Beyond Principals, Agents and Bureaucracy? The IMF and the OECD Address Climate Finance

- Draft, please do not quote without permission from the author -

Abstract:

Climate finance has been addressed by international economic organizations including the OECD and the IMF. The paper explores which factors that explain the differences in how the two organizations have addressed climate finance. The factors studied include two hitherto overlooked factors: (1) the interaction between international institutions and (2) which ministries that interact with the international organizations, as well as the theoretically derived factors of the bureaucracy of the international organizations, principal-agent relations and membership. The analysis shows that a high degree of autonomy from principals is a key condition for the international organizations' bureaucracies being influential. A low degree of autonomy increases the importance of which domestic ministry international organizations interact with. Both OECD and IMF attempted to influence the output so that it reflected their organizational culture, yet the IMF was a lot more successful due to its larger degree of autonomy. Interaction with other institutions was important in terms of inducing the IMF and to a lesser degree the OECD to address climate finance, but not did influence how they addressed the issue.

Keywords: IMF; OECD; climate finance; international organizations; institutional interaction.

Word count: 9316

Introduction

As climate finance – the financing of climate measures in developing countries – has grown in scope and political importance the last ten years, its relationship to development finance is becoming increasingly important. Climate finance will be defined as financial flows to developing countries "whose expected effect is to reduce net greenhouse gas emissions and/or to enhance resilience to the impacts of climate variability and the projected climate change" (Intergovernmental Panel on Climate Change 2014), the latter purpose also being referred to as adaptation. The emergence of climate finance as a topic has induced a set of international organizations (IOs) primarily focused on economic issues to address climate finance, a group that includes the IMF and the OECD. Their involvement raises important questions regarding which factors that shape their organizational output. Whereas much of the literature on IOs stress the influence of bureaucracy and the ideas about it holds (Barnett and Finnemore 2004; Chwieroth 2008; Chwieroth 2010; Park and Vetterlein 2010a) or the relations to their principals (Nielson and Tierney 2003; Hawkins, Lake et al. 2006) this paper argues that their interaction with other institutions as well as which national ministries they interact with may be as decisive characteristics of an institution as its bureaucracy or relationship to its principals.

In spite of their similarities in terms of economic outlook emphasizing economic objectives and instruments (see Bernstein 2001; Barnett and Finnemore 2004: 45-72) and being dominated by industrialized countries, the IMF and the OECD differ both in the degree to which they have addressed climate finance and how they have framed it. The OECD has been far more prolific than the IMF and mainly framed climate finance in terms of existing arrangements for development finance, drawn on environmental economics. as a subtype of development finance, whereas the IMF rather framed climate finance in termsof environmental economics and emphasized global solutions to climate finance including burden-sharing arrangements and multilateral governance. The differences between the two IOs underscores that even from the perspectives of economic organizations there are different ways of addressing climate finance, and exactly how a specific economic IO has addressed climate finance may be explained in terms of different theories of IO behavior such principalagent relations or IO bureaucracy, yet other factors are also worth exploring. The two IOs vary in terms of the autonomy of their bureaucracy: whereas the IMF is highly autonomous, the OECD is less so. Yet, the two IOs also differ in terms of which domestic ministries they interact with (what will be referred to as their governmental constituency): whereas the IMF

predominantly interact with finance ministries and central banks, the OECD interacts with a range of ministries but with finance ministries in a key role. Furthermore, the two IOs differ to some degree in terms of organizational culture with the IMF being more closely aligned with neo-classical economics. The IOs also differ in membership, with the OECD covering only industrialized countries, and the IMF covering practically all countries in the world but distributing voting rights according to the its share of the global economy. Finally, the IOs have occupied different positions within the global climate and economic institutional complexes, with the OECD often acting as a de facto secretariat to the G20. The two IOs have been selected because they as economic institutions not only share a basic outlook but also because climate change or development do not constitute key objectives the way it does for the World Bank or UNEP.

The present paper will explore which factors that explain the differences in how the two organizations have addressed climate finance:

Research question: Which factors explain the differences and similarities in organizational output regarding climate finance between the IMF and the OECD?

The **dependent variable** is the organizational output from the IOs that concerns climate finance, more precisely when they addressed climate finance and how they addressed climate finance. The **independent variables** include the theoretically derived factors of IO bureaucracy, principal-agent relations and membership as well as two hitherto overlooked factors: the interaction between international institutions and which ministries that interact with the IOs.

Answering the question will contribute to the existing theories of IOs by drawing on literature on institutional interaction and bureaucratic politics in order to include the influence of individual ministries and other international institutions on IOs in the theoretical framework. The present paper will also contribute to the academic understanding of how economic IOs address environmental issues. The roles of economic institutions concerning climate finance are important both due to their power compared to environmental institutions, but also since climate finance has gone through a decisive stage the last five years in which actors have argued over governance and the provision and allocation of climate finance as well as the roles of development finance and private finance.

The paper proceeds with a discussion of climate finance and the three key questions that have characterized the discussions regarding climate finance. Subsequently, the paper develops a theoretical framework for studying factors influencing the IO's organizational output, a framework that draws sociological institutionalist and principal agent theories of IOs and on theories of institutional interaction and domestic bureaucratic politics. The theoretical framework is applied to the cases of the OECD and IMF output regarding climate finance, which are described individually and then compared.

Key Issues in Climate Finance

Climate finance has been negotiated within and outside the UN Framework Convention for Climate Change (UNFCCC) for several years, starting with more principal discussions of how much climate finance industrialized countries should provide, which gradually became more concrete. Simultaneously, increasing amounts (though small compared to the estimated needs) of climate finance has been delivered from industrialized countries. The analysis will focus on three issues regarding climate finance negotiations that are particularly pertinent to economic IOs:

- 1. How much finance the industrialized countries should provide individually and as a group,
- 2. How climate finance should be governed, and
- 3. Which principles should determine the allocation of climate finance?

Regarding the first issue the countries agreed on a 100 billion dollar target for 2020 at the fifteenth and sixteenth Conferences of the Parties to the UNFCCC in 2009 and 2010 (plus a fast-start finance target of 30 billion dollar in the years 2010-2012). Yet, the developing countries had in the preceding negotiations proposed a target of 1-1.5 of industrialized countries' GDP, and several industrialized countries were opposed to any targets at all, although not to providing climate finance (Bailer and Weiler 2015: 54-55). The negotiations both preceding and particularly succeeding the 100 billion dollar target have also concerned

whether there should be a burden-sharing key (e.g. based on GDP or emissions) determining the individual country contributions and whether emerging economies should contribute. The US being strongly in favor of the latter and against the former, the EU being in favor of both, and most developing countries being against the latter and somewhat in favor of the former.

The question of contributions also concern the relationship to development finance, particularly whether climate finance should be "new and additional" to the industrialized countries' existing commitment to provide 0.7 of BNI in development finance, a commitment only few industrialized countries have met. While industrialized countries and some development banks such as the World Bank have argued for an integrated approach to climate finance and development finance, often emphasizing the complementarities between addressing climate change and promoting development (Michaelowa and Michaelowa 2011), developing countries and NGOs have argued for treating climate finance as different from development finance. Developing countries and NGOs argue that the two obligations are fundamentally different since climate finance is based on a distinct obligation flowing from developed countries' disproportionate contribution to climate change, whereas aid is based primarily on the responsibility of the wealthy to assist the poor (see Moore 2012; Ciplet, Roberts et al. 2013). Consequently, climate finance should be generated according to effortsharing arrangements different from those for aid; and delivered in a way that reflects developing countries' "entitlement" to funds, that is, with minimal conditions attached and preferably in the form of grants rather than loans (Schalatek 2012).

The discussions regarding how to meet the 100 billion target also concerns the role of private finance (see inter alia Romani and Stern 2013; Stadelmann, Michaelowa et al. 2013). The target covers both public and private finance, but most developing countries prefer a target solely for public finance. Industrialized countries have emphasized private finance, which may lower their contributions of public finance, but other actors have also defined such sources defined as crucial for an efficient response to climate change. In 2010 the UN Secretary General's High-level Advisory Group on Climate Change Financing published a report on their sources of climate finance, which discussed various public, private and so-called innovative or alternative sources (e.g. levies on international aviation) and which provided a framework for discussing the sources of climate finance (United Nations 2010).

The second issue concerns who should govern climate finance, including whether funding should be spent bi- or multilaterally, and through which funds and institutions. In this context it is crucial whether climate finance is treated as development aid or not. Treating it as development aid implies it would flow through (bi- and multilateral) development institutions in which industrialized countries prevailed rather than through UN climate institutions in which the developing countries exert greater control (Hicks, Parks et al. 2008; Persson 2009; Moore 2012: 36-38; Ciplet, Roberts et al. 2013). The vagueness of the finance commitments in the Copenhagen Accord and the Cancún Agreements means that the industrialized countries as a group are obliged to channel a "significant" proportion of their climate finance through Green Climate Fund (GCF), the individual country can decide how much to give to the GCF depending inter alia on whether the GCF allocates finance in a way the country approves of.

The third issue concerns the principles for the provision and allocation of climate finance between countries and between mitigation and adaptation, of which the most pertinent for this article are efficiency and equity (see inter alia Grasso 2007; Hayward 2007; Moore 2012; Persson and Remling 2014; Stadelmann, Persson et al. 2014). Efficiency refers to the "allocation of public resources such that net social benefits are maximised" (Persson and Remling 2014: 489). Thus, efficient climate finance is spent where it provides most mitigation or adaption for the money, which at least in the case of mitigation generally means the emerging economies rather than the Least Developed Countries.

Equity implies that the burden of mitigating and adapting to climate change should be distributed in an equitable way. Equity is a contested concept that is often interpreted in light of more specific normative principles such as Common But Differentiated Responsibility, historical responsibility or vulnerability. Historical responsibility recommends that countries shall contribute to the global effort against climate change (including to climate finance) according to how much they have emitted historically, thus placing a significant burden on industrialized countries (Moore 2012: 38-42). Common But Differentiated Responsibility (enshrined in the UN Framework Convention on Climate Change) implies that the industrialized countries shall take on a larger burden than developing countries due to their higher level of development, and arguably provide all of the climate finance. Unlike the two previous principles, the principle of vulnerability concerns the distribution of climate finance rather than of finance contributions and entails prioritizing adaptation finance over mitigation

finance and the most vulnerable countries over the ones that provide most adaptation for the money (Ciplet, Roberts et al. 2013: 59-60; Persson and Remling 2014: 492-493).

Adaptation finance and mitigation finance differ in that mitigation constitutes a global public good which it is in the industrialized countries' interest to contribute to independently of where it takes place, whereas adaptation in developing countries has only indirect benefits to industrialized countries (Rubbelke 2011: 1474-1475). Adopting a global perspective, mitigation finance is Pareto-improving due to the lower mitigation costs in developing countries, while adaptation finance is not (Rubbelke 2011). Consequently, the arguments in favour of adaptation are based on normative concerns such as the above-mentioned equity principles, unlike mitigation which can be argued for in terms of benefits to the provider. Several developing countries – particularly from Least Developed Countries and small island states – have called for an even split between mitigation and adaptation finance, while developed countries have generally expressed a stronger interest in contributing mitigation finance (Stadelmann, Brown et al. 2012: 134). The allocation of fast-start finance (but not the 100 billion) was supposed to be "balanced" between adaptation and mitigation (UNFCCC 2009: para 8).

Theoretical Framework

The present paper will draw on the literature on international institutions, IOs and international bureaucracies (Keohane 1989; Barnett and Finnemore 2004; Nielson and Tierney 2005; Biermann, Pattberg et al. 2009). Following Robert Keohane (1989: 3-4), international institutions shall be understood as a "persistent & connected sets of rules (formal & informal) that prescribe behavior, constrain activities and shape expectations". According to this definition, IOs constitute one subset of international institutions. A growing body of literature focuses on the IOs as actors in their own right independent of state behavior (Nielson and Tierney 2003; Barnett and Finnemore 2004; Biermann and Siebenhüner 2009a; Park and Vetterlein 2010a). While some scholars equate IOs and international bureaucracies (e.g. Barnett and Finnemore 2004), others treat the international bureaucracies as one (key) component of an IO together with the normative framework and decision-making procedures involving member states surrounding the organizations (Biermann and Siebenhüner 2009b: 7-8). The present paper will draw on the latter definition, focusing on the bureaucracy of the IO as one factor influencing the organizational output of IOs.

Theoretically, the two main strands of literature on IOs are Principal-Agent theory and sociological institutionalism or sociological organization¹ theory (Bauer, Biermann et al. 2009; Hibben 2015). The main focus of both strands have been on explaining the degree of influence of IOs (Nielson and Tierney 2003; Barnett and Finnemore 2004; Biermann and Siebenhüner 2009b), yet some scholars have focused on explaining organizational output and especially changes in organizational output of key IOs (Woods 2006; Chwieroth 2008; Chwieroth 2010; Howarth and Sadeh 2011; Hibben 2015). Principal-Agent and sociological institutionalist theories may have different ontological starting points, but have increasingly been combined (see Howarth and Sadeh 2011; Hibben 2015). The former strand explains the role of IOs in terms of their status as agents that are contracted by principals (the member states) to perform a function that will benefit the principals (Nielson and Tierney 2003: 245; see also Hawkins, Lake et al. 2006). The agents have some degree of discretion to act according to their own preferences, and the principals try to limit this discretion, particularly if it is exercised in a way contradicting their preferences.

The sociological institutionalist/organization theory strand explains the role of IOs in terms of their organizational culture – which defines how they perceive and act upon the world – and their authority as bureaucracies (Barnett and Finnemore 2004; Park and Vetterlein 2010a). This literature draws on the more ideas-oriented bureaucratic politics literature, according to which bureaucratic entities have different preferences and different perspectives on issues (Kaarbo 1998; Allison and Zelikow 1999; Halperin and Clapp 2006). Within each bureaucratic entity policy entrepreneurs may act to frame an issue in particular ways that lead to particular policy responses. The chances of such a framing being successful increases significantly when it draws on key tenets of the organizational culture. Policy entrepreneurs are more likely to succeed in promoting a particular frame if it is characterized by low degrees of prior commitments on the issue and agreement on how the issue shall be understood (Campbell 1998: 382-383; Rhinard 2010: 60).

Biermann et al (2009: 49-57) distinguishes between three kinds of influences on IOs: problem structure, extra-organizational (mainly the member states or principals), and the organization

¹ Whereas Barnett & Finnemore (2004) predominantly draw on sociological institutionalist literature, others such as the contributors to Biermann & Siebenhüner (2009) to a larger extent draw on (sociological) theories of organizations.

itself. On a related note, Woods (2006: 4-5), identify three kinds of influences on IMF and the World Bank lending: powerful governments, the professional background and the institutional environment of the IOs, and the borrowing governments. Whereas the problem structure (climate finance and climate change generally speaking) is constant between the two IOs analyzed here and borrowing governments are not relevant for climate finance, both extraand intra-organizational factors have varied considerably. The collective principals of the institutions vary, with the OECD covering only industrialized countries, and the IMF having voting rules which grant the major industrialized countries – particularly the US – a position close to a combined veto power. Furthermore, in terms of the arrangements through which the member states can influence organizational output, the IMF has more autonomy than the OECD (Busch 2009; Park and Vetterlein 2010b: 11; Ruffing 2010).

Regarding the organizational culture, the IMF and the OECD are somewhat similar, which in the case of the OECD and to an even larger degree the IMF means that the worldview is shaped by neoclassical economics (Chwieroth 2008; Howarth & Sadeh 2011; Bernstein 2001). Yet, the OECD has a much longer track record when it comes to environmental issues, and has been crucial in promoting the paradigm of "liberal environmentalism", a paradigm which stresses economic instruments and compatibility between economic growth and environmental protection and is influenced by neoclassical environmental economics as well as other academic traditions (Bernstein 2001). The organizational culture of both IOs are closely intertwined with the professional background of the bureaucracy staff which shape the inherent worldview of the organization.²

The present paper argues that the literature on international organizations ignores two important aspects of external influences. Firstly, although the relations between different branches of government have been addressed (see Broz and Hawes 2006), the tendency to treat states or the executive as unitary entities means that the intra-governmental dynamics within the member states' governments are ignored. Whereas the sociological institutionalist literature on IOs as bureaucracies draws on literature on the bureaucratic politics on the domestic level, the influence of such domestic bureaucratic politics on IOs has been somewhat overlooked. I argue that drawing on scholars such as Andrew Moravcsik (1998)

² I argue that it does not make sense to see the organizational culture and the professional background of staff as distinct influences, as they often correlate, and it is difficult to determine whether the professional culture leads to the recruitment of staff with a particular background or if staff with a particular background leads to the development of a particular organizational culture.

and Robert Putnam (1988) who focus on the domestic policy processes in defining national negotiation positions, and John Kingdon (2003) and Aron Wildavsky (1986) who focuses on the role of different ministries in the policy process may add important insights to the IO literature. More precisely, the analysis will include the role of the bureaucratic entity (for instance a ministry) that has the political responsibility for representing its country in the interaction with an international institution, what will be referred to as the institution's governmental constituency. The role of the governmental constituency is defined not just by its organizational culture, but also by its power, e.g. finance ministries being more powerful than most other ministries. The IMF and the OECD differ in their governmental constituencies as the IMF's constituency consists of finance ministries and central banks, while the OECD's constists of a wider range of ministries, regarding climate finance the relevant ones including development, environment, finance and economics ministries.

Secondly, besides the vertical interaction between IOs and principals the horizontal interaction between the international institutions, including but not limited to IOs, also constitute a hitherto overlooked influence (Young 2011). The growing body of literature on the dyadic interaction³ between institutions (Gehring and Oberthur 2009; Oberthür and Stokke 2011), as well as on the fragmentation and coupling of institutions into "regime complexes" (Biermann, Pattberg et al. 2009; Keohane and Victor 2011) rests on the assumption that international institutions cannot be understood without including their relationships to other institutions. Here, the focus will be on institutional interaction. Following Thomas Gehring and Sebastian Oberthür, institutional interaction exists if one institution affects the development or performance of another (Gehring and Oberthur 2009). Such interaction can inter alia take place through commitments placed on the target institution, or through processes affecting the ideas held by the IO.

On the basis of the theoretical discussion, a set of propositions has been established, the first two specifically addressing the influence from governmental constituencies and international interaction.

Proposition 1: The governmental constituencies influenced how the institutions addressed climate finance.

³ Often referred to as "interplay."

According to this proposition, one would expect the IMF to reflect the preferences of finance ministries and central banks, while OECD would reflect the diverging preferences of finance, environment and development ministries stand, something which may grant the OECD more discretion.

Proposition 2: Interaction with other international institutions influenced how climate finance was addressed.

According to this proposition, we should expect interaction with other institutions to have influenced the IMF and the OECD, and the influence being more pronounced in the case of the OECD, which has become something similar to the secretariat of the G20. The IMF has been less influenced by the G20 but occupied a role as one of the world's two leading and most powerful financial institutions, while the OECD had less direct power and instead plays the role of knowledge provider.

Proposition 3: The bureaucracy of the IOs influenced how climate finance was addressed.

According to this proposition, we should expect the organizational culture and policy entrepreneurs operating within the organizations playing important roles. These two factors are as mentioned above closely intertwined: the organizational culture shape which actions are possible for policy entrepreneurs, who will need to reframe their arguments so that it fits with this culture. Consequently, it may be difficult to distinguish between the influence of the organizational culture and that of policy entrepreneurs operating within that culture.

Proposition 4: The degree of autonomy from principals influenced how the IOs addressed climate finance.

Drawing on Principal-Agent theory, this proposition suggests that the IMF would have more autonomy than the OECD, since it controls its own resources and produces organizational output independently of the member states, unlike the OECD whose organizational output is reviewed by member states.

Proposition 5: The difference in membership is reflected in the differences in

how climate finance is addressed.

According to this proposition, the member states constituting the collective principal and their respective influence in the formal decision-making procedures (e.g. whether each state has an equal vote) of the institution influences the organizational output. Thus, the IMF would be expected to reflect the preferences of the largest industrialized countries to a larger degree than the other institutions, while the OECD would be expected to reflect the preferences of smaller industrialized countries to a larger degree.

Operationalization

In order to analyze the output of the IMF and the OECD, a combination of process-tracing of the processes leading to the output and analysis of the output has been used in order to compare the processes and outputs of the two organizations. The output has been operationalized as all actions addressing climate finance explicitly as a key issue, including but not limited to official publications and statements. In terms of data material, the way in which the two organizations have addressed climate finance has been analyzed on the basis of official documents and key informant interviews. The key informants are civil servants from the IMF and the OECD who have worked on climate finance representing different divisions of the two IOs, supplemented with interviews with representatives of key member states (the US, the UK, Sweden and India) characterized by strong engagement with climate finance. The analysis of the documents goes back to the first documents addressing climate finance and finishes with preparations for COP21 in December 2015. Official documents approved by the organization have been granted more weight compared to papers published by staff members and not officially approved by the organization.

The purpose of the analysis is to uncover how the organizations have addressed climate finance as well as the processes leading to the organizations addressing climate finance. Regarding the former, the output have been analyzed in order to identify how the IO addresses the key questions concerning climate finance outlined above, and to identify similarities and differences between the two IOs output on climate finance. In this respect official documents have been crucial.

Regarding the latter, the interviews and secondary sources have been used to analyze the

processes, particularly the causes that induced the IOs to address climate finance and that shaped the way in which the IOs addressed the issue.

Analysis

The OECD: The Original Liberal Environmentalists

The OECD membership covers the industrialized countries, including countries such as Mexico, Chile and South Korea which until recently were classified as developing countries. The OECD was established in 1961 in order to promote policies that that will improve the economic and social well-being of people around the world. The term "OECD" refers to the entirety of the OECD including the OECD Council (consisting of member state representatives, the various committees, working groups and expert groups which report to the Council, as well as the OECD Secretariat; the international bureaucracy which is an independent actor in its own right. While Secretariat staff drafts all OECD publications which then subsequently are subject to peer-review in OECD committees, some pass through consensus-based approval by the member states, and others just need approval from the Secretary-General (Ruffing 2010: 201-202). The former group represents the opinion of the OECD as a whole, while the latter only represents the opinion of the OECD Secretariat. The different directorates of the OECD have distinct organizational cultures which correspond to those of their different governmental constituencies, although they do not differ as much as national ministries but are influenced by the overarching organizational culture of the OECD which emphasizes the economic aspects of issues and on the production of knowledge (Ruffing 2010: 202).

The OECD involvement in environmental issues dates further back than the IMF's. The OECD Environment Directorate was established in 1971, and played an important role in developing environmental policy on the global level and within the OECD countries by being instrumental in developing the norm complex of liberal environmentalism (Bernstein 2001). Liberal environmentalism describes a normative compromise predicates international environmental protection on the promotion and maintenance of a liberal economic order(Bernstein 2001). In other words, the OECD Environmental policy solutions based on environmental (predominantly neo-classical) economics (Ruffing 2010: 202).

Since the OECD generally speaking does not possess instruments that can force or incentivize states to change policy (the way that e.g. the IMF can use its conditional lending), the OECD has to rely on cognitive and normative influences (Lehtonen 2007; Busch 2009). A key component of such influence is the OECD Secretariat's role as a producer of knowledge and data on all kinds of subjects, which is fed into and often produced in collaboration with the issue-specific committees and working groups consisting of member state representatives, limiting the autonomy of the OECD Secretariat. Increasingly, the OECD Secretariat is also acting as a kind of secretariat to the G20, providing analyses of key issues, including climate finance.

The OECD has addressed climate finance since the 1990s: in 1998 the OECD Development Assistance Committee (DAC) introduced the so-called Rio Markers for reporting aid projects related to biodiversity, desertification and climate change mitigation. In 2007 Rio Marker reporting became mandatory for member states and in 2010 an adaptation marker became mandatory. The DAC monitors and provides statistics on the Official Development Aid of member states based on review of their reports, and consists of representatives of the member states (mainly development and foreign ministries) as well as of the OECD staff, particularly from the Development Cooperation Directorate. Subsidiary bodies under the DAC such as the Network on Environment and Development Co-operation meet to discuss issues relating to environmental protection and development finance, particularly issues concerning tracking development finance with environmental purposes and the difficulties with such tracking. Beyond the DAC, the OECD has also published numerous reports and arranged workshops and meetings on climate finance, focusing on development finance as well as private finance and green investment. Much of this has been anchored in the Environment Directorate (particularly the Climate Change Expert Group) and the Directorate of Financial and Enterprise Affairs, directorates which work more closely with respectively the environment and the finance and economics ministries in the member states.

The initial causes of the OECD addressing climate finance originated in different places: while much of it was rooted in existing experiences with development, member states were also a key driving factor (interview with senior OECD official, May 25th 2015). Within the UNFCCC negotiations, most OECD member states have actively promoted a role for the OECD in monitoring climate finance, whereas most developing countries have preferred institutions anchored within the UNFCCC. The developing countries feared that the OECD

would be close to its member states interests and preferred monitoring within institutions in which they were represented. Finally, the OECD has been commissioned by other international institutions – particularly the G20 – to undertake research on the mobilization and delivery of climate finance (Kaminker, Kawanishi et al. 2013; OECD Secretariat 2013).

The OECD involvement with climate finance can be divided into two strands: one based on the OECD's established expertise regarding development finance and one based more on its expertise on investment. The former and most politically important strand – the "development strand" – has framed climate finance primarily as a subtype of development finance, and bilateral climate finance as a subtype of Official Development Aid. This framing was particularly pronounced in reports from the DAC and the Development Directorate (but also involved other Directorates especially the Environment Directorate), and reflects the perspective of the governmental constituencies represented in the DAC. Treating climate finance as a type of development finance meant that the OECD helped maintain the current climate finance system in which industrialized countries determine their contributions individually. Thus, the individual industrialized countries would de facto decide the question of how much the industrialized for individual or collective targets for public climate finance. Although the OECD did not explicitly endorse this system it did so by participating actively in constructing it. This system reflects the preferences of the member states.

The second strand – the "investment strand" – to larger degree framed climate finance as an instrument in the transition to low-carbon societies and to redirect investments from "brown" to "green" (Jan Corfee-Morlot, Marchal et al. 2012; Kato, Ellis et al. 2014) and thus did not focus on the size of individual or combined climate finance contributions. The strand was mainly based in the Environment and the Financial and Enterprise Affairs Directorates. Importantly, this strand linked climate finance to two key climate issues for the OECD, viz. fossil fuel subsidy reform and carbon pricing (OECD Secretariat 2010), as well as OECD institutional investment policy (OECD 2014). Fossil fuel subsidy reform, carbon pricing and institutional investment are issues that speak more directly to the powerful OECD directorates that deal with economic issues and to the parts of the OECD governmental constituencies that come from finance and economics ministries. The interaction with finance ministries and institutional investors meant that there was scope for the OECD for teaching actors not traditionally interested in climate issues about their importance, and generally for "pushing

the envelope" within the scope of the OECD mandate (interview with senior OECD official, April 30th 2015).

Regarding the governance of climate finance, within the development strand the OECD readily accepted the role as the monitor of national contributions, and advocated promoting cooperation and coordination within the current fragmented system of institutions outside and within the UNFCCC. Consequently, the system for climate finance would not be radically different from the development finance system with bilateral finance being crucial and the industrialized countries determining their own contribution and how it should be allocated. Thus, the OECD took the current system as their starting point and did not advocate radical changes that would have run against the preferences of its member states.

Regarding the issue of the principles that should determine the provision and allocation of climate finance, the OECD has mainly emphasized efficiency in its publications, devoting most attention to how climate finance could be mitigated most effectively at lowest costs. Private mitigation finance has been much emphasized in this respect (Haščič, Rodríguez et al. 2015). Equity has been emphasized in relation to securing an even geographical distribution that guarantees different regions and kinds of developing countries (particularly Least Developed Countries, Land-locked countries and small island states) their share of climate finance (Kato, Ellis et al. 2014). While the Environment and particularly the Fiscal Affairs Directorates may have been predominantly focused on mitigation (Jan Corfee-Morlot, Marchal et al. 2012; Haščič, Rodríguez et al. 2015), the Development Directorate paid more or less equal attention to adaptation, especially when it came to the development of the adaptation Rio Marker. However, altogether the development strand de facto supported the climate finance system in which the decisions about which principles that should guide climate finance was left to industrialized countries, while the investment strand pushed in the direction of more effective use of finance for mitigation.

The IMF: The Unlikely Environmentalist?

Undisputedly one of the most powerful international institutions, the IMF has a strong track record when it comes to influencing state policy (Vreeland 2007) but has traditionally not paid much attention to environmental protection. The IMF was founded in 1944 in order to ensure international financial stability and monetary cooperation, facilitate international trade,

promote high employment and sustainable economic growth, and reduce poverty. The considerable autonomy and power of the IMF is based on its independence from state funding and its authority stemming from being recognized as an expert organization on economic matters (Barnett and Finnemore 2004: 45-51). The economic training of the IMF officials is essential for understanding the way in which the institution perceives and acts upon the world (Chwieroth 2008), including climate finance. While the IMF has previously been described as a stronghold of the "Washington Consensus", a paradigm based on monetarist economic policy (Vreeland 2007; Chwieroth 2008), scholars increasingly talk about it following a "post-Washington Consensus" including a more Keynesian approach to fiscal policy (Öniş and Şenses 2005).

The initial cause of the IMF addressing climate finance mainly came from institutional interaction, more specifically the G20 asking the IMF and other IOs to provide such analysis. Following the 2010 AGF Report (described above), in 2011 the G20 Finance Ministers tasked the World Bank, working with Regional Development Banks and the IMF, to provide analysis on mobilizing sources of climate change financing (G20 Finance Ministers and Central Bank Governors 2011). It was in this context that the IMF produced its only official publications on climate finance, viz. two background papers on respectively domestic sources of climate finance and international aviation and shipping as sources of climate finance (IMF 2011b; IMF 2011a), a chapter in the report requested by the G20 (World Bank Group, IMF et al. 2011), and an IMF staff position note (Bredenkamp and Pattillo 2010). The joint report to the G20 was drafted by the World Bank, the IMF, the OECD and a group of regional Development Banks, with the IMF leading the drafting of the chapter on sources of public finance, a chapter based on its two background papers.

Policy entrepreneurs did play a more active role regarding the staff position note. An IMF staff position note is a kind of working paper that has not been though the internal IMF approval procedure and thus not necessarily reflects the official view of the IMF, but which nevertheless often are indicative of the perspective of IMF staff in general (a position note advocating a position conflicting with the official IMF line would not be published by the IMF). The staff position note advocated the advocated the establishment of a Green Fund (different from the Green *Climate* Fund established in 2010) which would use some of the

Special Drawing Rights⁴ (SDRs) of IMF member states as capital on its balance sheet, thus allowing the Green Fund to issue green bonds with SDRs as security. Importantly, the collective principal of the IMF did not play a role in getting the IMF to address climate, except for the indirect influence from the fact that the G20 countries are also key IMF member states.

Regarding the first key question, how much public finance the industrialized countries should provide individually and as a group, the IMF (World Bank Group, IMF et al. 2011: chapter 2) provided suggestions of how different sources - particularly carbon pricing - could be used to reach the 100 billion target. The IMF operated with an estimate (stemming from the AGF Report) that if 10% of the revenue from a 25 dollar per ton carbon price in the industrialised countries were used for international climate finance it would generate 25 billion dollars towards the 100 billion dollar target (IMF 2011b). Such an amount would constitute public finance provided by the industrialized countries according to an emissions-based burdensharing key. On a similar notion the IMF also proposed placing a price of 25 dollars per ton on the emissions from international aviation and shipping, two sectors hitherto exempted from public regulation and pricing of their emissions (IMF 2011a). If the developing countries were compensated for the burden that would fall on them⁵, such a price would generate an estimated 22 billion dollars towards the target. Finally the IMF also specified the fiscal savings from phasing out fossil fuel subsidies as a source of climate finance and estimated on the basis of OECD figures that 10-20 per cent of the expenditure saved could yield 4-12 billion dollars (World Bank Group, IMF et al. 2011: chapter 2). Altogether these estimates would add to a little more than 50 billion dollars, leaving the rest of the 100 billion dollars to be covered by private finance and voluntary contributions from industrialized countries.

Fundamental to the IMF's approach was the notion of pricing emissions. Climate change was defined as an externality which was best corrected through pricing either through carbon taxes or emissions trading systems (IMF 2011b; World Bank Group, IMF et al. 2011: chapter 2). The primary objective of carbon pricing is according to the IMF not to raise revenue but to mitigate climate change. This framing of climate change is also evident in subsequent organizational outputs on fossil fuel subsidies (Clements, Coady et al. 2013; Coady, Parry et

⁴ Foreign exchange reserve assets belonging to the IMF Member States and held by the IMF.

⁵ A global price on emissions from international shipping and aviation would be less effective if not implemented globally.

al. 2015) and carbon taxes (Ruud de Mooij, Michael Keen et al. 2012). Defining climate change as an externality to be corrected by pricing the externality is also a textbook example of neo-classical environmental economics, which defines environmental problems as economic problems – typically externalities – and pricing as the stand-alone solution to such problems (Jacobs 1997; Stern, Jotzo et al. 2013).

Concerning the second question of how climate governance should be governed, the IMF was less explicit, as the finance raised could be channelled bilaterally as well as multilaterally. Importantly, the relationship between climate finance development finance was not explicitly addressed, although the measures proposed by the IMF would de facto establish a system that was rather different from the development finance system. The revenue from the pricing of emissions from international aviation and shipping would according to the IMF probably have to be handled multilaterally, since the revenue stem from the exploitation of common property (IMF 2011a: 50). The 2010 staff position note also advocated a multilateral Green Fund that should raise the revenue (Bredenkamp and Pattillo 2010). Altogether, the IMF displayed an inclination towards multilateral governance of climate finance which was not completely shared with its key member states, particularly the US.

Finally, concerning the principles determining the provision and allocation of climate finance, the IMF as already mentioned stressed carbon pricing, which was advocated with reference to its efficiency (IMF 2011b: 3). The key objective was to mitigate climate change while keeping costs low. While efficiency was the key priority, the equity principles of Common But Differentiated Responsibility was explicitly stressed when it came to the incidence of global pricing of aviation and shipping emissions and to the earmarking of revenue from domestic carbon pricing (IMF 2011b: 7; World Bank Group, IMF et al. 2011: 18-20). The IMF emphasized that the developing countries, particularly those with low incomes and high levels of vulnerability, should not take on a share of the burden of providing climate finance. On a related note, the key priority regarding the use of climate finance was mitigation, although the staff position note operated with the notion of an even split between mitigation and adaptation finance (Bredenkamp and Pattillo 2010).

The IMF's approach reflected its organizational culture in terms of the framing of climate finance based on environmental economics, its experience with fiscal instruments such as taxes, and its emphasis on efficiency. Importantly, this approach diverged somewhat from that

of key member states, especially the US, which – in spite in being in favor of efficiency and mitigation emphasis – was not very keen on burden-sharing (especially not based on mitigation which would be costly to the US) and close integration between climate finance and development finance. The IMF documents were drafted on the initiative of the bureaucracy itself (interview with senior IMF official, March 25th 2015) without significant involvement of member states. More important influences came from other institutions, particularly the G20 but also OECD whose analyses the IMF relied on (IMF 2011b; IMF 2011a).

Comparisons

When it comes to climate finance, the two organizations have their similarities and differences. Regarding similarities, both organizations have framed climate finance and climate change in economic terms, emphasizing the economic consequences of climate change and the need for remedying them with economic instruments. This emphasis included stressing the importance of private finance. On a related note, both organizations prioritized efficiency over equity and mitigation over adaptation. Particular emphasis has been placed on carbon-pricing (especially by the IMF) and fossil fuel subsidy reform, two issues which in a range of other forums – especially the UNFCCC – have not been linked to climate finance. However, there is a distinction to be made between the neo-classical environmental economics of the IMF and the liberal environmentalism of the OECD. The latter is not only more unequivocal in its emphasis on pricing of externalities but also more solidly rooted in neo-classical economics than the latter, which draws on a range of different environmental, political and economic norms.

Concerning differences, the OECD output on climate finance is much wider in scope and quantity than the IMF's. Furthermore, generally speaking the IMF advocated solutions rooted in a vision of how climate finance ideally should be addressed, whereas the OECD to a larger degree departed from the actual state of affairs and tried to "push the envelope" within the context of this state of affairs. This pattern is evident regarding all three key questions. Firstly, the IMF (implicitly) advocated a global burden-sharing key based on emissions, while the OECD's proposal would leave it to the individual country to determine its contribution. Secondly, regarding governance, the IMF was more in favor of global and shared governance, unlike the OECD's notion of a bottom-up system. Thirdly, the OECD generally defined

climate finance as a sub-type of development finance, whereas the IMF proposed measures that would clearly set climate finance apart from development finance, such as on carbon pricing of domestic and international emissions and earmarking of domestic revenues as sources. Thus, the output from the OECD is more closely aligned with the preferences of its member states than the output of the IMF.

Turning to the propositions regarding the influences on the output of the IOs, proposition 1 about the influence of the **governmental constituencies** differs between the IOs and appears to be contingent upon other factors. The IMF bureaucracy operated rather independently of the member state representatives and were not influenced by them, yet the different OECD directorates interacted closely with member state representatives from different ministries, and an important OECD strategy was to convince key non-environment ministries of the importance of climate action (interview with senior OECD official, April 30th 2015). The governmental constituencies influenced how far the OECD bureaucracy could go and were a key reason for the OECD's organizational output was largely aligned with the member states yet differed according to which Directorate and which governmental constituency had been involved. In this way, proposition 1 is closely tied with proposition 2 concerning the IO as bureaucracies and 3 concerning Principal-Agent relations (see below).

Regarding the second proposition, **institutional interaction** with the G20 did matter in terms of impetus for particularly the IMF to address climate finance. While interaction with the G20 only appears to have affected the IMF to address climate finance and not influenced how the IMF addressed it, the OECD influenced how the IMF addressed climate finance by providing data and analysis which informed the IMF bureaucracy's position on climate finance and fossil fuel subsidy reform. While the OECD was also influenced by interaction with the G20, particularly being commissioned to providing analysis of climate finance, this influence was less decisive: the OECD published many reports on climate finance which were not commissioned by the G20 and these reports were not different from the G20-commissioned ones in content.

The **bureaucracy** (third proposition) of both organizations were influential in defining climate finance in economic terms rooted in their organizational culture, including the emphasis on economic instruments and the linking with fossil fuel subsidy reform, carbon pricing and (in the case of the OECD) institutional investment. Policy entrepreneurs within

both organizations attempted to push the envelope and acted independently of the member states. Yet, the ability of the bureaucracy to act independently was demarcated by the nature of their contract with the **principals** (fourth proposition): the IMF had more autonomy than the OECD, and used this autonomy adopt positions that ran against the preferences of key principals, particularly the US. The OECD bureaucracy had to make sure the organizational output was more acceptable to its principal. In this way, the autonomy of the IOs constituted an important scope condition for the influence of the IO bureaucracy and of institutional interaction.

Finally, the proposition that differences in **membership** were influential has not been supported. According to the proposition one should expect the IMF's position to reflect its member states with the most votes (especially the US, Japan and Germany), and the OECD to reflect the preferences of smaller industrialized countries to a larger degree than the IMF. However, the analysis did not confirm these expectations, and in the fact the IMF to a large degree went against the preferences of the US as outlined above.

Conclusion

In spite of the similarities between the two organizations, the ways in the OECD and the IMF addressed climate finance differed on several dimensions. The analysis showed that both differences and similarities in the IOs' output on climate finance can be explained by their respective bureaucracies and to a lesser degree their governmental constituencies, the degree of autonomy from the principals acting as a scope condition for both factors. A high degree of autonomy from principals is a key condition for bureaucracies being influential, while low degree of autonomy increases the importance of which domestic ministry the IO interacts with.

Both organizations emphasized the economic aspects of climate finance as well as on efficiency, mitigation and the link to fossil fuel subsidy reform and carbon pricing because of their bureaucracies. Yet the IO bureaucracy was less constrained by the collective principal in the case of the IMF than in the case of the OECD, since in the case of the IMF the member states had less formal involvement in drafting the texts.

This autonomy allowed the IMF to promote carbon pricing on an international level, something which included advocating an emissions-based burden-sharing arrangement and multilateral governance of climate finance. Both positions ran against the preferences of key member states, particularly the US.

The degree of autonomy from principals also had repercussions for the relationship between climate finance and development finance in the output of the IOs: the OECD promoted a system in which climate finance was a sub-type of development finance, whereas the IMF to a larger degree treated climate finance as an issue in its own right. The framing of climate finance as a kind of development finance is to a large degree due to the OECD's governmental constituencies (in the case of climate finance) including development ministries, while the IMF's consisted of finance ministries and central banks.

Interaction with other institutions – the G20 – was important in terms of inducing the IMF and to a lesser degree the OECD to address climate finance, but not did influence how they addressed the issue. The IMF to a large degree also relied on OECD analysis in its reports on climate finance. The final factor – which states that are members of an IO – did not have significant influence.

Altogether the analysis demonstrated the usefulness of including the influence of institutional interaction and particularly governmental constituencies. The findings open up new directions for research. On an empirical level, further empirical analysis of the influence of these two factors is useful, for instance through exploring other cases – for instance fossil fuel subsidy reform – which also involved the two institutions and are similar to climate finance in straddling environmental and economic policy. Theoretically, it makes sense to develop the influence of governmental constituencies and institutional interaction further, through further theory development (for instance focusing on the interaction between IO bureaucracies and domestic ones).

References

Allison, G. and P. Zelikow (1999). <u>Essence of Decision: Explaining the Cuban Missile</u> <u>Crisis</u>. New York, Longman.

- Bailer, S. and F. Weiler (2015). "A political economy of positions in climate change negotiations: Economic, structural, domestic, and strategic explanations." <u>Review of International Organizations</u> **10**(1): 43–66.
- Barnett, M. and M. Finnemore (2004). <u>Rules for the World International Organizations</u> <u>in Global Politics</u>. London, Cornell University Press.
- Bauer, S., F. Biermann, et al. (2009). Understanding International Bureaucracies: Taking Stock. <u>Managers of Global Change – The Influence of International Environmental</u> <u>Bureaucracies</u>. F. Biermann and B. Siebenhüner. Cambridge, MA, MIT Press.
- Bernstein, S. F. (2001). <u>The compromise of liberal environmentalism</u>. New York, Columbia University Press.
- Biermann, F., P. Pattberg, et al. (2009). "The Fragmentation of Global Governance Architectures: A Framework for Analysis." <u>Global Environmental Politics</u> **9**(4): 14-+.
- Biermann, F. and B. Siebenhüner (2009a). <u>Managers of Global Change The Influence of</u> <u>International Environmental Bureaucracies</u>. Cambridge, MA, MIT Press.
- Biermann, F. and B. Siebenhüner (2009b). The Role and Relevance of International Bureaucracies: Setting the Stage. <u>Managers of Global Change – The Influence of</u> <u>International Environmental Bureaucracies</u>. F. Biermann and B. Siebenhüner. Cambridge, MA, MIT Press.
- Biermann, F., B. Siebenhüner, et al. (2009). Studying the Infleunce of International Bureaucracies: A Conceptual Framework. <u>Managers of Global Change</u>. F.
 Biermann and B. Siebenhüner. Cambridge, MA, MIT Press.
- Bredenkamp, H. and C. Pattillo (2010). Financing the Response to Climate Change. P. Strategy, and Review Department. **SPN10/06**.
- Broz, J. L. and M. B. Hawes (2006). US domestic politics and International Monetary Fund policy. <u>Delegation and Agency in International Organizations</u>. D. G. Hawkins, D. A. Lake, D. L. Nielson and M. J. Tierney. Cambridge, UK, Cambridge University Press.
- Busch, P.-O. (2009). The OECD Environment Directorate: The Art of Persuasion and its Limitations. <u>Managers of Global Change</u>. F. Biermann and B. Siebenhüner. Cambridge, MA, MIT Press.
- Campbell, J. L. (1998). "Institutional analysis and the role of ideas in political economy." <u>Theory and Society</u> **27**(3): 377-409.
- Chwieroth, J. M. (2008). "Normative Change from Within: The International Monetary Fund's Approach to Capital Account Liberalization." <u>INTERNATIONAL STUDIES</u> <u>QUARTERLY</u> **52**(1): 129–158.
- Chwieroth, J. M. (2010). <u>Capital Ideas: the IMF and the rise of financial liberalization</u>. Princeton, NJ, Princeton University Press.
- Ciplet, D., J. T. Roberts, et al. (2013). "The Politics of International Climate Adaptation Funding: Justice and Divisions in the Greenhouse." <u>Global Environmental Politics</u> **13**(1): 49-68.
- Clements, B., D. Coady, et al. (2013). Energy Subsidy Reform Lessons and Implications. Washington DC, International Monetary Fund.
- Coady, D., I. Parry, et al. (2015). How Large Are Global Energy Subsidies? Washington DC, IMF.
- G20 Finance Ministers and Central Bank Governors (2011). Communiqué. Washington DC.

- Gehring, T. and S. Oberthur (2009). "The Causal Mechanisms of Interaction between International Institutions." <u>European Journal of International Relations</u> 15(1): 125-156.
- Grasso, M. (2007). "A Normative Ethical Framework in Climate Change." <u>Climatic Change</u> **81**(3): 223-246.
- Halperin, M. H. and P. Clapp (2006). <u>Bureaucratic politics and foreign policy</u>. Washington, D.C., Brookings Institution Press.
- Haščič, I., M. C. Rodríguez, et al. (2015). Public Interventions and Private Climate Finance Flows. Paris, OECD Publishing.
- Hawkins, D. G., D. A. Lake, et al. (2006). <u>Delegation and agency in international</u> <u>organizations</u>, New York : Cambridge University Press, 2006.
- Hayward, T. (2007). "Human Rights versus Emission Rights: Climate Justice and the Equitable Distribution of Ecological Space." <u>Ethics and International Affairs</u> 21(4).
- Hibben, M. (2015). "Coalitions of change: explaining IMF low-income country reform in the post-Washington Consensus." <u>Journal of International Relations and</u> <u>Development</u> **18**(2): 202-226.
- Hicks, R. L., B. C. Parks, et al. (2008). <u>Greening Aid?: Understanding the Environmental</u> <u>Impact of Development Assistance</u>, Oxford University Press.
- Howarth, D. and T. Sadeh (2011). "In the vanguard of globalization: The OECD and international capital liberalization." <u>Review of International Political Economy</u> 18(5): 622-645.
- IMF (2011a). Market-Based Instruments for International Aviation and Shipping as a Source of Climate Finance.
- IMF (2011b). Promising Domestic Fiscal Instruments for Climate Finance.
- Intergovernmental Panel on Climate Change (2014). Chapter 16: Cross-cutting Investment and Finance Issues. <u>Climate Change 2014</u>, <u>Mitigation of Climate</u> <u>Change. Contribution of Working Group III to the Fifth Assessment Report of the</u> <u>Intergovernmental Panel on Climate Change.</u> Cambridge, Cambridge University Press.
- Jacobs, M. (1997). "Sustainability and markets: On the neoclassical model of environmental economics." <u>New Political Economy</u> **2**(3): 365-385.
- Jan Corfee-Morlot, V. Marchal, et al. (2012). Towards a Green Investment Policy Framework. Paris, OECD Publishing.
- Kaarbo, J. (1998). "Power Politics in Foreign Policy:: The Influence of Bureaucratic Minorities." <u>European Journal of International Relations</u> **4**(1): 67-97.
- Kaminker, C., O. Kawanishi, et al. (2013). Institutional Investors and Green Infrastructure Investments: Selected Case Studies Paris., OECD Publishing.
- Kato, T., J. Ellis, et al. (2014). THE ROLE OF THE 2015 AGREEMENT IN MOBILISING CLIMATE FINANCE. C. C. E. Group. Paris, OECD. **2014**.
- Keohane, R. O. (1989). <u>International Institutions and State Power: Essays in</u> <u>International Relations Theory</u>. Boulder, CO., Westview Press.
- Keohane, R. O. and D. G. Victor (2011). The Regime Complex for Climate Change, Cambridge University Press: 7.
- Kingdon, J. W. (2003). <u>Agendas, Alternatives, and Public Policies</u>. London, Longman.
- Lehtonen, M. (2007). "Environmental policy integration through OECD peer reviews: Integrating the economy with the environment or the environment with the economy?" <u>Environmental Politics</u> **16**(1): 15-35.

- Michaelowa, A. and K. Michaelowa (2011). "Old wine in new bottles? Does climate policy determine bilateral development aid for renewable energy and energy efficiency? ." <u>International Development Policy</u> **2**: 60-86.
- Moore, F. C. (2012). "Costing Adaptation: Revealing Tensions in the Normative Basis of Adaptation Policy in Adaptation Cost Estimates." <u>Science Technology & Human</u> <u>Values</u> **37**(2): 171-198.
- Nielson, D. L. and M. I. Tierney (2003). "Delegation to international organizations: Agency theory and World Bank environmental reform." <u>International</u> <u>Organization</u> **57**(2): 241-+.
- Nielson, D. L. and M. J. Tierney (2005). "Theory, data, and hypothesis testing: World bank environmental reform Redux." <u>International Organization</u> **59**(3): 785-800.
- Oberthür, S. and O. S. Stokke, Eds. (2011). <u>Managing Institutional Complexity: Regime</u> <u>Interplay and Global Environmental Change</u>. Cambridge, MA, MIT Press.
- OECD (2014). UPDATE ON THE OECD'S WORK ON CLIMATE FINANCE AND INVESTMENT.
- OECD Secretariat (2010). Measuring Support to Energy. Paris.
- OECD Secretariat (2013). OECD POLICY GUIDANCE FOR INVESTMENT IN CLEAN ENERGY INFRASTRUCTURE. Paris, OECD Publishing.
- Öniş, Z. and F. Şenses (2005). "Rethinking the Emerging Post-Washington Consensus." <u>Development & Change</u> **36**(2): 263-290.
- Park, S. and A. Vetterlein, Eds. (2010a). <u>Owning Development Creating Policy Norms in the IMF and the World Bank</u>.
- Park, S. and A. Vetterlein (2010b). Owning Development : Creating Policy Norms in the IMF and the World Bank. <u>Owning Development : Creating Policy Norms in the</u> <u>IMF and the World Bank</u>. S. Park and A. Vetterlein. Cambridge, Cambridge University Press.
- Persson, Å. (2009). "Environmental policy integration and bilateral development assistance: challenges and opportunities with an evolving governance framework." International Environmental Agreements **9**(4): 409-429.
- Persson, Å. and E. Remling (2014). "Equity and efficiency in adaptation finance: initial experiences of the Adaptation Fund." <u>Climate Policy</u> **14**(4): 488-506.
- Rhinard, M. (2010). <u>Framing Europe : the policy shaping strategies of the European</u> <u>Commission</u>, Dordrecht : Republic of Letters, 2010.
- Romani, M. and N. Stern (2013). Sources of finance for climate action: Principles and options for implementation mechanisms in this decade. <u>International climate finance</u>. E. Haites. London, Routledge.
- Rubbelke, D. T. G. (2011). "International support of climate change policies in developing countries: Strategic, moral and fairness aspects." <u>Ecological Economics</u> **70**(8): 1470-1480.
- Ruffing, K. G. (2010). "The Role of the Organization for Economic Cooperation and Development in Environmental Policy Making." <u>Review of Environmental</u> <u>Economics and Policy</u> **4**(2): 199-220.
- Ruud de Mooij, Michael Keen, et al. (2012). Fiscal Policy to Mitigate Climate Change: A Guide for Policymakers. Washington DC, IMF Press.
- Schalatek, L. (2012). "Democratizing climate finance governance and the public funding of climate action." <u>Democratization</u> **19**(5): 951-973.
- Stadelmann, M., J. Brown, et al. (2012). Fast-start finance: Scattered governance, information and programmes. <u>Carbon markets or climate finance? Low Carbon</u>

and Adaptation Investment Choices for the Developing World. A. Michaelowa. London, Routledge: 117-145

- Stadelmann, M., A. Michaelowa, et al. (2013). "Difficulties in accounting for private finance in international climate policy." <u>Climate Policy</u> **13**(6): 718-737.
- Stadelmann, M., A. Persson, et al. (2014). "Equity and cost-effectiveness of multilateral adaptation finance: are they friends or foes?" <u>International Environmental Agreements-Politics Law and Economics</u> **14**(2): 101-120.
- Stern, D. I., F. Jotzo, et al. (2013). The Economics of Global Climate Change: A Historical Literature Review. <u>CCEP Working Paper 1307</u>.
- UNFCCC (2009). Copenhagen Accord.
- United Nations (2010). Report of the Secretary-General's High-level Advisory Group on Climate Change Financing. New York.
- Vreeland, J. (2007). <u>The International Monetary Fund: Politics of Conditional Lending</u>. London, Routledge.
- Wildavsky, A. (1986). <u>Budgeting: A Comparative Theory of Budgetary Processes</u>. New Brunswick, Transaction Books.
- Woods, N. (2006). <u>The Globalizers The IMF, The World Bank, and Their Borrowers</u>. London, Cornell University Press.
- World Bank Group, IMF, et al. (2011). "Mobilizing Climate Finance A Paper prepared at the request of G20 Finance Ministers."
- Young, O. R. (2011). "Effectiveness of International Environmental Regimes: Existing Knowledge, Cutting-edge Themes, and Research Strategies." <u>Proceedings of the</u> <u>National Academy of Sciences of the United States of America</u> **108**(50): 19853-19860.