

Angling for Influence: Institutional Proliferation in Development Banking

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Abstract

Why do states build multiple international institutions in the same policy domain? Prevailing theories of institutional formation emphasize their ability to improve cooperative outcomes. Yet significant coordination problems arise when several institutions compete for authority in the same issue area. I argue that a contest for bargaining power leads states to strategically proliferate institutions. When their influence in existing venues is constrained, states construct new cooperative arrangements to augment their control over global governance. To test this argument, I examine how the distribution of formal vote shares in the World Bank drives the proliferation of new development banks. I leverage a unique natural experiment associated with the allocation of votes at the 1944 Bretton Woods Conference to estimate the causal effect of states' influence in the World Bank. Statistical analysis shows that the probability of institutional proliferation is significantly higher when power is misaligned in existing institutions. These results demonstrate that concerns about relative influence contribute to the increasing fragmentation of global governance.

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1 Introduction

Since the end of the World War II, states have constructed international institutions at a breakneck pace. The number of formal international organizations (IOs) grew from less than a hundred in 1950 to over 300 by the year 2000. The volume of multilateral treaties negotiated by states has grown at a similarly rapid pace.¹ This proliferation has generated a significant crowding of governance institutions in issue areas like trade, counterterrorism, and election monitoring, where multiple IOs compete for the authority to regulate state behavior. Recently, the proliferation of multilateral development banks has drawn the attention of policymakers and academics, as the newly formed Asian Infrastructure Investment Bank (AIIB) and New Development Bank (NDB or “BRICS Bank”) challenge the supremacy of established institutions.

The proliferation of IOs is meaningful because it has the potential to undermine international cooperation. International institutions are believed to play an important role in world politics, facilitating cooperation and managing interdependence among states. Yet a growing literature on “international regime complexity” argues that the fragmentation of global governance across multiple IOs often leads to coordination problems, redundancy, and rule conflict (Raustiala & Victor, 2004; Alter & Meunier, 2009). Policymakers echo these concerns. Commenting on the growth in development aid institutions, a group of government ministers observes that “the effectiveness of aid is reduced when there are too many duplicating initiatives” and cautions against “creating separate new channels that risk further fragmentation.”² While some argue that institutional crowding does not necessarily undermine cooperation, at the very least sustained proliferation demands a high level of

¹See Figure 1 for a visual depiction of growth in international organizations. Data are from version 3.0 of the Correlates of War IGO dataset (Pevehouse *et al.*, 2004). The number of multilateral treaties deposited with the United Nations grew from 494 in 1950 to 3,073 in 2000.

²Accra Agenda for Action, <http://www.oecd.org/dac/effectiveness/34428351.pdf>

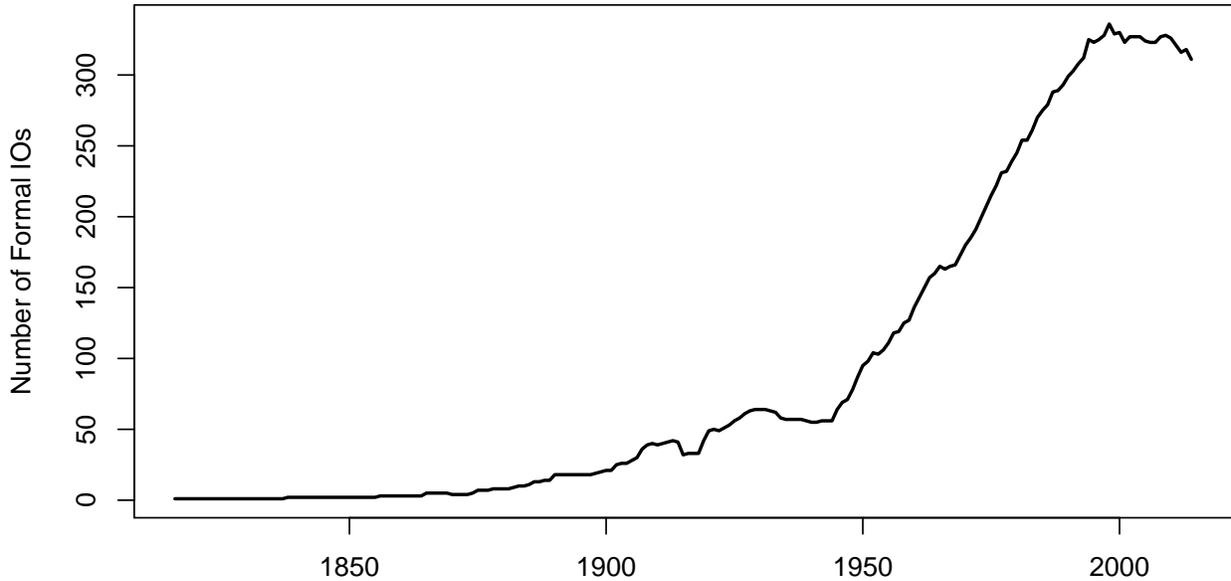


Figure 1: Quantity of International Organizations over Time. Data are from version 3.0 of the Correlates of War IGO dataset (Pevehouse *et al.* , 2004).

policy coordination among IOs (Gehring & Faude, 2014; Abbott *et al.* , 2015; Pratt, 2017).

Prevailing theories provide few explanations for the proliferation of multiple IOs in a single policy domain. Rational institutionalist theory argues that states build IOs to reduce transaction costs, overcome market failures, and capture gains from cooperation (Keohane, 1984). This functional theory provides a convincing account of IO construction when few pre-existing institutions exist (such as the formation of the World Bank in 1944), but is less compelling when many institutions are already present (e.g., the creation of the Asian Infrastructure Investment Bank in 2015). In the latter context, institutional proliferation is likely to raise transaction costs by increasing uncertainty and introducing multiple bargaining venues.

This article offers an alternative theory in which institutional proliferation emerges from a contest for bargaining power among states. States seek influence in IOs because governing

institutions invariably involve distributional conflicts. These conflicts generate a desire for control in order to push negotiation outcomes toward a state's favored position. States that are dissatisfied with their influence build new international institutions in which they have greater control. Rather than a purposeful attempt to fragment global governance across multiple institutions, proliferation is a byproduct of state attempts to increase their influence over multilateral outcomes.

My argument draws on power transition theory, which emphasizes dynamic shifts in the relative power of states and the subsequent conflict over adaptation of the international order (Organski, 1968; Gilpin, 1981; Zangl *et al.* , 2016). When IOs are created, member states typically design formal and informal rules so that multilateral influence reflects states' underlying material power. As the distribution of state power shifts, however, institutions do not smoothly adapt. A power misalignment emerges when a state's influence within the institution is not commensurate with its unilateral power. States engage in institutional proliferation as part of a strategy to rectify these misalignments.

To test the link between power misalignment and institutional proliferation, I examine the creation of multilateral development banks. The regime for development lending grew from a single development bank in 1944 (the World Bank) to twenty-eight overlapping institutions today. These institutions are important actors in world politics. They have collectively disbursed over \$240 billion in development finance to borrowing states.³ Development lending is also an issue area with a clear functional rationale for institutionalized cooperation (i.e., the coordination of global development finance efforts) and a substantial amount of proliferation that is difficult to explain on purely functional grounds. My theory of institutional proliferation suggests that states are more likely to construct new development banks when their influence in the central institution (the World Bank) is misaligned with their underlying material power.

³Calculations are conducted using the AidData dataset (Tierney *et al.* , 2011).

The endogenous nature of state influence in international institutions is a significant obstacle to making accurate causal inferences about the effect of power misalignment. I overcome this problem by leveraging a unique natural experiment that occurred during negotiations over the formation of the World Bank. To satisfy a political promise made to its wartime allies, the United States made an abrupt change to the formula used to allocate vote shares at the 1944 Bretton Woods conference. The formula change generated an exogenous shock to the votes of most member states in the World Bank. I leverage this shock to identify the causal effect of power misalignment in the Bank on the probability that member states create new development banks.

Statistical tests confirm that states are significantly more likely to engage in the proliferation of development banks when their vote power in the World Bank is incommensurate with their broader economic power. If a state is under-represented in the Bank by a single percentage point compared to its underlying economic power, it is 6.8% more likely to participate in the proliferation of new development banks. These results establish the importance of power misalignment in spurring the emergence and expansion of international regime complexes.

The paper is organized as follows. In Section 2, I introduce the power misalignment theory of institutional proliferation, in which states create overlapping IOs to rectify imbalances in multilateral influence. Section 3 describes the regime complex for development lending, presents several testable hypotheses, and describes a newly created dataset of multilateral development bank proliferation. Section 4 presents empirical results that identify a strong effect of power misalignment on the creation of new development banks. Section 5 discusses implications of this finding and identifies avenues for future research.

2 Institutional Proliferation in World Politics

The primary argument of this paper is that state competition for bargaining power, rather than an attempt to maximize gains from cooperation, often drives states to construct new IOs. The argument begins with the assumption that states prefer greater influence over the activities and policy decisions of multilateral institutions. States value influence for several reasons. First, it helps them ensure that multilateral outcomes reflect their policy preferences. As Krasner (1991) argues, states participating in institutionalized cooperation care not only about reaching efficiency-enhancing bargains, but also about “which point along the Pareto frontier should be chosen” (p. 43).

Second, states value influence in international institutions even when policy outcomes are consistent with their preferences. Multilateral influence allows states to steer cooperative benefits to their allies (Fleck & Kilby, 2006; Kuziemko & Werker, 2006; Davis & Pratt, 2017). In addition, states – and particularly rising powers – associate influence in IOs with status in world politics (Paul *et al.*, 2014). The degree of control granted to states in multilateral institutions may provide a signal to domestic or international audiences, generating sensitivity among states about their relative influence.

The desire for influence generates dissatisfaction among states who believe that existing institutions fail to provide them with an appropriate level of control. Under certain conditions — most importantly, when a large misalignment arises between a state’s underlying material power and its influence in the regime — a state will attempt to gather a coalition of partners to construct a new institution which offers it greater control.

The primary independent variable in the theory is the degree of alignment between a state’s influence in multilateral institutions and its underlying material power. I define “underlying material power” as the national resources available to help a country achieve its desired outcome in the issue area via *unilateral* action. This is similar to Gruber’s con-

ceptualization of “go-it-alone power” in international institutions (2000), as well as Stone’s definition of “structural power” (2011). The relevant material power resource will vary by issue area. For security institutions, the key resource is military strength; for trade and financial institutions, it is economic capacity. I define “influence in existing institutions” as the institutional procedures that help a state to achieve outcomes in the issue area via *multilateral* action. Influence in multilateral institutions may be formal or informal, though in the empirical analysis below I focus on formal vote power in international organizations.

States’ influence in IOs and their underlying material power are usually well aligned when an organization is initially created. A power misalignment emerges over time when there are large shifts in states’ underlying material power and a bargaining failure prevents the IO from adapting its rules to this new reality.⁴ Bargaining failures in international institutions occur for a range of reasons. Morse & Keohane (2014) and Zangl *et al.* (2016) point to states’ inability to resolve information asymmetries through credible signaling as a common source of institutional bargaining failure. Many IOs also delegate control to international bureaucrats, creating vested interests that resist state control and adaptation (Hawkins *et al.*, 2006; Johnson, 2014). Urpelainen & de Graaf (2013) argue that adaptation may be stymied when an IO is captured by institutional interests that are opposed to reform. While a full examination of these processes is beyond the scope of this paper, a bargaining failure that prevents institutional adaptation is a necessary condition for power misalignments to emerge and persist in IOs.

The theory’s emphasis on power misalignment implies that states pay close attention to their relative influence in IOs. They expect their influence to reflect their unilateral capacity outside the institution; when it does not, they are more likely to challenge the

⁴In addition to changes in the distribution of states’ underlying material power, power misalignment may arise from the temporal sequence with which states join a particular IO. Founding member states often enjoy a larger share of decision-making power than states that join later through accession. In the World Bank, for example, founding members control 1.72% of voting power in the organization, on average, compared to 0.41% for members that acceded in later years (calculations by author).

existing regime via institutional proliferation. The focus on power misalignment builds on a long-standing literature examining power sharing in multilateral institutions. Gruber (2000) argues dominant states have the ability to dictate outcomes in IOs because of their capacity to act alone. This does not imply that decision-making procedures will always disproportionately favor powerful states, however. As Ikenberry (2001) argues, prudent great powers may intentionally design multilateral institutions to augment the influence of weaker states and gain their acquiescence in a mutually beneficial international order.⁵ Stone (2011) concurs, describing how powerful states allow others to wield control of formal IO procedures but reserve the right to exert informal influence at pivotal moments.

As this previous work has demonstrated, control of multilateral institutions is often carefully distributed among member states to maintain their support for the regime (Ikenberry, 2001; Stone, 2011). When power sharing arrangements become inequitable, or are perceived as mechanisms of great power domination, support for the institution may break down. Keohane & Nye (1977) argue that the rules within a single international regime are likely to be renegotiated when bargaining power becomes misaligned. If renegotiation does not occur, disadvantaged states may take disruptive action to rectify power imbalances. Gilpin (1981) posits that misalignment between state power and the distribution of benefits in the international system can generate hegemonic wars that rebalance the international order. A similar logic drives states concerned about their relative influence in IOs to proliferate new institutions.

In the power misalignment theory of institutional proliferation, states *strategically* create overlapping international institutions. They pay the potentially high costs of IO formation in order to increase their influence over multilateral outcomes in the issue area. Institutional proliferation bestows additional influence to states in at least two ways. First, proliferating

⁵Lake (2009) also describes power-sharing arrangements between dominant powers and weaker states. He argues that weak states enter into voluntary, subordinate relationships with a dominant power in return for the provision of public goods such as security and order.

states usually design new institutions to give themselves greater decision-making power than they have in existing IOs. When the Asian Development Bank (ADB) was created in 1966, for example, Japan was awarded more than 20% of formal vote shares (compared to less than 3% in the World Bank). This level of control reflects Japan's status as a founding member and architect of the new institution.⁶

Second, IO proliferation can reshape influence in the issue area more broadly by offering some states an additional outside option during multilateral negotiations. A state with a credible outside option gains bargaining leverage, shifting negotiation outcomes in its favor (Hirschman, 1970; Voeten, 2001; Schneider, 2011). Other scholars have noted how institutional exit options can potentially alter bargaining power among states (Helfer, 2004), including among development banks (Lipsy, 2015).⁷ According to this logic, the creation of the ADB should grant Japan additional influence over lending decisions in the World Bank, since it can credibly threaten to shift proposed programs to the ADB.

Institutional proliferation is therefore a strategy that states use to augment their control over multilateral outcomes. If executed successfully, this strategy generates additional influence in both the new IO and the legacy institution. However, the strategy also entails costs which constrain its use by states. Two constraints are particularly important. The first is the difficulty of amassing a coalition of states to join a new organization. Institutional proliferation is not a unilateral act; it requires the participation of multiple states. The operational success and perceived legitimacy of a new IO grows as it attracts more members, increasing the need to amass a large coalition. Powerful states can buy off potential

⁶In 1966, Japan was significantly under-represented in the World Bank (2.9% of formal vote shares vs. 5.7% of economic output among World Bank member states). Japanese representation in the World Bank had declined relative to its economic power over the preceding decade, as the country's rapid economic growth was not matched by proportionate increases in its voting power.

⁷Countries do not usually "exit" IOs in the classic sense of relinquishing their membership in the organization. They can shift negotiations on specific issues from one fora to another, however, and the threat of shifting to a more favorable IO should generate additional bargaining leverage.

collaborators through concessions and side payments, but constructing a new organization is significantly easier if there is an existing set of states that are similarly dissatisfied with the current regime.

The second constraint is the efficiency costs associated with creating a new institution. The distribution of gains from institutionalized cooperation may change as new IOs are added to an issue area. When the act of creating a new institution generates large efficiency costs for the proliferating state, proliferation will be less likely. The size and incidence of efficiency costs will vary across policy domains.⁸ In issue areas like trade and investment, they are relatively small. Creating a new trade institution (e.g., a preferential trade agreement) does not impose significant new costs on proliferating states. There may be a loss of efficiency from trade diversion, but these costs are not borne by the proliferators; instead, they take the form of negative externalities imposed on states left out of the new agreement. In other issue areas, the introduction of multiple institutions creates significant costs for proliferators. The creation of a new development bank, for example, generates a loss of power for lending states (i.e., those that provide funding for the institution) relative to borrowing states. Each additional development bank provides borrowers with another venue for development finance, facilitating forum-shopping and undermining the monopoly power of lenders. Since proliferating states usually become the primary lenders in a new development bank, they feel these costs directly.⁹ Notably, this paper argues that states are sometimes willing to pay these efficiency costs – in effect, sacrificing cooperative gains – in order to strengthen their influence over multilateral outcomes.

⁸As Martin (1992) argues, each issue comes with a unique set of transaction costs that provide the foundation for states' strategic interaction.

⁹While the proliferation of development banks may shift power away from proliferating states, it does not necessarily undermine the functioning of the regime complex. Lipsky (2015) argues that as a result, development lending has seen a large amount of institutional proliferation compared to balance of payments lending (i.e., the IMF). Because of incentives created by the structure of the issue area, we should expect some issues to experience significantly more proliferation than others.

The theory presented and tested in this paper makes two important contributions to scholarship on international cooperation. First, it distinguishes the process of institutional proliferation, in which states add multiple overlapping IOs to an issue area, from the initial process of *de novo* institutional formation. The dominant theory of institutional formation is the functional logic originally developed by Keohane (1984): states construct institutions to lower transaction costs and reach cooperative bargains that would be difficult to achieve in their absence.¹⁰ While the functionalist account offers significant insight into why states initially construct an institution, it struggles to explain IO proliferation within a particular issue area. Cooperative outcomes often suffer as issue areas become crowded with institutions, leading to a fragmented and conflicting set of international rules.¹¹ As a result, it is hard to explain institutional proliferation solely by pointing to its anticipated cooperative benefits.

Second, the paper deepens our understanding of how overlapping institutions emerge and interact. Scholars have made significant progress in understanding the operation of multiple institutions in the same issue area. Studies using the frameworks of “international regime complexity” (Raustiala & Victor, 2004; Alter & Meunier, 2009), “contested multilateralism” (Morse & Keohane, 2014), and “institutional choice” (Jupille *et al.*, 2013) examine how IOs with overlapping mandates influence state behavior and shape cooperative outcomes. However, our understanding of why states proliferate institutions in the first place remains under-theorized. Existing treatments tend to emphasize how preference divergence among

¹⁰This functional account of state demand for institutions also been used to explain institutional design: Koremenos *et al.* (2001) argue that states choose the design of international institutions in order to minimize transaction costs in specific issue areas.

¹¹The literature on international regime complexity provides many examples of rule conflict among multiple IOs: Raustiala & Victor (2004) describe “legal inconsistencies” in the regime complex for plant genetic resources, and further argue that “legal conflict among overlapping rules...is a recurring and difficult challenge for regime architects” (300). Similarly, Helfer (2009) finds institutions adopting a “competing regulatory approach” in the intellectual property regime complex (40), Davis (2009) notes “the potential for contradictory legal rulings” among trade institutions (25), and Pratt (2017) highlights the arbitrage opportunities created by conflicting standards in counterterrorism IOs.

member states of an IO generates dissatisfaction among a subset of members, spurring calls for a new institution (Urpelainen & de Graaf, 2013; Morse & Keohane, 2014). However, states may have motives to proliferate IOs even when existing organizations operate in a manner consistent with their preferences. Influence over multilateral outcomes brings states unique benefits, including the ability to extract side payments or incentivize others to engage in desired behavior, that cannot be achieved without control. The power misalignment account illuminates how concerns about influence may engender institutional proliferation even when states concur on the basic goals and norms of the regime.

3 The Multilateral Development Lending Regime

3.1 Case Selection

In this section, I introduce the case I will use to test the effect of bargaining power misalignment on institutional proliferation. Development lending is both a puzzling and a substantively important case for examining institutional proliferation. It is a highly salient issue area with a substantial amount of proliferation that is difficult to fully explain on functionalist grounds. Proliferation induces inefficiencies as development banks engage in redundant efforts to screen proposals, negotiate with borrowing countries, and audit funded projects. Development banks have recognized these problems and spend significant time and effort attempting to coordinate with each other. And while proliferating states often claim that new banks will fill unmet development needs in a drastic departure from existing institutions, new banks typically closely replicate the activities of other IOs. A large proportion of development projects approved by the AIIB, for instance, have been co-financed by the World Bank.

As noted in the previous section, the efficiency costs of development bank proliferation make it a puzzling case. Donor states, who are the actors best positioned to create new

banks, have few incentives to engage in institutional proliferation. The ability of borrowers to opportunistically “forum shop” and generate competition among lending institutions limits the leverage donors have over borrowers. This should act as a damper on donor states’ behavior, constraining their willingness to build new institutions.

If states’ primary goal in development lending is to construct a regime complex that maximizes cooperate gains, we should not expect a significant amount of institutional proliferation. However, an abundant academic literature examining the politics of the World Bank and other international financial institutions (IFIs) suggests that states have more self-interested goals. At least two conclusions from this research program are relevant for understanding institutional proliferation. First, IFIs are inherently political institutions; they distribute development finance on the basis of “high politics” at least as much as technical need (Frey & Schneider, 1986; Thacker, 1999; Stone, 2011; Dreher *et al.* , 2009; Copelovitch, 2010; Kersting & Kilby, 2016). This invites distributional concerns from member states who have differing preferences over the allocation of loans. Second and relatedly, influence in IFIs is contested and highly sought after by states (Krasner, 1981; Zangl *et al.* , 2016). In both the World Bank and regional development banks, states can use their influence to steer benefits to allies in support of broader foreign policy goals (Fleck & Kilby, 2006; Lim & Vreeland, 2013). States also trade influence in the World Bank to buy votes in other multilateral institutions (Dreher & Sturm, 2012). The findings from this literature confirm the assumptions of the power misalignment theory: states care deeply about their influence in IFIs and will seek to augment that influence when possible.

Finally, development banking provides several advantages that make it an ideal issue area for large-N empirical tests. The presence of a clear focal institution that distributes formal voting power to members (the World Bank) facilitates the measurement of states’ influence in the existing regime. The issue area also provides a unique opportunity for causal identification rooted in the allocation of vote shares at Bretton Woods, the multilateral

conference that created the World Bank and International Monetary Fund (IMF). I discuss this historical episode in greater detail in the Section 3.5.

3.2 Evolution of the Regime Complex

Before turning to the data, this section provides a brief narrative description of the proliferation of multilateral development banks. Multilateral development lending began in 1944, when a large group of states created the International Bank for Reconstruction and Development (IBRD), commonly known as the World Bank. The main impetus for the World Bank was the need to coordinate European economic reconstruction after World War II. Over time, the Bank shifted its emphasis from post-war reconstruction to economic development, and it became primarily a provider of development finance for less developed countries. From its inception, state influence within the Bank was determined by states' formal vote shares, which are distributed unequally among member states. These vote shares are tied to the capital subscriptions that states are required to contribute to the Bank, though in later years much of the capital for Bank programs came from private finance rather than state contributions.

For the first decade of its existence, the World Bank was the world's only large multilateral development lending institution. Beginning in the mid-1950s, however, coalitions of states began to construct additional development banks. Many of these early banks were associated with new or existing international organizations. In 1956, for example, members of the Council of Europe created a development bank of their own.¹² Two years later, European states created the European Investment Bank (EIB) as part of the Treaty of Rome. The debate surrounding the creation of the EIB provides a window into the strategic incentives that drove states to begin constructing new development banks. France, the most vocal

¹²Although the bank was created by Council of Europe (COE) members and retains the name of the original institution, it has autonomous decision-making authority and is formally a separate legal entity from the COE.

advocate of the EIB, argued that without a bank of their own European states would “soon depend entirely on the United States,” the dominant vote holder in the World Bank (Bussière, 2008, 32). Notably, the French proposal was strongly opposed by the United Kingdom, which enjoyed the second largest vote share in the World Bank, on the grounds that it “would have duplicated the Washington institution” (Bussière, 2008, 33).

In 1959, states in the Western Hemisphere created the Inter-American Development Bank (IADB), followed the next year by the Central American Bank for Economic Integration. Architects of the IADB cited the “low level of representation of Latin American countries in the existing financial institutions” as a primary justification for the new bank (Diaz-Bonilla & del Campo, 2011, 59). Two other large regional institutions, the African and Asian Development Banks, were created in 1965 and 1966, respectively. These new banks tended to focus their lending activities on specific geographic regions, though state membership was generally not restricted to regional states (e.g., the United States and United Kingdom were both early members of the Asian Development Bank). Like the World Bank, these institutions typically employed weighted decision-making rules that allocated unequal influence to member states. However, the distribution of influence in the new banks often departed significantly from the World Bank. In the Asian Development Bank, for example, regional powers sought to limit Western influence over the institution’s operation. According to Wilson, “The Asian feeling at the time was that the World Bank was dominated by ‘Anglo-Saxons’ – by the Western powers led by the United States and Britain...The ambition was therefore to have the Americans not as the largest shareholder but as equal with Japan” (1987, 6).

By 1993, states had created at least twenty-four IOs that participated in development lending alongside the World Bank. These included sub-regional institutions like the Arab Fund for Economic and Social Development, Caribbean Development Bank, and Nordic Development Fund, as well as development banks emanating from existing institutions (e.g., the OPEC Fund for International Development). Institutional proliferation increased again

in the late 2000s, as groups of mostly developing countries led a series of efforts to build banks which gave them greater control over lending decisions. Russia and Kazakhstan created the Eurasian Development Bank in 2006. In 2013, the BRICS countries (Brazil, Russia, India, China, and South Africa) founded the New Development Bank (NDB), intended “as an alternative to the existing US-dominated World Bank.”¹³ The following year, 21 Asian states joined a Chinese-led effort to create the Asian Infrastructure and Investment Bank, which plans to focus on infrastructure lending in Asia. Despite a lobbying campaign by the United States to prevent its allies from joining the AIIB, thirty-six additional countries (including the United Kingdom, Australia and many European states) signed the 2015 Articles of Agreement to become “founding members” of the bank.

Table 1 summarizes the observed cases of institutional proliferation in the regime complex for development lending. The table displays all multilateral development lending institutions and their dates of formation, starting with the establishment of the IBRD in 1944. In the final column, I list the number of states that participated in the planning and creation of the new institution (described in further detail in Section 3.4).

3.3 Development Bank Proliferation: Testable Hypotheses

The power misalignment theory of institutional proliferation argues that the formation of new multilateral development banks is driven by a divergence between states’ influence in the development lending regime and the underlying distribution of material power. When member states are unable to bargain for greater influence within the existing regime, they confront a choice. They can continue to support the current institution despite their relative lack of control. Or they can begin the costly process of constructing a new development bank, where their control over lending decisions more accurately reflects their economic power. The theory implies that states are more likely to make the latter choice when they

¹³“About the New Development Bank,” <http://ndbbriics.org>

Institution	Date	Founders
International Bank for Reconstruction and Development	1944	2
Council of Europe Development Bank	1956	7
European Investment Bank	1958	7
Inter-American Development Bank	1959	13
Central American Bank for Economic Integration	1960	5
African Development Bank	1965	15
Asian Development Bank	1966	7
East African Development Bank	1967	3
Arab Fund for Economic and Social Development	1968	12
Andean Development Corporation	1968	4
Caribbean Development Bank	1970	5
Islamic Development Bank	1973	10
West African Development Bank	1973	5
Development Bank of Central African States	1975	4
Arab Bank for Economic Development in Africa	1975	17
Development Bank of the Great Lakes States	1976	3
OPEC Fund for International Development	1976	12
Nordic Investment Bank	1976	5
International Fund for Agricultural Development	1977	10
Eastern and Southern African Trade and Development Bank	1985	10
Nordic Development Fund	1989	5
European Bank for Reconstruction and Development	1991	3
Black Sea Trade and Development Bank	1992	6
North American Development Bank	1993	2
Economic Cooperation Organization Trade and Development Bank	2005	3
Eurasian Development Bank	2006	2
New Development Bank	2013	5
Asian Infrastructure Investment Bank	2015	17

Table 1: Institutional Proliferation of Multilateral Development Banks

face large misalignments in influence in the current institution. This logic underpins the primary hypothesis tested in this paper:

Power Misalignment Hypothesis: States are more likely to create new development banks when their underlying material power (GDP) exceeds their influence in existing institutions (World Bank vote share).

I argued above that states confront two key constraints on their ability to proliferate institutions: 1) the difficulty of amassing a coalition of states, and 2) the efficiency costs generated by creating new IOs. Efficiency costs will vary primarily across issue areas, and therefore cannot be directly tested in a single issue study. The need to construct a coalition of actors, however, suggests an additional observable implication. Each state's decision to engage in institutional proliferation is driven not only by its own dissatisfaction, but the dissatisfaction of other states. Creating a new IO requires coming to an agreement with potential partners over the purpose, design, and distribution of authority in the new institution. When a large group of states is concerned about their influence in existing institutions, it is easier to find potential partners with whom these negotiations can be successfully concluded. The need for a coalition generates a second hypothesis:

Coalition Hypothesis: A state's probability of creating a new development bank is increasing in the number of other states dissatisfied with their influence in existing institutions.

The empirical tests will examine whether power misalignment and the availability of a dissatisfied coalition predict when states participate in the creation of new development lending institutions. Of course, this is by no means an exhaustive list of reasons that states might construct new development lending institutions. I briefly discuss alternative explanations below; they motivate the control variables that are included in the empirical analysis.

The most important alternative explanation is that states judge existing institutions

on the basis of policy outcomes, not relative power. An under-represented state may be unconcerned about its lack of influence as long as the policy decisions made by the World Bank are consistent with the state’s preferences. In particular, states might evaluate the World Bank according to the distribution of loans the organization provides. If a state is dissatisfied with the way the World Bank disburses development finance, it may be motivated to construct a new development bank that will conform more closely to its preferences.

In the empirical analysis below, I control for two possible dimensions of state satisfaction with World Bank lending decisions.¹⁴ First, states may care about their own access to development finance. In this scenario, the demand for more development aid drives institutional proliferation: a coalition of states whose development needs are insufficiently addressed by existing institutions decide to construct a new bank to increase their access to development loans. To account for this possibility, I control for the (logged) annual value of development aid disbursed to each state by existing institutions.¹⁵ Because development banks often have a regional geographic focus, I also control for the amount of aid given to the state’s geographic region.¹⁶ In addition to demand for development aid, an excess “supply” of capital could lead states with large financial reserves to form new banks through which they can disburse development finance. I control for states’ supply of capital for development aid with a measure of annual outgoing bilateral aid flows.

Second, states may prefer that World Bank loans are disbursed to their geopolitical allies. This explanation is consistent with existing work emphasizing geopolitical contestation over

¹⁴Because policy decisions in the World Bank are affected by member states’ vote power, controlling for them risks introducing post-treatment bias. This bias is likely to attenuate the estimated effect of power misalignment. If greater vote power allows a state to steer the Bank’s decisions in its desired direction, then part of the effect of vote power will be mediated by Bank decisions. In the results below, I show that the effect of vote power misalignment is significant in specifications with and without these controls.

¹⁵Data on aid from existing institutions comes from the AidData dataset (Tierney *et al.* , 2011).

¹⁶I use regional categories from the World Bank. I also include a separate control for regional economic integration to address the possibility that states construct regional banks to encourage economic integration among regional partners

World Bank lending patterns (Frey & Schneider, 1986; Thacker, 1999). If a high percentage of World Bank financing is targeted toward a state's allies, it will be less likely to engage in institutional proliferation. As World Bank loans depart from a state's ideal distribution, the probability of proliferation will increase. To account for states' geopolitical preferences, I control for the percent of World Bank loan disbursements that are distributed to a state's formal allies¹⁷ in each year.

Two additional alternative explanations are worth highlighting, even though they cannot be directly accounted for in the empirical analysis. First, the impetus for many development banks was rooted in unique historical circumstances that generated demand for new institutions. The International Fund for Agricultural Development (IFAD), for example, was formed in response to a series of famine-induced humanitarian crises in the 1970s. The European Bank for Reconstruction and Development (EBRD) was created at the end of the Cold War to meet the surge in demand for development finance in post-Soviet states. These context-specific factors clearly shaped patterns of development bank proliferation. Even in these cases, however, power misalignment may have played a significant role. External shocks such as the disintegration of the Soviet Union convinced states to shift their development priorities, but they did not predetermine the creation of new development banks. States still had to decide whether to use existing institutions or new IOs to meet shifts in demand. That choice was shaped by concerns over power misalignment. By the time the EBRD was proposed, for example, "institutions like the IFC [International Finance Corporation] and EIB were starting operations in Central and Eastern Europe and were well capable of extending their respective roles in the region" (Menkveld, 1991, 32). Instead of using these banks, states opted to create an entirely new institution. Among the justifications provided by European officials was the desired ability of European states to make lending decisions "without the consent of the United States" (Bronstone, 1999, 27).

¹⁷As measured in the Correlates of War Formal Alliances dataset.

Finally, perhaps the proliferation of multilateral development banks operates in a manner akin to the creation of private firms in a competitive market. Profit-seeking producers (donor states) enter the market to capitalize on demand from consumers (borrowing states). Development banks continue to proliferate until an equilibrium is reached such that the introduction of additional banks fails to generate positive profits.¹⁸ There are several problems with applying a simple market logic to multilateral development banks. Unlike in other markets, the pool of potential producers is limited to nation-states, who are generally not profit motivated when creating development banks (a fact attested to by the concessional, below-market interest rates offered by many multilateral development banks). More importantly, all cases of institutional proliferation examined here are carried out by states that are already members of the World Bank. In the market context, this is akin to suppliers who once enjoyed monopoly status creating competing firms and thereby transforming development lending into a competitive market – a puzzling choice from a purely economic perspective.¹⁹

3.4 Measurement and Data

To test the hypotheses, I collect data on the proliferation of development banks as well as states' influence in the central development lending institution, the World Bank. The dependent variable is state participation in development bank proliferation. To operationalize proliferation, I identify twenty-seven unique development banking institutions that were

¹⁸In other words, “equilibrium in the number of firms is then taken to require all enterprises to earn nonnegative profits, while the introduction of one additional firm is taken to cause each of the incumbent firms to earn profits that are strictly negative” (Baumol *et al.* , 1982, 4).

¹⁹A second market-based explanation could point to borrowing states' demand for differentiated development finance “products” and the tendency of “potential entrants [to] look for unfilled market niches” (Tirole, 1988, 346). Even in that scenario, however, existing firms should deter entry by diversifying their products. We should not expect the creation of new banks unless states have some other reason (e.g., concerns about influence) to spurn existing institutions.

created after the establishment of the World Bank (displayed in Table 1 above).²⁰ I then construct a dichotomous variable, *Institutional Proliferation*, which is measured at the state-year level; it takes a value of one when a state participates in the creation of a new multilateral development bank, and zero otherwise.²¹

For the main analysis, I code the dependent variable manually, drawing on a range of secondary historical sources to identify the set of states that were meaningful participants in each bank's creation.²² The dataset includes approximately 9,000 observations, and institutional proliferation occurs in 2.3% (203) of state-year units.

The primary independent variable is power misalignment within existing institutions. To measure this variable, I first collect annual data on formal vote shares in the World Bank. The World Bank is the clear focal institution in the regime complex. Since its inception, it has been the largest multilateral development bank in terms of lending, personnel, and bureaucratic expertise.²³ Formal vote power in the Bank therefore provides a reasonable measure of states' influence over multilateral development lending. Vote power varies significantly both cross-nationally and within countries over time. Figure 1 displays the distribution of World Bank vote power in 2014 for the 30 states with the highest vote share. The United States is the dominant power in the institution, with slightly over 15% of its vote share.

Vote shares in the World Bank are not static, though they often do not change as rapidly as states' relative economic capacity. Figure 2 shows how vote power in the Bank has changed over the last 35 years for select states. Countries that experienced rapid economic growth

²⁰I do not code the World Bank as institutional proliferation since no pre-existing banks were present.

²¹I distinguish between states who participate in the planning and creation of a development bank and those that join later through accession. States that oppose the creation of an institution may join later if their attempt to block the institution fails.

²²See Table A1 in the Appendix for a list of the states that participated in the creation of each multilateral development bank in the sample. Figure A1 provides a graphical depiction of the distribution of the dependent variable over time. As a robustness check, I classify all states that joined a multilateral development bank in its first year of existence as a "founder."

²³Figure A2 in the Appendix shows the World Bank's share of total development assistance since 1970.

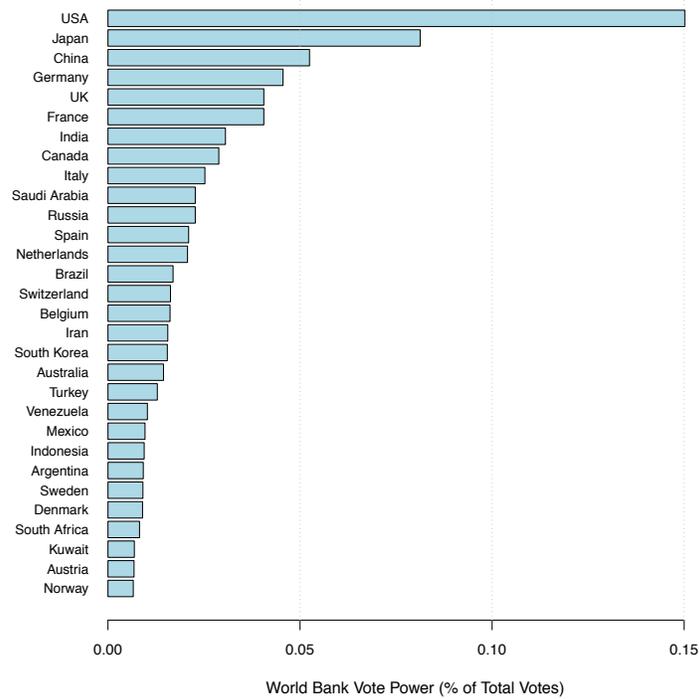


Figure 1: World Bank Vote Share, 2014. The figure displays the 30 states with highest share of formal votes in 2014. Data are from World Bank annual reports.

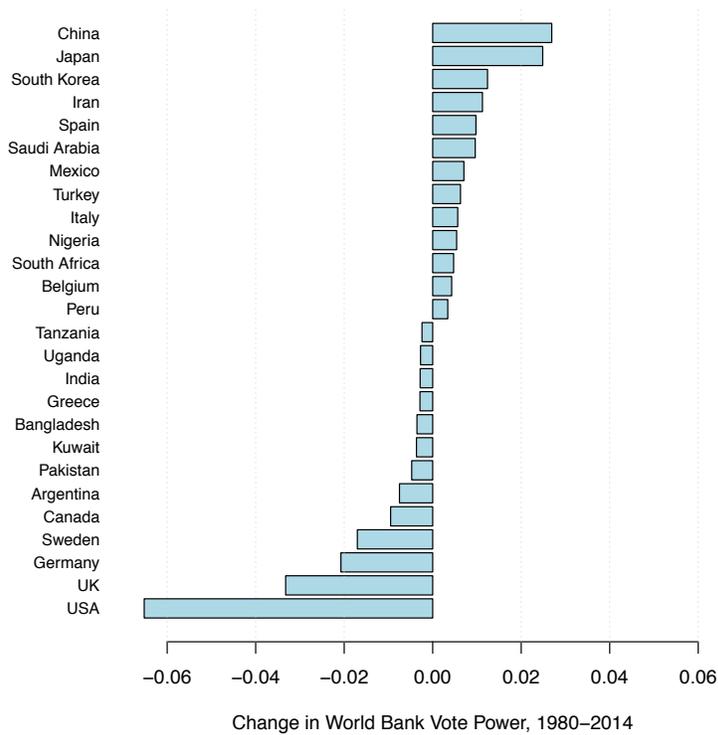


Figure 2: Change in World Bank Vote Share, 1980-2014. The figure shows changes in share of formal influence within the World Bank for select states over the period 1980-2014.

tended to receive more formal authority in this period (e.g., China and Japan) while others saw their relative influence reduced (United States, United Kingdom).

The independent variable of interest is power misalignment, which is a measure of the difference between a state's regime-specific influence and its underlying material power. Figure 3 demonstrates the relationship between material power and institutional influence by plotting 2014 World Bank vote power for a subset of states (Y-axis) against the same states' share of 2014 total GDP, a measure of material economic power (X-axis). As the figure shows, some states (e.g., Turkey, France) have a share of World Bank vote power that is almost exactly commensurate with their underlying economic capacity. Others appear to "punch above their weight," with vote power outstripping their economic might (e.g., Saudi Arabia, Netherlands). A few states are less influential in the World Bank relative to their economic power (e.g., China, Mexico). These are precisely the states I expect to have a higher probability of engaging in institutional proliferation.

I use the data displayed in Figure 3 to create a variable called **Vote Power Misalignment** for each state-year observation. This is the main independent variable used in the empirical analysis. It measures the difference between state i 's share of total GDP among World Bank members in year t and its World Bank vote share in the same year: $\text{GDP share}_{it} - \text{World Bank vote share}_{it}$. Higher values (> 0) indicate that a state's formal influence in the World Bank falls short of its underlying material power. For example, Brazil represented 3.1% of World Bank members' economic output in 2014, but only received 1.7% of vote shares in the organization. Its **Vote Power Misalignment** was 1.4, the difference between these numbers. The Power Misalignment Hypothesis suggests we should observe a positive effect of this variable on the probability that a state participates in institutional proliferation.

I also hypothesized that states are more likely to engage in institutional proliferation when they have access to a coalition of partners who are similarly dissatisfied with their influence in existing institutions (Coalition Hypothesis). I construct a second independent

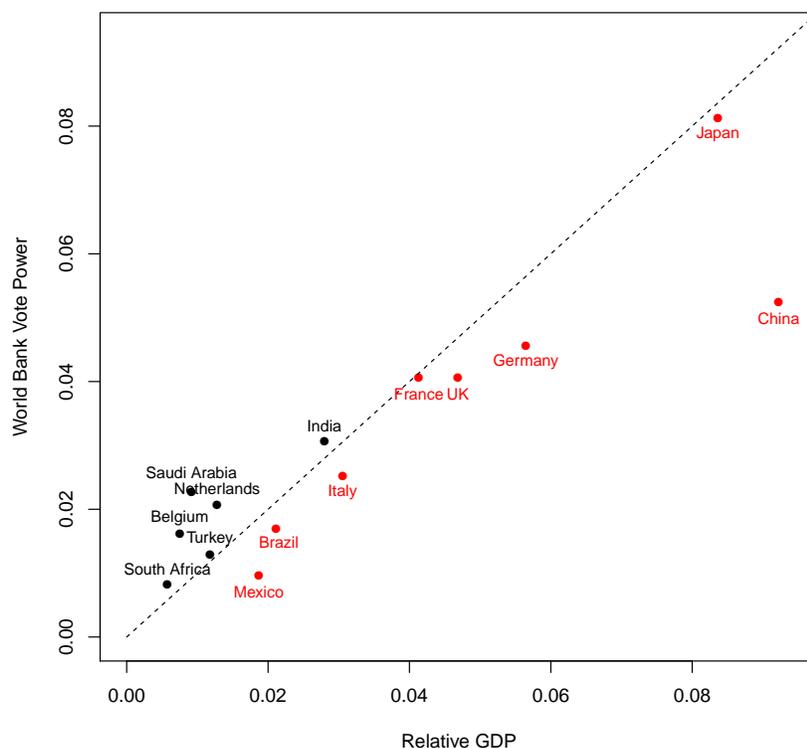


Figure 3: World Bank Vote Share vs. Relative GDP, 2014. Select states are plotted according to their share of World Bank vote power (Y-axis) and economic power (GDP, X-axis) in the year 2014.

variable, `Coalition`, to test this hypothesis. To create this variable, I assume all states that are “undervalued” in the World Bank (i.e., `Vote Power Misalignment` $>$ 0) represent a potential coalition of partners for a state interested in creating a new institution. The variable `Coalition` measures the number of these potential partners in a given year. The Coalition Hypothesis predicts a positive effect of `Coalition` on the probability of institutional proliferation.

A series of control variables address potential confounders and alternative explanations. To account for states’ demand for development assistance, I include states’ GDP, level of development (GDP per capita), and incoming flows of bilateral and multilateral development aid. I also include states’ outgoing aid flows, to capture the possibility that states who give more financial assistance will create development banks in order to facilitate the delivery of

development aid. To address states' geopolitical preferences regarding World Bank loans, I control for the percent of World Bank funds that are disbursed to a state's formal allies. I account for the possibility that states form development banks to facilitate regional economic integration by controlling for the proportion of each state's total trade that is conducted with regional partners.²⁴ I also include fixed effects for each region to account for varying baseline propensities of some regions to form new banks.

Additional variables address state-level features that influence the probability of institutional proliferation. A control for democratic political institutions reflects the higher propensity of democracies to create and form IOs.²⁵ Measures of states' national military capability control for the potential use of coercion to build a coalition of proliferating states. I include a count of development banks previously joined to address the extent to which states are already represented in the regime complex. Finally, I account for time dependence with a cubic polynomial (Carter & Signorino, 2010).

Despite the inclusion of these control variables, endogeneity remains a significant threat to causal identification. Vote shares in the World Bank are not randomly assigned. They are the outcome of a complex bargaining process that is inextricably linked to states' political power, diplomatic prowess, and preferences for development lending. This political process makes it likely that unobserved factors influence both states' vote power misalignment and their propensity to create new development banks. Endogeneity could generate bias in either direction, depending on how vote shares are allocated. If powerful states are able to bargain for greater influence in the Bank and can also more easily mobilize a coalition for new institutions, coefficient estimates in a standard regression will be biased in a negative direction. On the other hand, if states that are devoted to certain lending practices — for

²⁴I include an analogous variable at the region level (the proportion of total trade that is conducted intra-region). Geographic regions are defined according to the World Bank's regional classification scheme.

²⁵States' polity scores are from the Polity IV dataset.

example, condition-based lending that requires borrowers to uphold economic, environmental and social standards — are given more influence in the Bank, and these same states resist the creation of new development banks, regression estimates will be biased in a positive direction.

To account for potential bias, I use an identification strategy that accurately estimates the effect of power misalignment even in the presence of unobserved confounders. Specifically, I leverage a natural experiment that occurred during negotiations regarding the formation of the World Bank. Late in this process, the Bank’s architects switched formulas for allocating votes to member states. I use this abrupt change as an instrument for **Vote Power Misalignment** in order to estimate its causal effect on institutional proliferation.

3.5 Vote Share Allocation at Bretton Woods

Serious planning for the institution that would become the World Bank started in the early 1940s, in the midst of the second World War. American policymakers, anticipating the need for multilateral cooperation to assist in the reconstruction of Europe after the war, began to draw up designs for a “Bank for Reconstruction and Development of the United and Associated Nations” in 1942 (White, 1942). Primary responsibility for planning the bank, as well as an International Stabilization Fund (which would become the IMF), was given to Department of Treasury official Harry Dexter White. White’s influence on the Bank was profound; his thinking shaped its institutional goals, structure, and decision-making procedures. From 1942 until the Bretton Woods Conference in July 1944, White worked closely (and often contentiously) with his British counterpart, the noted economist John Maynard Keynes, to put plans for the bank into action (Steil, 2013).

White’s professional correspondence provides a detailed picture of the Bank’s origins, including his plans to distribute vote shares among the founding member states. Initial drafts

of the bank, prepared in a series of memos for Treasury Secretary Henry Morgenthau Jr., describe a highly technical institution, with each member state assigned a unique, minimum number of stock shares they would hold in the bank.²⁶ The earliest formula for member state stock shares was simple and intuitive: each member would contribute “2 percent of its estimated national annual income,” and states would receive “50 votes plus one vote for each share of stock held” (White, 1942). This formula for allocating vote power had a clear basis in states’ economic power: those with a higher national income would contribute more to the bank’s capital, and therefore would receive greater influence in the organization.

As White began to negotiate the terms of the bank with US allies, it soon became clear that the purely technical formula would have to bend to certain political realities. The UK, which was comparatively limited in national income but had very large trade volume, successfully lobbied the United States to add international trade as an element in the vote share formula (White, 1943). White would have to contend with similar requests from China and the USSR, the other two major US allies in the war effort. To complicate matters, US officials determined it would be too onerous to negotiate the allocation of vote shares in the World Bank and IMF separately; instead, they decided to come up with a single distribution of decision-making power that would apply to both institutions.

U.S. officials soon realized that the effort would not succeed without first achieving a politically feasible distribution of votes among the “Big Four” allies: the US, UK, USSR, and China. Accordingly, the relative vote power of the Big Four was set at the highest political level, in violation of the original formula envisioned by White. The United States would receive the largest capital subscription of approximately \$2.9 billion, the UK half that amount, and the USSR and China slightly less. As in White’s initial draft of the bank, each state’s voting power was tied to their capital subscription (Mikesell, 1994, p. 22). Having

²⁶Stock shares were essentially capital subscriptions; states with a higher number of shares were required to commit greater capital resources to the bank, and they were also given greater influence over lending decisions via increased vote power.

achieved agreement among these fundamentally important states, White desperately wanted to limit diplomatic negotiations with the other 40 states who would attend the Bretton Woods conference. His strategy for doing so was to tie vote shares to a “scientific formula” and thus limit procedural complaints about the allocation of votes. The challenge was finding a reasonable formula that would still respect the political decision over voting power granted to the Big Four. White assigned this task to an aide named Raymond Mikesell.

Mikesell recalls the assignment from White in his memoir of the negotiations preceding Bretton Woods. White instructed Mikesell to construct a formula using four variables — national income, foreign trade (exports and imports), gold reserves, and dollar holdings. He “gave no instruction on the weights to be used,” but insisted the formula accurately reflect the agreed upon vote shares among the Big Four (Mikesell, 1994, p. 22). Mikesell went through “dozens of trials” (p. 22) to create a formula that satisfied these difficult constraints; many of his rejected drafts are included among White’s archival records. Eventually, Mikesell developed a formula that White deemed close enough to the political agreement forged among the Big Four. Unfortunately, the formula was difficult to justify on any rational basis. According to the Mikesell formula, a country’s capital subscription would be calculated by first taking the sum of 4 quantities: 2 percent of national income, 5 percent of gold and dollar holdings, 10 percent of average imports, and 10 percent of the maximum variation in exports from 1934-1938. This sum was then multiplied by the ratio of average exports from 1934-1938 to national income in 1940 to get a state’s final capital subscription (Mikesell, 1994, p. 23).

Stone (2011) describes the resulting quota formula as an attempt by the United States “to cloak in technocratic calculations its political judgments about what share of control it was necessary to cede to each of the great powers in order to secure their participation” (53). For countries outside of the Big Four, what the complex formula accomplished was to add a great deal of randomness to the initial allocation of vote shares. White and Mikesell were

aware of this fact, and took great pains to hide the details of the formula from potential member states. Their concern is apparent in White’s personal correspondence. Responding to a memo from Mikesell detailing one proposed vote formula, White scribbles in the margins: “Deny it ever existed!”

As the US and its allies prepared for the Bretton Woods conference, they circulated the proposed distribution of vote shares to participating states, but withheld Mikesell’s formula.²⁷ At Bretton Woods, the vote quotas arising from the formula were used as starting points for negotiation. States were permitted to issue protests, and some successfully lobbied for increases in vote power over their initial allocation. It appears that deviations from Mikesell’s formula were fairly limited, however. One important reason was effective US control of the “Committee on Quotas” at the conference. The committee was chaired by high-ranking Treasury official Fred Vinson, and its technical advisor was none other than Raymond Mikesell (Mikesell, 1994).

In addition to being an interesting historical episode, the allocation of vote shares at Bretton Woods can be used to help mitigate the endogeneity of bargaining power. I exploit the “randomness” associated with Mikesell’s formula to create an instrument for vote power in the World Bank. Specifically, for each state I calculate the change in vote power that arose by shifting from White’s original vote formula (2% of national income) to the complex formula that was ultimately used at Bretton Woods. Because vote shares in the World Bank are highly path dependent, the shift in vote allocation at Bretton Woods had a long-term effect on their relative control of the institution. The initial change in vote shares can therefore be used as an instrument for states’ bargaining power in the World Bank.²⁸

²⁷Mikesell would report that despite his insistence that vote shares were derived using a scientific formula, delegates “were intelligent enough to know that the process was more political than scientific” (Mikesell, 1994, p. 23).

²⁸The additional vote share gained via the change in vote quota formula is positively correlated (0.21) with future vote shares in the World Bank.

There are three assumptions embedded in the instrumental variables approach. The first, exogeneity, requires that the instrument's effect on the independent variable is independent of potential outcomes. In this case, the assumption requires that the "extra" vote power a state received (or lost) by transitioning to the Mikesell formula is unrelated to variables that might influence states to build new development banks, such as their underlying political power or preferences for development lending. This is clearly not true for the "Big Four" allies, whose political power prompted the new vote formula in the first place. For all other states, however, the change in vote share was exogenous to political considerations.²⁹

Two pieces of evidence support the exogeneity assumption. The first is the historical record, which indicates White and Mikesell intentionally searched for a vote quota formula with a single goal in mind: to accurately match the political promise made to the big four allies. Mikesell is clear that the *only* instructions White provided were related to the big four allies; other considerations were ignored as he adjusted the formula to achieve the correct weighting among the US, UK, USSR, and China.³⁰ The fact that the formula itself was hidden from other states at Bretton Woods affirms the notion that their interests were not reflected in its construction.

Second, the data reveal no significant correlation between the change in vote shares and observed indicators of political or economic power. Figure 4 demonstrates the distribution of the change in vote shares resulting from the use of the Mikesell formula. About half of

²⁹Importantly, I do not claim that political considerations did not influence the ultimate allocation of vote shares in the Bank itself — merely that the change in vote shares from the original plan to the Mikesell formula was independent of political power for those outside the "Big Four." In practice, the formula did not fully determine vote shares but were used as guidelines to start negotiations at Bretton Woods. The actual votes deviated from the Mikesell formula, sometimes significantly (see Stone (2011, p. 54)).

³⁰Mikesell (1994, p. 22-23) states: "White gave no instructions on the weights to be used, but I was to give the United States a quota of approximately \$2.9 billion; the United Kingdom (including its colonies), about half the U.S. quota; the Soviet Union, an amount just under that of the United Kingdom; and China, somewhat less...I confess to having exercised a certain amount of freedom in making these estimates in order to achieve the predetermined quotas. I went through dozens of trials, using different weights and combinations of trade data before reaching a formula that satisfied most of Whites objectives."

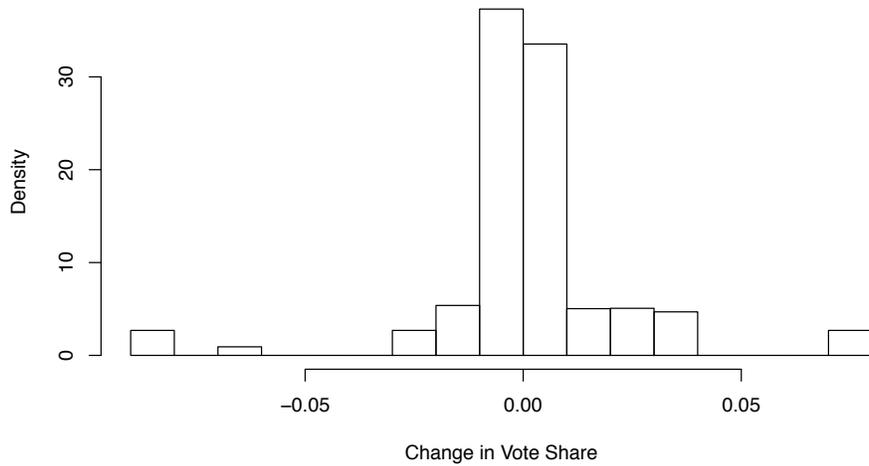


Figure 4: Change in Vote Power caused by the Mikesell Formula. Distribution of changes in formal vote power arising from the shift from the national income vote formula to the Mikesell formula, for states that participated in the Bretton Woods conference.

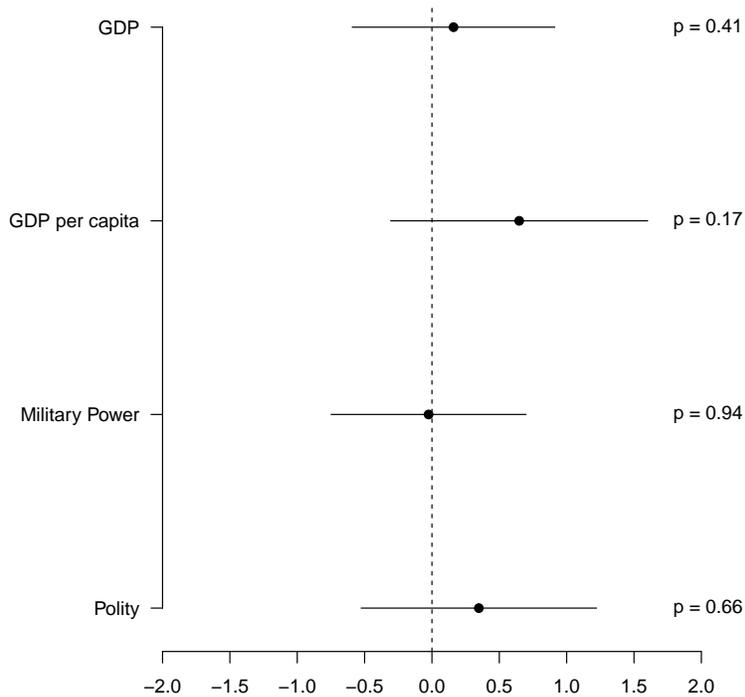


Figure 5: Covariate Balance for States Affected by Mikesell Formula. Standardized mean differences and 95% confidence intervals for "winners" vs. "losers" from the Mikesell formula. Data are from 1947 (earliest available year after the switch to the Mikesell formula).

Bretton Woods participants benefited from the shift in terms of greater vote power; others saw their formal influence fall. Figure 5 compares the characteristics of states who gained influence from the Mikesell formula to those that lost vote power. The two groups exhibit no significant differences in economic power (GDP), level of development (GDP per capita), Military Power (CINC score), or political regime (Polity score).

The second IV assumption, often referred to as the “exclusion restriction,” is that the instrument only affects the outcome (institutional proliferation) through its relationship with the independent variable (**Vote Power Misalignment**). Here the assumption is true by construction, since the instrument constitutes a direct shift in states’ vote power in the Bank. Finally, the third assumption (“monotonicity”) requires that the instrument affects all observations in the same direction. This assumption is violated if an increase in vote power resulting from the formula shift decreases the propensity of some states to engage in institutional proliferation, while increasing the propensity of others. While this assumption is not directly testable, it is highly unlikely that states become more dissatisfied with the World Bank after being given greater control within the institution.

4 Results

4.1 2SLS

To identify the effect of **Vote Power Misalignment** on institutional proliferation, I use a two-stage least squares (2SLS) model with the following estimating equations for each stage.

For state i in year t :

$$\text{Vote Power Misalignment}_{it} = \alpha_1 + \gamma_1 \text{Formula Shift}_i + \gamma_2 X_{it} + \epsilon_{it} \quad (1)$$

$$\text{Institutional Proliferation}_{it} = \alpha_2 + \beta_1 \widehat{\text{Vote Power Misalignment}}_{it} + \beta_2 X_{it} + \delta_{it} \quad (2)$$

where X_{it} is a vector of control variables discussed in the previous section.

Table 2 presents the results of the 2SLS models testing the effect of power misalignment on

the probability of institutional proliferation. Column 1 reports the results of a model which includes the key independent variable, **Vote Power Misalignment**, instrumented by the vote quota change arising from Mikesell's formula, as well as a series of baseline control variables. All models further include region fixed effects, a time polynomial, and the four component variables that comprise Mikesell's vote quota formula.³¹ Including these variables controls for the possibility that Mikesell strategically altered the formula to privilege or undermine states other than the Big Four. The historical record suggests this is unlikely, but to be cautious I include states' imports, exports, national income, and gold reserves in the years before Bretton Woods. The instrument thus measures the change in voting power arising from Mikesell's formula, conditioning on the variables in the formula.

The estimated effect of **Vote Power Misalignment** on institutional proliferation is positive and statistically significant in Model 1, suggesting states are more likely to create new development banks when their authority in the World Bank falls short of their underlying economic power (consistent with the Power Misalignment Hypothesis). The coefficient is substantively large: a one standard deviation increase in **Vote Power Misalignment** (0.012) causes a 3.8% increase in the probability of institutional proliferation, more than doubling the baseline rate of 2.3%. In contrast, the **Coalition** variable has no measurable influence on institutional proliferation. This suggests, contrary to the Coalition Hypothesis, that states are not constrained by the need to amass a group of partners to help create a new institution. Control variables perform largely as expected. Democratic states and those with higher GDP are more likely to construct new development banks, while states at lower levels of development (GDP per capita) are less likely to proliferate. Military capacity is negatively associated with institutional proliferation.

Column 2 adds the remaining controls. The effect of **Vote Power Misalignment** is even

³¹These variables are not shown in the results table. They include: states' national income in 1940; average exports from 1934-1938; gold and dollar reserves in 1940; and maximum variation in exports from 1934-1938.

	(1)	(2)	(3)
	2SLS	2SLS	Reduced Form
Vote Power Misalignment	3.352** (1.454)	6.767** (3.163)	
Mikesell Vote Shift			-11.344*** (4.734)
Coalition	-0.001 (0.001)	-0.003** (0.001)	-0.004** (0.001)
GDP	0.022*** (0.006)	0.046*** (0.015)	0.028*** (0.007)
GDP per capita	-0.012* (0.007)	-0.040** (0.016)	-0.015** (0.007)
Polity	0.002*** (0.001)	0.003** (0.001)	0.002** (0.001)
Military Capacity	-5.031*** (1.881)	-11.866** (4.902)	-2.776** (0.821)
Loans to Allies		-0.040 (0.055)	-0.026 (0.044)
Aid Received		-0.001 (0.001)	-0.001 (0.001)
Aid Given		0.002 (0.001)	0.002** (0.001)
Regional Trade Integration		0.054 (0.072)	0.048 (0.060)
Observations	1,898	1,456	1,456
F Statistic	19.165	13.818	

Table 2: Effect of Vote Power Misalignment on Institutional Proliferation. Models examining the effect of vote power misalignment on development bank formation. Standard errors are clustered by country. Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

larger in magnitude than in Model 1. The `Coalition` variable is negative and statistically significant, though substantively very small. States' geopolitical preferences over the distribution of World Bank loans (`Loans to Allies`) has no significant effect on institutional proliferation. Similarly, the results suggest the creation of new banks is not significantly shaped by states' need for development aid (`Aid Received`), stock of development finance capital (`Aid Given`), or desire to economically integrate their geographic region (`Regional Trade Integration`).

The results provides strong support for the effect of vote power misalignment on institutional proliferation. To demonstrate the magnitude of the effect, suppose the World Bank offered China more authority in 2012, changing its `Vote Power Misalignment` from the observed value (0.078) to a level equivalent to Japan (-0.013). The results in Model 2 indicate this additional influence would make China 62% less likely to create a new development bank (as it did with the Asian Infrastructure Investment Bank shortly thereafter).

Finally, Column 3 shows the results of a linear probability model that estimates the direct effect of the shift in vote power from Mikesell's formula on the probability of institutional proliferation. Unlike the instrumental variables approach, this reduced form model does not provide an accurate estimate of the effect of `Vote Power Misalignment`, since it does not consider vote share in relation to states' underlying economic power. But it can confirm our expectation that an exogenous infusion of additional vote power reduces the probability that a state engages in institutional proliferation. Indeed, the results demonstrate that a one percentage point increase in World Bank vote share decreases the probability of institutional proliferation by 11.34 percentage points.

Diagnostic tests indicate the instrument is strongly correlated with `Vote Power Misalignment` (F-statistic = 13.818), and further suggest that OLS estimates are likely to be inconsistent (Wu-Hausman test, $p = 0.05$).³² Following Conley *et al.* (2012), I perform sensitivity

³²See Table A2 in the appendix for results from the first stage of the instrumental variables model.

analysis to examine how robust the findings are to violations of the exclusion restriction. In this case, the instrument (the Mikesell formula) can have a direct effect on the outcome (institutional proliferation) of up to $+3.1$ until the results become statistically insignificant. This is equivalent to each standard deviation increase in vote share received from the Mikesell formula directly affecting the probability of institutional proliferation by over 3%.

The findings presented above are robust to the inclusion of additional controls (democratization, trade openness, and a count of state memberships in other banks). I re-estimated the models while removing each of the twenty-eight development banks to ensure the results are not driven by one particular institution, with similar results. One potential concern is that the use of the Mikesell formula to instrument future vote power misalignment in the World Bank results in a weak instrument, since the shift in formula only occurs at one point in time. While the F-statistic from the first stage regression suggests the instrument is sufficiently strong,³³ I calculated the Anderson-Rubin standard errors which are robust to weak instruments. `Vote Power Misalignment` retains its statistically significant effect on institutional proliferation. Finally, I performed a placebo test by repeating the same IV analysis on the proliferation of multilateral security institutions. If the theory is correct, states' power misalignment in the World Bank should affect their propensity to form new development banks, but not create new security IOs. As expected the estimated effect of `Vote Power Misalignment` on the proliferation of security institutions is substantively and statistically insignificant.

4.2 OLS and First Difference Models

The strength of the instrumental variable strategy is internal validity; it correctly estimates the effect of `Vote Power Misalignment` even in the presence of unobserved confounders.

³³Traditionally, an F-statistic of greater than 10 is considered a sign that the instrument is not weak. In the full model (Column 3), the F-statistic is greater than this threshold (11.179)

However, this approach also entails two limitations. The first is the need to restrict the sample of observations. To ensure the instrument is exogeneous, I excluded the “Big Four” states (US, UK, China, Russia) and only included other states for which contemporaneous data is available on the Bretton Woods vote quota formula. This reduces the number of states that are included in the sample.³⁴ The models in Table 2 therefore estimate the local effect of **Vote Power Misalignment** on the 34 states affected by the instrument, which excludes many potential states of interest.

Second, the instrument only affects states’ vote power in the World Bank. Realistically, states are likely to consider their level of influence in the broader range of institutions that engage in development finance. China’s decision to create the AIIB, for example, may be driven by its lack of representation in the Asian Development Bank as much as in the World Bank. Likewise, Japan’s dominant position in the Asian Development Bank should dissuade it from establishing additional institutions.

To test these expectations, the final set of results examines the effect of **Vote Power Misalignment** in a series of non-instrumented regression models. Table 3, Column 1 re-estimates the fully specified 2SLS model in a linear probability model, using the same sample as in Table 2.³⁵ The coefficient for **Vote Power Misalignment** is statistically insignificant and much smaller in magnitude than in the instrumented version, suggesting the regression results are subject to attenuation bias. We should therefore interpret the coefficients in this table as a lower bound on the true effect of **Vote Power Misalignment** (i.e., the true effect is more positive than the estimates derived from a linear regression model). Column 2 expands the sample to the full set of country-year observations. As in the first model, power

³⁴The 34 remaining states in the sample are: Argentina, Australia, Belgium, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Czechoslovakia, Denmark, Ecuador, Egypt, El Salvador, Finland, Germany, Greece, Italy, Japan, Mexico, Netherlands, New Zealand, Norway, Peru, Philippines, Poland, Portugal, South Africa, Sweden, Thailand, Turkey, Uruguay, Venezuela, and Yugoslavia.

³⁵I use a linear probability model for consistency with the 2SLS specification. Results are substantively unchanged in a logit model.

	<i>Dependent variable: Institutional Proliferation</i>			
	(1)	(2)	(3)	(4)
	OLS	OLS	FD	FD
Vote Power Misalignment	0.820 (0.872)	0.052 (0.144)	2.531** (1.021)	1.477** (0.607)
Vote Power Misalignment (Region)				0.118** (0.007)
GDP	0.018** (0.008)	0.006*** (0.002)	0.003*** (0.001)	0.005*** (0.002)
GDP per capita	-0.016** (0.008)	-0.004* (0.002)	-0.003 (0.002)	-0.003 (0.002)
Polity	0.002*** (0.001)	0.0002 (0.0004)	0.001 (0.0002)	0.0002 (0.0004)
Military Capacity	-2.725* (1.427)	-0.345*** (0.100)	-0.142** (0.064)	-0.316*** (0.083)
Coalition	-0.003** (0.001)	0.001 (0.001)	0.005** (0.002)	0.001 (0.001)
Regional Coalition				0.009*** (0.004)
Loans to Allies	-0.027 (0.042)	0.007** (0.036)	0.026 (0.036)	0.083** (0.037)
Observations	1,456	5,840	5,752	5,748
States	34	160	160	160
MDBs	17	23	23	23

Table 3: Effect of Vote Power Misalignment on Institutional Proliferation, OLS Models. Results of regression models examining the effect of bargaining power misalignment on states' propensity to construct new development banks. Standard errors are clustered by country. All models include a time polynomial, region fixed effects, ingoing and outgoing aid flows, regional trade dependence, and number of members in existing banks (not shown). Statistical significance is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

misalignment has no significant association with institutional proliferation.

The final two columns employ first difference models, leveraging dynamic changes in `Vote Power Misalignment` to explain the creation of new development banks.³⁶ These models account for time-invariant, state-level variables that may influence the propensity to engage in institutional proliferation. The results for Model 3 show a positive and statistically significant effect of `Vote Power Misalignment`, demonstrating that the effect is not limited to the 34 states in the 2SLS sample.

The final model incorporates a separate measure of power misalignment in the four largest regional development banks.³⁷ To construct this variable, I collect data on states' vote share in the major development lending institution that corresponds to the states' geographic region.³⁸ As in the first `Vote Power Misalignment` measure, I then calculate the difference in states' relative vote share in their regional development bank and their relative economic power. Results reveal that states consider more than just their influence in the World Bank when constructing new development banks. While the effect of `Vote Power Misalignment` in the World Bank remains positive and statistically significant, power misalignment in regional development banks has a separate, significant effect on institutional proliferation. This findings helps explain why institutional proliferation continues to occur even after states have constructed alternative development banks. Each time a bank is created to resolve power misalignment for one set of states, it simultaneously disadvantages others and generates additional motivation for institutional proliferation.

³⁶This specification models the change in outcome, $Institutional\ Proliferation_{it} - Institutional\ Proliferation_{i,t-1}$, as a function of the change in the independent variable, $Vote\ Power\ Misalignment_{it} - Vote\ Power\ Misalignment_{i,t-1}$.

³⁷Regional development banks included in this model are the European Investment Bank, Inter-American Development Bank, African Development Bank, and Asian Development Bank.

³⁸I collect this data for all years in which the regional development banks have publicly available annual reports, where states' vote shares are listed.

5 Discussion and Future Research

This paper argues that states are more likely to create new IOs when they believe their influence in existing institutions is constrained by outdated rules. Rather than attempting to maximize cooperative benefits, states often build institutions as part of a competition for influence in multilateral organizations. IOs that fail to adapt to changes in states' underlying material power risk the proliferation of additional institutions, fragmenting global governance and potentially creating obstacles to effective cooperation.

Power misalignment in existing IOs is one powerful pathway through which states decide to build multiple, overlapping institutions. It provides a rationale for perhaps the most significant trend in international cooperation over the last several decades: the increasing crowding of governance institutions in many issue areas. This trend has only recently begun to attract scholarly attention, and the power misalignment theory offers an important complement to preference-based explanations that have been advanced in the literature. A notable implication of the theory is that we will observe more institutional proliferation than is strictly optimal for cooperation. As the distribution of state power evolves, regime complexes are likely to experience continued fragmentation and its attendant coordination challenges. This expectation stands opposed to the “rational design” literature (Koremenos *et al.* , 2001), which argues that international regimes are designed to efficiently address the underlying cooperation problem states confront.

I find empirical support for the effect of power misalignment in the issue area of development lending. By leveraging a unique natural experiment, I demonstrate that imbalances in multilateral bargaining power in the World Bank causes states to construct new development banks. The substantive effect of power misalignment is large in magnitude, significantly increasing the probability of institutional proliferation among disadvantaged states.

My analysis of development lending institutions has several implications that contribute

to our understanding of international financial institutions. The first is the sources of leverage that provide states with influence in IFIs. My argument suggests newly established institutions offer proliferating states an additional outside option, which should strengthen their hand in negotiations. As a result, understanding how states influence World Bank lending or disbursement patterns requires knowing who wields power in other development banks as well as the internal politics of the Bank. Second, concerns about severe discord between new banks and existing IFIs may be overblown. If states establish a new institution with the specific intent of providing bargaining leverage – and not to challenge operational practices in existing banks – the institutions may interact more harmoniously than is commonly expected. To serve as a viable outside option, new institutions must be at least a partial substitute for the original IO. This implies new development banks will not function in fundamentally different ways than existing ones. Coordination among multiple institutions will remain a challenge, but the basic mission and operation of new development banks should be consistent with long-standing institutions like the World Bank.

These implications should extend beyond development banking to other salient issue areas in world politics. Other major institutions, including the European Union and the UN Security Council, have formal decision-making procedures that distribute influence unequally to member states. If these procedures fail to adapt to changes in the underlying distribution of state power – as the Security Council is often accused of doing – they may find themselves sharing governing authority with newly established IOs. Even IOs that operate by consensus or give members equal formal vote power are not immune to power misalignment. As Stone (2011) argues, powerful states often exert informal influence over multilateral institutions. Precisely because this process is informal, it may be more difficult to adjust as state power evolves. The bargaining failures that create power misalignment in weighted IOs may be even more prevalent in institutions which claim to be egalitarian.

References

- Abbott, Kenneth W., Genschel, Philipp, Zangl, Bernhard, & Snidal, Duncan. 2015. *International Organizations as Orchestrators*. Cambridge University Press.
- Alter, Karen J., & Meunier, Sophie. 2009. The politics of international regime complexity. *Perspectives on politics*, **7**(01), 13–24.
- Baumol, WJ, Panzar, JC, & Willig, RD. 1982. *Contestable markets and the theory of industry structure*. San Diego [etc.]: HBJ.
- Bronstone, Adam. 1999. *The European Bank for reconstruction and development: The building of a bank for East Central Europe*. Manchester University Press.
- Bussière, Èric. 2008. *The bank of the European Union: the EIB, 1958-2008*. European Investment Bank.
- Carter, David B., & Signorino, Curtis S. 2010. Back to the future: Modeling time dependence in binary data. *Political Analysis*, mpq013.
- Conley, Timothy G, Hansen, Christian B, & Rossi, Peter E. 2012. Plausibly exogenous. *Review of Economics and Statistics*, **94**(1), 260–272.
- Copelovitch, Mark S. 2010. Master or servant? Common agency and the political economy of IMF lending. *International Studies Quarterly*, **54**(1), 49–77.
- Davis, Christina, & Pratt, Tyler. 2017. *The Forces of Attraction: How Security Interests Shape Membership in Economic Institutions*. Available at http://scholar.princeton.edu/sites/default/files/tylerpratt/files/davispratt_june2017.pdf.
- Davis, Christina L. 2009. Overlapping institutions in trade policy. *Perspectives on politics*, **7**(01), 25–31.

- Diaz-Bonilla, Eugenio, & del Campo, Victoria. 2011. *A Long and Winding Road: The Creation of the Inter American Development Bank*. Lulu. com.
- Dreher, Axel, & Sturm, Jan-Egbert. 2012. Do the IMF and the World Bank influence voting in the UN General Assembly? *Public Choice*, **151**(1-2), 363–397.
- Dreher, Axel, Sturm, Jan-Egbert, & Vreeland, James Raymond. 2009. Development aid and international politics: Does membership on the UN Security Council influence World Bank decisions? *Journal of Development Economics*, **88**(1), 1–18.
- Fleck, Robert K, & Kilby, Christopher. 2006. World Bank independence: A model and statistical analysis of US influence. *Review of Development Economics*, **10**(2), 224–240.
- Frey, Bruno S, & Schneider, Friedrich. 1986. Competing models of international lending activity. *Journal of Development Economics*, **20**(2), 225–245.
- Gehring, Thomas, & Faude, Benjamin. 2014. A theory of emerging order within institutional complexes: How competition among regulatory international institutions leads to institutional adaptation and division of labor. *The Review of International Organizations*, **9**(4), 471–498.
- Gilpin, Robert. 1981. *War and change in world politics*. Cambridge University Press.
- Gruber, Lloyd. 2000. *Ruling the world: Power politics and the rise of supranational institutions*. Princeton University Press.
- Hawkins, Darren G., Lake, David A., Nielson, Daniel L., & Tierney, Michael J. 2006. *Delegation and agency in international organizations*. Cambridge University Press.
- Helfer, Laurence R. 2004. Regime shifting: the TRIPS agreement and new dynamics of international intellectual property lawmaking. *Yale J.Int'l L.*, **29**, 1.

- Helfer, Laurence R. 2009. Regime shifting in the international intellectual property system. *Perspectives on Politics*, **7**(01), 39–44.
- Hirschman, Albert O. 1970. *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*. Vol. 25. Harvard university press.
- Ikenberry, G. John. 2001. *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order after Major Wars*. Princeton University Press.
- Johnson, Tana. 2014. *Organizational progeny: Why governments are losing control over the proliferating structures of global governance*. Oxford University Press, USA.
- Jupille, Joseph, Mattli, Walter, & Snidal, Duncan. 2013. *Institutional choice and global commerce*. Cambridge University Press.
- Keohane, Robert. 1984. 0.(1984) After Hegemony. *Cooperation and Discord in the World Political Economy*, Princeton.
- Keohane, Robert Owen, & Nye, Joseph S. 1977. *Power and interdependence: World politics in transition*. Little, Brown Boston.
- Kersting, Erasmus K, & Kilby, Christopher. 2016. With a little help from my friends: Global electioneering and World Bank lending. *Journal of Development Economics*, **121**, 153–165.
- Koremenos, Barbara, Lipson, Charles, & Snidal, Duncan. 2001. The rational design of international institutions. *International organization*, **55**(04), 761–799.
- Krasner, Stephen D. 1981. Power structures and regional development banks. *International organization*, **35**(2), 303–328.
- Krasner, Stephen D. 1991. Global communications and national power: Life on the Pareto frontier. *World Politics*, **43**(03), 336–366.

- Kuziemko, Ilyana, & Werker, Eric. 2006. How Much Is a Seat on the Security Council Worth? Foreign Aid and Bribery at the United Nations. *Journal of Political Economy*, **114**(5), pp. 905–930.
- Lake, David A. 2009. *Hierarchy in international relations*. Cornell University Press.
- Lim, Daniel Yew Mao, & Vreeland, James Raymond. 2013. Regional organizations and international politics: Japanese influence over the Asian Development Bank and the UN Security Council. *World Politics*, **65**(01), 34–72.
- Lipsy, Phillip Y. 2015. Explaining Institutional Change: Policy Areas, Outside Options, and the Bretton Woods Institutions. *American Journal of Political Science*, **59**(2), 341–356.
- Martin, Lisa L. 1992. Interests, power, and multilateralism. *International Organization*, **46**, 765–765.
- Menkveld, Paul A. 1991. *Origins and Role of the European Bank for Reconstruction and Development*. Graham and Trotman.
- Mikesell, Raymond F. 1994. The Bretton Woods Debates: A Memoir, Essays in International Finance, No. 192, Princeton University. *International Finance Section*.
- Morse, Julia C., & Keohane, Robert O. 2014. Contested multilateralism. *The Review of International Organizations*, 1–28.
- Organski, Alfred FK. 1968. *World Politics*.
- Paul, Thazha V, Larson, Deborah Welch, & Wohlforth, William C. 2014. *Status in world politics*. Cambridge University Press.
- Pevehouse, Jon, Nordstrom, Timothy, & Warnke, Kevin. 2004. The Correlates of War 2 international governmental organizations data version 2.0. *Conflict Management and Peace Science*, **21**(2), 101–119.

- Pratt, Tyler. 2017. *Deference and Hierarchy in International Regime Complexes*. Available at http://scholar.princeton.edu/sites/default/files/tylerpratt/files/deference_iorevisions_2017.pdf.
- Raustiala, Kal, & Victor, David G. 2004. The regime complex for plant genetic resources. *International organization*, 277–309.
- Schneider, Christina J. 2011. Weak states and institutionalized bargaining power in international organizations. *International Studies Quarterly*, **55**(2), 331–355.
- Steil, Benn. 2013. *The battle of Bretton Woods: John Maynard Keynes, Harry Dexter White, and the making of a new world order*. Princeton University Press.
- Stone, Randall W. 2011. *Controlling institutions: International organizations and the global economy*. Cambridge University Press.
- Thacker, Strom C. 1999. The high politics of IMF lending. *World politics*, **52**(01), 38–75.
- Tierney, Michael J, Nielson, Daniel L, Hawkins, Darren G, Roberts, J Timmons, Findley, Michael G, Powers, Ryan M, Parks, Bradley, Wilson, Sven E, & Hicks, Robert L. 2011. More dollars than sense: Refining our knowledge of development finance using AidData. *World Development*, **39**(11), 1891–1906.
- Tirole, Jean. 1988. *The theory of industrial organization*. MIT press.
- Urpelainen, Johannes, & de Graaf, Thijs Van. 2013. Your Place or Mine? Institutional Capture and the Creation of Overlapping International Institutions. *British Journal of Political Science*.
- Voeten, Erik. 2001. Outside options and the logic of Security Council action. *American Political Science Review*, **95**(4), 845–858.

White, Harry Dexter. 1942. “United Nations Stabilization Fund and a Bank for Reconstruction and Development of the United and Associated Nations”. *Harry Dexter White Papers, Box 6, Folder 6; Public Policy Papers, Department of Rare Books and Special Collections, Princeton University Library.*

White, Harry Dexter. 1943. “Preliminary Draft Outline of a Proposal for a United Nations Bank for Reconstruction and Development ”. *Harry Dexter White Papers, Box 6, Folder 6; Public Policy Papers, Department of Rare Books and Special Collections, Princeton University Library.*

Wilson, Dick. 1987. *A bank for half the world: the story of the Asian Development Bank, 1966-1986.* Asian Development Bank Manila.

Zangl, Bernhard, Heußner, Frederick, Kruck, Andreas, & Lanzendörfer, Xenia. 2016. Imperfect adaptation: how the WTO and the IMF adjust to shifting power distributions among their members. *The Review of International Organizations*, **11**(2), 171–196.

Appendix

Institution	Year	States
CEDB	1956	France, Italy, Turkey, Germany, Belgium, Iceland, Luxembourg
EIB	1958	France, Netherlands, Italy, Ireland, Belgium, Luxembourg, Germany
IDB	1959	Brazil, Chile, Colombia, Ecuador, Haiti, Costa Rica, Mexico, Cuba, Dominican Republic, El Salvador, Honduras, Panama, Venezuela
CABEI	1960	Guatemala, El Salvador, Honduras, Nicaragua
AfDB	1965	Sudan, Nigeria, Cameroon, DR Congo, Ethiopia, Ghana, Guinea, Cote d'Ivoire, Kenya, Liberia, Mali, Morocco, Sierra Leone, Tanzania, Togo, Uganda
AsDB	1966	Japan, Sri Lanka, Thailand, Malaysia, Philippines, Thailand, India, Indonesia
EADB	1967	Kenya, Uganda, Tanzania
AFESD	1968	Kuwait, Jordan, Tunisia, Algeria, Sudan, Iraq, Saudi Arabia, Syria, Lybia, Egypt, Yemen, Lebanon, Morocco, United Arab Emirates, Bahrain, Qatar
CAF	1968	Colombia, Chile, Ecuador, Peru
CDB	1970	Canada, Jamaica, Barbados, Trinidad & Tobago, Guyana, Grenada, United Kingdom, Dominica, St. Kitts & Nevis, St. Lucia, St. Vincent & Grenadines
IsDB	1973	Saudi Arabia, Egypt, Pakistan, Qatar, Bahrain, Oman, Libya, United Arab Emirates, Malaysia, Morocco
WADB	1973	Cote d'Ivoire, Benin, Niger, Senegal, Togo
BDEAC	1975	Cameroon, Central African Republic, Congo, Gabon
ABEDA	1975	Jordan, United Arab Emirates, Bahrain, Tunisia, Algeria, Sudan, Saudi Arabia, Iraq, Oman, Qatar, Kuwait, Lebanon, Libya, Egypt, Syria, Morocco, Mauritania
BDEGL	1976	Burundi, Rwanda, DR Congo
OFID	1976	Iran, Iraq, Kuwait, Saudi Arabia, Venezuela, Qatar, Indonesia, Libya, United Arab Emirates, Algeria, Nigeria, Ecuador
NIB	1976	Denmark, Finland, Iceland, Norway, Sweden

Table A1: Coding of Institutional Proliferation

Institution	Year	States
IFAD	1977	Australia, New Zealand, Netherlands, Mexico, Sierra Leone, Kuwait, Bangladesh, Venezuela, Saudi Arabia, Iran, United Arab Emirates
ESATDB	1985	Ethiopia, Kenya, Lesotho, Malawi, Mauritius Swaziland, Somalia, Uganda, Zambia, Zimbabwe
NDF	1989	Denmark, Finland, Iceland, Norway, Sweden
EBRD	1991	France, Germany, Italy
BSTDB	1992	Albania, Armenia, Azerbaijan, Bulgaria, Greece, Georgia, Moldova Romania, Russia, Turkey, Ukraine
NADB	1993	United States, Mexico
ECOTDB	2005	Iran, Pakistan, Turkey
EuADB	2006	Russia, Kazakhstan
NDB	2013	Brazil, Russia, India, China, South Africa
AIIB	2015	China, Singapore, India, Vietnam, Philippines, Mongolia, Laos, Cambodia, Oman, Uzbekistan, Thailand, Sri Lanka, Qatar, Pakistan, Nepal, Bangladesh, Brunei, Kazakhstan, Kuwait, Malaysia, Myanmar

Table A1 (cont): Coding of Institutional Proliferation

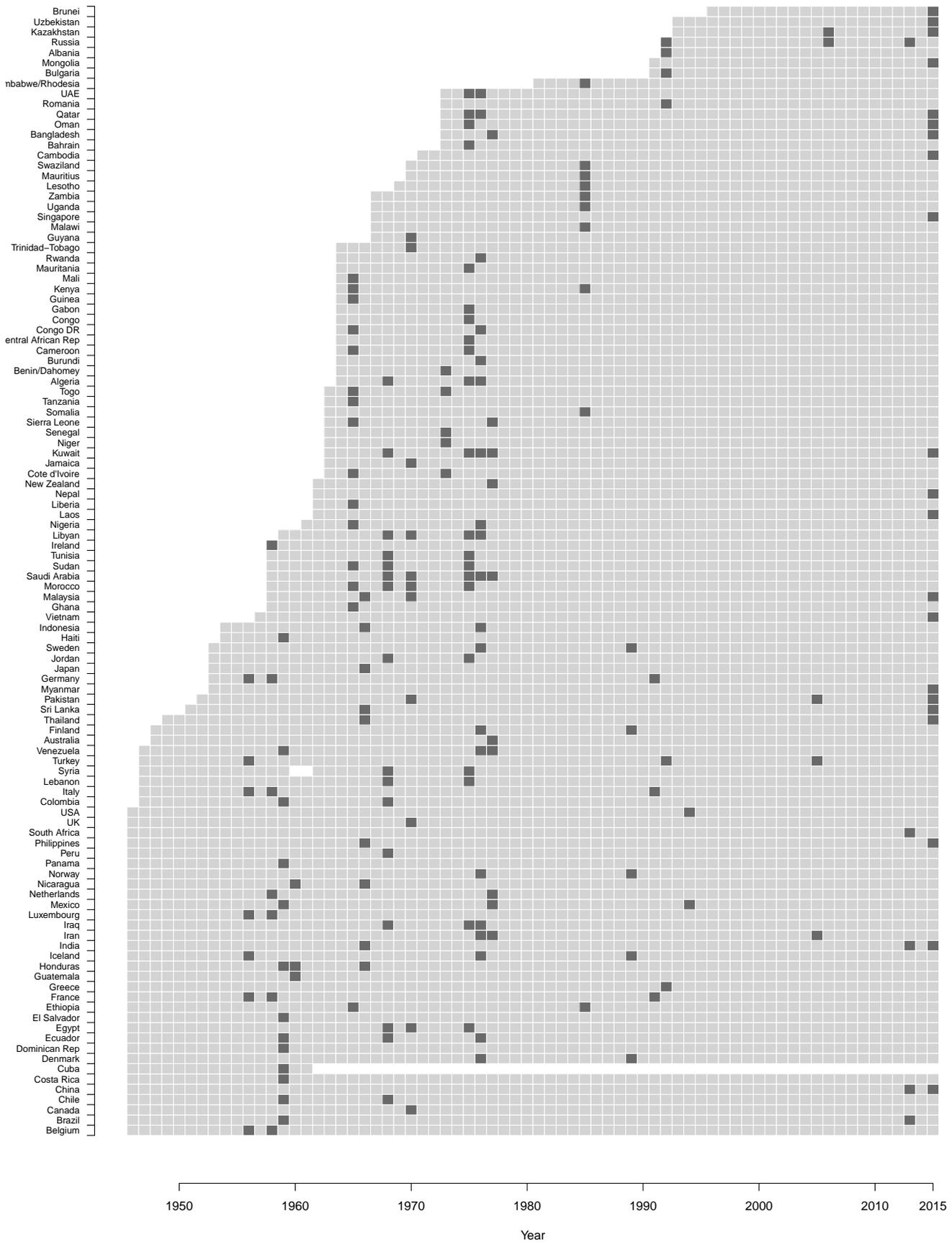


Figure A1: Institutional Proliferation Variable

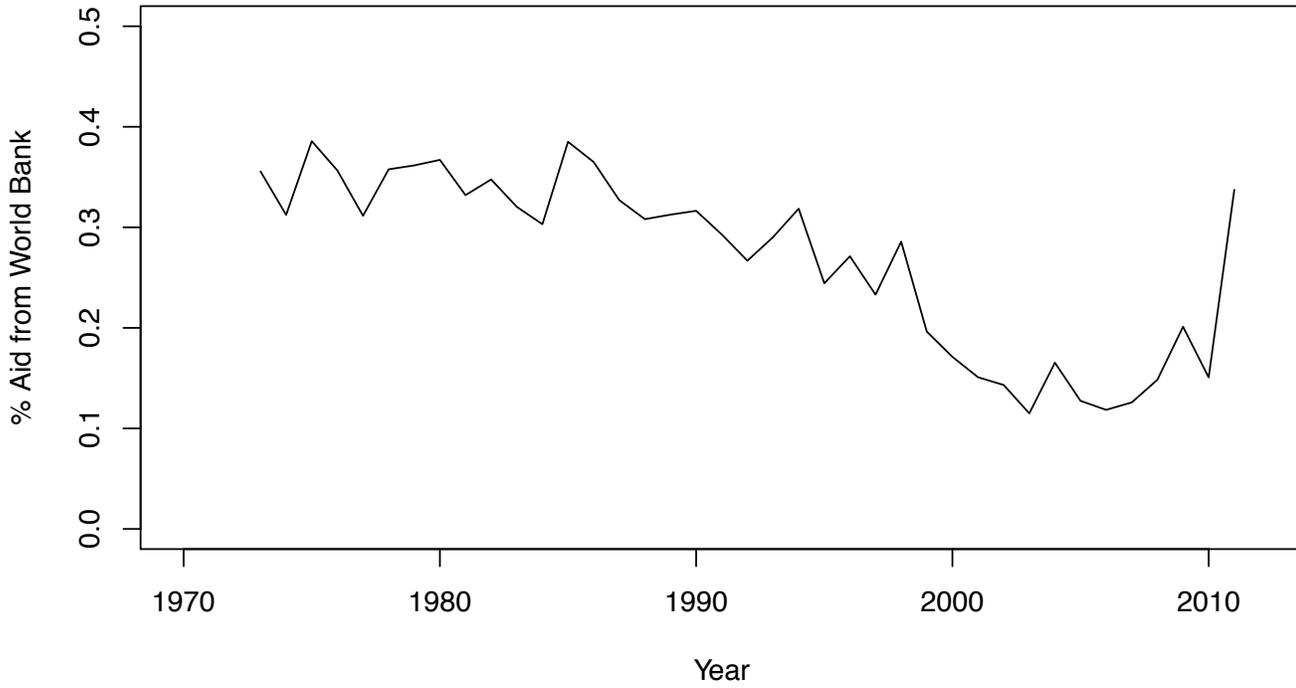


Figure A2: World Bank Share of Total Development Assistance. Data is from the AidData dataset.

Dependent variable: Vote Power Misalignment	
Vote Shift	-1.933*** (0.024)
GDP	0.002*** (0.001)
GDP per capita	-0.003*** (0.001)
Polity	0.0001 (0.0001)
Military Capacity	-1.205*** (0.169)
Coalition	0.00004 (0.00009)
Loans to Allies	-0.002 (0.004)
Aid Received	0.00002 (0.00003)
Aid Given	-0.0001 (0.0001)
Regional Trade Integration	-0.00006 (0.005)
Observations	1,456
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table A2: First Stage Results. Results of the first stage model examining the effect of the instrument (Quota Change) on Vote Power Misalignment (Table 3, Model 3). Time polynomial not shown. Statistical significance is denoted by: *p<0.1; **p<0.05; ***p<0.01.