

LOOKING FOR ADVICE:
THE POLITICS OF CONSULTING SERVICES PROCUREMENT IN THE WORLD BANK

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ABSTRACT:

Scholarship on informal politics in multilateral aid organizations investigates informal influence at all stages of the project cycle – from project identification to aid disbursement and project evaluation. This literature is yet to evaluate one area of informal influence in multilateral development aid – consulting services that facilitate project development and implementation. This paper aims to address this shortcoming of the existing research and develops a theory of consulting procurement in multilateral aid organizations. The theoretical argument explores the relationship between formal requirements and informal influence, and the role of this complex relationship in explaining patterns of consulting contract allocation. On the one hand, recipients seek to get access to advice and knowledge necessary for project implementation. On the other hand, these governments also have powerful incentives to influence contract allocation in favor of their domestic consulting firms and firms of important partners. World Bank data on consulting contract awards for projects funded by the organization provide an opportunity to test empirical implications of two procurement determinants: expertise versus informal influence.

INTRODUCTION

Multilateral organizations emerge to facilitate cooperation among actors with a range of preferences, which can diverge dramatically. Aid organizations in particular serve a shared goal of alleviating poverty and encouraging economic development; yet, member governments often disagree how this goal is to be achieved. Joint decision-making rules and a certain degree of autonomy that organizations' staff enjoy allow to adopt and implement policies. At the same time, member governments seek to use formal and informal instruments to move these policies closer to their ideal points. While formal rules are relatively more advantageous for weaker actors' interests, powerful actors make use of their informal influence over organizations' policy-making.

The extent of this informal influence remains an important research question. Studies of different stages of financial assistance programs implemented by multilateral organizations find that informal influence may affect the World Bank's willingness to punish recipients' non-compliance with program conditionality by suspending aid disbursements (Mosley et al. 1995; Collier 1997; Dreher 2004; Kilby 2009). Research on the World Bank's sister institution, the International Monetary Fund (IMF), has also found evidence that conditionality is shaped by the strategic interests of its most powerful shareholders at the imposition and implementation stages (Dreher and Jensen 2007; Stone 2002, 2004, 2008, 2011).¹ Similarly, powerful member governments' interests influence decisions about which countries receive foreign aid, how much aid they receive, and even how aid resources are distributed among different sectors (Schoultz 1982; Thacker 1999; Stone 2002, 2004, 2008; Nielson and Tierney 2003, 2010; Faini and Grilli 2004; Copelovitch 2010). For instance, Neumayer (2003) shows that former colonies of influential member countries tend to receive more multilateral aid. Similarly, Schneider and Tobin (2013) find that dominant European donors influence allocations of EU aid.

While various stages of multilateral financial assistance have received a significant amount of attention, one facet of interactions between multilateral aid organizations and

¹ Other authors find no effect at the implementation stage (Dreher 2004; Copelovitch 2010).

their aid recipients remains largely overlooked – i.e., no research has analyzed the process of hiring consultants to facilitate project implementation. Multiple actors pay keen attention to consulting contracts. All governments have incentives to promote their consulting firms. There is also an additional interest that is likely to be shared by donor governments, recipients and aid organizations: they prefer to see most qualified firms to win consulting contracts, all else being equal. These various interests are constrained by formal rules that structure consulting in multilateral aid organizations. Taken together, procurement of consulting services can be expected to reflect diverging preferences and face institutional constraints in pursuing their interests.

Consequently, two related questions emerge and motivate my research. How do multilateral aid organizations balance their formal consulting rules with governments' powerful incentives to support their domestic firms in the process of consulting contract allocation? Moreover, what role do effectiveness considerations (i.e., hiring best experts) play? Traditionally, powerful member governments are expected to use informal influence to achieve their objectives when important interests are at stake, thereby weakening the impact of other governments' preferences and aid effectiveness considerations. Recent research suggests that less powerful countries can rely on informal influence as well. Schneider and Tobin (2013) argue that weaker member governments can form coalitions to shape EU aid allocations. In the case of consulting contracts, I argue, aid recipients have strong incentives as well as a certain degree of leverage over the multilateral organization to get a more favorable distribution of consulting contracts. Therefore, recipients' informal influence dominates that of largest shareholder members, as well as the objective of finding the most knowledgeable experts.

The rest of the paper proceeds as follows. I begin by discussing the importance of studying the allocation of consulting contracts, which enable recipients to get access to advice and knowledge necessary for project implementation. I argue that even though recipient governments care about hiring most knowledgeable experts, these governments also have powerful incentives to influence consulting contract allocation in favor of their domestic firms and firms of recipients' economic and political partners. I then describe the process of selecting consultants for implementation of aid-funded projects. The focus

of my study is on the World Bank, the world's largest development aid organization. My key conclusion is that recipients' informal influence in awarding consulting contracts is enabled in part by the World Bank's formal rules that regulate consulting services. In order to conduct empirical tests of my argument, I use data on the allocations of World Bank consulting contracts over the period between 2011-2015. My analyses provide empirical evidence of recipients' ability to favor their domestic consulting firms in the process of contract allocation, as well as major World Bank donor firms, and firms of recipients' important trading partners, aid donors, and like-minded countries. At the same time, recipients do not neglect the World Bank's procurement rules: I find that consulting firms from countries with greater human capital and lower corruption are more likely to secure consulting contracts.

CONSULTING SERVICES DURING AID ALLOCATION AND IMPLEMENTATION

The process of aid allocation has been extensively analyzed in the existing aid research. The flow of aid from donor countries to multilateral organizations and directly to recipient governments is significantly influenced by donor preferences and their relations with multilateral and bilateral recipients. The flow of aid from multilateral organizations to recipient governments is less politicized; however, it still displays some of the biases of bilateral aid allocations. This literature, however, has largely overlooked the process of obtaining knowledge, advice and guidance that help governments develop projects, secure multilateral financial assistance and carry out proposed project activities. In practice, of course, many of aid recipients have low levels of government capacity and hence need to access consulting services to make project implementation possible. Therefore, consulting represents an integral part of development programs funded by multilateral aid organizations.

Consulting Services for World Bank Projects: Rules vs. Informal Influence

Multilateral aid organizations, such as the World Bank, seek to eliminate informal influences on the procurement process generally and consulting services procurement,

specifically. On the one hand, the aid organization acknowledges that recipient governments, or borrowers, are in charge of project preparation and implementation. Therefore, governments have the ability to choose consultants for Bank-funded projects. On the other hand, the World Bank has the mandate to “ensure that the proceeds of any loan are used only for the purposes for which the loan was granted, with due attention to considerations of economy and efficiency and without regard to political or other non-economic influences or considerations” under the World Bank’s Articles of Agreement (Article III, Section 5(b)). Therefore, the aid organization adopted a set of detailed rules and procedures to structure the selection process. Furthermore, the Bank reviews governments’ consulting contract awards, and verifies and monitors governments’ compliance with firm eligibility rules, potential conflicts of interest, and cases of unfair competitive advantage. In addition to these arrangements, the Bank expects recipient governments to rely primarily on Quality- and Cost-Based Selection (QCBS) as consulting firm selection method. The main objective of this approach is to identify the most qualified firms, which can also offer competitive prices for their services.

While QCBS is the World Bank’s preferred allocation method and, when properly executed, can enhance recipients’ access to high-quality advice and guidance at a reasonable price, the Bank’s guidelines also leave significant room for recipients’ pursuit of their domestic interests: “the specific rules and procedures to be followed for employing consultants depend on the circumstances of the particular case” (WB 2011, 2). Moreover, while the consultant selection guidelines seek to create a level playing field for all eligible consultants by providing them with information and opportunities to compete for consulting contracts, the World Bank acknowledges its “interest in encouraging the development and use of national consultants in its developing member countries” (WB 2011, 2). Therefore, selection rules allow recipient governments to influence outcomes of contract bidding informally if this benefits domestic firms.

Recipient governments in fact have powerful incentives to pay close attention to domestic interests. When a government awards contracts to domestic firms, this increases their profits (Branco 1994; Vagstad 1995). In exchange for greater profits, these domestic beneficiaries are likely to provide financial and/or political support for the incumbent

government in democratic countries. Similarly, in autocratic regimes, economic elites may weaken their support for the government that consistently fails to award contracts domestically. In sum, there are strong theoretical reasons to expect recipient governments to be willing and able to exert informal influence over consulting contract allocation.

Selecting domestic consulting firms has another benefit for recipient countries. Such consultants may recommend procurement of more local products and services through project design and technical specifications, thereby creating positive spillover effects for recipients' domestic companies. This outcome is not inconsistent with the World Bank's overall goal of boosting local development and promoting domestic industries. However, some member countries may view this local bias unfavorably if their companies lose contract opportunities available through the World Bank. The recipient government can counter some of this dissatisfaction by awarding contracts to firms from influential member countries, thereby making them less likely to insist on strict adherence to the World Bank's procurement rules, and to firms from important bilateral partners, such as aid donors, trading partners, neighboring countries and like-minded states. In the case of bilateral partners, recipients' willingness to bias contract allocation would be perceived as an effort to maintain bilateral ties and make these partners less dissatisfied with biased contract allocation. Therefore, recipient governments stand to benefit both domestically and internationally when they use their ability to influence consulting contract allocation to reward domestic and international supporters. I expect this powerful self-interested motivation to result in a pattern of contract allocation that diverges from one based on expertise and efficiency alone.

DATA AND MEASUREMENT

There is currently a limited body of research investigating contract allocation (Miyagiwa 1991; Trionfetti 2000; Rickard and Kono 2013). All of these studies, however, focus on public procurement financed by governments, rather than contract allocation in multilateral aid organizations. One exception is McLean (2017), which evaluates procurement of goods and services for World Bank project implementation. Therefore,

this paper aims to enhance our understanding of the politics of the World Bank contract allocation in general, and procurement of consulting services, more specifically.

Dependent variable

Data on contract awards is the World Bank's Contract Awards Database.² The database provides information on major contracts awarded through the World Bank financed projects and reviewed by the World Bank staff. The database makes contract information available for projects awarded between 2000 and 2017. The Contract Awards Database provides detailed information about included contract awards, such as the contractor, project country, project sector, contract signing date, procurement method and type, and contract amount. There are two procurement groups: consultants, and goods and services. Given that the focus of this paper is on consulting contracts, I drop all goods and services contracts from my dataset.

One important shortcoming of the Contract Awards Database is the lack of information on all submitted bids; I only know which firm received a contract. Hence, I had to construct a list of all consulting firms that could potentially bid on a given contract. Using information available in this database, I split all contract observations into 10 sectors: Agriculture; Education; Energy and mining; Finance; Health and social services; Industry and trade; Information and communication; Public administration and law; Transportation; Water, sanitation and flood protection. I then identified consulting companies that received two or more contracts in a given sector at any point during the 2010-2017 period. As a result, I constructed a list of companies that could submit a bid for a given contract in every sector. Therefore, for each awarded contract, in addition to the original observation, I included additional observations for these potential bidders, depending on the sector of the contract. As a result of these coding steps, the number of observations is 12,178,959, and the unit of observation changes from the contract to the contract bid. For convenience, I limited the time period under study to the years from

² The database can be found at <http://go.worldbank.org/GM7GBOVGS0>.

2011 to 2015; the reported results are based on a reduced sample of 4,162,476 observations.

The dependent variable used in this study is *Contract award*. This is a binary measure that takes the value of one when a consulting firm from a given country is awarded a contract, and zero otherwise. Only .41 percent of all contract bids in my dataset result in a contract award (N= 16,893).

Main independent variables

I first constructed measures that reflect the importance of formal decision-making rules during the procurement process. The World Bank's procurement rules emphasize the need for "the need for economy and efficiency in the implementation of the project" (WB 2011, 2), which suggests that firms from countries with high levels of human capital should be in the best position to win consulting contracts, all else being equal. Therefore, I use several measures of human capital and expertise availability in bidding countries. I also include two firm-specific variables to represent experience-based expertise that may make some firms more (or less) likely to receive contracts. Another formal requirement of the procurement process is to maintain the integrity and high ethical standards of contract bidding and execution. To capture the likelihood of fraudulent or any other type of unethical behavior, I use a measure of corruption at the country level for bidding countries. Consulting firms from countries with better reputations should be more successful in the bidding process.

Expertise. To examine the effect of expertise on the likelihood of winning a consulting contract, I rely on variables extracted from the World Economic Forum's Global Competitiveness dataset. Specifically, I rely on seven indices of knowledge and education availability; each takes the values from one (the lowest quality) to seven (the highest quality). These indicators are: *Quality of math and science education*; *Quality of the education system*; *Availability of research and training services*; *Quality of scientific research institutions*; *Availability of latest technologies*; *Availability of scientists and engineers*; and *Capacity for innovation*. The expectation is that these variables will have a positive association with the

likelihood of contract award, as recipients will seek out consulting firms from countries with the highest levels of technical, scientific and educational expertise. Naturally, these variables are highly correlated: correlation coefficients range from .48 to .90.

Experience. In addition to country-level measures, which represent the size and quality of expert pool in a given country, I use firm-level indicators of expertise. These measures capture how much experience a given firm has working with the World Bank in general, and the World Bank's assistance to a given recipient country, more specifically. I construct these variables using information from the World Bank's Contract Award Database. *Firm's annual contract value* is the annual amount of all consulting contracts that a given consulting firm has received from the World Bank. *Firm's previous contracts with recipient* represents the amount of all consulting contracts that a firm has received from the World Bank's assistance to a given recipient country. Both variables should have a positive relationship with contract award likelihood because greater experience-based expertise should increase the firm's attractiveness as a consulting services provider.

Corruption. One of the key concerns of the World Bank in the procurement process is to ensure that its assistance is not misused; therefore, the IO's rules seek to protect contract bidding and award from corrupt or fraudulent practices. I rely on a measure of corruption, *CPI score*, which is available from the Corruption Perceptions Index (CPI) by Transparency International. This variable can take values from 0 (most corrupt countries) to 100 (least corrupt countries), although in my sample the values range from 1 to 92. The primary focus of this indicator is to capture perceptions of country experts and business representatives of the level of corruption in their country's public sector.³ Least corrupt bidder countries are Finland, Denmark and New Zealand, and the most corrupt are Somalia and North Korea.

³ The dataset is available at <http://www.transparency.org/research/cpi/>

Informal influence. The next set of variables gauges the level of informal influence that recipient and donor governments exert on the process of consulting contract allocation. First, *Recipient firm* gauges the informal influence of recipient governments over the procurement process: the variable takes the value of one if the contract was awarded to the recipient's domestic company, and zero otherwise. Only 8.6 percent of observations in my dataset represent bids submitted by firms from recipient countries; yet, 74 percent of the contracts in my dataset were awarded to consulting these firms. *US firm* and *Top WB donor firm* are two dummies that capture the top World Bank shareholder status: the former takes the value of one for the US, the single largest donor country in the Bank; and the latter takes the value of one for top six largest shareholders (the US, the UK, France, Germany, Japan, and China).⁴ US companies received approximately 2 percent of contracts in my dataset, while companies from the five major donor nations received a little less than 9 percent of all contracts. However, when recipient country firms do not submit bids for a contract, firms from the major donor nations account for 30 percent of contract awards, with US companies receiving 7.5 percent.

Another mechanism of informal influence operates through bilateral ties between recipient and bidder countries. Recipients' partners may expect their companies to receive preferential treatment, and recipient governments' contract allocations are likely to reflect such expectations as a demonstration of goodwill and interest in maintaining relations between the countries. I include the following variables to capture effects of bilateral relations on consulting contract allocations: *Ideal point distance*, *Distance*, *Recipient-bidder trade*, *Bidder aid to recipient*, and *Bidder aid to recipient (dummy)*. *Ideal point distance* is an indicator of the similarity of the bidder's and recipient's foreign policy positions: I expect recipient countries to favor bids from countries that are more closely aligned with recipients in their foreign policy preferences. *Ideal point distance* is a continuous variable, ranging from 0 (when countries' positions are identical) to 4.17

⁴ The UK and France are tied in their IBRD vote share in the last three years of the period under study.

(when countries' preferences diverge).⁵ Hence, there should be a negative relationship between *Ideal point distance* and the likelihood of receiving a consulting contract. The second variable, *Distance*, is the natural logarithm of the distance between two countries' capitals (in km). Countries may seek to maintain and improve their relations with neighbors or countries in the same region; therefore, I expect recipients to allocate more contracts to countries located closer, which means that there should be a negative relationship between *Distance* and the probability of winning a contract award.⁶ Another measure of significant ties between recipient and bidder countries reflects the scale of bilateral trade links: as the size of the trade relationship grows, the recipient should be more likely to choose major trading partners' firms. *Recipient-bidder trade* is the (logged) total volume of recipient-bidder trade; I expect to find evidence of a positive relationship between contract awards and trade levels.⁷ Finally, I use information from the AidData project to construct the aid variables to measure financial assistance from the bidder country to the recipient.⁸ While *Bidder aid to recipient* is the logged value of annual aid flows from the bidder to the recipient, *Bidder aid to recipient (dummy)* is a binary indicator, taking the value of 1 if the bidder provided any amount of aid to the recipient, and 0 otherwise. In both cases, aid allocations should have a positive association with contract allocations.

Control variables

I include three additional explanatory variables in the models of contract allocation based on the insights provided by the empirical literature on foreign economic policies. These variables gauge the economic capacity of a country: bidders with higher levels of capacity should be more likely to receive contracts. *GDP per capita* is a country's per capita GDP, measured in constant 2005 USD and logged. *GDP growth* is a country's

⁵ The variable is included in Voeten et al. (2009)'s dataset, which is available at [hdl:1902.1/12379](https://hdl.handle.net/1902.1/12379).

⁶ The data are available at <http://privatewww.essex.ac.uk/~ksg/data-5.html>.

⁷ The source of bilateral trade data is the International Trade dataset available at <http://www.correlatesofwar.org/data-sets/bilateral-trade>.

⁸ The dataset is available at <http://dashboard.aiddata.org>.

annual rate of GDP growth. *Trade openness* is a sum of exports and imports of a given country, divided by its GDP. The World Bank's World Development Indicators database is the data source for all these variables. Summary statistics of all variables used in this study are reported in Table A1 in the appendix.

MODEL SPECIFICATION

Tables 1 and 2 present the main estimation results: the former provides full sample models, while the latter restricts the sample to non-recipient country bidders. Tables 3 and 4 report additional models, which split the sample of all consulting contracts into ten sectors, following the World Bank classification. Each sector represents a part of the recipient's economy, which is supported by the Bank's funding and technical advice. The dependent variable in all models is a binary indicator that codes whether a bidding firm from a given country received a contract. I estimate logit models in different specifications and include recipient country and year fixed effects.

EMPIRICAL RESULTS

To summarize the main findings briefly, I find evidence that both formal rules and informal influence shape the process of consulting contract allocation. The World Bank's rules that center on expertise and efficiency affect the process of selecting consultant firms, as does the recipient's bias in favor of its domestic firms and firms from important partner countries. Also, these results suggest that firms from top donor countries, including the World Bank's most powerful shareholder, the US, are more likely to receive consulting contracts than firms from other countries.

[Table 1 about here]

The first set of results demonstrates that formal rules governing consulting contract allocation matter. Several variables that measure country-level expertise have a positive and statistically significant effect on contract award in different specifications.

Countries that score higher on different dimensions of technical and scientific expertise are more likely to receive consulting contracts because expertise is instrumental to successful project implementation. Given that effective project implementation is one of the key World Bank's objectives and formal contract allocation rules aim at enhancing project effectiveness, this is an encouraging result. When recipients receive access to most qualified consultants, the odds of successful project implementation can be expected to rise. The coefficients on five out of seven expertise regressors (*Availability of latest technologies*, *Quality of scientific research institutions*, *Research/training services*, *Quality of education system*, and *Availability of scientists/engineers*) are positive and significant at conventional levels in Table 1. When the sample is restricted to bidding firms from non-recipient countries, some of the indicators remain as significant determinants of contract allocation. Specifically, *Quality of scientific research institutions*, *Research/training services*, and *Availability of scientists/engineers* are positively associated with bidding firms' ability to secure consulting contracts, as Table 2 reports. Finally, the results are more nuanced in sector-based models. Tables 3 and 4 indicate that projects in different sectors may require different types of expertise: *Availability of latest technologies* has a positive effect on contract awards in the Finance and Energy & Mining sectors; *Quality of scientific research institutions* increases the probability of receiving a contract in the Industry & Trade sector; *Research/training services* positively affects contract allocation in the Health & Social Services and Industry & Trade sectors; *Quality of education system* has a positive association with contract awards in the Information & Communication and Health & Social Services sectors; *Quality of math and science education* increases the probability of receiving a contract in the Finance sector; and *Availability of scientists/engineers* has a positive effect on contract allocations in the Public Administration & Law, Education and Transportation sectors. These findings indicate that, despite some sectoral variation in types of required expertise, contract allocations reflect the World Bank's requirement to seek out highly qualified experts as providers of consulting services.

Another type of expertise, i.e., knowledge and information accumulated by a firm's experience through its work with the World Bank in general, or World Bank-financed projects in a given recipient country, is another significant determinant of

consulting contract allocation. As *Firm's annual contract value* increases, the firm's portfolio of World Bank-funded contracts grows and hence its experience with such contracts increases as well. As Tables 1 and 2 show, this experience results in a greater probability of winning a contract award. Sector-specific models in Tables 3 and 4 reflect a similar positive relationship between firms' experience and the contract award likelihood, although the result is statistically significant only in three out of ten specifications. At the same time, a firm's experience with a given recipient country has the opposite effect on contract allocation: when values of *Firm's previous contracts with recipient* increase, the probability of receiving a consulting contract declines, which is contrary to my expectation. This suggests that, controlling for the overall size of a firm's consulting portfolio with the World Bank, recipient governments do not view the firm's substantial experience in providing them with advice as an asset. Therefore, experience seems to matter, but only when it is broad based, not country-specific.

My expectation of a positive relationship between the corruption measure and the likelihood of contract award also finds empirical support. Since *CPI score* takes higher values for countries with lower corruption risk, firms from less corrupt countries should be more likely to receive contracts for consulting services. As Table 1 indicates, this variable has a statistically significant, positive relationship with contract awards across different specifications. The results in Table 2 are similar, although the coefficient on *CPI score* is only significant at the .05 level in one specification out of four. Tables 3 and 4 report more mixed findings regarding the relationship between the corruption measure and contract allocation: only in the Public Administration & Law and Finance sectors is the coefficient on *CPI score* positive and statistically significant, while in the remaining eight sectors the coefficient is indistinguishable from zero. Since the Public Administration & Law sector has the largest number of contract awards (and hence contract bid observations), it is likely that the positive and significant results in full sample models are driven by contracts in this sector. Intuitively, the World Bank should be most likely to emphasize the importance of protecting its projects and consulting bids from corrupt or fraudulent practices in the sector that funds institution-building

activities, strengthening the rule of law and other similarly sensitive reforms in public administration, and law and justice.

[Table 2 about here]

The second set of results highlights the scale of donor and recipient influence, which shifts contract allocation away from strictly expertise-based criteria. Firms from recipient countries enjoy a substantial advantage when it comes to consulting contract allocation. In every specification reported in Tables 1, 3 and 4, recipient firms are more likely to win contracts than firms from other countries, all else being equal. Given that the results are statistically significant in full sample and sector-based models, empirical evidence indicates that this advantage is not driven by any given sector, that recipient governments consistently favor domestic firms when hiring consultants. To use the Industry & Trade sector as an example, I calculate the predicted probability of a contract award for recipient firms versus non-recipient firms: the probability for the former is .163, whereas the probability for the latter is just .004, while all other regressors are fixed at their mean values.⁹ Therefore, empirical evidence indicates a substantial degree of informal influence exercised by recipient governments, and such favorable treatment of domestic firms cannot be explained by their expertise or experience with World Bank contracts.

[Table 3 about here]

The US and other top World Bank shareholders also exercise some informal influence over consulting contract allocation, but the extent of such influence is more limited than recipients' ability to bias the process of contract allocation in favor of domestic consultants. Table 1 shows that US firms and donor country firms are more likely to win a contract than firms from other country, all else being equal. Moreover, Tables 3 and 4 indicate that these results hold in sector-specific models too. Specifically, firms from top World Bank shareholder countries are favored to win consulting contracts

⁹ The 95% confidence interval is [.127, .199] for the predicted probability for recipient firms, and [.003, .004] for the predicted probability for non-recipient countries' firms.

in five out of ten sectors, such as Agriculture, Public Administration & Law, Education, Finance, and Industry & Trade. The results are also substantively significant. A major donor's firm, for instance, is twice as likely to win a consulting contract in the Industry & Trade sector than a firm from another country: the predicted probability of winning a contract award increases from .02 to .04 when the value of *Top WB donor firm* changes from 0 to 1, while the remaining regressors are held at their means.¹⁰ Results for US firms are weaker: in sector-based models, US firms are more likely to win Industry & Trade and Education contracts, whereas in other sectors these firms do not enjoy any advantage over non-US firms.¹¹ At the same time, US firms' preferential treatment in these two sectors is substantively significant: for instance, in the Industry & Trade sector, the predicted probability of receiving a contract is .02 for a non-US firm, and .03 for a US firm, while all other regressors are fixed at their means.¹²

Table 2 also provides evidence of a different type of informal influence - the influence that recipients' major partners can exert via their bilateral links with recipients. The key results that emerges from the models reported in Table 2 is suggestive of recipient governments' willingness to accommodate interests of their aid donors, trade partners, neighbors and like-minded governments. Specifically, firms from recipients' aid donor countries are significantly more likely to win contract awards than other firms: the coefficients on both aid variables are positive and statistically significant in Models 2 and 3. Similarly, volumes of trade between the recipient and bidding country have a positive and significant effect on contract awards (Models 2-4). At the same time, firms from countries that are more distant from the recipient, either geographically or ideologically, are less likely to receive contracts than other firms, all else being equal (Models 2-4). These findings are consistent with my theoretical expectations: recipient governments use World Bank-financed contracts to maintain friendly relations with important economic and political partners.

¹⁰ The 95% confidence interval is [.017, .071] for the predicted probability for major donors' firms, and [.013, .016] for the predicted probability for other countries' firms.

¹¹ These results are available in the appendix.

¹² The 95% confidence interval is [.015, .017] for the non-US predicted probability, and [.018, .038] for the US predicted probability.

[Table 4 about here]

Finally, several control variables yield statistically significant results. Bidding countries' economic capacity has a positive relationship with their firms' ability to secure consulting contracts. Specifically, full sample models in Table 1 indicate that the bidding country's trade openness increases the likelihood of receiving a contract. The results are mixed when recipients are excluded from the sample in Table 2 and when I estimate sector-specific models in Tables 3 and 4. *GDP per capita* has a similar positive effect on contract allocation, indicating that firms from more advanced countries are in an advantageous position. This result is more robust than the previous one: the coefficient on GDP per capita reaches statistical significance in all full-sample models (Table 1), three out of four non-recipient models (Table 2), and seven out of ten sector-based models (Tables 3 and 4). The third economic variable, *GDP growth*, does not have an effect on the likelihood of securing a consulting contract.

CONCLUSION

This paper has argued that the politics of World Bank-funded contract allocation is shaped by informal influence exercise by different actors: not only by powerful governments, but governments that are traditionally considered weak, such as recipients of multilateral aid. Recipients are able to exercise such influence because they are in charge of allocation and administration of contracts funded by the World Bank. Recipient governments have strong incentives to bias this process: they can reward their domestic economic constituents by hiring local consulting firms, and their important economic and political partners by awarding consulting contracts to firms from companies with significant bilateral ties to the recipient government administering the bidding process. In addition, the World Bank's major shareholders receive more favorable treatment, regardless of their bilateral ties with recipients.

Empirical results presented in the paper lend support to my expectations. While formal procurement rules constrain the process of consulting contract allocation, these

are not sole determinants of firm selection. Availability of expertise in bidding firms' countries and a firm's experience in providing consulting services for World Bank-funded projects have a significant positive effect on the likelihood of winning a contract award. At the same time, my findings identify firms that are in a more advantageous position in the bidding process: recipient firms, US firms and major World Bank shareholder firms, as well as firms from recipients' economic and political partner countries, are more likely to receive a consulting contract than other firms.

This paper highlights the compromise between countries' interests in securing economic benefits from World Bank-funded contracts and the formal procurement rules that stem from the World Bank's mandate and require using multilateral aid in the most effective and efficient way possible. Recipient governments use consulting contracts to buy goodwill and support domestically and internationally; however, this allocation bias results in inefficiencies since the most competitive bids do not always win. Also, the recipient may not receive the most highly qualified advice, which could diminish the project's success. Donor governments may be similarly inclined to accept diminished effectiveness and efficiency of multilateral aid in exchange for a flow of benefits to their own domestic constituents. Such benefits also make it easier to defend resource allocation to multilateral aid organizations. The scale of costs associated with such biased contract allocation remains unclear: an assessment of the degree of inefficiency and reduced quality of project implementation should compare project implementation outcomes when contracts are allocated to the most qualified firm and when contract allocation is swayed by informal influence. Such an assessment would be valuable in determining how damaging biased contract allocation is to achieving the World Bank's economic growth and human development objectives.

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Table 1: Models of Consulting Contract Allocation (Full Sample)

	Model 1	Model 2	Model 3
Recipient firm	6.04** (0.04)	6.04** (0.04)	6.02** (0.04)
US firm		0.20** (0.08)	
Top WB donor firm			0.37** (0.05)
Firm's annual contract value	0.16** (0.02)	0.16** (0.02)	0.16** (0.02)
Firm's previous contracts with recipient	-0.08** (0.02)	-0.08** (0.02)	-0.08** (0.02)
Availability of latest technologies	0.09* (0.04)	0.09* (0.04)	0.09* (0.04)
Quality of scientific research institutions	0.11** (0.04)	0.11** (0.04)	0.07 (0.04)
Research/training services	0.21** (0.05)	0.24** (0.05)	0.21** (0.05)
Capacity for innovation	-0.36** (0.04)	-0.38** (0.04)	-0.45** (0.04)
Quality of education system	0.09* (0.04)	0.08* (0.04)	0.17** (0.04)
Quality of math/science education	-0.02 (0.03)	0.01 (0.03)	-0.03 (0.03)
Availability of scientists/engineers	0.17** (0.04)	0.14** (0.04)	0.18** (0.04)
B's trade openness	0.00** (0.00)	0.00** (0.00)	0.00** (0.00)
B's GDP growth	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
B's GDP per capita	0.31** (0.02)	0.31** (0.02)	0.32** (0.02)
CPI score	0.01** (0.00)	0.01** (0.00)	0.01** (0.00)
Constant	-11.42** (0.18)	-11.37** (0.18)	-11.35** (0.18)
Observations	3,029,066	3,029,066	3,029,066
LL	-59345.38	-59342.00	-59320.31

Note: Logit models with recipient and year fixed effects (fixed effects are not reported); DV = Contract award; standard errors in parentheses. Unit of analysis: contract bid. * p<0.05, ** p<0.01

Table 2: Models of Consulting Contract Allocation (Non-Recipient Sample)

	Model 1	Model 2	Model 3	Model 4
Ideal point distance		-2.44**	-0.66**	-0.53**
		(0.54)	(0.10)	(0.10)
Distance		-1.29**	-1.11**	-1.10**
		(0.39)	(0.06)	(0.06)
Recipient-bidder trade		0.20	0.05*	0.05*
		(0.12)	(0.02)	(0.02)
Bidder aid to recipient		0.17**		
		(0.07)		
Bidder aid to recipient (dummy)			0.88**	
			(0.16)	
Firm's annual contract value	0.45**	0.61**	0.49**	0.49**
	(0.03)	(0.13)	(0.06)	(0.06)
Firm's previous contracts with recipient	-0.19**	-0.14	-0.25**	-0.24**
	(0.03)	(0.14)	(0.07)	(0.07)
Availability of latest technologies	0.13*	0.24	-0.43**	-0.34**
	(0.07)	(0.83)	(0.13)	(0.13)
Quality of scientific research institutions	0.51**	-0.24	0.75**	0.73**
	(0.05)	(0.52)	(0.11)	(0.11)
Research/training services	-0.01	2.45**	0.57**	0.57**
	(0.08)	(0.68)	(0.18)	(0.18)
Capacity for innovation	-0.45**	-2.28**	-1.44**	-1.37**
	(0.05)	(0.36)	(0.12)	(0.12)
Quality of education system	-0.05	0.82	-0.22	-0.17
	(0.06)	(0.62)	(0.13)	(0.13)
Quality of math/science education	0.05	0.09	-0.05	-0.02
	(0.04)	(0.37)	(0.12)	(0.12)
Availability of scientists/engineers	0.37**	0.13	0.83**	0.72**
	(0.05)	(0.47)	(0.11)	(0.11)
B's trade openness	0.00**	-0.02**	0.00	0.00
	(0.00)	(0.01)	(0.00)	(0.00)
B's GDP growth	-0.04**	-0.11	-0.05**	-0.06**
	(0.01)	(0.06)	(0.02)	(0.02)
B's GDP per capita	0.19**	-0.63	0.73**	0.79**
	(0.03)	(0.73)	(0.06)	(0.06)
CPI score	0.00	0.01	0.01**	0.01
	(0.00)	(0.02)	(0.00)	(0.00)
Constant	-11.28**	7.36	-4.46**	-5.48**
	(0.30)	(8.39)	(0.65)	(0.63)
Observations	2,702,413	97,968	828,552	828,552
LL	-21286.18	-804.04	-4257.33	-4271.90

Note: Logit models with recipient and year fixed effects (fixed effects are not reported); DV = Contract award; standard errors in parentheses. Unit of analysis: contract bid. * p<0.05, ** p<0.01

Table 3: Models of Consulting Contract Allocation by Sector (Agriculture; Public administration and law; Information and communication; Education; Finance)

	Ag	Pa	Inf	Ed	Fin
Recipient firm	6.96** (0.15)	6.59** (0.10)	6.43** (0.50)	7.11** (0.21)	5.03** (0.31)
Top WB donor firm	0.81** (0.17)	0.46** (0.14)	0.67 (0.86)	0.75** (0.29)	1.29** (0.39)
Firm's annual contract value	0.07 (0.05)	0.17** (0.03)	0.02 (0.11)	0.00 (0.07)	0.10 (0.10)
Firm's previous contracts with recipient	-0.01 (0.05)	-0.04 (0.03)	0.02 (0.08)	0.06 (0.07)	-0.01 (0.09)
Availability of latest technologies	0.19 (0.12)	0.19 (0.10)	0.19 (0.66)	0.28 (0.20)	2.39** (0.40)
Quality of scientific research institutions	0.18 (0.13)	0.10 (0.09)	0.77 (0.57)	-0.04 (0.20)	0.02 (0.34)
Research/training services	-0.37* (0.17)	0.15 (0.13)	-0.41 (0.84)	-0.08 (0.23)	-1.58** (0.39)
Capacity for innovation	-0.35* (0.14)	-0.53** (0.11)	-0.68 (0.53)	-0.48** (0.17)	-0.44 (0.30)
Quality of education system	0.17 (0.13)	-0.03 (0.10)	1.12* (0.55)	-0.22 (0.20)	-1.56** (0.39)
Quality of math/science education	0.05 (0.12)	-0.00 (0.08)	-0.28 (0.40)	0.30 (0.16)	2.12** (0.29)
Availability of scientists/engineers	0.10 (0.13)	0.23* (0.10)	0.35 (0.53)	0.40* (0.18)	-0.09 (0.28)
B's trade openness	-0.00 (0.00)	0.00** (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00* (0.00)
B's GDP growth	-0.00 (0.01)	-0.03** (0.01)	-0.01 (0.10)	-0.02 (0.02)	0.03 (0.03)
B's GDP per capita	0.67** (0.07)	0.27** (0.05)	-0.08 (0.32)	0.33** (0.12)	0.11 (0.17)
CPI score	-0.01 (0.00)	0.02** (0.00)	-0.01 (0.01)	0.01 (0.01)	0.02* (0.01)
Constant	-12.34** (0.64)	-8.43** (0.46)	-11.12** (2.46)	-13.94** (0.81)	-12.32** (1.49)
Observations	273,091	885,241	93,079	115,232	27,072
LL	-6260.37	-13631.91	-3130.42	-3713.58	-1706.38

Note: Logit models with recipient and year fixed effects (fixed effects are not reported); DV = Contract award; standard errors in parentheses. Unit of analysis: contract bid. * p<0.05, ** p<0.01

Table 4: Models of Consulting Contract Allocation by Sector (Health and social services; Industry and trade; Energy and mining; Transportation; Water, sanitation and flood protection)

	Hlth	Ind	En	Tr	Wtr
Recipient firm	7.59** (0.14)	5.62** (0.16)	6.11** (0.11)	6.33** (0.12)	5.92** (0.22)
Top WB donor firm	0.40 (0.21)	0.46** (0.15)	0.02 (0.12)	0.07 (0.13)	-0.71* (0.33)
Firm's annual contract value	-0.04 (0.05)	0.05 (0.07)	0.08* (0.04)	0.09* (0.04)	-0.02 (0.12)
Firm's previous contracts with recipient	0.07 (0.05)	-0.01 (0.07)	-0.05 (0.04)	-0.04 (0.04)	0.09 (0.11)
Availability of latest technologies	0.25 (0.15)	0.15 (0.14)	0.26* (0.11)	0.11 (0.12)	-0.43 (0.22)
Quality of scientific research institutions	0.12 (0.14)	0.41** (0.13)	0.20 (0.10)	0.11 (0.11)	0.21 (0.25)
Research/training services	0.51** (0.19)	0.62** (0.19)	0.08 (0.14)	0.30 (0.15)	-0.48 (0.30)
Capacity for innovation	-0.64** (0.15)	-0.71** (0.13)	-0.45** (0.10)	-0.25* (0.11)	0.51* (0.25)
Quality of education system	0.40** (0.15)	-0.06 (0.16)	0.08 (0.11)	-0.41** (0.12)	0.46 (0.29)
Quality of math/science education	-0.31* (0.12)	0.22 (0.12)	-0.08 (0.09)	0.07 (0.09)	-0.45* (0.20)
Availability of scientists/engineers	-0.00 (0.15)	-0.22 (0.13)	0.14 (0.10)	0.57** (0.11)	0.42 (0.25)
B's trade openness	0.01** (0.00)	0.00 (0.00)	0.00 (0.00)	0.00* (0.00)	0.00 (0.00)
B's GDP growth	0.03 (0.01)	0.02 (0.02)	-0.03* (0.02)	-0.04** (0.01)	-0.02 (0.03)
B's GDP per capita	0.15* (0.07)	0.12 (0.08)	0.27** (0.06)	0.33** (0.06)	0.59** (0.14)
CPI score	0.01 (0.00)	-0.01 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.01 (0.01)
Constant	-11.29** (0.63)	-9.91** (0.68)	-10.44** (0.51)	-12.48** (0.56)	-9.16** (1.13)
Observations	516,064	53,604	416,798	440,801	24,610
LL	-5687.22	-3136.38	-6760.66	-6903.69	-1296.14

Note: Logit models with recipient and year fixed effects (fixed effects are not reported); DV = Contract award; standard errors in parentheses. Unit of analysis: contract bid. * p<0.05, ** p<0.01

APPENDIX

Table A1: Summary Statistics

Variable	Mean	Std. Dev.	Min	Max	Source
Contract award	0.00	0.06	0	1	WB contracts database
Recipient firm	0.09	0.28	0	1	Constructed by author
US firm	0.03	0.16	0	1	Constructed by author
Top WB donor firm	0.11	0.31	0	1	Constructed by author
Ideal point distance	0.84	0.77	0	4.17	Voeten et al. (2009)
Distance	8.74	0.77	3.37	9.89	COW Project
Recipient-bidder trade	2.88	3.88	-13.82	12.95	COW Project
Bidder aid to recipient	16.22	2.58	3.95	22.09	AidData
Bidder aid to recipient (dummy)	0.10	0.30	0	1	Constructed by author
Availability of latest technologies	5.01	0.91	2.14	6.87	WEF's GCI dataset
Quality of research institutions	3.91	1.12	1.46	6.35	WEF's GCI dataset
Research/training services	4.30	0.90	1.92	6.50	WEF's GCI dataset
Capacity for innovation	3.60	0.94	1.53	5.89	WEF's GCI dataset
Quality of education system	3.63	0.87	1.72	6.11	WEF's GCI dataset
Quality of math/science education	3.78	0.97	1.52	6.46	WEF's GCI dataset
Availability of scientists/engineers	4.15	0.72	2.30	6.30	WEF's GCI dataset
B's trade openness	69.71	32.62	0.18	379.59	WB's WDI dataset
B's GDP growth	4.14	3.18	-46.08	20.72	WB's WDI dataset
B's GDP per capita	8.41	1.58	5.44	11.58	WB's WDI dataset
CPI score	26.28	24.02	1	92	Transparency Intl.
Firm's annual contract value	-2.43	2.10	-6.91	5.22	Constructed by author
Firm's previous contracts with recipient	-2.17	2.13	-6.91	5.08	Constructed by author

Table A2: Models of Consulting Contract Allocation by Sector (Agriculture; Public administration and law; Information and communication; Education; Finance) - *Top WB donor firm* replaced with *US firm*

	Ag	Pa	Inf	Ed	Fin
Recipient firm	7.04** (0.15)	6.64** (0.10)	6.50** (0.51)	7.09** (0.21)	5.11** (0.31)
US firm	0.14 (0.23)	0.04 (0.17)	-1.95* (0.80)	1.54** (0.40)	-0.06 (0.45)
Firm's annual contract value	0.07 (0.05)	0.17** (0.03)	0.02 (0.11)	0.00 (0.07)	0.10 (0.10)
Firm's previous contracts with recipient	-0.01 (0.05)	-0.04 (0.03)	0.02 (0.08)	0.06 (0.07)	-0.01 (0.09)
Availability of latest technologies	0.13 (0.12)	0.19 (0.10)	-0.09 (0.62)	0.34 (0.20)	2.37** (0.41)
Quality of scientific research institutions	0.24 (0.13)	0.15 (0.09)	1.18* (0.47)	0.04 (0.20)	0.42 (0.34)
Research/training services	-0.29 (0.17)	0.14 (0.13)	-1.08 (0.85)	-0.01 (0.23)	-1.56** (0.39)
Capacity for innovation	-0.15 (0.13)	-0.37** (0.10)	0.09 (0.43)	-0.48** (0.17)	-0.23 (0.28)
Quality of education system	-0.03 (0.13)	-0.12 (0.10)	0.83 (0.47)	-0.31 (0.20)	-1.70** (0.40)
Quality of math/science education	0.17 (0.12)	0.01 (0.08)	-0.71 (0.44)	0.36* (0.16)	1.98** (0.30)
Availability of scientists/engineers	0.08 (0.14)	0.22* (0.10)	1.19 (0.61)	0.27 (0.18)	-0.11 (0.30)
B's trade openness	-0.00 (0.00)	0.00** (0.00)	0.00 (0.00)	0.00 (0.00)	-0.01** (0.00)
B's GDP growth	-0.01 (0.01)	-0.03** (0.01)	-0.04 (0.10)	-0.02 (0.02)	0.04 (0.03)
B's GDP per capita	0.65** (0.07)	0.26** (0.05)	-0.11 (0.31)	0.30* (0.12)	0.06 (0.17)
CPI score	-0.00 (0.00)	0.02** (0.00)	0.00 (0.01)	0.01 (0.01)	0.02* (0.01)
Constant	-12.49** (0.64)	-8.54** (0.47)	-11.39** (2.52)	-13.86** (0.81)	-12.79** (1.48)
Observations	273,091	885,241	93,079	115,232	27,072
LL	-6271.71	-13637.45	-3127.34	-3710.94	-1712.16

Note: Logit models with recipient and year fixed effects (fixed effects are not reported); DV = Contract award; standard errors in parentheses. Unit of analysis: contract bid. * p<0.05, ** p<0.01

Table A3: Models of Consulting Contract Allocation by Sector (Health and social services; Industry and trade; Energy and mining; Transportation; Water, sanitation and flood protection) - *Top WB donor firm replaced with US firm*

	Hlth	Ind	En	Tr	Wtr
Recipient firm	7.60** (0.14)	5.65** (0.16)	6.11** (0.11)	6.33** (0.12)	5.94** (0.23)
US firm	0.11 (0.30)	0.70** (0.24)	0.38 (0.20)	0.29 (0.21)	-0.57 (0.39)
Firm's annual contract value	-0.04 (0.05)	0.05 (0.07)	0.08* (0.04)	0.09* (0.04)	-0.02 (0.12)
Firm's previous contracts with recipient	0.07 (0.05)	-0.01 (0.07)	-0.05 (0.04)	-0.04 (0.04)	0.09 (0.11)
Availability of latest technologies	0.27 (0.15)	0.16 (0.14)	0.25* (0.11)	0.11 (0.12)	-0.43 (0.22)
Quality of scientific research institutions	0.17 (0.14)	0.45** (0.13)	0.20* (0.10)	0.11 (0.11)	0.19 (0.25)
Research/training services	0.50** (0.19)	0.75** (0.19)	0.12 (0.15)	0.34* (0.16)	-0.59 (0.32)
Capacity for innovation	-0.57** (0.15)	-0.61** (0.12)	-0.48** (0.10)	-0.26* (0.11)	0.30 (0.21)
Quality of education system	0.34* (0.15)	-0.27 (0.15)	0.06 (0.11)	-0.44** (0.11)	0.70** (0.26)
Quality of math/science education	-0.31* (0.12)	0.39** (0.12)	-0.04 (0.09)	0.11 (0.09)	-0.61** (0.21)
Availability of scientists/engineers	-0.02 (0.15)	-0.36** (0.14)	0.09 (0.11)	0.53** (0.11)	0.52 (0.28)
B's trade openness	0.01** (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00* (0.00)	0.00 (0.00)
B's GDP growth	0.03 (0.01)	0.02 (0.02)	-0.03* (0.02)	-0.04* (0.01)	-0.02 (0.03)
B's GDP per capita	0.14 (0.07)	0.07 (0.08)	0.26** (0.06)	0.32** (0.06)	0.66** (0.14)
CPI score	0.01 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.01)
Constant	-11.35** (0.63)	-9.76** (0.68)	-10.36** (0.51)	-12.45** (0.56)	-9.24** (1.15)
Observations	516,064	53,604	416,798	440,801	24,610
LL	-5689.01	-3137.45	-6759.07	-6902.91	-1297.35

Note: Logit models with recipient and year fixed effects (fixed effects are not reported); DV = Contract award; standard errors in parentheses. Unit of analysis: contract bid. * p<0.05, ** p<0.01