Major donors, World Bank, and premier borrowers: the political economy of the World Bank's loan allocation

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What factors affect the "power" of stakeholders in exerting their influence in international organizations is a question that many scholars are interested in. The research questions I am going to answer in this paper are to what extent are the soft and hard loan windows in the World Bank affected by the major donors and what decides major donors' extent of power in influencing the World Bank's loan allocation? Inspired by the classical theories such as principal-agent theory and "he who pays the piper call the tune" in international relations and international political economy, I argue that the power of stakeholder is related to their economic importance to the international organization. Higher economic reliance of the institution to the stakeholder will translate into higher bargaining power of the stakeholder against the institution, which increases the chances that the stakeholder's interests to be achieved.

I examined my theory through analyzing the two main loan windows in the World Bank, soft loan window (IDA) and hard loan window (IBRD), which have very different business models and funding structures. I find that major donors are more capable of affecting the loan allocation in IDA than IBRD in realizing its interests, which lends empirical support to my theory since IDA is more financially reliant on the capital from major donors than IBRD. Meanwhile, the World Bank is more capable of maintaining its autonomy in loan allocation in IBRD. Through maintaining the stable lending relationship with the "premier borrowers" in IBRD, the World Bank realizes its interests in sustainable operation and financial robustness.

1. Relevant literature

Loan allocation is the core subject of the World Bank and the main entry point to study the internal political problem of the organization. International relations and political economy scholars have extensively studied this topic previously. One general argument that has often been raised is that the

decision making of the World Bank in loan allocation is not a simple economic problem, rather, it is a complex political economy problem that involves the interests of different stakeholders.

For example, a large body of literature argue that, as the dominant players in the World Bank, the major donors especially the U.S. exert a great influence on the operation and business of the MDBs (Andersen, Hansen, and Markussen 2006; Babb 2009; Braaten 2014; Clark and Dolan 2021; Kersting and Kilby 2021; Kilby 2009). Countries that are strategically important to the U.S. receive more loans and favorable terms from the World Bank. Other studies examined the bureaucratic politics and incentives within the World Bank, pointing out that the interests within the World Bank institution influence the World Bank's behaviors in loan allocation (Moloney 2022; Weaver 2007, 2008). In recent years, some studies have also begun to focus on the impact of other stakeholders, such as market investors, borrowers and NGOs, on the World Bank's lending policies and strategies (Humphrey 2016, 2017; Knack, Rogers, and Heckelman 2012; Molinari and Patrucchi 2020).

While previous studies showed the existence of various stakeholders' influence on the World Bank's lending activities, it does not explain why the level of influence of each party varies and what determines their level of influence in the organization. For example, we know that, according to the principal-agent theory (P-A theory), the World Bank's policies are significantly influenced by major donors (G-7 countries) since their capital contribution in total exceeds other member states, and the current governance structure and decision-making mechanism in the World Bank grant large shareholders more voice and power. However, what we know very little is how powerful are the major donors especially when their interests are at odds with the World Bank's own (which often happens), and what determines their extent of power in the World Bank. In other words, most previous research primarily focused on the abilities and power of major donors to influence the decision-making and behaviors of international organizations, however, very few studies paid enough attention to the constraining factors that limit the major donors in exercising their power. Since major donors' power is not constant across different branches in the World Bank and over times, without knowing the factors that affect such extent of power, the previous theory becomes less effective in explaining the change of power dynamics in the World Bank.

2. Theory

2.1. He who pays the piper calls the tune

There is a saying that "he who pays the piper calls the tune", which suggests that the actor that pays the most has the greatest say. The logic behind is that the economic power can be translated into political power in international relations. This theory is widely used in the field of political economy. For instance, in the book "Money talks: the International Monetary Fund, conditionality, and supplementary financiers", Gould (2006) argues that the external financing suppliers of IMF profoundly affected the design of IMF loan conditionality program. Similarly, Humphrey (2017) examines how the change of credit rating methodology towards multilateral development banks (MDBs) motivates the MDBs to change the lending policies in order to maintain high credit rating in the market. On the basis of these studies, I will further analyze how the variation of the economic relationship between the stakeholder and the international organization would affect the political influence of the stakeholder in the international organization.

I will take the World Bank as my research subject, examining specifically the relationship between the major donors and the World Bank and analyze their extent of power to affect the World Bank's lending allocation. I limit the major donors to those non-borrower shareholders (i.e., developed countries) because although some emerging countries also have high stakes in traditional MDBs (for example, China is the third largest shareholder of the World Bank), as both borrowers and shareholders, their interests in the World Bank are significantly different from other non-borrower shareholders. In addition, so far, the World Bank and major traditional Regional Developed Banks (RDBs) are still dominated by non-borrowing shareholders[1], and the emerging countries' efforts to increase their shares in the World Bank faced great resistance from non-borrower shareholders due to the latter's fear of losing the domination in the institution.

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[1] The four major RDBs included in the study are Asian Development Bank (ADB), African Development Bank (AfDB), Inter-American Development Bank (IADB) and European Bank for Reconstruction and Development (EBRD). All four RDBs are de facto creditor-led MDBs according to the typology of governance structure from Ray (Ray 2021). Many studies indicate that borrower-oriented MDBs and donor-oriented MDBs are substantially different in policies and operation due to the stark differences of the demands and interests between borrowers and donors (Humphrey and Michaelowa 2013; Ray and Kamal 2019; Zhu 2019).

The basic idea of the theory is that the actor that is more economically powerful in the pair relationship is also likely to be more politically powerful, which has greater say in policy making and implementation. I am going to argue that major donors are more powerful in soft loan window than hard loan window because the World Bank relies more on the funding support from the donors in the soft loan window. On the contrary, in the hard loan window, the World Bank needs to pay more attention to the market investors' preferences based on the commercial considerations, which pushes the World Bank to maintain the stable lending relationship with some "premier borrowers". Such consideration from the World Bank may, in some extent, lower the impact of major donors in the organization.

In the next part, I will illustrate the business model and funding structure of the soft and hard loan window in the World Bank to analyze the political and economic relationship between the major donors and the World Bank.

2.2 Soft and hard loan window: one World Bank, two different banks

2.2.1 Business model

MDB usually has two loan windows: soft loan and hard loan window. In the World Bank, IDA is the soft loan window while IBRD is the hard loan window. Soft loan window provides high concessional development finance including grants and low interest rate loans for low-income countries. This loan window is not profit-driven. Since the majority of funding in this platform comes from the donor contribution, the financing cost for the World Bank is almost zero, which allows the World Bank to provide a very concessionary finance to the borrowing countries.

In comparison, the hard loan window is to provide loans close to the market interest rate for those middle-income developing countries. These loans are less concessional but more profitable for the World Bank compared with the soft loans. Since the hard loan window is more marketable, the financing cost for IBRD is higher than IDA, so the average lending cost to borrowing countries is higher as well.
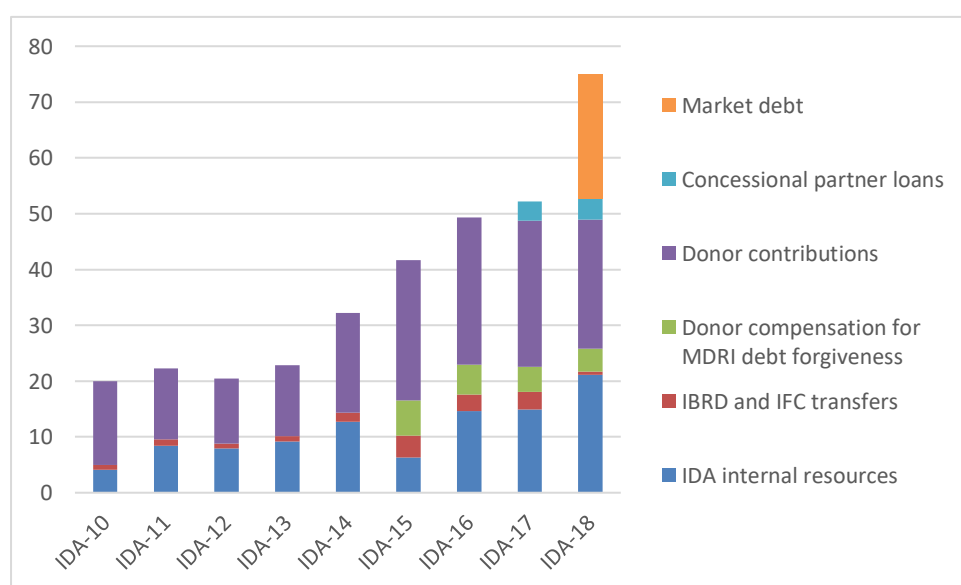
2.2.2 Source of funding

Aside from the different target borrowing countries and different financial instruments, another major difference between IDA and IBRD comes from the source of funding.

The majority of the funding in soft loan window comes from the periodical capital replenishment from donor countries, complemented with some income transfer from hard loan window and internal sources (principal repayment and investment income). Only in recent years did it directly raise fund from financial market through bond issuance (World Bank IDA issued first bond in 2018).

There are several reasons why the funding of the soft loan window mainly depends on donor contribution. First, since soft loans are mainly given to high-risk and low-income countries, it is less "bankable" in the eyes of market investors and, therefore, hard to raise fund from the financial market. Second, soft loan window provides highly concessional financial products such as grant and concessional loan, so the profit-generating capacity of these financial products is relatively low, making it less attractive to market investors. Third, soft loan window provides some grants to low-income countries which does not need to be repaid by the borrowing countries. Consequently, the overall level of available funding in this window will continue to drop, thereby requires periodical capital replenishment from donor countries to guarantee the sufficiency of funding.

Figure 1: IDA funding sources (billion USD)

Source: author's compilation based on information in World Bank annual reports

In contrast, the sources of funding in hard loan are more diverse. Donor capital contribution only represents a small portion of the total capital. The callable capital rule in the World Bank allows the donors to transfer only a small portion of their subscribed capital to the World Bank while retain the rest as callable capital. The World Bank will only exercise the power to call the remaining capital from donors when it faces severe operating difficulties which is very less likely to happen. Besides the donor capital, the majority of hard loan funding comes from the market financing through bond issuance. The international reputation, "Preferred Creditor Status" (PCS) as well as the sovereign credit support from developed countries enable the World Bank to raise money in the market with low cost and transfer such benefits to its borrowing countries. The third source of finance comes from the loan repayment from borrowing countries and the income from equity investment. Though the IBRD is not purely profit-driven, the stable income from the hard loan repayment plays a crucial role in maintaining the IBRD's business model.

Figure 2: IBRD funding sources
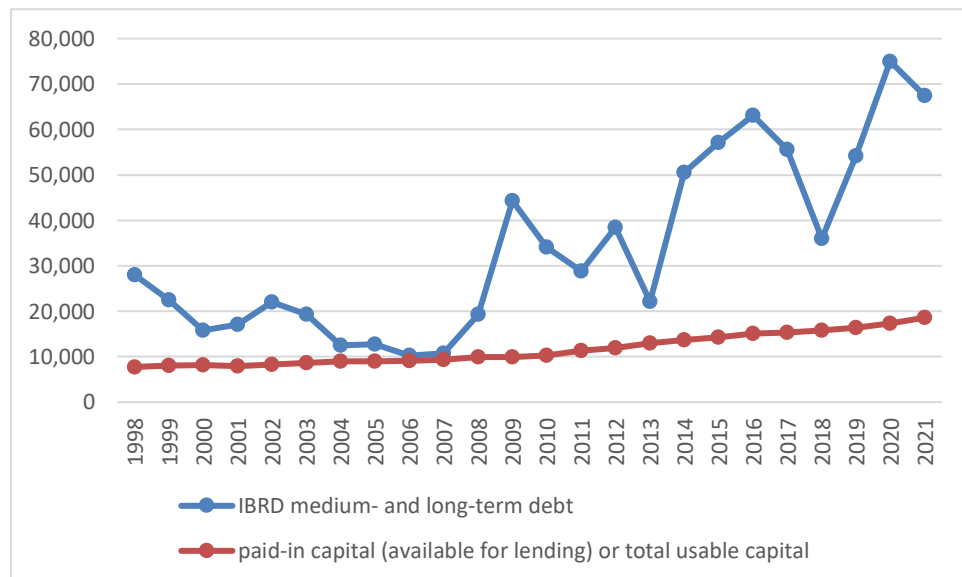
Source: author's compilation based on the information in World Bank's annual reports

Another major difference between IDA and IBRD besides the funding structure is the frequency of capital replenishment by donor countries. As mentioned above, since the business model of IDA is less financially self-sustainable than IBRD, donor countries need to discuss and negotiate the capital

replenishment matter more frequently (average three years) in IDA to maintain the business operation. The negotiation of capital replenishment each time involves how the IDA resources should be used in developing countries as well as the objectives and mandates of the organization. So, naturally, the donor countries will have more chances to influence the IDA's various policies and decisions through the capital replenishment agreement. In comparison, IBRD does not need to increase capital very often. In most of the years, IBRD mainly relied on market financing to fund its lending program. From its establishment in 1944 to the present, IBRD has carried out general capital increase (GCI) for only five times, and most of the donor contribution in capital increase was in the form of callable capital, which indicates that the part of capital that needs to be actually transferred by donor countries to the IBRD is actually limited. For instance, IBRD's last capital increase was in 2018 (GCI-5). Among the total capital increase, only $7.5 billion USD was in the form of paid-in capital, while a much higher $52.6 billion USD was in the form of callable capital. In contrast, in the latest IDA capital replenishment in 2022 (IDA-20), donor countries contributed a total capital of $23.5 billion USD.

In sum, although both IDA and IBRD are branches of the World Bank, their nature and characteristics are quite different, which leads to different relationship between the shareholders and the organization.

2.3 The economic relationship between the major donor and the World Bank

Before discussion the economic relationship between the major donor and the World Bank, I will first explain the definition of economic relationship in this paper. The economic relationship here is defined as the extent of economic reliance of one party on another. When one party is more economically dependent on the other party than the other way around, that party is in a relatively weak position in the economic relationship between the two, and vice versa. In the case of the World Bank, the economic reliance is whether one party needs the money more from the other party than the other way around.

The economic relationship between major donors and the World Bank in soft loan window and hard

loan window is different. In the soft loan window (IDA), since the majority of funding comes from donor contribution, the economic reliance of the World Bank on the donor countries is strong. Conversely, the economic reliance of donor countries on the World Bank is low because, unlike commercial banks, the World Bank does not share the profits through dividend with the donor countries.

Things are a bit more complicated when it comes the hard loan window (IBRD). Similar to the soft loan window, donor countries do not rely on the investment returns from the hard loans, which makes the economic reliance of donor countries on the World Bank very low. However, different from the soft loans, the funding structure of hard loan window is quite different as mentioned above. Donor contribution only consists of a small portion of total funding in hard loan window. This lowers the financial burden of donor countries but requires the IBRD to find other sources of funding to fill the gap. As a result, market financing plays a much more important role in hard loan window. This indicates that the direct economic reliance of World Bank on the donors is lower compared with IDA.

However, there may be some indirect economic reliance of the World Bank on donor countries in IBRD. As some studies mentioned, the composition of shareholders is crucial for MDBs in fundraising in the market (Humphrey 2019; Zhu 2019). The credit endorsement of developed countries helps improve the credit rating of MDB, which further determines the financing cost of MDB and the borrowing cost of developing countries. Having the developed countries with good credits as major shareholders can help assure the market investors that the MDB is less likely to have financial problems. This is because even if MDB encounters some operational difficulties such as the loan default from borrowers, MDB is still able to "call" the capital (callable capital rule) from these developed countries to maintain the financial stability of the institution. This indicates that IBRD has some indirect economic reliance on the Western donor countries. However, the benefits of having developed countries as shareholders to the credit rating enhancement of MDBs are also limited based on the existing methodology of the major credit rating agencies (Standard & Pool, Moody, and Fitch). Also, major MDBs do not even incorporate the factor of callable capital in their own "capital adequacy, framework" (G20 Expert Panel 2022, 30), which shows that they do not

value this special arrangement in MDBs very much.

In sum, the direct economic reliance of the World Bank on the major donors is higher in soft loan window than hard loan window. While the World Bank has some indirect economic reliance on the major donors in hard loan window, the extent of such indirect reliance is unclear and should not be overestimated.

2.4 The political relationship

The political relationship reflects the extent to which one party can push the other party to satisfy its interests and demands. When party A is more capable of requiring party B to do the things that satisfy party A's interests, especially those things that are at odds with the interests of party B, then party A is in a relatively stronger political position between the two, and vice versa. It is obvious that the interests of major donors are not always in line with the World Bank, so the engagement between major donors and the World Bank must be accompanied with many negotiations and compromises. The party that can make fewer concessions in the negotiation is more likely to realize its interests.

Economic relationship has close connection with the political relationship because the economic reliance of one party on another can transform into the bargaining power of that party in negotiation, which further enhances its political influence and capacities to further its interests.

Source of stakeholder's power in the World Bank

economic contribution → bargaining power → political influence → capacity to further its interests

In IDA, donor countries especially major donors play a dominant role in soft loan window and their interests and preferences are likely to significantly affect the soft loan allocation. If the World Bank cannot meet the donors' needs, donors can threaten to cut the funding support to pressure the World Bank to make the compromise (Clegg 2013). In IBRD, major donors have limited power to affect

the hard loan allocation[2]. Donor interests are only more likely to be realized when there is no interest conflict between the donor and the World Bank. At the same time, the World Bank is more capable of realizing its own interest even if this goes against donor's will.

For the World Bank, if it can find the alternative funding beyond donor contribution without increasing the financing cost (especially keep triple A credit rating), then its reliance on donors will decline and its leverage against donors will increase. This involves two issues, one is the alternative funding, and another one is the financing cost. For alternative funding, the hard loan window in the World Bank (IBRD) can rely more on market financing or internal income from the institution to lower its reliance on donors. This is not that hard to realize compared with the second issue, financing cost. The World Bank needs to prove the market that, even without the major donors' consistent support, the World Bank can still maintain the stable and sustainable operation which allows it to still borrow from the market with the same interest rate as before. For instance, the World Bank can persuade the credit rating agencies that existing business model is effective and resilience enough that the chance to really call the capital from developed countries is very low, so the importance of major donors' credit endorsement is overvalued in credit rating assessment. What's more, with the economic development and credit improvement of emerging donors, the role of traditional Western donors can be partially replaced by the emerging donors. As we can see from the recent governance structure reform, the World Bank is moving in this way to increase the shares of developing countries which enjoy both donor and borrower status in the institution.

Since IBRD's business model makes it relatively easier for the World Bank to meet the two conditions above (find the alternative funding and keep the financial costs), therefore, the World Bank is more likely to gain a stronger bargaining power in IBRD than in IDA. When the World Bank's interests go against major donor's interests, the World Bank is more likely to make decisions based on its own interests than completely follow the demands and interests of major donors.

I will test the theory by examining the extent to which one can realize its interests in the World

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[2] Previous research also argues that determinants of soft and hard loan window is different. For example, empirical evidence suggests that IBRD provided more hard loan to countries with good governance, while IDA did exactly the opposite. Such difference may be related to the different extent of donor pressure on two platforms (Winters 2010).

Bank's loan allocation issue. As the theory suggests, the bargaining power of one party can translate into its ability to realize the interests in relevant issue. If the theory is correct, then we are likely to see that the major donors are more powerful to realize their interests in World Bank loan allocation in soft loan window than hard loan window, while the World Bank's own interests are more likely to be realized in the hard loan window. Before moving to the empirical part, I will first illustrate what the major donors and World Bank's interests are in loan allocation.

2.5 The interests of major donors and World Bank in loan allocation

2.5.1 The interest of major donors

Foreign aid is widely used as a foreign policy tool by many states, and the multilateral aid has also been seen as an extension of a state's foreign policy (Babb 2009). In democratic countries, the government aid decision is affected both by factors at domestic and international levels, which echoes the "two-level game theory" raised by Putnam in foreign policy (Putnam 1988). Domestic politics play a role because the government needs to seek the political support from domestic population in election, while the international relations play a role because the government wants to gain political and economic interests from the recipient country through aid.

Previous literature contends that when a donor country makes the choices between bilateral aid (aid from donor to recipient government) and multilateral aid (aid channeled through a multilateral institution to the recipient), the country needs to first consider the domestic public opinion. The more negative the public opinion about foreign aid, the higher the percentage of multilateral aid the country will use to ease the domestic concerns (Milner 2006). This indicates that the bilateral and multilateral aid play the similar role in the eyes of a donor country in achieving its policy goals. The only difference is through which channel will the donor country get more domestic support.

Besides the domestic factors, the donor will also consider the policies and practice of international organization because the donor must make the tradeoff between the aid control and the burden sharing when choosing to use the multilateral aid. While channeling the aid through multilateral institutions is an effective way for the donor to reduce the time and cost to negotiate with the recipient countries and

screen the projects, and make full use of the expertise and experience of multilateral institutions in international development (especially dealing with risky low-income countries), the donor country loses the direct control over the use of aid (delegation costs). In this situation, the closer the aid policies alignment between the state and the multilateral organization, the lower the delegation costs for the state as the principal, and the more likely the state will use the multilateral aid (Milner and Tingley 2013).

Base on such motivation, the donor country will naturally have strong incentives to intervene the decision-making of the MDB, pushing it to provide more loans to those borrowers that are economically and politically important to the donor in order to realize the private interests. What the donors want the least is to see the MDB to lend substantial amount of money to its main political and economic opponents. In the case of the U.S., there are many politicians in U.S. calling the World Bank to cut or stop lending to China in recent years. For example, in December 2019, the World Bank Board of Directors approved a new plan to provide China with 1 billion to 1.5 billion concessional loans per year until 2025 (under country partnership framework FY2020-2025), which was met with strong opposition by U.S. Treasury Secretary Mnuchin and President Trump. On April 29, 2021, U.S. Republican Sen. Chuck Grassley announced that he was drafting a bill called the "World Bank Integrity Preservation Act of 2021". The only content of the bill is to curb China's access to concessional loans for developing countries from the World Bank and deprive China of its borrowing eligibility. From that, it can be seen that the World Bank, at least in the eyes of some US politicians, is an extension of US foreign policy to contain the rise of its strategic rival, especially China.

In a word, donor would hope that the World Bank to allocate more loans to those countries that are either important to them or have a close relationship with them. In this way, donor can reduce the delegation costs as much as possible while enjoy the benefits brought by the advantages of multilateral aid.

2.5.2 The interest of the World Bank
The World Bank's core interests include several aspects. First, the World Bank needs to ensure that its business model can operate effectively, so as to ensure the financial and operational sustainability

of the institution. The key is the stable loan income. Therefore, in loan allocation, especially hard loans, the World Bank needs borrowers that can provide them with stable and substantial loan returns. Premier borrowers are more likely to be favored by the World Bank due to their strong loan absorption capacity and good credit which guarantees the loan repayment on time (Kirk 2012). Though the World Bank enjoys the "Preferred Creditor Status" which helps it lower the lending risk in risky countries, premier borrowers still own the credit advantage that other countries do not have.

Second, the World Bank, as the world's largest development finance institution, needs to fulfill its mandates of providing concessional loans to low-income and high-risk countries. However, in order to achieve this goal, the World Bank needs to provide premier borrowers with at least a certain percentage of loans to offset the lending risk to high-risk borrowers and ensure the Bank's financial stability. This consideration is particularly salient in the context of the World Bank's expansion of its overall loan scale and the declining willingness of major Western donors to continue to increase capital contribution. When the World Bank needs to rely more on the market financing to fulfill its mandates, it will have to become more market-oriented. Keeping the lending relationship with premier borrowers is in line with both the market investors' demands and the World Bank's own interests.

Third, in order to prove the effectiveness of the institution and obtain continuous financial support from different sources, the World Bank needs to prove the effectiveness of its operations, that is, the World Bank's loans have achieved good development outcome in the borrowing countries. Therefore, countries that have achieved good World Bank's project performance in past are more likely to be favored by the World Bank. Thanks to the stronger government management capacities, the projects in premier borrowers from the World Bank are also more likely to succeed. The successful projects will later become the positive feedback, prompting the World Bank to continue its engagement in the country. For example, with the substantial financial and knowledge support of the World Bank as well as Chinese government's strict management of the multilateral loans, China has made tremendous progress in poverty reduction and economic development in the past 30 years, making great contributions to the international poverty reduction business. As the key development partner, the World Bank's international influence and prestige also got improved due

to its close relationship with China.

Finally, from the perspective of the bureaucratic internal interests, the World Bank also has a strong incentive to maintain relationships with premier borrowers. First of all, although some shareholder countries and NGOs hope the World Bank to act in a cautious way in loan review and approval in order to improve the effective use of the capital, the World Bank interests is to disburse its loan in a fast way to ensure that the annual loan budget will not be reduced in the future (Weaver 2008). Maintaining the lending volume is also important for the World Bank to justify the necessity of its business and show the shareholders and investors why their continuous funding support is needed. If the World Bank's total loan volume drops significantly, it means that the value of the institution is not that significant and the role it plays in the international community is not that important, which is obviously not in the interest of the World Bank. In addition, World Bank staff also want the institution to lend quickly for their own interests, which stems from distortions in incentive mechanisms. Easterly (2002) argues that aid agencies encourage visible outcomes such as aid disbursements rather than actual development outcomes such as implementation of project conditions and project evaluations. Since the project evaluation involves a lot of subjective judgement, it is less persuasive and objective than the more visible outcomes. The performance evaluation and promotion mechanism of the project manager are also related to the loan disbursement. (Briggs 2021) argues that the World Bank tends to lend to wealthy regions because the Team Task Leader (TTL) thinks that the projects in wealthy regions are easier to be implemented, which is helpful to the performance of TTL. The discrepancy of the internal and external interests makes the World Bank to "talk in one way and act in another way (Weaver 2008, 3)". Therefore, the borrowing countries that allow the World Bank to lend quickly on a large scale without compromising the quality of the loan will receive more favor from the World Bank.

To sum up, the World Bank has strong incentives to maintain long-term lending relationship with premier borrowers, whether from the perspectives of maintaining the operating sustainability of the institution, fulfilling its mandate to assist the low-income countries, or from the perspectives of business effectiveness or bureaucratic interests.

Table: World Bank's interests in loan allocation

Sources of World Bank's motivation	World Bank's interests in loan allocation
Financial and operating sustainability	Maintain some level of lending to premier borrowers to acquire stable and considerable loan income.
Fulfillment of mandates	Maintain some level of lending to premier borrowers to offset the lending risk to high-risk countries.
Business effectiveness	Maintain the lending relationship with premier borrowers to improve the business effectiveness
Bureaucratic incentives	Lend to premier borrowers to disburse the large-scale loans quicky without undermining the loan quality

2.6 Hypotheses

Based on economic and political relationship between major donors and the World Bank in IDA and IBRD, and their respective interests in loan allocation, the following hypotheses will be tested in in the empirical part.

H1: Major donors' interests are more likely to be realized in soft loan window (IDA) than hard loan window (IBRD).

H1.1: Borrowing country that has a closer relationship with the US is likely to receive a higher number and amount of loans from IDA. Such effect is less significant in IBRD.

H1.2: Borrowing country that receives more bilateral aid from DAC donors is likely to also receive a higher number and amount of loans from IDA. Such effect is less significant in IBRD.

H2: World Bank's interests are more likely to be realized in soft loan window (IBRD) than hard loan window (IDA).

H2.1 Premier borrower (large population and low risk) is likely to receive a higher number and amount of loans from IBRD. Such effect is less significant in IDA.

3. Empirical Analysis

The empirical analysis is consisted of several parts. First, I introduce the variables used in the

analysis and their measurement. Second, I describe the models I use and reasons to use it. Then, I present the regression results followed by the discussion of the results. Lastly, I will discuss the robustness check.

3.1 Variable and measurement

3.1.1 Dependent variable

The first dependent variable is the three-year average (from t0 to t2) of the number of soft or hard loans from the World Bank to a borrowing country. The second dependent variable is the three-year average (from t0 to t2) of the total amount of soft or hard loan (commitment) to a borrowing country. I compile and calculate these country-level variables based on the project data from the World Bank project database[3]. This database contains all the World Bank IDA and IBRD projects in history since 1947.

There are several points that need to be noted in dealing with this variable. First, commitment data is preferable to disbursement data since the former one better reflects the motivation of the World Bank in loan allocation while the latter one could be subject to the influence of some less controllable factors such as the project implementation condition and the informal influence of major donor (Kilby 2011). Though some studies point out that much of the influence of major donors in MDBs is through informal channel such as loan disbursement speed and amount after the loan approval stage (Kilby 2011, 2013), these aspects also involve more recipient-related factors which is hard to control. Since the focus of this study is to assess and compare the overall power of influence of each stakeholder in the World Bank rather than how each stakeholder affects the decision-making of the World Bank. I use the commitment data which better reflects the motivation of the lending behavior.

Second, three-year average (from t0 to t2) is applied to deal with the time lag of the World Bank's response to change of the borrowing country's political and economic conditions and smooth the volatility of World Bank's annual lending to individual borrower. Since the World Bank's projects

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[3] The World Bank projects database is downloaded from the World Bank website: https://datacatalog.worldbank.org/search/dataset/0037800/World-Bank-Projects---Operations, access on March 25th, 2022.

are usually planned several years in advance, the World Bank may not be able to quickly adjust the loan scale to a country in a short period of time. Another advantage of using the variable is that it can also help address the endogeneity problem caused by reverse causality because it is possible that the World Bank lending could affect the risk condition of a country. As the World Bank loans may help the borrower government to ease its debt and deficit problems, it could play a positive role to reduce to risk of the borrowing country.

The following two figures show the distribution of three-year average of the number and amount of IDA and IBRD loans to each eligible borrower from 1990 to 2018. It can be found that a large percentage of eligible borrowers in both windows did not get the World Bank loans during some three-year period. The three-year average number of IDA and IBRD loans to individual borrower is 2.15 and 1.59, respectively, while the three-year average amount of IDA and IBRD loans to individual borrower is 132.84 and 252.29 million USD, respectively. From that, it can be argued that the average project amount in IBRD is significantly higher than IDA.

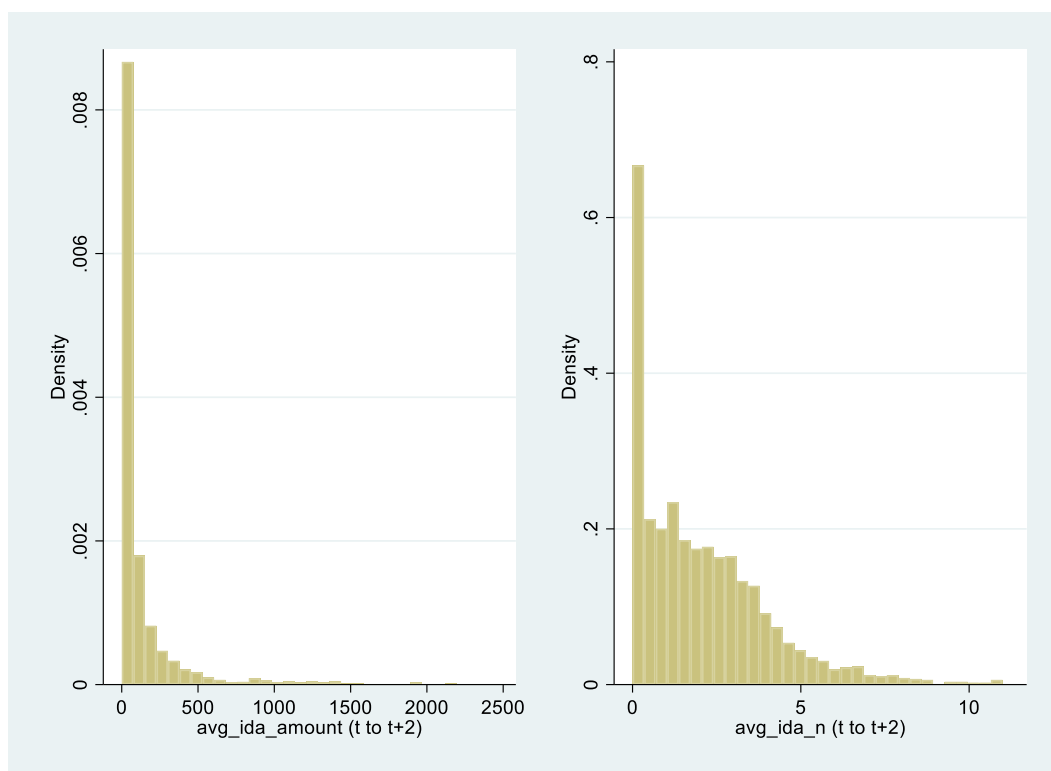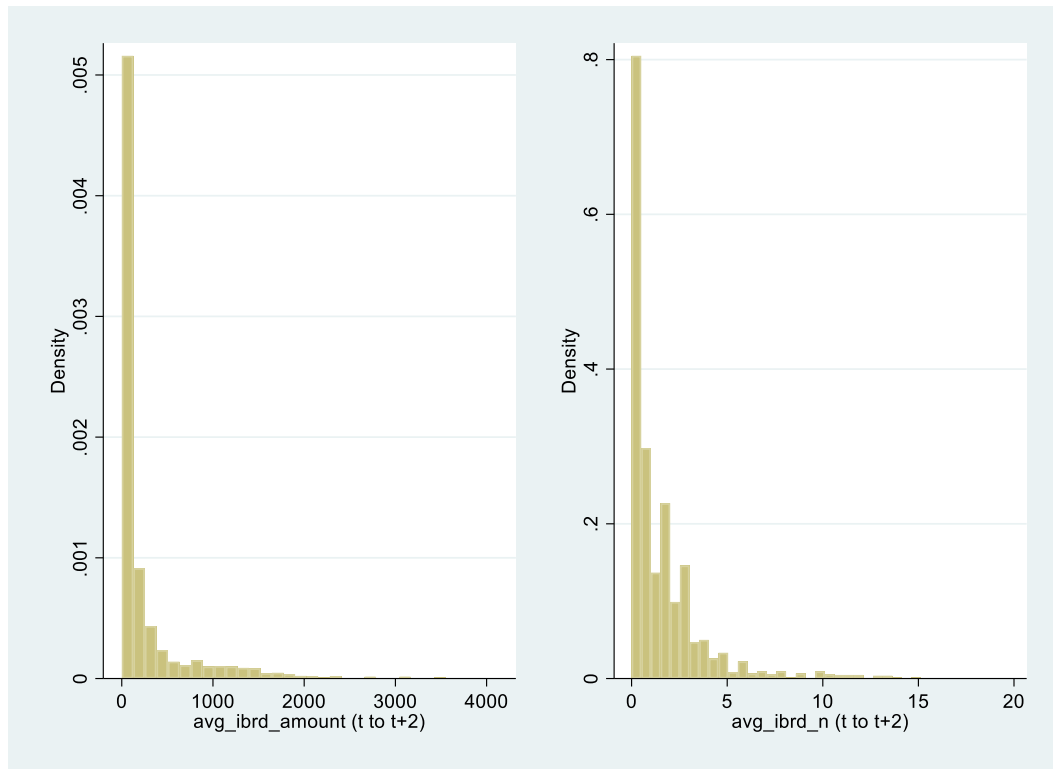Figure: Distribution of three-year average of IDA loan number and amount

Figure: Distribution of three-year average of IBRD loan number and amount

3.1.2 Independent variables

- Major donor interests

I will use two variables to measure the major donors' interests. The first one is the United Nations General Assembly (UNGA) voting alignment between a borrower country and the largest shareholder in the World Bank, the U.S. It is found that donors often provide aid to obtain political support from the borrower. UNGA voting alignment is often used by previous studies to measure the similarity of the political standpoints between two countries (Andersen, Hansen, and Markussen 2006; Ben-Artzi 2018; Dreher and Sturm 2012; Kilby 2006, 2011). Previous study also suggests that the voting behavior of recipient countries in UNGA is indeed a crucial indicator for the US Congress to allocate and adjust the bilateral aid to the countries (Dreher et al. 2022, 1940). Recipient countries that have a lower voting alignment with the US in UNGA are likely to receive fewer bilateral US aid.

In this study, I will use the difference of UNGA voting ideal point between the borrower and the U.S. as a proxy for the similarity of their political standpoints. The advantage of this measurement

relative to the affinity score is that it can track the change in country's voting behaviors caused by the preference change of the country than by the change of voting agenda (Bailey, Strezhnev, and Voeten 2017, 431). This is crucial because we want to measure the political importance of the borrower to the U.S. controlling the change of voting agenda.

Another variable used is the log of bilateral aid to a country from OECD-DAC countries. Previous literature uses the bilateral aid as a proxy of donor interest in multilateral organization based on the idea that bilateral aid policy reflects the political and economic interests of a donor country (Kilby 2011, 232). It is well-known that the major non-borrowing shareholders in the World Bank are all OECD-DAC countries. If the developing country that receives more bilateral aid from DAC countries also receives more loans from the World Bank, then it reflects the consistency of World Bank's preference with DAC donors' preferences. This data is drawn from the OECD-CRS database.

- Premier borrowers

Premier borrowing countries are defined as those borrowing countries that have both strong loan absorptive capacity and low investment risk. I set two conditions for determine whether a borrowing country belongs to the premier borrower group in a given year.

a.1 absorptive capacity

The first condition is that the country needs to have strong absorptive capacity toward the World Bank loans because this allows the World Bank to extend the loan at large scale to the country.

A country's loan absorptive capacity is related to the overall size of the country, such as population and the size of territory. Imagine two developing countries with similar levels of economic development. Country with large population must have greater demand to external financing than the country with small populations. When choosing the lending projects, the World Bank will pay much attention on the number of people that may get benefits from the project. If the population of a country is not large enough, the World Bank may not carry out some large-scale projects, such as transportation and energy infrastructure projects.

Besides, large country is also more likely to face the problem of unbalanced development which increases its potential demand toward the external financing. In another words, even if the average economic development of a country exceeds a certain level, there are still many less-developed regions or low-income population within the country waiting for the financial support from the external financial institutions. The study of the World Bank's engagement in India finds that the World Bank changed its business focus from focused states to lagged states in alignment with India's domestic plan since mid-2000s to realize India's goal of a more balanced economic growth (Kirk 2012, 22–23). That is to say, the large country usually has stronger stickiness to World Bank loans.

a.2 good credit conditions

Besides the great absorptive capacity, borrowing countries also need to have good credit conditions to ensure that the large amount of loans provided by the World Bank will not get default. The case of Inter-American Development Bank's lending activity to Argentina proves that when a borrower receiving a large loan volume is downgraded, MDB will significantly reduce the loans to that country to diminish the negative effect on the overall loan portfolio quality (Molinari and Patrucchi 2020).

To measure the investment risk of the country, I use the 'Composite Risk Rating' index in International Country Risk Guide (ICRG) constructed by Political Risk Service Group (PRSG) as a proxy. This index is a weighted average of political risk, financial risk and economic risk index, comprehensively reflecting the overall risk of the country. It is noteworthy that the ICRG risk index is negatively related to the composite risk of a country. The higher the risk rating, the lower the country risk.

Absorptive capacity and credit condition are two indispensable conditions. If a borrowing country has high loan absorptive capacity but with a poor credit condition, it will have a greater negative impact on the quality of the World bank loan portfolio. Also, even if a country has good credit condition, without great absorptive capacity, the World Bank still needs to find other borrowers to expand the volume of loans. Therefore, only when a country meets both conditions will it be counted as a premier borrower by the World Bank.

b. Method of measurement

Regarding the specific measurement, I will use the ranking the population and risk rating of eligible borrowing countries in IDA and IBRD in each year, separately, and then identify the countries that are among the top 10 countries with the largest population and top 20 countries with the highest risk rating (low risk) as the premier borrower, creating a dummy variable that equals one if the country belongs to the premier borrower. Soft loan and hard loan window will be separated in this process. That means only borrowing countries that belong to the same loan window will be compared in deciding the population and risk ranking. This approach actually treats population and risk rating as categorical variables.

Premier borrower criteria	Criteria 1: population	Criteria 2: risk
IBRD/IDA	Population ranking (top 10)	ICRG risk index ranking (top 20)

Based on this measurement approach, it is found that a total of 10 countries are classified as premier borrowers in IBRD for at least one year during the sample period (from 1990 to 2018). The specific list of the premier borrowers in each year is listed in the table below. As we can see, China is the most frequent "premier borrower", followed by Mexico and Russia. The other countries include Brazil, Egypt, India, Indonesia, Philippines, Thailand and Vietnam. Since the population of a country is relatively stable, the "premier borrower" status is basically determined by the risk ranking of the country as the risk ranking of the country is not always stable. For example, Mexico was a premier borrower between 1990-94, but with the onset of the currency crisis in 1994, Mexico left the prime borrower group and did not come back until 2004. Another example is Brazil. Brazil's risk dropped significantly from 2009-2012, which helped it to become a premier borrower during that period. However, with the domestic economic crisis that began in 2014, Brazil's risk increased significantly which caused it to leave the group of premier borrower.

Premier borrowers-IBRD	Year
BRA	1990, 1991, 2010, 2011, 2012
CHN	1991, 1992, 1993, 1995, 1996, 1997, 1998, 1999, 2000, 2002, 2003, 2004, 2005,

	2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018
EGY	1994, 1995
IDN	1990, 1991, 1992, 1993, 1996
IND	2015, 2016, 2017
MEX	1990, 1991, 1992, 1993, 1994, 2004, 2005, 2006, 2007, 2008, 2010, 2011, 2012, 2013, 2014
PHL	1997, 2012, 2013, 2014, 2015, 2016, 2017, 2018
RUS	2003, 2004, 2005, 2006, 2007, 2008, 2010, 2011, 2012, 2013, 2018
THA	1990, 1991
VNM	2015

In robustness test, I will use the absolute risk level based on the risk distribution during the sample period to decide whether a country belongs to low-risk country in a year or not and use that as a basis to calculate the premier borrower dummy. I will also use other variables to measure the risk of the borrowing countries such as OECD country risk classification and debt service to GNI ratio, given that the country coverage of ICRG risk data is not that broad especially among low-income countries.

3.1.3 Control variables

Control variables are selected based on the previous findings of other possible factors that could affect the loan allocation of MDBs.

- Economic and social development level

First, I will use several variables to measure the economic and social development level of the borrowing countries, which also reflects the borrower's needs towards the multilateral loans (Andersen, Hansen, and Markussen 2006; Ben-Artzi 2018; Kilby 2006, 2011). Conventional wisdom argues that countries with lower economic and social development level are supposed to receive more multilateral loans because the responsibility of the MDBs is to assist the country most in need of the cheap lending. Yet some studies challenge this idea by arguing that wealthier country are favored more by MDBs. This may relate to the MDB's commercial motivation to obtain more stable loan returns from borrowers with better economic and social conditions (Ben-Artzi 2018), or relate to the World Bank staff's belief that projects in wealthier regions are easier to implement, which is helpful to improve the work performance of the staff (Briggs 2021).

The specific variables are chosen as follow: in terms of the variable of economic development level, *log of GDP per capita and GDP growth rate* are selected. In terms of the social development level, *infant mortality rate* is used. All the data are drawn from World Bank database.

- Democratic and economic openness level

Second, the variables that reflect the democratic and economic openness level of the borrower will be controlled. MDBs may reward countries with high democratic level and good governance quality since some studies find that aid can only make effect in recipients with high institutional quality and good governance (Burnside and Dollar 2000; Montinola 2010). Democratic countries may also be favored by international organizations because they are more likely to comply with the loan conditions (Dreher 2006). In contrast, some other studies contends that it is more difficult for democratic countries to reach loan agreements with international organizations than authoritarian regimes (Przeworski and Vreeland 2000; Putnam 1988). For example, based on the "two-level game" theory raised by Putnam (1988), if a democratic country want to reach an agreement with international organizations, it must not only go through the consultation between the national government and international organizations (level-1), but also get ratification from the domestic legislature (level-2). In comparison, authoritarian regimes face fewer domestic constraints, so they have greater autonomy in international negotiations which makes it easier to reach agreements with international organizations. I will use the *average of "Political Rights" and "Civil Liberties"* scores from *freedom house* database to measure the democratic level of a country. The lower the score, the higher the democratic level.

In addition, country with higher economic and financial openness may indicate its strong commitment to free and open economy, which is highly valued by MDBs under the influence of neoliberalism (Babb and Kentikelenis 2018, 21; Browne 2006). However, some empirical evidence does not support this argument in reality. For instance, (Abouharb and Cingranelli 2005) find that there is no significant relationship between the democratic level of the country and the likelihood of the country to receive the "Structural Adjustment Lending (SAL)" from the World Bank.

I will use the *Financial Openness Index (kaopen)* from Chinn and Ito database to measure the financial openness of a country. The higher the index value, the higher the extent of economic and financial openness.

- Alternative sources of finance

Alternative sources of finance one country can acquire are also controlled in the model. A country's external financing demand may be satisfied by other sources of finance such as bilateral aid and FDI other than multilateral development finance (Humphrey and Michaelowa 2019, 18). The more alternative finance one country can get access to, the less demand the country has towards the MDBs loans, and the stronger bargaining power the country gains against the MDB.

FDI is more business-oriented and profit-driven in nature and less concessional than development finance. Only when a country has stable political and economic environment and good chance of investment returns will it attracts abundant FDI. As mentioned above, with the growth of a borrower's economy, the edge of MDB loan's concessionality (soft to hard loan) to the borrower declines while borrower's good economic condition helps it attract more FDI inflows to replace the official finance. Thus, in some extent, FDI has a substitutive relationship to MDB loans as well.

- Other control variables

Lastly, the two variables that decide the classification of borrowers, *log of population and ICRG composite risk rating*, will be included in the model as separate variables. The aim is to investigate the individual effect of the variable to the World Bank's loan allocation. Besides, the year-to-year risk change is also included to reflect the possibility that the World Bank mainly reacts to the change of a borrower's risk level over time rather than the absolute risk level.

Year fixed effect is added in the model to control for the time trend of World Bank loans. It is possible that loan allocation mechanism of the World Bank is affected by the total lending volume. For example, the World Bank may prefer to lend to more risky countries when the total loan volume is small, but change that preference to less risky countries when the total loan volume increases. So, controlling this time factor is necessary. Standard error is clustered at country level in robustness

test.

3.2 Model

- Scope of country sample

The unit of analysis is borrowing country-year. I will limit the country sample only to those eligible borrowing countries in the World Bank. This means that a country will not be included in the sample before joining the World Bank as a member state and after graduating from the World Bank as a borrowing country. As a result, the time coverage of different countries in the dataset is different, which leads to an unbalanced panel data. What's more, since the soft and hard loan allocation are separated in the analysis, country's eligibility to soft and hard loans will also be differentiated which results in different country sample in two windows[4]. In terms of the time period, I choose the period from 1990 to 2018 due to two reasons. First, the beginning year, 1990, marks the end of cold war. As many previous studies found that the cold war is a crucial factor affecting the bilateral and multilateral aid allocation (Berthélemy and Tichit 2004; Boschini and Olofsgård 2007; Dunning 2004; Fuchs, Dreher, and Nunnenkamp 2014; McLean and Schneider 2014), choosing the post-cold war era can remove the impact of this factor in loan allocation. Second, the information of IBRD eligible borrowers is less clear in World Bank annual report before 1990. So, choosing the period after 1990 can ensure the accuracy of the data. After the data cleaning, 114 IDA and 97 IBRD borrowing countries are included in the sample, respectively.

- Model selection

I have two types of dependent variables. One is the number of loans and the other is the amount of loans. For the former one, since it belongs to the count variable that basically follows the Poisson distribution, I use the Poisson fixed and random effect model (FE and RE) in regression (column and 2 in regression table).

For the latter one, I use the general fixed and random effect model for panel data (column 3 and 4 in regression table). Fixed effect model assumes that time-invariant unobserved effect is correlate

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[4] The borrowing countries in the World Bank can be classified into IDA-only countries, IBRD-only countries and blend countries (access to both IDA and IBRD loans)

with at least one independent variable, while the random effect model assumes that time-invariant unobserved effect is uncorrelated with each independent variable. I will used both models to check the regression result. If the FE and RE model results are consistent, the result is more convincing. If the FE and RE model results are not consistent, then Hausman Test will be applied to test whether FE or RE model is more effective.

What's more, considering the fact that the loan amount is a non-negative continuous variable and contains abundant zero in the observation (since many eligible borrowers do not receive loans every single year), the OLS estimation may be biased in this context. Tobit model, as one type of censored regression model, is useful to deal with the limited dependent variable. I use the panel Tobit random effect model rather than fixed effect model (column 5 in regression table). For Tobit fixed effect model, since the sufficient estimator of individual difference cannot be found, conditional maximum likelihood estimation cannot be performed like the fixed effect Logit or count model. The fixed effect estimators obtained by including the dummy variable of unit in Pooled Tobit model are also inconsistent (Chen 2014, 327). Thus, I use the panel Tobit random effect model. In the robustness check, I will also use the poisson pseudo-maximum likelihood (PPML) regression raised by (Silva and Tenreyro 2006). PPML model is more effective in estimating the parameter in the context of heteroscedasticity when the log-linear model estimated by OLS could generate biased result ((Silva and Tenreyro 2006). It can also help identify and drop the regressors that lead to the non-existence of maximum likelihood estimates (MLE) in Poisson regression (Santos Silva and Tenreyro 2010).

3.3 Regression result and analysis

3.3.1 IDA loan allocation

Table 1 presents the regression result of IDA loan allocation. The first two columns use the number of IDA loans as dependent variable (Poisson fixed and random effect model), and column 3-5 use the amount of loans as dependent variable (Fixed effect, Random effect, Tobit random effect).

Table 1: IDA loan allocation

	Poi-FE	Poi-RE	FE	RE	Tobit-RE
	ida_#	ida_#	ida_$	ida_$	ida_$

unga_us	-.18**	-.219***	-54.985**	-59.959***	-86.443***
	(.073)	(.067)	(23.703)	(22.282)	(23.399)
Mortality	.001	0	-.119	.462	.257
	(.003)	(.002)	(.965)	(.617)	(.76)
log_fdi	.022	.021	3.522	.877	.109
	(.019)	(.019)	(5.823)	(5.863)	(5.921)
fh	-.003	-.022	23.263***	8.707	15.02*
	(.027)	(.026)	(8.737)	(8.261)	(8.706)
log_gdp	.071	-.098	376.405***	125.775***	321.737***
	(.149)	(.088)	(41.687)	(26.54)	(43.178)
gdp_growth	.012**	.013**	.653	1.616	.87
	(.006)	(.005)	(1.5)	(1.545)	(1.577)
log_dac_oda	.268***	.265***	92.547***	91.917***	120.821***
	(.037)	(.035)	(11.218)	(11.141)	(11.665)
risk_diff	-.017	-.021*	5.44	-.345	1.951
	(.011)	(.011)	(3.429)	(3.509)	(3.566)
ka_open	-.107	-.04	14.993	-20.85	-.078
	(.133)	(.119)	(39.529)	(36.862)	(39.51)
log_pop	.409	.087*	331.796***	102.306***	101.463***
	(.396)	(.05)	(116.876)	(16.653)	(30.719)
risk	.013	.018**	-9.198***	-4.887**	-5.191**
	(.008)	(.008)	(2.166)	(2.143)	(2.316)
premier	-.012	-.025	30.037	42.405	27.388
	(.08)	(.079)	(30.368)	(30.683)	(30.693)
Year dummy	Yes	Yes	Yes	Yes	Yes
Observations	1112	1112	1112	1112	1112

Standard errors are in parentheses
*** p<.01, ** p<.05, * p<.1*

Analysis

Major donor interests

The result shows that the coefficient of UNGA voting alignment with the U.S. is negative and statistically significant in all specifications, indicating that the U.S. interest do play a very significant role in soft loan allocation. IDA borrowing country that has a closer political position with the U.S. in UNGA voting is likely to receive both a higher number and amount of soft loans from the World Bank. This fits my theory (hypothesis 1) that financial reliance of the World Bank on major donors gives the donor the significant influence in loan allocation.

Another variable that measures the major donors' interests, log of bilateral aid from DAC countries, is also positively and significantly related to the World Bank soft loan number and amount to that country, suggesting that the large recipients of DAC donors' bilateral aid are also the large recipient of World Bank soft loans. This provides some evidences that major donors' interests are realized in soft loan allocation.

However, a cautious interpretation of this outcome is needed as I am not clear whether it is the DAC

donors that affect the decision of World Bank or it is the other way around. It is also possible that DAC donors and the World Bank are simply driven by the similar set of factors in making the decision of resource allocation. Even if I cannot firmly conclude that DAC donors' interests are realized in IDA's soft loan allocation, the fact that the consistency exists between DAC donors' bilateral aid allocation and IDA's soft loan allocation presents the closer connection between DAC donors and IDA.

Premier borrower effect

I will first check the individual effect of the two factors, population, and country risk, that decides the premier borrower status on the soft loan allocation. The positive and significant coefficients of population variable from column 3 to 5 suggests that large countries receive higher soft loan amount from IDA. This makes sense as large country has greater financing demand, keeping other factors constant. However, the impact of population on the number of soft loans is less clear: the coefficient is only slightly significant in Poisson random effect model.

In terms of the country risk, the risk rating exhibits a significant negative relationship with the amount of soft loans. The higher the risk of the borrowing country, the higher the soft loan amount that country is likely to receive from IDA. This suggests that IDA, in general, plays the counter-cyclical role which allocates more loan resources to those countries which lack access to other sources of finance due to the high risk.

When looking at the premium borrower dummy, the coefficients in all model specifications are not significant, indicating that the premier borrower effect in IDA lending allocation is not significant. According to my theory, soft loan window does not need to pay attention to the profitability of the loans as much as hard loan window, so its reliance on "premier borrower" is not that strong. Furthermore, as the average risk level of IDA premier borrowers is significantly higher than IBRD premier borrowers, the advantage of premier borrowers in providing stable returns for IDA is less prominent compared with IBRD. That could be another reason why premier borrower effect is not significant in IDA.

Other variables

Before moving to the regression result of IBRD, I will check the effect of other control variables on soft loan allocation. As the result shows, most of the control variables are not significant expect few. Regarding the political factor, Freedom House index has a significant positive relationship with the soft loan amount in fixed effect model and Tobit random effect model, which means that the country with higher democratic level (lower Freedom House index) receives a lower amount of soft loans. Turning to the variables of the economic and social development level (infant mortality rate and GDP per capita) of the country, their effects on soft loan allocation are contradictory to the expectation. IDA does not significantly increase the lending to the countries with higher infant mortality rate. When it comes to the variable of log GDP per capita, the positive and significant coefficient even indicates that wealthier countries actually received a higher amount of soft loans.

In conclusion, the regression result shows that the major donor interests do play an important role in soft loan allocation while the "premier borrower" effect is not very significant. I will compare this result with IBRD later.

3.3.2 IBRD loan allocation

Table 2 presents the regression result of IBRD loan allocation. Similar to the table 1, the first two columns use the number of IBRD loans as dependent variable (Poisson fixed and random effect model), and column 3-5 use the amount of loans as dependent variable (Fixed effect, Random effect, Tobit random effect).

Table 2: IBRD loan allocation

	Poi-FE ibrd_#	Poi-RE ibrd_#	FE ibrd_$	RE ibrd_$	Tobit-RE ibrd_$
unga_us	.045	-.08	-20.047	-38.099	-56.082
	(.087)	(.078)	(43.25)	(36.97)	(43.466)
mortality	-.028***	-.025***	-16.361***	-9.552***	-14.487***
	(.006)	(.004)	(2.361)	(1.734)	(2.285)
log_fdi	.014	.022	19.854**	19.593**	26.745**
	(.028)	(.027)	(9.978)	(9.799)	(11.677)
fh	-.059	-.015	-73.21***	-66.54***	-84.345***
	(.039)	(.034)	(18.449)	(15.804)	(18.449)
log_gdp	.304**	.1	81.22	72.679	50.947
	(.146)	(.111)	(76.608)	(55.681)	(64.845)
gdp_growth	.004	.002	1.713	1.316	1.073
	(.007)	(.007)	(2.546)	(2.529)	(3.135)
log_dac_oda	.078*	.082**	13.1	19.628	42.428**
	(.041)	(.039)	(16.686)	(15.68)	(19.063)

risk_diff	-.013	-.015	-.04	-2.98	-6.953
	(.013)	(.013)	(5.938)	(5.837)	(6.943)
ka_open	.506***	.465***	69.137	31.027	98.505
	(.125)	(.116)	(56.627)	(52.854)	(61.107)
log_pop	1.018**	.398***	313.199	234.118***	267.987***
	(.514)	(.062)	(195.883)	(26.867)	(30.374)
risk	-.011	-.008	-19.045***	-15.621***	-14.576***
	(.01)	(.01)	(4.141)	(3.85)	(4.686)
premier	.243***	.232**	377.071***	371.648***	360.171***
	(.092)	(.091)	(64.569)	(63.358)	(70.726)
Year dummy	Yes	Yes	Yes	Yes	Yes
Observations	1199	1202	1202	1202	1202

Standard errors are in parentheses
*** p<.01, ** p<.05, * p<.1

Analysis

Major donor interests

Different from IDA, the coefficients of UNGA voting alignment with US, though negative in number, are not significant in all model specifications, which is in line with my theory that the U.S., as the largest shareholder in the World Bank, is less influential in deciding the hard loan allocation than soft loan allocation. The World Bank does not give more hard loans to a borrowing country simply because the country has a close political relationship with the U.S.

When examining the effect of another variable measuring the major donor interest, log of DAC donor aid, it can be found that though it has a significant positive relationship with the number of hard loans, its relationship with the amount of hard loans is only significant in Tobit random effect model. In comparison, the coefficients of this variable are significant in all model specification in IDA. So, it can be argued that the World Bank soft loan allocation has a closer alignment with DAC donors bilateral aid allocation compared with hard loan.

Combining these two variables, it seems that the impact of major donor on hard loan allocation is not as strong as many thoughts.

Premier borrower effect

Like IDA result analysis, I first examine the individual effect of population and country risk on hard loan allocation. The result shows that country with larger population is likely to receive more hard loans and higher amount of hard loans. When I perform the Hausman test, it does not reject the null

hypothesis that fixed effect model is preferrable than random effect model. Thus, the significant coefficient of population factor in random effect model lends support to the argument that country population is positively related to the amount of hard loans the country receives.

The coefficients of country risk are negative and significant in all three models when dependent variable is hard loan amount. This suggests that borrowing country with higher risk (low risk rating) is likely to receive higher amount of hard loans from IBRD. Again, this proves that the World Bank, as a development finance institution, provides the important counter-cyclical financing to more risky countries.

When checking premier borrower dummy, the result is quite impressive. The coefficients of premier borrower dummy are positive and statistically significant in all model specification, whether the dependent variable is the number or amount of hard loans. Being a premier borrower can increase the number of three-year average hard loans that country receives by around 1.27 ($e^{0.24}$), increase the amount of three-year average hard loans by around 370 million USD. Compared the IDA model above, the significant premier borrower effect lends support to the argument that the hard loan window is economically more reliant on premier borrowers than soft loan window.

Other variables

First, IBRD rewards the countries with higher democratic and financial openness level. The result suggests that countries with higher democratic level receives higher amount of hard loans, while countries with higher financial openness receives higher number of hard loans. In comparison with the result of IDA, IBRD values the democracy and financial openness of borrowers more in loan allocation.

Second, the social development level of the borrowing country is positively related to the hard loans. Country with lower infant mortality rate is associated with both higher number and amount of hard loans. This finding is in consistent with the argument of (Ben-Artzi 2018) that development banks tend to prefer the borrowers with good economic and social conditions as a way to maintain the operation and attract capital. This is rather different from IDA, where the mortality rate is not a

significant factor. This difference between IDA and IBRD further illustrate that IBRD is closer to a commercial bank, while IDA is more like an aid agency.

In sum, major donors are less influential in affecting the hard loan allocation in the World Bank. Meanwhile, the "premier borrower effect" is significant in the hard loan window.

3.4 Robustness check

The robustness check is conducted through several ways. First, I use the robust and clustered standard error in the panel model. The result still holds. Second, I limit the dependent variable to non-zero value to get rid of the disturbance to result when the dependent variable is zero. The result still holds. Third, I use the "US military aid to the country" as another variable to measure the US interest. Still, the US interest is more significant in IDA than IBRD. Fourth, instead of using the risk ranking as one criterion to determine the premier borrower, I set a division line between high risk and low risk country based on an absolute risk level. The result does not change. Fifth, as China is the most frequent "premier borrower" in IBRD, I remove China from the sample to see if the result still holds without China. The result still holds. Sixth, instead of using the three-year average value of dependent variable, I simply use the single year value as dependent variable. The result still holds. Finally, I separate the sample period into crisis years and normal years to see if the logic of World Bank lending allocation varies in different circumstances. It can be found that, in crisis time (1998, 1999, 2009, 2010), the premier borrower effect in IBRD is more significant than in normal time, which suggests that premier borrowers are more important to the hard loan window during crisis time as they can help balance the overall rising risk facing the IBRD.

4. Conclusion

What affects the power of the stakeholder in realizing its interest in international organization? I argue that the political influence of the stakeholder is related to its economic importance to the institution. The more economically important of the stakeholder to the institution, the higher the bargaining power gained by the stakeholder and the more likely the stakeholder can realize its

interest in the institution. Through analyzing the power dynamics of World Bank's two loan windows (IDA vs IBRD) with quite different business models and funding structures, I argue that the major donors are more influential and more capable of affecting the loan allocation decision to realize its interests in the soft loan window (IDA) than hard loan window (IBRD). At the same time, the World Bank is more capable of maintaining its autonomy in IBRD than IDA when facing the pressure from the donor countries. Through maintaining the stable lending relationship with the premier borrowers in IBRD, the World Bank realizes its interests in sustainable operation and financial robustness.

This finding challenges the previous argument that the major donors can always realize its interests in the World Bank because of the formal governance and voting structure. The argument in this paper further implies that the change of funding structure of the World Bank could lead to the change of power dynamic in the institution. For example, the initiation of market financing by IDA since 2018 suggests the rising economic reliance of IDA towards the market investors relative to donor countries, this could, in some degree, undermines the dominant power of major donors in IDA and further affect the loan allocation mechanism in this platform.

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