (0.008)	0.274 (0.007)	0.264 (0.008)	0.266 (0.008)
Log contract value	-0.070 (0.000)	-0.071 (0.000)	-0.071 (0.000)	-0.071 (0.000)	-0.071 (0.000)
GSA-run procurement	-0.421 (0.145)	-0.418 (0.147)	-0.418 (0.147)	-0.419 (0.146)	-0.419 (0.146)
Commercial item	-0.008 (0.752)	-0.008 (0.750)	-0.007 (0.797)	-0.008 (0.743)	-0.007 (0.773)
Fixed-price contract	0.180 (0.115)	0.178 (0.115)	0.178 (0.118)	0.179 (0.114)	0.179 (0.115)
Cost-plus contract	0.134 (0.271)	0.130 (0.279)	0.130 (0.286)	0.132 (0.272)	0.132 (0.273)
Num.Obs.	427 748	427 748	427 748	427 748	427 748
R2	0.317	0.318	0.318	0.318	0.318

Table A23: **Robustness checks for H3.** This table reproduces Table 4 in the main text but considers uses a 4-categories version of agency type (omitted category: “indep. commission & IRC”). Results are largely robust to considering 4 categories instead of 2.

C.8 Changing the dependent variable

C.8.1 Single bidding & non-competitive procedure

	Single bidding & non-competitive procedure		
	(1)	(2)	(3)
Donation dummy	0.017 (0.139)	-0.130 (0.001)	
Log donation		0.014 (0.001)	
Med. donation			0.029 (0.062)
Lrg. donation			0.113 (0.001)
Log contract value	-0.019 (0.000)	-0.019 (0.000)	-0.019 (0.000)
GSA-run procurement	-0.272 (0.008)	-0.270 (0.008)	-0.270 (0.008)
Commercial item	-0.026 (0.020)	-0.026 (0.019)	-0.026 (0.020)
Fixed-price contract	0.101 (0.076)	0.100 (0.076)	0.100 (0.076)
Cost-plus contract	0.076 (0.153)	0.074 (0.157)	0.074 (0.156)
Num.Obs.	463 889	463 889	463 889
R2	0.288	0.289	0.289

Table A24: **Robustness checks for H1.** This table reproduces Table 2 in the main text but takes single bidding and non-competitive procedure as the dependent variable. Results are largely robust to changing the dependent variable.

	Single bidding & non-competitive procedure			
	(1)	(2)	(3)	(4)
Donation dummy	-0.040 (0.025)		-0.069 (0.004)	
Log donation to majority (β_1)	0.007 (0.008)		0.004 (0.077)	
Log donation to opp. (β_2)			0.006 (0.002)	
Intermediate donation to majority (β_1)		0.011 (0.365)		-0.004 (0.752)
Large donation to majority (β_3)		0.117 (0.000)		0.084 (0.026)
Intermediate donation to opposition (β_2)				0.020 (0.120)
Large donation to opposition (β_4)				0.036 (0.366)
Log contract value	-0.019 (0.000)	-0.019 (0.000)	-0.019 (0.000)	-0.019 (0.000)
GSA-run procurement	-0.271 (0.008)	-0.271 (0.008)	-0.270 (0.008)	-0.271 (0.008)
Commercial item	-0.026 (0.020)	-0.026 (0.020)	-0.026 (0.020)	-0.026 (0.021)
Fixed-price contract	0.100 (0.076)	0.100 (0.076)	0.100 (0.076)	0.100 (0.076)
Cost-plus contract	0.075 (0.152)	0.075 (0.153)	0.074 (0.157)	0.075 (0.154)
Num.Obs.	463 889	463 889	463 889	463 889
R2	0.289	0.289	0.289	0.289
$H_0 : \beta_1 - \beta_2 = 0$			1.430 (0.285)	1.426 (0.286)
$H_0 : \beta_3 - \beta_4 = 0$				0.600 (0.474)

Table A25: **Robustness checks for H2.** This table reproduces Table 3 in the main text but takes single bidding and non-competitive procedure as the dependent variable. Results are largely robust to changing the dependent variable.

	Single bidding & non-competitive procedure				
	(1)	(2)	(3)	(4)	(5)
Donation dummy	-0.024 (0.138)	-0.128 (0.001)		-0.039 (0.026)	
Donation dummy × Cabinet/Exec. dep.	0.045 (0.012)				
Log donation		0.010 (0.003)			
Log donation × Cabinet/Exec. dep.		0.004 (0.017)			
Log donation to majority				0.001 (0.618)	
Log donation to majority × Cabinet/Exec. dep.				0.006 (0.009)	
Med. donation			-0.023 (0.226)		
Lrg. donation			0.044 (0.481)		
Med. donation × Cabinet/Exec. dep.			0.057 (0.015)		
Lrg. donation × Cabinet/Exec. dep.			0.070 (0.335)		
Intermediate donation to majority					-0.033 (0.117)
Large donation to majority					0.020 (0.695)
Med. donation to maj. × Cabinet/Exec. dep.					0.048 (0.013)
Lrg. donation to maj. × Cabinet/Exec. dep.					0.100 (0.131)
Cabinet/Exec. dep.	0.015 (0.606)	0.014 (0.621)	0.016 (0.578)	0.014 (0.629)	0.015 (0.599)
Log contract value	-0.019 (0.000)	-0.019 (0.000)	-0.019 (0.000)	-0.019 (0.000)	-0.019 (0.000)
GSA-run procurement	-0.275 (0.007)	-0.274 (0.007)	-0.274 (0.007)	-0.274 (0.007)	-0.274 (0.007)
Commercial item	-0.027 (0.018)	-0.027 (0.018)	-0.027 (0.018)	-0.027 (0.018)	-0.027 (0.018)
Fixed-price contract	0.101 (0.070)	0.100 (0.070)	0.100 (0.070)	0.101 (0.070)	0.100 (0.070)
Cost-plus contract	0.078 (0.136)	0.076 (0.139)	0.076 (0.139)	0.077 (0.135)	0.077 (0.135)
Num.Obs.	449 914	449 914	449 914	449 914	449 914
R2	0.288	0.289	0.289	0.289	0.289

Table A26: **Robustness checks for H3.** This table reproduces Table 4 in the main text but takes single bidding and non-competitive procedure as the dependent variable. Results are largely robust to changing the dependent variable.

C.8.2 Simple average

	Simple average		
	(1)	(2)	(3)
Donation dummy	0.018 (0.020)	-0.039 (0.023)	
Log donation		0.005 (0.003)	
Med. donation			0.024 (0.011)
Lrg. donation			0.046 (0.001)
Log contract value	-0.001 (0.630)	-0.001 (0.572)	-0.001 (0.581)
GSA-run procurement	-0.051 (0.294)	-0.050 (0.297)	-0.050 (0.296)
Commercial item	0.004 (0.363)	0.004 (0.364)	0.004 (0.364)
Fixed-price contract	0.017 (0.331)	0.017 (0.335)	0.017 (0.335)
Cost-plus contract	0.021 (0.307)	0.020 (0.318)	0.020 (0.318)
Num.Obs.	475 459	475 459	475 459
R2	0.323	0.323	0.323

Table A27: **Robustness checks for H1.** This table reproduces Table 2 in the main text but takes the simple average of all 7 dimensions of the FRI as the dependent variable. Results are largely robust to changing the dependent variable.

	Simple average			
	(1)	(2)	(3)	(4)
Donation dummy	-0.008 (0.339)		-0.019 (0.065)	
Log donation to majority (β_1)	0.003 (0.004)		0.002 (0.035)	
Log donation to opp. (β_2)			0.002 (0.014)	
Intermediate donation to majority (β_1)		0.018 (0.027)		0.008 (0.292)
Large donation to majority (β_3)		0.048 (0.001)		0.027 (0.090)
Intermediate donation to opposition (β_2)				0.014 (0.112)
Large donation to opposition (β_4)				0.023 (0.161)
Log contract value	-0.001 (0.584)	-0.001 (0.591)	-0.001 (0.567)	-0.001 (0.581)
GSA-run procurement	-0.050 (0.296)	-0.050 (0.296)	-0.050 (0.298)	-0.050 (0.297)
Commercial item	0.004 (0.369)	0.004 (0.360)	0.004 (0.365)	0.004 (0.356)
Fixed-price contract	0.017 (0.332)	0.017 (0.333)	0.017 (0.334)	0.017 (0.335)
Cost-plus contract	0.021 (0.311)	0.021 (0.309)	0.020 (0.319)	0.020 (0.315)
Num.Obs.	475 459	475 459	475 459	475 459
R2	0.323	0.323	0.323	0.323
$H_0 : \beta_1 - \beta_2 = 0$			0.257 (0.634)	0.250 (0.639)
$H_0 : \beta_3 - \beta_4 = 0$				0.025 (0.881)

Table A28: **Robustness checks for H2.** This table reproduces Table 3 in the main text but takes the simple average of all 7 dimensions of the FRI as the dependent variable. Results are largely robust to changing the dependent variable.

	Simple average				
	(1)	(2)	(3)	(4)	(5)
Donation dummy	-0.009 (0.219)	-0.039 (0.027)		-0.008 (0.375)	
Donation dummy × Cabinet/Exec. dep.	0.029 (0.008)				
Log donation		0.003 (0.081)			
Log donation × Cabinet/Exec. dep.		0.003 (0.009)			
Log donation to majority				0.000 (0.939)	
Log donation to majority × Cabinet/Exec. dep.				0.003 (0.007)	
Med. donation			-0.006 (0.517)		
Lrg. donation			0.005 (0.837)		
Med. donation × Cabinet/Exec. dep.			0.032 (0.004)		
Lrg. donation × Cabinet/Exec. dep.			0.044 (0.149)		
Intermediate donation to majority					-0.009 (0.337)
Large donation to majority					-0.003 (0.871)
Med. donation to maj. × Cabinet/Exec. dep.					0.029 (0.012)
Lrg. donation to maj. × Cabinet/Exec. dep.					0.054 (0.069)
Cabinet/Exec. dep.	-0.044 (0.010)	-0.045 (0.010)	-0.043 (0.011)	-0.044 (0.010)	-0.044 (0.011)
Log contract value	-0.001 (0.632)	-0.001 (0.573)	-0.001 (0.582)	-0.001 (0.585)	-0.001 (0.591)
GSA-run procurement	-0.050 (0.291)	-0.050 (0.294)	-0.050 (0.293)	-0.050 (0.293)	-0.050 (0.293)
Commercial item	0.003 (0.455)	0.003 (0.456)	0.003 (0.450)	0.003 (0.463)	0.003 (0.450)
Fixed-price contract	0.018 (0.312)	0.017 (0.315)	0.017 (0.315)	0.018 (0.312)	0.018 (0.313)
Cost-plus contract	0.022 (0.279)	0.021 (0.289)	0.021 (0.289)	0.021 (0.281)	0.022 (0.281)
Num.Obs.	460 953	460 953	460 953	460 953	460 953
R2	0.324	0.325	0.325	0.325	0.325

Table A29: **Robustness checks for H3.** This table reproduces Table 4 in the main text but takes the simple average of all 7 dimensions of the FRI as the dependent variable. Results are largely robust to changing the dependent variable.

C.8.3 Factor 1/3

	Factor 1/3		
	(1)	(2)	(3)
Donation dummy	0.059 (0.038)	-0.254 (0.002)	
Log donation		0.029 (0.001)	
Med. donation			0.083 (0.019)
Lrg. donation			0.263 (0.001)
Log contract value	-0.041 (0.000)	-0.041 (0.000)	-0.041 (0.000)
GSA-run procurement	-0.282 (0.226)	-0.278 (0.230)	-0.279 (0.230)
Commercial item	-0.034 (0.126)	-0.034 (0.126)	-0.033 (0.129)
Fixed-price contract	0.154 (0.157)	0.152 (0.158)	0.152 (0.158)
Cost-plus contract	0.129 (0.262)	0.125 (0.271)	0.126 (0.270)
Num.Obs.	440 987	440 987	440 987
R2	0.311	0.312	0.312

Table A30: **Robustness checks for H1.** This table reproduces Table 2 in the main text but takes the first of a 3-factors specification as the dependent variable. Results are largely robust to changing the dependent variable.

	Factor 1/3			
	(1)	(2)	(3)	(4)
Donation dummy	-0.071 (0.050)		-0.131 (0.008)	
Log donation to majority (β_1)	0.015 (0.006)		0.009 (0.047)	
Log donation to opp. (β_2)			0.013 (0.003)	
Intermediate donation to majority (β_1)		0.049 (0.096)		0.011 (0.699)
Large donation to majority (β_3)		0.269 (0.000)		0.174 (0.040)
Intermediate donation to opposition (β_2)				0.050 (0.090)
Large donation to opposition (β_4)				0.107 (0.261)
Log contract value	-0.041 (0.000)	-0.041 (0.000)	-0.041 (0.000)	-0.041 (0.000)
GSA-run procurement	-0.279 (0.229)	-0.280 (0.228)	-0.278 (0.230)	-0.279 (0.229)
Commercial item	-0.034 (0.125)	-0.033 (0.129)	-0.033 (0.128)	-0.033 (0.133)
Fixed-price contract	0.153 (0.157)	0.153 (0.158)	0.152 (0.158)	0.152 (0.158)
Cost-plus contract	0.127 (0.264)	0.127 (0.264)	0.126 (0.271)	0.126 (0.267)
Num.Obs.	440 987	440 987	440 987	440 987
R2	0.312	0.312	0.312	0.312
$H_0 : \beta_1 - \beta_2 = 0$			0.680 (0.447)	0.706 (0.439)
$H_0 : \beta_3 - \beta_4 = 0$				0.211 (0.665)

Table A31: **Robustness checks for H2.** This table reproduces Table 3 in the main text but takes the first of a 3-factors specification as the dependent variable. Results are largely robust to changing the dependent variable.

	Factor 1/3				
	(1)	(2)	(3)	(4)	(5)
Donation dummy	-0.062 (0.088)	-0.248 (0.002)		-0.067 (0.059)	
Donation dummy × Cabinet/Exec. dep.	0.131 (0.005)				
Log donation		0.017 (0.016)			
Log donation × Cabinet/Exec. dep.		0.013 (0.006)			
Log donation to majority				0.000 (0.940)	
Log donation to majority × Cabinet/Exec. dep.				0.016 (0.004)	
Med. donation			-0.056 (0.193)		
Lrg. donation			0.040 (0.748)		
Med. donation × Cabinet/Exec. dep.			0.149 (0.004)		
Lrg. donation × Cabinet/Exec. dep.			0.232 (0.132)		
Intermediate donation to majority					-0.078 (0.103)
Large donation to majority					-0.011 (0.928)
Med. donation to maj. × Cabinet/Exec. dep.					0.138 (0.007)
Lrg. donation to maj. × Cabinet/Exec. dep.					0.292 (0.063)
Cabinet/Exec. dep.	-0.087 (0.202)	-0.089 (0.195)	-0.083 (0.222)	-0.089 (0.193)	-0.086 (0.208)
Log contract value	-0.040 (0.000)	-0.041 (0.000)	-0.041 (0.000)	-0.041 (0.000)	-0.041 (0.000)
GSA-run procurement	-0.281 (0.216)	-0.278 (0.220)	-0.278 (0.220)	-0.279 (0.218)	-0.279 (0.218)
Commercial item	-0.035 (0.114)	-0.034 (0.114)	-0.034 (0.119)	-0.035 (0.113)	-0.034 (0.117)
Fixed-price contract	0.155 (0.142)	0.153 (0.143)	0.154 (0.142)	0.155 (0.142)	0.154 (0.142)
Cost-plus contract	0.135 (0.229)	0.131 (0.235)	0.132 (0.235)	0.133 (0.229)	0.134 (0.229)
Num.Obs.	427 748	427 748	427 748	427 748	427 748
R2	0.311	0.312	0.312	0.311	0.311

Table A32: **Robustness checks for H3.** This table reproduces Table 4 in the main text but takes the first of a 3-factors specification as the dependent variable. Results are largely robust to changing the dependent variable.

D Regression discontinuity

	Low threshold (\$650k)			High threshold (\$12.5m)		
	Pooled	Donor	Non-Donor	Pooled	Donor	Non-Donor
Estimate	-0.323 (0.000)	-0.224 (0.000)	-0.323 (0.000)	-0.080 (0.114)	-0.127 (0.199)	-0.065 (0.237)
Bandwidth (k\$)	[-45; 542]	[-121; 1,704]	[-48; 545]	[-2,749; 116,239]	[-4,493; 136,109]	[-2,746; 136,309]
N	422,362	47,565	374,797	151,470	19,123	132,347

Table A33: **Effect of higher scrutiny on the FRI.** This table reproduces table 6, but defines donor firms as firms having made any donation to the party that holds the presidency. Results are not robust to this change, suggesting that political appointees only favor medium-to-large donors.

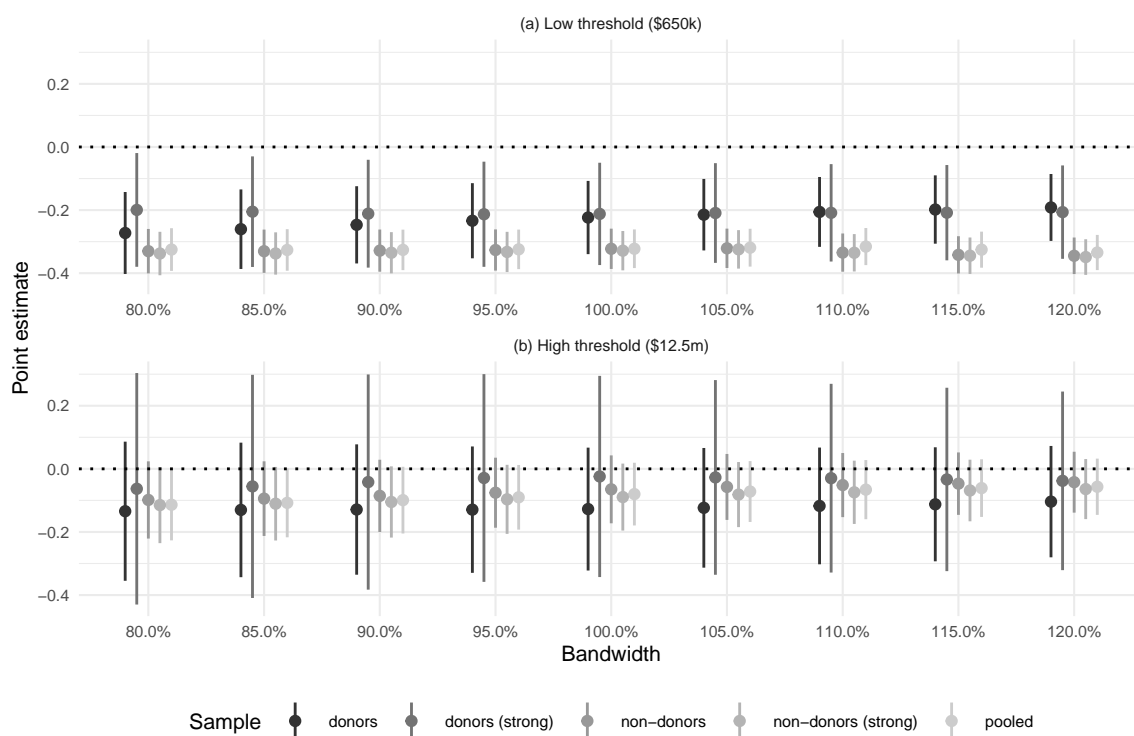


Figure A3: **RDD estimates with different bandwidths.** This figure re-estimates the models in Tables 6 and A33 but considers bandwidths that range from 80% to 120% of the original bandwidth. *Strong* denotes the strong definition of donor firms; that is, firms that have made intermediate to large donations to the party that holds the presidency. The weak definition defines as donors the firms that have made any donation to the party that holds the presidency. Results are robust to using different bandwidths.

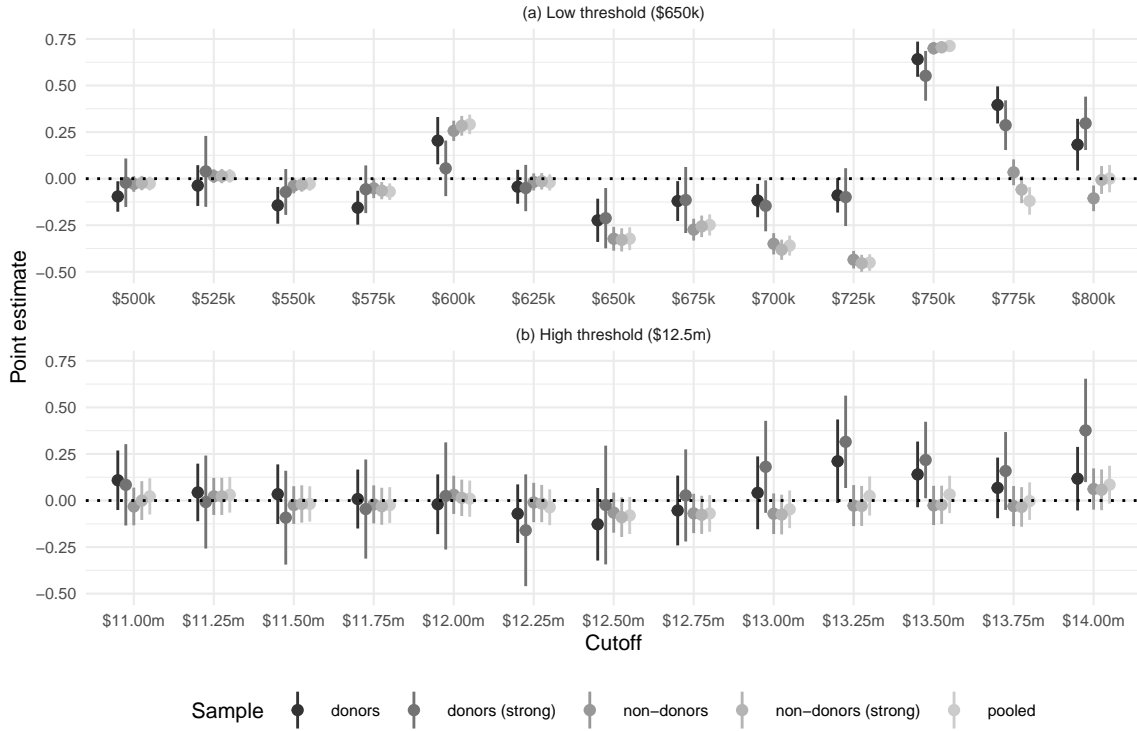


Figure A4: **RDD estimates with different thresholds.** This figure re-estimates the models in Tables 6 and A33 but uses different thresholds. *Strong* denotes the strong definition of donor firms; that is, firms that have made intermediate to large donations to the party that holds the presidency. The weak definition defines as donors the firms that have made any donation to the party that holds the presidency. Results either become insignificant or are inconsistent when using different thresholds.