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The Politics of Choice and Institutional Development of Global Climate Regimes: Assessment Through Emerging Countries' New Intergovernmental Organizations

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DRAFT – Please do not circulate.

1. Introduction

Regimes on many global governance arenas today are heavily saturated with numerous international institutions and actors.[1] It is therefore fitting that scholars have begun to focus more on the strategies of forum shopping, institutional proliferation, and on their effects. Many have reached the conclusion that regime complexes, which are arrays of "partially overlapping institutions governing a particular issue-area, among which there is no agreed upon hierarchy,"[2] are now a common phenomenon. Such institutional arrangements exist in the issue areas of trade,[3] human rights,[4] intellectual property rights,[5] energy security,[6] food security,[7] and the environment.[8] In this paper, I focus on institutional proliferation, fragmentation, and complexity of climate change, whose regime has evolved to encompass a wide spectrum of issues from political economy to finance to development to social justice. Regime for climate change, as with other issue-areas, is already heavily saturated with various institutions driven by both state and non-state actors, hence giving actors ample opportunities to engage in forum shopping. However, we are witnessing a proliferation of new institutions, with varying purposes, membership, budget, types, and approaches, to at least partly address the broadly defined issue of climate change. This raises three important questions: why is the institutional design of intergovernmental organizations (IGOs) being selected, what is motivating emerging powers to establish them, and why is climate change part of their rhetoric and institutionalization?

[1] Biermann et al. 2009.
[2] Raustiala and Victor 2004; Alter and Meunier 2009. Keohane and Victor 2011.
[3] Alter and Meunier 2006; Busch 2007; Davis 2009; Dunoff 2007; Pauwelyn and Salles 2009.
[4] Hafner-Burton 2009; Teitel and Howse 2009.
[5] Helfer 2004.
[6] Colgan, Keohane, and Van de Graaf 2011; Van de Graaf 2013.
[7] Margulis 2013.
[8] Keohane and Victor 2011; Oberthur and Stokke 2011.

Throughout the 1990s and early 2000s, global climate governance was centered in the United Nations system, with the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol forming the core of the climate regime. Yet this began to change around the time the Kyoto Protocol went into effect in 2005. A number of states began forum shopping; that is, they initiated climate discussions in venues traditionally not associated with environmental governance. The United States also launched a multitude of new international institutions for cooperation on climate change in the mid-2000s, with the Major Economies Forum on Energy and Climate Change. These incidences of forum shopping and institutional proliferation contributed to the fragmentation of the once-coherent climate regime, leading to the emergence of a "regime complex for climate change."[9]

The literature on the effects of institutional proliferation at the systemic level has primarily focused on institutional change towards greater regime complexity. What is missing from the discussion, however, is the process of when, why and how states deliberately diverge from a certain institutional path and establish new institutions with similar or partially overlapping functions. Further, until recently, little attention was paid to the latecomers on the discussions of climate governance. We know relatively little about how international development organizations, particularly those that were established by emerging countries, are responding to climate change. Countries that were traditionally passive, reluctant, or adamantly opposed to collective mitigation efforts have recently changed their positions and begun to actively engage in multilateralism and issue-linkages that create a different set of normative framework and approaches. They remain in the focal institution of climate change, the UNFCCC, but have also moved beyond the existing arrangements. By choosing to establish new institutions from scratch instead of creating nested institutions or remaining engaged in forum shopping, these countries have contributed to increasing institutional proliferation and strengthening substantive linkages that help them leverage more voice and legitimacy. Thus, institutional proliferation and issue-linkages, both driven by emerging countries, have further fragmented the climate regime complex.[10]

Global environmental governance scholars have focused on global environmental organizations and how they are responding to climate change. They have also explored the increasing complexity and fragmentation of the climate regime as it broadens to include a range of new issues and new actors from NGOs to interest groups to IGOs.[11] They have identified why international organizations may "bandwagon" on the climate regime.[12] They have pointed out the benefits institutions can gain, in particular new material and ideational resources, and the role that secretariats play in managing regime interplays.[13] However, scholars have not sufficiently examined how existing *non-environmental* institutions are adapting to climate change, and what impact this is having on their mandates.

The goal of this paper is look beyond the climate regime's focal institution and to assess why and how emerging powers contribute to institutional proliferation in the climate regime. More specifically, why have emerging powers, despite their diverse economic and political capacity, turned to multilateral

[9] Keohane and Victor 2011, 7.
[10] Regime complex consists of not only state actors and state-driven institutions, but also non-state actors that play crucial role in its operation and complexity. However, for the purpose of this paper, I focus on institutions whose members consist of nation-states.
[11] Keohane and Victor 2011.
[12] Jinnah 2011.
[13] Hall 2016; Jinnah 2014.

institutions and establish new ones from scratch in the heavily saturated climate change regime, instead of using easier and less costly alternatives? What is the mechanism of doing so, and how were they able to achieve success in the establishment process, given the sheer cost of IGO establishment and the poor track record of initiating multilateral institutions in the past? What does the institutional choice and implications mean for the regime complex for climate change? These are the main questions that guide my research. I address the first two by looking at both domestic preferences and international factors around the establishment of the two cases, and the third one by examining the norms, operations, and guiding principles of my cases in the context of the broader regime fragmentation and complexity for climate change. Bringing domestic perspectives into the current debates, this paper argues that emerging powers have set up institutions and engage in multilateral arrangements as response to both domestic and international pressures. Successful substantive linkages of economic development, sustainable development, and climate change were the mechanism of doing so, and the coalition of like-minded countries, among others, was a key success factor for their establishment.

The findings from this paper point to the broader debate in research on international environmental governance, international relations theory over the utility and impacts of international cooperation and institutions, the effectiveness of international regime complexity or fragmentation on global environmental governance.[14] Studying formal governance initiatives and institutions is a natural focus for the global environmental politics field, given that it emerged from a desire to develop policy in the face of a mismatch between political borders and problems without jurisdictional boundaries.[15] Although formal IGOs have been seriously neglected in the theoretical study of international regimes for several decades, they have played a major role in many, if not most, instances of interstate collaboration.[16] The fact that the IGOs have not been abandoned by states – and in fact continue to be created – is testimony to both their actual value and their potential. A better theoretical and empirical understanding of IGOs should help improve their performance. The policy implications of analysis are significant as well. Many states, notably the US, resist the creation of IGOs and hesitate to support those already in operation, citing the shortcomings of international bureaucracy, the costs of formal organization, and the irritations of IGO autonomy.[17] By focusing on the other side of the ledger, I hope to draw important lessons that may offer a different perspective from which to understand IGOs in the context of the climate change regime.

I examine these arguments in the context of IGOs that have been established since 2010 by emerging countries on the broadly defined area of climate change.[18] I employ process tracing to analyze the incremental ways in which state selected a certain institutional design and how those choices generated patterns of institutional development towards greater or lesser regime complexity. The establishments of international institutions on climate change are considered as deviant cases from expected trends, which would be continuing its business-as-usual developmental model and using bilateral transactions, modifying existing institutions, creating nested institutions, and/or forum shopping. I attempt to determine the specific factors that have contributed to these phenomena. Drawing from

[14] O'Neill 2017; Pickering, Betzold, and Skovgaard 2017; Young 2011.
[15] Dauvergne and Clapp 2016.
[16] Abbott and Snidal 1998.
[17] Ibid.
[18] My other cases include the Global Green Growth Institute (Korea), and the South-South Cooperation Fund for Climate Change (China). For the purpose of this paper, I focus on two multilateral development banks.

theoretical perspectives on international political economy, I identify factors, such as the levels of dissatisfaction and heterogeneity of interests within existing organizations,[19] which may have played a role in triggering the establishment of new institutions by emerging powers. Based on the literatures on domestic coalition formations and expert interviews, I explore the ways in which domestic preferences and interests lead to linkages of certain issues and the establishment of IGOs.

This paper proceeds as follows. In section 2, I explain my research design, followed by the theoretical and conceptual framework in section 3 to engage the debates on the utility of international institutions and difficulties with establishing international institutions and regimes, to delve into the evolving linkages between sustainable development and climate change, and to see how emerging countries are actively making and utilizing these linkages to exert themselves as central players in negotiations and regime formation. Section 4 explains these outcomes with in-depth case studies, followed by discussions in section 5. I end with preliminary conclusions.

2. Research Design

In this study, I engage in theory-guided analysis, in which my interpretation of changes in the climate regime complex is structured by a more general understanding of how institutions emerge and change in world politics. The advantage of such a disciplined interpretive case study is that, by applying known theories to a new terrain, it forces one to sharpen these theoretical perspectives and it may generate new suggestions for improving the theory.[20]

I focus on two cases: China's Asian Infrastructure Investment Bank (AIIB) and the BRICS' New Development Bank (NDB). Case selection is based on a most-different systems design, with the outcome of interest as the establishment of formal IGOs by emerging economies on the broadly defined issue-area of climate change. The two cases display considerable variation in the independent variables, yet have the same outcome. The AIIB, established in 2015, is the first multilateral development bank (MDB) driven by China's leadership to finance infrastructure projects in Asia, with 52 founding members and headquarters in Beijing. The NDB, proposed by India in 2012 and established by the BRICS as an MDB in 2015, supports infrastructure financing in the BRICS and other underserved, emerging economies. Difference of these cases means I can control for many alternative explanations. However, because multiple causal factors are hard or impossible to determine using this method, I aim to rule out "necessary" causes for my outcome than determining causality.

The cases in this study have an important role to play in assisting developing countries, who are predicted to be the most vulnerable to climate change, and contribute to invigorate a South-South development assistance and cooperation regime. This is particularly important. as there is no new global "adaptation" organization tasked with assisting developing countries with preparing for and dealing with the impacts of climate change.[21] Climate change itself is not the explicit motivation or purpose of the establishments of my cases, but it comprises an important element in their approach and founding. As will

[19] Colgan, Keohane, and Van de Graaf 2011.
[20] Odell 2001; Colgan, Keohane, and Van de Graaf 2011.
[21] Hall 2016.

be explored in depth in subsequent sections, this integration of climate change and sustainable development considerations is highly significant and deviant from expected trends for these emerging countries, particularly in the light of climate justice perspectives and the common but differentiated responsibilities and respective capabilities principle enshrined in the UNFCCC.

I have built on the secondary literature of each organization's history and evolution, which is detailed in the case studies. I also analyzed the publicly available speeches, reports, policy papers, and proceedings relating to my guiding questions. While I consider my cases' performance to date, my analysis is by necessity largely perspective; both cases are still new and significant aspects of their operation remain undecided. For supplementation and triangulation, I conducted semi-structured interviews with over 40 officials, practitioners, and scholars from my fieldwork between December 2016 and March 2017. Almost all interview participants are kept anonymous, in keeping with their wishes.

3. Theoretical and Conceptual Framework

3.1 Political and Institutional Context and the IGO Establishment

A careful examination of today's political and institutional trends and context reveals that the emergence of new IGOs is indeed a rare and unusual phenomenon. The creation of multilateral organizations and treaties has slowed,[22] with states turning to less formal institutions,[23] signaling declining multilateralism.[24] Non-state, private and networked forms of governance – polycentric governance – have proliferated, responding to perceived weaknesses in the multilateral system.[25] Sustainable development governance has been at the forefront of these moves, notably by promoting public-private partnerships as a primary means of implementation at the 2002 World Summit on Sustainable Development (WSSD).[26]

In this context, I start with a question asking why states would set up an IGO. Abbot and Snidal (1998) highlight centralization and independence as functional characteristics that lead states to prefer IGOs to alternate form of institutionalization. As network-weaving organizations, IGOs allow for the centralization of collective activities through a concrete and stable organizational structure and a supportive administrative apparatus.[27] These increase the efficiency of collective activities and enhance the organization's ability to affect the understandings, environment, and interests of states. Independence allows IGOs to act with a degree of autonomy within defined spheres. It often entails the capacity to operate as a neutral party in managing interstate disputes and conflicts. Therefore, states consciously use IGOs both to reduce transaction costs in the narrow sense and, more broadly, to create information, ideas, norms, and expectations; to carry out and encourage specific activities; to legitimize or delegitimize particular ideas and practices; and to enhance their capacities and power.[28]

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[22] Pauwelyn, Wessel, and Wouters, 2012.
[23] Vabulas 2013.
[24] Biermann et al. 2009.
[25] Ostrom 2010; Rayner, Buck and Katila, 2010; Abbott 2012, 2013; Abbott & Hale 2014.
[26] Bäckstrand and Kylsäter 2014.
[27] Ingram and Torfason 2010.
[28] Abbott and Snidal 1998.

In addition to these advantages, taking the initiative to establish an IGO can heighten one's influence within the institution and facilitate the process of establishing its headquarters in one's country. The advantages to a host country for supporting the headquarters of an international institution are immense. These advantages may include easier and more rapid access to the activities of the institution in terms of research, data, and human capital, opportunities for informal networking, and ideological influence through immersion of the institution's staff in the host country's academic, journalistic, and social sources of information.[29] All of these benefits are especially important for emerging countries, which have not, until recently, been successful with hosting prominent international institutions except for some exceptions.[30]

Despite these advantages, IGOs are difficult to establish. Scholars have viewed that certain conditions were necessary for new institutional arrangements, be it the existence of a hegemonic state that is willing to bear the cost of setting up new institutions[31] or the occurrence a severe and sudden crisis that triggers punctuated equilibrium of institutions.[32] Empirically, in order to create international institutions, states have to engage in various and sometimes painstaking tasks, such as acquiring information about the issue, about each other, and about the likely effects of alternative institutional forms. In addition to the initial "start-up" transaction costs, there are other types of transaction costs, such as safeguards to ensure compliance and sustain cooperation.[33] Given the various costs involved in creating institutions, actors seeking to pursue common interests in a new area may prefer, wherever possible, to make use of preexisting institutions rather than start from scratch, engage in forum shopping or regime shifting in which dissatisfied actors choose to operate through particular institutions or shift to other regimes, settle for relatively minor institutional changes, or create nested institutions in which broader regimes have influenced the design of them that are narrower in scope, hence "nesting" the new ones within an existing institutional context in hierarchical fashion.[34]

The context in which *de novo* institutions are positioned within makes their establishment even harder. The post-World War II order is more institutionalized than ever, and has a durability that past orders did not.[35] It has more layers and realms of rules and institutions, which are more deeply rooted in the economies and societies around the world. Governments and their domestic constituencies have vested interests in existing designs, and thus resist change. This results in dissatisfaction to some member states that are frustrated with inflexible and sometimes outdated institutional arrangements, but the same inflexibility contributes to the durability of existing institution. In other words, this "stickiness" of international institutions and regime means that once they are constructed, they do not die off easily as states rarely disestablish old ones.[36] Furthermore, institutions established for certain tasks can and do change their approach, purpose, and focus once their original ones become obsolete or irrelevant (e.g., World Bank's focus from Europe's reconstruction post-WWII to global poverty eradication, the UN's mission creep, etc.).[37]

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[29] Lipscy 2003.
[30] Examples include Manila, the Philippines (Asian Development Bank) and Nairobi, Kenya (UN Environment Program).
[31] Kindleberger 1973; Gilpin 1975; Krasner 1976.
[32] Colgan, Keohane, and Van de Graaf 2011.
[33] Williamson 1985; and Yarbrough and Yarbrough 1992.
[34] Duffield 2003; Aggarwal 1998; Biermann et al. 2009; Busch 2007; Raustiala and Victor 2004; Helfer 2004.
[35] Ikenberry and Lim 2017.
[36] Jupille, Mattli, and Snidal 2013.
[37] It is interesting that most regional and multilateral development banks have started their existence with a major or exclusive focus on infrastructure. For example, the European Investment Bank (EIB) started its operations with the aim of building key infrastructure that helped integrate infrastructure between European countries. Similarly, the World Bank was established to support the reconstruction of European infrastructure after World War II. Over the course of time, most of these multilateral

Given these difficulties and context, what explains the establishment of *de novo* IGO? One possible explanation comes from the voice-exist model, which posits that when migration of a governance site to an outside institution takes place, it is likely to result from dissatisfaction with the outcomes under the existing arrangement.[38] In this model, dissatisfied member states have two options: they can either "voice" and attempt to reform the organization, or they can "exit" by withdrawing from the organization.[39] Given the high costs of exit, voice is the default option for dissatisfied states. However, their strategy often changes when an organization is, or is perceived to be, "captured" by an actor or coalition of actors, who influences the institution's distribution of benefits and costs among members, and the institution appears to be impermeable to change as a result.[40] Another way of thinking about institutional change is in terms of the demands for and supply of innovation.[41] Demand is created by strong dissatisfaction by policymakers with the outcomes of the regime complex. This dissatisfaction typically stems mainly from dissatisfaction with the distribution of material benefits that arises from the regime complex, although symbolic issues may sometimes be relevant as well.[42] Unsatisfactory outcomes may be perceived as a result, in part, of ineffective, missing, or inappropriate institutions. As dissatisfaction about outcomes in the issue-area increases, so do opportunities for change in the institutional landscape. Therefore, although *de novo* institutions are costly and difficult to establish, the standard explanation for them is that they are a result of dissatisfied states seeking alternatives that would better serve their interests.

However, high levels of dissatisfaction by one set of states or another are a necessary, but not sufficient condition for institutional innovation. Colgan et al. (2011) suggest that the character and degree of institutional change depends on the degree of homogeneity of preferences among the key players in the existing institutions. In this context, major institutional innovation such as creation of new organizations occurs only when dissatisfaction with the status quo is intense among major actors and when their interests are heterogeneous; when those interests are homogenous, change is path-dependent, involving incremental changes in existing institutions. However, not all dissatisfied states have turned to establishing alternative institutions (the Global South), not all institutions needed a coalition of states that spearheaded the establishment process (AIIB) and not all alternative institutions were established by dissatisfied states, as will be explored in subsequent sections.

Failed Attempts: EAC, AMF, NIEO, Northeast Asian Development Bank

What is unique about the cases in this study is that they have actually succeeded in becoming established. Other attempts by developing and emerging countries, particularly in East Asia, to establish regional/international institutions in the 20th century have failed or stalled at the proposal stage due to various factors, such as strong opposition from the region's hegemon, lukewarm response from neighboring countries and hence lack of a strong coalition in favor of the creation of the institution, and the issue-area being heavily

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banks diversified and expanded their activities to lend to other sectors (e.g., social sectors, indirect lending via global loans channeled through commercial or other banks to SMEs), and in the past few decades, have increasingly focused on more sustainable development (Griffith-Jones 2014). Many of them have also started positioning themselves as "knowledge banks" that disseminate the lessons learned from their experience to help build human capital.

[38] Helfer 2004; Kahler and Lake 2009.

[39] Hirschman 1970.

[40] Van de Graaf 2013. Mansfield 1995.

[41] Keohane 1982.

[42] Colgan, Keohane, and Van de Graaf 2011.

dominated, or captured, by existing institutions. Of course, the external and internal conditions are different today, and it is impossible to tease out every confounding factor. However, looking at these cases may provide important lessons and insights for explaining why these recent institutions have been successful. I plan to investigate the internal and external conditions around three proposals: the East Asian Economic Group (EAEG), the Asian Monetary Fund (AMF), and the Northeast Asian Development Bank (NEADB). The East Asian Economic Group was advocated by Malaysia to create an exclusively Asian institution as an alternative to the Asia-Pacific Economic Cooperation (APEC). The Asian Monetary Fund was proposed by Japan at the height of the Asian financial crisis in 1997, but rejected by the US as it was perceived to be a rival to the IMF and hence failed to galvanize the necessary momentum to move the proposal forward.[43] The NEADC would serve as a multilateral development bank to attract investment in Northeast Asia, specifically intending to incentivize North Korea to denuclearize through access to external capital for development. The origins of the concept for a NEADC can be traced as far back as 1991, but this proposal, too, was met with lukewarm response from the international community with no clear leadership.[44] These attempts indicate that a state or a group of states being dissatisfied with the status quo or having implicit and explicit motivations to establish an IGO is not enough; domestic and international conditions – such as building coalitions, having vested interests, and being strategic about an issue area – have to be met as well.

3.2 Relationship and Linkages: Sustainable Development, Climate Change, and Infrastructure Financing

Some may question the consistency and comparability of the cases in this study. After all, neither of them positions itself as an institution focusing exclusively and specifically on climate change mitigation and adaptation, but rather put their priority on economic development and growth in developing countries. However, at an institutional level, they have incorporated sustainable development and climate change considerations into their framework and operational guidelines, as will be explored in section 4. At a regime level, the relationships among climate change, sustainable development, and economic growth are increasingly getting blurred, in which financing infrastructure projects is considered myopic and anachronous and subject to severe criticisms from watchdog organizations if they do not take into account environmental and social sustainability and climate change considerations.

This section focuses on the emergence of a substantive issue-linkage between climate and (sustainable) development, which in turn offers a rationale for the AIIB and the NDB to serve as case studies. This linkage shapes when and why these organizations engage with climate change and provides critical contextual information for the following sections. I examine the intersections among sustainable development, climate change, and infrastructure financing to underscore the role of developing and emerging countries in expanding the climate regime beyond the "environmental" problem to a comprehensive complex that has become highly relevant to diverse economic, finance, and development issues, ultimately to argue that the cases have significant implications for the evolution and effectiveness of the climate regime complex.

[43] As an alternative, the Chiang Mai Initiative was established. The aim of CMI is to address balance-of-payments and short-term liquidity difficulties in the region, as well as to supplement existing international financial arrangements. However, it is limited to a regional grouping and to a currency swap, and remains linked to the IMF.
[44] Cho and Katz 2001; Ferrier 2015.

The Rise and Continuance of Sustainable Development

Starting at the 1972 Stockholm Conference, governments in the Global South led in linking environmental protection and economic development under the rubric of sustainable development and stressing the environmental degradation caused by poverty. They have also successfully challenged the environmental priorities and problem frames set out by the international community, arguing that these have focused on problems of greater concern to the North (climate change, ozone depletion) while underplaying the environmental problems of most concern to people in poorer nations (desertification and fresh water availability).[45] These debates have influenced the issues over which countries negotiate in recent decades, as well as the shape of international environmental agreements and national commitments. In particular, they successfully incorporated the principle of common but differentiated responsibilities into international agreements, giving the South additional time or resources to meet (often lower) targets.

However, it was the 1990s that saw intense international attention on the environment and new linkages between the environment and economic development. The 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil, also known as the 1992 Earth Summit, institutionalized sustainable development and norms of liberal environmentalism that predicate environmental protection on the promotion and maintenance of a liberal economic and political order.[46] This normative shift – from "do development and environment concerns contradict each other?" to "how can sustainable development be achieved?" – enabled environmental concerns to gain prominence on the international agenda, and marks the most important shift over the past decades in how the international community addresses environmental problems.[47] The definition of sustainable development, the one adopted by the World Commission on Environment and Development (WCED), is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987; p 43). Some criticize the vagueness of this definition that resulted in incoherent or inconsistent concepts, criteria and policies, but some emphasize that the value of the definition lies in its vagueness, as it allows people with hitherto irreconcilable positions in the environment-development debate to search for common ground without appearing to compromise their positions.[48]

Given the South's initial skepticism, for it to have taken so influential a stand in the environmental arena seems surprising. O'Neill (2017) presents reasons for this. First, unlike key arenas of global economic governance – international trade and finance – that often operate through closed-door meetings of major players, environmental negotiations operate under a more open, "one-member, one vote" process. Second, in addition to finding a collective negotiating voice, Southern countries have critical sources of power and leverage in environmental issues. Given that over half the world's population already lives in the developing world, and that it is in the South that the bulk of the world's industrialization and population growth will occur in the 21st century, their participation was recognized as critical to future global sustainability. In specific issue areas, too, the South has been able to exert material leverage (e.g., biodiversity) or moral leadership (e.g., the hazardous waste trade). It is against this international context that the new IGOs on infrastructure financing with sustainable development

[45] O'Neill 2017.
[46] Bernstein 2000.
[47] Ibid.; Lele 1991.
[48] Lele 1991.

imperatives were established. The South has been unusually active and instrumental in integrating developmental issues into environmental agendas, and vice versa. However, through infrastructure and development financing, countries from the South are taking the initiative and demonstrating leadership in the international community for the very first time.

Enter the Climate Change

Climate change has emerged as one of the defining issues of the early 21st century. Global surface temperatures in the past decades are 0.8°C higher than the start of the 20th century, with two-thirds of this warming having occurred since 1975.[49]. There is a high probability of observed trends, such as increases in heat waves and heavy precipitation events, intensifying over the 21st century.[50]. Extreme weather and climate events are anticipated to generate significant risks to societies and ecosystems.[51]

Initially, climate change had been regarded as a typical environmental, scientific problem. As a result, climate change science is well developed and capable of measuring and assessing the environmental consequences of climate change. By comparison, social scientific research on climate change is more recent, far less coherent, and lacks consensus on either epistemological or substantive grounds.[52] In practice, policymakers have been fixated on finding solutions that often get stuck, because the environmental policy toolkit consisting of relatively simple technological shifts and regulatory policies is poorly matched to the central regulatory task in slowing climate change.[53] Most of the politics of environmental policy are handled by ministries that in most governments are peripheral to the policy challenges of climate change involving the design and management of a slow, costly, and difficult transformation in how society obtains and uses energy.

Climate change is now classified as a "super wicked" problem.[54] It is inherently difficult to resolve because of its complexity and interdependency with other issues. Climate change has an impact on a huge number of areas, including issues of direct consequence to development organizations. With climate change, development actors that have embraced sustainable development are propelled to address climate change mitigation and adaptation as well, moving away – at least rhetorically – from the fossil fuel intensive industrialization model that worked phenomenally for today's developed countries.

The broadening of the climate change regime enabled states to undertake forum shopping and a range of new institutions to engage with the UNFCCC, even though they were not environmental or climate change oriented. States initiated climate discussions in venues traditionally not associated with environmental governance, including the G8, the Asia Pacific Economic Council, and the World Trade Organization. These actors made substantive issue-linkages, elaborating how climate change impacted on their issue-areas and vice versa (Hall 2016). A different framing for climate change was also used, to frame it as a development, energy, and finance issue rather than an environmental one. Development

[49] Hansen, Ruedy, Sato, & Lo, 2010.
[50] IPCC 2007.
[51] IPCC 2012.
[52] Levin et al. 2012.
[53] Victor 2011.
[54] Levin et al. 2012. "Super wicked" problem comprising four key features: time is running out; those who cause the problem also seek to provide a solution; the central authority needed to address it is weak or non-existent; and, partly as a result, policy responses discount the future irrationally.

agencies looked to "climate proof" their development activities.[55] The World Bank, for example, has begun an effort to assess the exposure of its lending and grant portfolio to changing climate. In 2006 it reported its first assessment, finding that 20-40 percent of the traditional development projects it manages are subject to climate risk.[56] The World Bank has also limited lending to coal-related projects because of concerns about pollution and climate change. The European Bank for Reconstruction and Development finances coal projects under "rare and exceptional circumstances."[57] Other international and regional development banks follow the suit. Institutions such as the WTO, UNDP and World Bank have begun to pay much more attention to the environment and sustainable development than in the past.[58] Moreover, MDBs' mandate in leveraging their capacities to boost infrastructure investment has been further cemented in the recently launched UN agenda for sustainable development.[59] Therefore, many of the important decisions affecting environmental governance are taken outside the complex system of the global environmental regime and are made instead in areas such as trade, investment, and international development.

In sum, the concept and subsequent institutionalization of sustainable development bridged the gap between the environment and economic development that persisted in the 1970s. As the problem and risk of climate change loomed larger, climate change became not only an environmental problem but also a development concern and underlying objective. For developing and emerging economies, climate change was initially seen as a challenge that would compromise their development and growth potential. However, with changing international context and priorities, it is increasingly embraced as an opportunity for growth. Climate change is now part of the development rhetoric for developing and emerging economies.[60] They have made this substantive linkage very strong. As long as climate change can be used to further developmental goals, developing countries will not shy away from embracing it.

4. Case Study

This section traces the origins and evolution of new international institutions whose establishments were driven by non-traditional donor countries. By doing so, I aim to delineate implicit and explicit motivations behind these institutions, determine necessary factors that have led to their successful establishment, and draw implications for the regime complex for climate change. For comparative purposes, these institutions share a number of important similarities. Although my cases here are not a representative sample of the total population of new IGOs, they are united by the fact that they are both treaty-based IGOs created, funded, and mandated by states to perform particular tasks on their behalf, established recently by the leadership of a developing countries or a group of them, focus on

[55] Gupta 2009.
[56] World Bank 2006. However, decisions that govern production, trade, and investment often pay inadequate attention to protecting the environment and human needs. Most development is not yet sustainable and the environment is seen as an add-on rather than the essential foundation of all human well-being and economic production (Chamber 2009). Although the bank is being asked to take a lead on climate change and committed to do so (Parnell 2013), without significant changes in the World Bank's governance, substantial new resources and a new multilateral authority, the Bank's work will be full of contradictions (Woods 2009) because it has to work with large emerging economies that are its fee-paying clients.
[57] Smyth and Hornby 2016.
[58] Chambers 2009.
[59] United Nations 2015.
[60] Interview in Beijing, 2017.

financing infrastructure projects in developing countries, and are based on the Global South. Their establishments strengthen the voice of developing and emerging economies in the development finance architecture, as well as provide much needed additional finance.[61]

4.1 Asian Infrastructure Investment Bank

In 2013, just before the APEC meeting in Bali, Chinese President Xi Jinping proposed the establishment of the AIIB to provide funds for infrastructure demands in the Asia-Pacific region. The lack of details on China's plan since President Xi's proposal has led to rampant speculation about its scope and composition, and how it may (or may not) align and engage with existing development institutions and investors.[62] Amidst the controversy and US's initially blatant opposition, the AIIB attracted a surprising number of, and composition of, members, with 57 countries and important donor and US ally countries such as UK, France, and Germany. Operational since January of 2016, the AIIB is headquartered in Beijing and headed by Jin Liqun, the former head of China's sovereign wealth fund and a former senior official at the ADB. This arrangement was contrary to experts' prediction that China would have to give up either the location of the headquarters or the person in charge to be open to other Asian governments.[63] This decision has somewhat reinforced the notion that the AIIB is a Chinese-run entity.

Motivations

China's explicit motivation behind AIIB is the significant funding need for infrastructure investment. There are about 360 million people in the Asia-Pacific region who do not have access to clean water, and about 160 million who do not have access to permanent power and basic social infrastructure.[64] In 2009, the ADB estimated that Asia needs USD800 billion annually for the next decade in infrastructure investment.[65] Yet, it lent USD10 billion a year for infrastructure, providing scope for other entities such as AIIB. Even with the World Bank, which with ADB collectively put in about USD 45 billion toward funding projects in Asia,[66] the funding gap is significant. The ADB's new estimation in 2017 of infrastructure investment needs in Asia to maintain growth, tackle poverty, and respond to climate change is more than double the original estimate – USD 1.7 trillion annual,[67] further highlighting the gap and demand for investments. Private funding of risky and long-term projects is often either expensive or non-existent.[68]

However, much more focus has been on China's domestic motivations. International institutions and organizations are difficult to establish, as explored in section 3.1. China's decisions to establish an array of multilateral institutions (One Belt, One Road initiative, South-South Cooperation Fund, Silk Road Fund, etc.), despite the difficulties, have stirred a lot of speculations and skepticisms, particularly from the realist perspectives that see international institutions epiphenomenal to national interest and power. To them, the

[61] Griffith-Jones 2014.
[62] Santos 2014.
[63] The Economist 2013.
[64] Ibid.
[65] ADB 2009.
[66] Ying 2014 .
[67] Asian Development Bank 2017. The inclusion of climate-related investments, the continued rapid growth forecasted for the region, and the inclusion of all 45 ADB member countries in developing Asia (compared to 32 in the 2009 report), and the use of 2015 prices versus 2008 explain the increase.
[68] Wolf 2015.

AIIB was to alter the balance of power between the US and China, to challenge whether the US-created system is best able to meet states' needs or a Chinese model of international political economy (some kind of "Beijing consensus") can do better.[69]

I attempt to go further and delve into domestic motivations as well as international demand to argue that several factors are at play,[70] Some point the bank's creation to China's effort to find more profitable investment channels for its USD3.8 trillion foreign-exchange reserves, which are now mainly invested in low-yielding US treasuries.[71] Others have argued that the AIIB will be used to promote internationalization of China's currency, renminbi.[72] More altruistic views suggest that China simply wants to give back to the international community now that it is wealthier than before.[73] I focus on the most prevalently discussed motivation: China's dissatisfaction with current institution and ambition to construct a grand scheme that satisfies China's national interest, thereby challenging the hegemonic US in Asia. I argue that this factor alone is not sufficient to explain the AIIB, giving room for other explanatory variables.

The AIIB is seen as China's attempt to establish an alternative institution out of frustration with current arrangements. In recent years, China and other developing countries perceive major development institutions such as the World Bank, the Asian Development Bank (ADB), and the IMF to be "captured" by industrialized, Western states (including Japan) and their neoliberal ideology. The founders of these "legacy" institutions built in several institutional protections for their preeminent position, most obviously the US veto on constitutional decisions, and the gentlemen's agreement that the US supports the European's choice of Managing Director of the IMF and the Europeans support the American choice of president of the World Bank.[74] The Bretton Woods systems locked in balances of power and policy paradigms for lengthy periods of time, and gave those in privileged positions a stake in protecting extant designs, especially non-majoritarian ones.[75] On the one hand, feedback effects over the past decades created a favorable environment for learning, critical masses of support, and the spillover-like expansion of international cooperation. On the other hand, detrimental feedback effects resulted in path dependency becoming inflexible and inefficient because more veto players populated the scene, and the status quo increasingly biased the actors' interests and perceptions.[76] The more decision-making becomes linked and

[69] Ikenberry and Lim 2017.
[70] Less discussed perspectives include the ones that point out that China's frustration is not just about its weight within the existing institutions, but about where their attention is. In the case of the World Bank, China has argued for years for more focus on infrastructure and growth (Dollar 2015). Some offer alternative perspectives, arguing that China is not necessarily interested in becoming a leader in today's global governance architecture, but actually wants a minimal role as it has been shying away from taking on more responsibilities in some global affairs. They argue that the view that China wanting increased voice and influence is misleading, and that China's decision to embrace multilateralism is a sign that its own bilateral efforts have not worked well (Beattie 2015). However, the fact that China is engaging with multilateralism and new and old international institutions does not support this view. A careful assessment of China's bilateral assistance and multilateral engagement would also better delineate this picture.
[71] Anderlini 2014; The Economist 2015.
[72] Financial Times 2016. In 2016, AIIB has ruled out lending in currencies other than the dollar, signaling that Beijing will not use the development bank as a platform to promote renminbi internationalization.
[73] Interview in Beijing, 2017.
[74] Wade and Vestergaard 2015. The heads chair the boards and hold senior management and staff to account, promoting, hiring and firing, and setting directions for each organization. Their actions are ostensibly supervised by an executive board which is said to be ill-equipped to hold management to account (Woods 2009). The result is that the countries who appoint the President and the Managing Director skew the accountability of the whole organization towards themselves.
[75] Fioretos 2011.
[76] Alter and Meunier 2009.

insular, and the more international cooperation creates winners and losers, the larger and more dissatisfied the political outgroup can become.[77]

Developing countries have complained for decades of a lack of fair voting rights at these institutions, and of the strict austerity measures imposed on governments if they are to receive emergency bailouts. As one of the largest economies in the world, China has been perceived as being increasingly frustrated by its persistently insignificant voting power that does not compare with its international standing. Many of the existing global rules and institutions were established prior to China's ascent and entry into the global system. [78] Their governance structures are locked into the past, reflecting a world in which the US was the largest creditor and financial stability depended upon decisions made by the US or G7.[79] It is perhaps a natural course that China takes as its economic and political powers increase; great powers rise up and contest the terms of international order (Ikenberry 67 Gilpin and Paul Kennedy) as their interests expand outward.

Another perspective assesses the AIIB in the context of China's grand multilateral strategy. In 2013, China proposed the One Belt, One Road (OBOR) initiative, to create the world's largest platform linking China and Central Asia, West Asia, and parts of South Asia for economic cooperation, including policy coordination, trade and financing collaboration, and social and cultural cooperation.[80] The AIIB was seen to finance the OBOR initiative, ultimately to serve China's interests. However, regardless of the voting share, the AIIB is a treaty-based, independent IGO. If some of the OBOR initiative projects meet the AIIB's project selection criteria and meet the bank's goals, it will bid to finance them; AIIB will be just one of many financing entities for the initiative.[81]

Success and Constraining Factors

How was AIIB successfully established? AIIB's establishment was considered a breakthrough, partly because there was a strong initial opposition and eventual reservations from the US and Japan, the traditional hegemonic powers in the region.[82] I identify AIIB's success factors as the broad membership that has built a winning coalition without the US and Japan, differentiating itself from existing institutions and positioning itself as a parallel, not overlapping, institution to provide convincing rationale for its presence, and making a strong substantive linkage of sustainable development and climate change imperatives with infrastructure financing.

The US Treasury Department has criticized the AIIB as a deliberate effort to undercut the World Bank and the ADB. Washington saw the AIIB as a political tool for China to pull countries in Southeast Asia closer to its orbit, a soft-power play that promises economic benefits while polishing its image

[77] Alter 2000.
[78] Ikenberry and Lim 2017.
[79] Woods 2009. Today, the US is the world's largest debtor and financial stability depends as much on decisions made in Beijing and Dubai as in Washington. Global development finance is increasingly accessed directly from private sources and from emerging economies.
[80] Jinchen 2016.
[81] Interview in Beijing, 2017
[82] US officials claim they have not "lobbied against" it, but merely stressed how important it is that the AIIB abide by international standards of transparency, creditworthiness, environmental sustainability, and so on (The Economist 2015).

among neighbors in territorial disputes.[83] The US's attitude worked initially, as three major countries in the region – Japan, Australia, and Korea– that were conspicuously absent at the AIIB's Memorandum of Understanding signing ceremony, where twenty-one countries signed in October 2014.[84] Notable American ally signed up to becoming an AIIB founding member, despite Washington opposition was Singapore, who said it wanted to shape the bank from the inside rather than remain a critic outside.[85] In the past, the lack of a winning coalition was sufficient to break apart or stall proposals for international initiatives, as explored in section 3.1. China did declare that it was going to go ahead with AIIB even if nobody else joins it,[86] and it has the financial and political capacity to do so. However, at this stage, it seemed Washington successfully deprived the AIIB of the prestige and respectability that the Chinese sought.[87]

In March 2015, however, in a landmark move, the United Kingdom expressed its interest to apply and join AIIB as a founding member and becoming the first of the advanced economies from the west to show support for the AIIB. As Singapore did, the UK stressed that "the UK will play a key role in ensuring that the AIIB embodies the best standards in accountability, transparency and governance." [88] London's move paved the way for other European countries, such as France, Germany, Italy, to join the AIIB. Subsequently, Korea, Russia, Denmark, Brazil, the Netherlands, and Australia joined the bank as prospective founding members. The participation of European donor countries, and US allies in the Asia-Pacific region provided the AIIB both a considerable legitimacy and leverage. The eagerness with which non-Asian governments from Europe and the Middle East was both surprising and a source of great confidence for China.[89] A broad base of member states is the major source of legitimacy for the AIIB in the face of the continued reluctance of the US and Japan to join. Even as its widespread membership has quickly elevated the AIIB's global reputation, however, it now becomes a critical component of the AIIB's ongoing viability.[90] The AIIB's decision-making and operations cannot stray too far from Western member state preferences, which are broadly supportive of the existing rules, practices, and norms surrounding multilateral development financing. Therefore, multilateralism is thus a source of both legitimacy and constraint for the AIIB.[91]

There was a high level of initial concerns and criticisms regarding the AIIB's commitment to human rights and environmental sustainability. In response, AIIB architects have embraced the criticisms regarding social and environmental considerations and actively sought advice and consultations from legacy institutions to ensure sustainability of the bank and its operations. These actions were not only effective in countering initial criticisms, but welcomed by critics and practioners. Early evidence shows encouraging signs on paper yet mixed signs in practice.

The AIIB's official *modus operandi* is lean, clean, and green: lean, with a small and efficient management team; clean, an ethical organization with zero tolerance for corruption and green, an

[83] Perlez 2014.
[84] Yang 2014. These countries are: Bangladesh, Brunei, Cambodia, China, India, Kazakhstan, Kuwait, Laos, Malaysia, Mongolia, Myanmar, Nepal, Oman, Pakistan, the Philippines, Qatar, Singapore, Sri Lanka, Thailand, Uzbekistan and Vietnam.
[85] Ibid.
[86] Anderlini 2013.
[87] Perlez 2014.
[88] HM Treasury 2015.
[89] Koh Gui Qing, "How China Decided to Redraw the Global Financial Map," Reuters, September 17, 2015
[90] Ikenberry and Lim 2017.
[91] Ruggie 1993.

institution built on respect for the environment.[92] Environmental and social sustainability is said to be a fundamental aspect of the Bank's support for infrastructure development and enhanced interconnectivity in Asia.[93] AIIB's Environment and Social Framework outlines a vision that includes "supporting green growth" and "assisting clients in achieving their nationally determined contributions" and "developing knowledge." These may become mere greenwashing, but the incorporation of these concepts, and norms and principles that embody them are significant steps for an IGO whose establishment was driven by China.[94] By showing that the AIIB and its practice do not deviate from, but in fact strive to enhance the currently dominant concepts of liberal environmentalism – namely sustainable development – and assist countries with climate change mitigation and adaptation, the new IGO has effectively responded to initial criticisms and pushback from established institutions and environmentalists and positioned itself as a parallel, partner institution and not a rival that will trigger the race to the bottom. Furthermore, by having these terms and ideologies on their official mandates and safeguards, the AIIB is under scrutiny of and accountable to the international community, particularly civil society actors and other institutions.

The bank's actual practice and investment, however, show mixed signals. The bank plans to prioritize investments promoting greenhouse gas emission neutral and climate resilient infrastructure, including actions for reducing emissions, climate-proofing and promotion of renewable energy.[95] Of the nine projects approved in 2016, four are in the energy sector. Despite repeated references to climate change and support for the Paris Agreement in the strategy's guiding principles, however, the four approved projects to date have ignored renewables such as wind and solar, and emphasized growth and connectivity.[96] This trajectory is consistent with one source who said "AIIB is not a climate or environmental organization; it is a development bank. Its priority is to develop, and climate change and environmental considerations are secondary."[97] An assessment of the bank's initial projects and projection suggest that development rhetoric and priority dominate the bank's practice, and sustainability and climate change take sidelines. However, one should bear in mind that the AIIB's identity and trajectory should not be judged by the first round of projects, as they will be "demonstration" projects that need to buy in current and potential member states, ward off criticisms, and most importantly, prove the bank's financial sustainability with low-risk projects.

In sum, a combination of various motivations explain China's decision to establish an MDB: wide and significant funding gap for infrastructure development in Asia, dissatisfaction with current institutional arrangements that give China limited voice and influence, excess foreign exchange reserves, surplus of domestic infrastructure industry, and heightened political, economic, and diplomatic power in the region. For China, a coalition of domestic constituencies or other member states was not a key factor – it was going to establish an IGO regardless of who joins. However, the membership of European donors that have expertise and knowhow and a certain set of expectations and principles for an IGO, gave the AIIB a considerable boost in its legitimacy and international standing. At the same time, this can have an effective constraining force on China's attempt, if any, to unilaterally control the institution. Furthermore,

[92] AIIB 2016b.
[93] AIIB 2016a.
[94] These actions also distinguish itself from the practice of China's Export-Import Bank and the China Development Bank (Larsen and Gilbert 2016).
[95] AIIB 2016a. Vision 16 Measures for Climate Change, pg. 5
[96] The four approved projects to date have ignored renewables. Instead, investments have focused on bringing energy and electricity to rural areas, upgrading fossil fuel electricity generation, and the "responsible" construction of hydropower capacity.
[97] Interview in Beijing, 2017.

because the AIIB is a new MDB established by China on infrastructure financing that existing institutions have already been addressing, it is under a lot of scrutiny and attention from the international community. As one interviewee put it: 'it is not in China's interest to portray AIIB as a Chinese entity, as China wants to have established a legitimate, well-functioning IGO.'[98] Furthermore, through AIIB, China has the opportunity to change its image of ignoring environmental and social issues in the pursuit of growth.[99] A substantive linkage that makes the AIIB important and relevant, however, may also hinder the "lean" process of implementation and innovative approaches to the daunting tasks that address poverty, sustainable development, and climate change.[100]

4.2 New Development Bank

In March 2013, the leaders of the BRICS countries (Brazil, Russia, India, China, and South Africa) approved the creation of a new development bank to finance investment in infrastructure and more sustainable development in BRICS and other emerging and developing countries. This is reflected in the 2013 Durban Summit Declaration and Action Plan:

> In March 2012 we directed our Finance Ministers to examine the feasibility and viability of setting up a New Development Bank for mobilising resources for infrastructure and sustainable development projects in BRICS and other emerging economies and developing countries, to supplement the existing efforts of multilateral and regional financial institutions for global growth and development... We have agreed to establish the New Development Bank. The initial contribution to the Bank should be substantial and sufficient for the Bank to be effective in financing infrastructure (BRICS, 2013: paragraph 9).

The new BRICS bank, officially called the New Development Bank (NDB), has been launched at the sixth BRICS summit held in Brazil in July 2014. The NDB has subscribed starting capital of USD50 billion, with Brazil, Russia, India, China, and South Africa initially contributing USD10 billion each. Based in Shanghai and headed by an Indian national K.V. Kamath, the NDB focuses on the major needs in infrastructure and more sustainable development.

The historical context that gave rise to the BRICS as a bloc and their establishment of the NDB is widely documented and understood. It has been about two decades since Jim O'Neill (2001) of Goldman Sachs coined the acronym BRIC to refer to Brazil, Russia, India, and China.[101] The BRICs have been seen as the vanguard of emerging economies of the Global South. When this term was coined, there was little movement to formalize the group. No clear case of a collective BRIC identity emerged in the cases of the WTO, the G20, and the climate change regime.[102] Since the lowercase *s* has been replaced by an

[98] Interview in Beijing, 2017.
[99] Chin 2015, from Santos 2015.
[100] The World Bank, for example, political pressures and the close scrutiny of NGOs have affected its operations by making traditional donors extremely risk averse to stories of corruption, waste, human rights abuses, and environmental injustices. In response to these pressures, the legacy MDBs have gradually become burdened with a proliferation of rules and processes that are meant to eliminate corruption and safeguard legitimate aims such as environmental and social protection, but that often fail to do so effectively or to serve the institutions' broader development mission. The result is widespread borrower frustration with the hassle factor that increases the costs and delays of major infrastructure projects (Ahluwalia, Summers, and Velasco 2016).
[101] Coined in a 2001 by Jim O'Neill, the author of a Goldman Sachs report entitled "Building Better Global Economic BRICs". Taking various factors ranging from economic size, population, and territory, the report projected that these nations would match and overtake the OECD countries in their economic prowess within 40-50 years.
[102] In the case of the WTO, new powers, such as China, India, and Brazil, are challenging the traditional dominance of the United States in the governance of the global economy. However, as Hopewell highlights, the BRICs took different paths to power:

uppercase S, however, the five-member bloc was advertised as the next global economic powerhouse and both a political and economic challenge to Western dominance of the global governance architecture.[103] Despite sharing little in terms of a common identity with foundationally different economic and political systems, cultural contexts, and belief systems, the BRICS nonetheless slowly institutionalized through ministerial meetings and high-level summits. However, over the past decade, they have been struggling to keep the grouping sustained and relevant. With the exception of India and China, GPD growth has been tepid across the bloc. In late 2014, Goldman Sachs, the original purveyor of the acronym, shuttered its BRICS investment fund after years of losses. Political uncertainty has ravaged Brazil and South Africa. In the midst of these signs of fracture, the NDB, signifying the highest level of international institutionalization, is seen as the only real manifestation of its collective economic might.[104]

In terms of motivations behind establishing the NDB, a similar assessment through dissatisfaction and "voice and exit" framework is often used, as well as factors such as the accumulation of foreign exchange reserves and the need for additional financing for development of developing countries. In brief, there have been fundamental changes and shifts in the global economy, including a radical shift in the world economy towards developing countries, and Asia in particular. Among these countries, the BRICS bloc constitutes 43 percent of the word's population and generates roughly 22 percent of global GDP.[105] For some time, the conditions have been ripe for the establishment of a new development bank anchored in the emerging markets. Several past attempts to reorganize the governance structures of the World Bank and the IMF to give a bigger voice to developing countries have failed.[106] Furthermore, emerging markets have accumulated large long-term foreign exchange reserves over this period, creating the right conditions for a bank like the NDB to emerge.[107] From the perspective of the BRICS themselves, as well as other potential contributors of capital to the new bank, there are clear advantages in putting a small part of their existing reserves into long-term investment in developing countries, as this offers them clear benefits of diversification, as well as improving facilities for infrastructure in countries with which they increasingly trade and invest in.[108] This context and explanations correspond to the ones for the AIIB.

While China's rise has been more closely tied to its growing economic might, the rise of Brazil and India has been driven primarily by their mobilization and leadership of developing country coalitions, which enabled them to exercise influence above their economic weight. This has driven the BRIC nations to undertake very different role behaviors within the WTO. Hopewell (2015) identifies that not only have Brazil and India assumed a more aggressive and activist position in WTO negotiations than China, they have also played a greater role in shaping the agenda of the Doha Round. At the Copenhagen Climate Conference in 2009, Russia distanced itself from the other BRICs. Unlike Brazil, China, and India, Russia sides with the Europeans in its support of the Kyoto Protocol.

[103] Duggan 2015; Ghoshal 2017. After a long campaign, South Africa was invited to join the BRIC grouping in December 2010, changing the acronym to BRICS. With South Africa's GDP only a third of Brazil's and Russia's, and a tiny fraction of China's and India's, South Africa's claims for membership were driven and justified by political rather than economic factors. As Africa is the continent with the largest number of developing states, its largest economy, South Africa, was seen by the BRIC states as a representative of the entire continent.

[104] Griffith-Jones 2014.

[105] Maasdorp 2015.

[106] On the other hand, Woods (2009) points out that the voice of emerging countries has for a long time been curiously absent from the debate about how to reform the Bretton Woods institutions and have not advanced proposals about restructuring because they have too little confidence that such efforts would be repaid. With this line of argument, the push for significant reform in both the IMF and the World Bank is unlikely to come from emerging economies such as China, Republic of Korea, Brazil, Mexico, Argentina and Turkey, who have de facto left the IMF and are much less reliant on the World Bank. Some Asian countries have self-insured, stockpiling their own resources and setting up their own swap arrangements (Chiang Mai Initiative) and developing regional information sharing and standard setting. Emerging economies have access to multiple sources of development financing; some are now donors in their own right (Woods 2009, p.71).

[107] Maasdorp 2015.

[108] Griffith-Jones 2014.

Also like the AIIB, the NDB was initially met with a wide range of reactions, although the intensity of pushback and attention was not as strong as the one for the AIIB, possibly because the NDB emerged out of a coalition of five countries instead of a single country that is China. Some portrayed the NDB as a rival to the World Bank and the IMF, but NDB President made it clear that the objective is to not challenge or replace the existing system of development finance, but instead to improve and complement the system.[109] The article of the NDB states that the purpose of the NDB is to "mobilize resources for infrastructure and sustainable development projects in BRICS and other emerging economies, complementing the existing efforts of multilateral and regional development banks". By positioning itself as a complementary institution and not an overlapping one, as did the AIIB, the NDB highlighted the need for additional institution.

The NDB is unique on at least two fronts: that the member states have an equal share on its governance and it has a heavy emphasis on sustainable development. Each of the BRICS has ownership of one-fifth of the share of the bank, which translates into an equal say in decision-making.[110] This is unlike the World Bank, the IMF, or even the AIIB, where decision-making power is heavily skewed in favor of a particular set of countries. It is also symbolically significant, that despite the major variations of economic size between its founding members – the nominal GDP of China is larger than that of the other BRICS members combined – the NDB was set up on an equal share basis. This also allows an equal weight in the day-to-day management and governance of the bank. However, as Kamath announced in April 2017, the bank is looking to add new members as it prepares to widen its footprint.[111] The terms and conditions for membership have been approved by the board, and the criteria are being worked out. This equitable share of the NDB governance structure will be tested with increased membership.

The NDB has placed sustainable development at the core of its mandate.[112] Since beginning operations in July 2015, NDB has approved seven projects located within the BRICS for a total of USD1.5 billion. Six of them are in the renewable energy sector and one in transport financing. In 2017, it expects to fund 15 other projects with a total value of between USD2.5 billion and 3 billion.[113] This is in a stark contrast with the AIIB, who, despite repeated references to climate change and support for the Paris Agreement in the strategy's guiding principles, does not have a single renewable energy project in its first round of approved ones.

One has to wonder how the NDB was successfully established, given the very little commonalities that hold these countries together. As one interviewee stated, it is not very surprising for the AIIB to be established and run because of China's strong determination; but very puzzling for NDB because they have so little that's holding them together.[114] Perhaps that is why the founding members are looking to expand and diversify its membership. As it expands its membership and geographical scope, however, NDB needs to distinguish itself from the AIIB as both new development banks focus on

[109] NDB 2017.
[110] NDB is also focusing on lending in local currency to help member countries (NDB 2017).
[111] As of 2017, the NDB is working on the criterion to select and look at countries that could be a fit in terms of NDB.
[112] Agreement on the New Development Bank, http://www.ndb.int/wp-content/themes/ndb/pdf/Agreement-on-the-New-Development-Bank.pdf
[113] NDB 2017.
[114] Interview in Beijing, 2017.

infrastructure financing in the context of sustainable development – although the interpretation and the level of ambition seem to differ at this point, based on project selection.

5. Discussion

MDBs make capital available for direct financing into infrastructure sectors from sanitation to telecoms, but also typically provide technical assistance for improving the mobilization of capital, set up monitoring and risk assessment frameworks, and help establish capital market to support infrastructure investment. MDBs may also provide credit enhancement schemes, ensuring funding for riskier projects. Because of these functions, MDBs will continue to play an important role in developing the institutional framework for not only infrastructure financing, but low-carbon, sustainable development in emerging and developing countries.

The dominant rhetoric and explanation for the development community's newest international financial institutions have been consistently reflecting the view that the emerging countries are creating their own rule of law and challenging the existing principles, norms, values, and decision-making processes. However, a more careful examination is warranted, as the effects of multilateralism, interlocking directorates, learning, and path dependency are not negligible. The new institutions are not only mimicking some aspects and practice of existing IGOs but may also repeat the same mistake of letting path dependency, a process by which the prevailing structure, after a specific moment in time, shapes the subsequent trajectory and makes alternative institutional designs substantially less likely to triumph,[115] ossify the flexibility and adaptability of an organization. Ngaire Woods points out that what is missing from the IMF and the World Bank as they are currently structured is adequate 'buy-in' from all their members. If either agency is to be effective as a forum for global negotiations or global action, it must inspire political confidence and engagement of countries whose cooperation is vital if the issues are to be addressed. The institutions must be seen as *neutral meeting ground* within which key governments can meet and negotiate. Each institution must be *perceived and trusted as an impartial arbiter or advisor*.[116] These deficiencies are said to have contributed to the rise of new institutions driven by emerging powers. These fledgling institutions will need to make sure they do not go on to the same paths as the legacy institutions.

Even if the emergence of these institutions driven by developing countries increases the tension and rivalry among entities, competition is not necessarily bad, and even beneficial to recipient countries and the prospect of sustainable development and climate governance as a whole. Additional institutions means further fragmentation and increased complexity, but also mean more options – funding sources, projects, forums – for developing countries who are in desperate need of investment. Initial concerns revolved around the possibility of race to the bottom, where lending institutions are lowering their environmental and social safeguards and conditionalities regarding governance to attract clients, in this case, recipient countries. The AIIB and the NDB are aware of these concerns and that not having and complying with the global standard would risk their legitimacy as fledgling institutions. High standards of governance are one of the contentious issues regarding the AIIB's legitimacy and membership. The US's

[115] Qian 2015.; Fioretos 2011.
[116] Woods 2009.

official position is that "any new multilateral institution should incorporate the high standards of the World Bank and the regional development banks…and that the US has concerns about whether the AIIB will meet these high standards, particularly related to governance, and environmental and social safeguards."[117] However, as assessed in section 4, these institutions are making steps that signify the banks' intent to comply with international standards and procedures, with public consultations and internationally competitive standards.[118] Concerns about the race to the bottom are legitimate and should be taken seriously, but they should not be the reason to not join the banks.

Furthermore, in terms of the overall effectiveness of the global development finance/climate regime, the creation of new institutions and players is already showing signs of generating valuable externalities, both through competition and complementarities. More specifically, the creation of new institutions has a positive spillover to legacy institutions, in which they undertake the long-waited reform of their own governance and approaches. For example, in December 2015, the US Congress finally approved the IMF's 2010 Quota and Governance Reforms that gives more voting rights to emerging economies like China, India, and Brazil. The 2010 reforms were initiated in part by the Obama administration in a bid to keep China satisfied and within the Bretton Woods system.[119] But their stalling in Congress amid Republican concerns that they would diminish US influence at the IMF was seen by many as contributing to Beijing's decision to establish alternative institutions such as the Asian Infrastructure Investment Bank.[120] Griffith-Jones (2014) points out that the mere proposal of a BRICS bank has reportedly encouraged a new proposal by the World Bank to launch a separate fund for infrastructure financing in Sub-Saharan Africa with greater participation for developing and emerging economies, and this expansion and improvement of World Bank initiatives is to be welcomed. Moreover, it was reported in May 2016 that the ADB was open to allowing emerging economies to boost their capital shares, which would thereby increase their formal power within an institution dominated by Japan and the US.[121]

Examining the safeguards, project selection processes, and the content of projects can draw implications for climate change adaptation and mitigation, and the climate regime itself. Given that they are new initiatives driven by emerging countries who have not had a chance to lead governance, the new institutions have opportunities to break away from conventional and highly bureaucratic approach to addressing problems. Since they are new, they are not yet subject to path dependency and inertia that have been causing detrimental effects on legacy institutions.

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[117] Watt, Lewis, and Branigan 2015; Perlez 2014.There are some who view this position unwarranted and hypocritical (Mahbubani 2015; Wolf 2015; Qian 2015; de Mesquita and Smith 2009, among others) as studies have shown that the existing institutions, namely the World Bank and the IMF, have strategically financed projects for national interests of major shareholders.

[118] These procedures and the framework itself are not without criticisms. Civil society actors contend that the provisions in the framework and the manner in which it will be implemented are not as stringent as what should be expected from a USD100 billion development finance institution. These groups raised concerns about a short consultation window (the draft document was released on September 7, 2015; the interim secretariat opened up written consultations until October 6. This is in contrast with the World Bank's lengthy review process for its safeguards, which spanned 4 years from 2012 to 2016), lack of local language translation of the documents for member countries, and a lack of face to face interactions.

[119] Donnan 2015.

[120] Pilling and Noble 2015.

[121] "ADB May Let Emerging Countries Raise Stakes," Nikkei Report, May 3, 2016.

Sustainable development and climate change have become mainstream by corresponding to liberal ideals and market solutions. However, in exchange, the approach and solutions thus far have little tangible effects. Will AIIB/NDB follow the same paths? By employing the same rhetoric, partnering with existing institutions, having western donor countries as members, and recruiting and hiring people from existing organizations, the new institutions have identities that are less China and BRICS than originally anticipated. These commitments and actions may have earned legitimacy and sustainability of the banks' operations, but the approach, norms and principles may vary little from existing organizations. As we need a radical approach to climate change that moves away from business as usual, or incremental changes, we may be missing the narrow window of opportunity.

6. Conclusion

The purpose of this paper was to assess why and how emerging powers contribute to institutional proliferation and regime complexity of climate change. Through the cases of the AIIB and the NDB, I attempted to seek answers to the questions of why emerging powers have turned to establishing *de novo* intergovernmental organizations on the broadly defined issue-area of sustainable development and climate change, and draw relevant implications for the overall effectiveness of the climate regime complex.

Motivations behind IGO establishment are a mix of domestic and international factors at varying degrees. There cannot be a formula since every country or a group of countries has a different external and internal environment. But by identifying what those are, this paper contributes to drawing a more elucidating picture of the establishment and design of international institutions on the issue of the nexus between sustainable development, developing financing, and climate change. The assessment of domestic motivations and international pressure reveals that these cases were established to partly satisfy national interest but also to fill the gap in the governance issue area of development financing and sustainable development. The motivations behind the AIIB and the NDB revolve around domestic and national interests of China and the BRICS, e.g., their dissatisfaction with the current regime that triggered them to seek alternative arrangements, their interest to better reach other developing countries for their market and/or for the improvement of South-South cooperation, for export opportunities of infrastructure sector, for geopolitical reasons, among others. The international factors, namely the actual gap and demand for infrastructure financing and sustainable development are often overlooked. Ultimately, the fair competition and effective coordination between the new and legacy institutions will benefit the recipient countries that would have more options to choose from.[122]

I argue that these institutions represent institutional proliferation and further complexity of the development and climate regimes, not only by the number of institutions external to existing ones but also issue-areas through substantive linkages. By addressing sustainable development and climate change considerations – even if they are secondary priorities – from the angle of infrastructure financing, the emerging countries are exerting themselves as entrepreneurial leaders that hope to complement existing actors. The impact of these institutions on sustainable development and climate change is much more significant than infrastructure financing itself. Nonetheless, a coordination problem persists. In order to

[122] Similar to how it is the consumers who benefit from the low costs of effective solar panel and the overall deployment of low carbon, renewable energy due to renewable energy trade war/increased competition between the US and China (Lewis 2013).

not stop at contributing further fragmentation, there needs a coordinating mechanism and channels to streamline activities of the new and legacy institutions. In addition, the new institutions will need to carefully calibrate their identities and activities to not end up being conceived for symbolic reasons and not as mechanisms for getting things done.

Because of the complexity of the issue itself, as well as political and economic implications, we expect continuous movement towards fragmentation and complexity in the climate regime. Therefore, it is important to determine what these new institutions represent, and whether they engage in innovative mechanisms that better meet the needs of developing countries and that are more effective in climate mitigation and adaptation than the conventional convention-protocol model. Contrary to the initial expectation and perception of new institutions by skeptics and media, that they will exert themselves as rival institutions that offer a set of weaker requirements to recipient countries thereby initiating the race to the bottom for social and environmental outcomes, they may become merely another version of what we already have, just with a different composition of major stakeholders.

From the perspective of climate regime, a new development bank with a significant financial and technical expertise is a welcoming addition. Infrastructure is a key factor in both mitigation and adaptation. The new development banks can play an important role in facilitating mitigation in developing parts of the world, whereby they leapfrog the stage of building and using inefficient buildings and infrastructure that encourages consumptive patterns to the carbon neutral and sustainable one. Infrastructure is also key to climate change adaptation, which anticipates the adverse effects of climate change by taking appropriate action to prevent or minimize the damage it can cause, or taking advantage of opportunities that may arise. Given that the poor and developing parts of the world are also most vulnerable to climate change, both short- and long-term measures are critical, and these new institutions can play an important role.

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