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Zelli, Fariborz; Biermann, Frank; Pattberg, Philipp; van Asselt, Harro

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LUND UNIVERSITY

PO Box 117  
221 00 Lund  
+46 46-222 00 00

## 3

# The consequences of a fragmented climate governance architecture: a policy appraisal

FARIBORZ ZELLI, FRANK BIERMANN, PHILIPP PATTBERG AND  
HARRO VAN ASSELT

### 3.1 Introduction

This chapter complements the analysis in Chapter 2 by a policy-oriented inquiry of how different degrees of fragmentation of governance architectures are likely to affect the environmental effectiveness of policies. Our study relates here to an area of widespread contestation in academic and policy writing. It is often maintained, as we describe further below, that a more integrated climate governance architecture would promise higher effectiveness. This claim, however, is also contested, and several authors emphasize the potential benefits of a multitude of agreements, institutions and approaches within an overall fragmented architecture. Claims in favour and against stronger or lesser fragmentation are found in a variety of literatures, ranging from international relations and international law to the comparative study of environmental policy. We review these claims here,<sup>1</sup> organized along the questions of: (1) the relative speed of reaching agreements; (2) the level of regulatory ambition that can be realized; (3) the level of potential participation of actors and sectors; and (4) the equity concerns involved.

The four aspects of speed, ambition, participation and equity are interrelated and eventually will have a bearing on overall governance performance.<sup>2</sup> Based on our typology in the previous chapter (Biermann *et al.*, this volume, Chapter 2), we view the propositions as a continuum of different claims as to the relative positive or negative consequences of higher (conflictive) or lower (synergistic) degrees of fragmentation.

### 3.2 Methodology

For this qualitative assessment, we reviewed and discussed the state of the art in the scholarly literature regarding the promises or perils of fragmentation of global

<sup>1</sup> This chapter draws on Biermann *et al.* (forthcoming).

<sup>2</sup> While we use these four aspects here to structure arguments on the *consequences* of fragmentation, the criteria presented in the previous chapter (Biermann *et al.*, this volume, Chapter 2) in Table 2.1 help assess the *degree* of fragmentation.

governance architectures. We analysed different bodies of literature, comprising writings on international law, international relations and cooperation theory in general as well as more specific writing on global environmental governance and institutional interlinkages. We contrasted these bodies of literature with evidence from current climate negotiations. As a further ‘reality check’, we discussed the pros and cons of fragmentation repeatedly with international experts of the Contact Group of the ADAM Project and other experts of the project.

### 3.3 Analysis

#### 3.3.1 *Speed*

Proponents of fragmentation in governance architectures emphasize, first, that agreements that encompass merely few yet important countries may on average be faster to negotiate and to enter into force. Fragmentation, in its cooperative form with different memberships, loosely integrated institutions and common core norms, could thus be a positive quality of governance architectures, or at least not a reason for concern. Concerning climate governance, Victor for instance favours a ‘club’ approach that involves few nations that would negotiate and review climate policy packages (Victor 2007). Others have suggested that the United States should conclude alternative, regional agreements with like-minded countries, for example in Latin America or with China and, possibly, other key developing countries (Stewart and Wiener 2003). Bodansky, for instance, argued for an ‘institutional hedging strategy’ with the United States becoming the creator of ‘a more diversified, robust portfolio of international climate change policies in the long term’ (Bodansky 2002: 1). In terms of the criterion of actor constellation, such regional or small-party agreements could cover only the world’s largest greenhouse gas emitters and allow for experimentation of alternative international climate regulatory frameworks. For some, such an approach would allow to negotiate only with the more ‘moderate’ developing countries, while disabling ‘the hard-line developing countries ... to prevent more moderate developing states from joining’ (Bodansky 2002: 6). Likewise, Barrett (2007) argues for a ‘multi-track climate treaty system, with protocols for research and development into mitigation technologies; the development and diffusion of these technologies; funding for adaptation; and geo-engineering’. Similarly, Sugiyama and Sinton (2005) suggest an ‘orchestra of treaties’ that would have many elements described here as cooperative fragmentation. This orchestra of treaties would complement the climate convention with a focus on mitigation and adaptation technologies, clean development in developing countries and carbon markets. Countries could apply a pick-and-choose strategy and sign only those treaties that promote their interests.

However, it is doubtful whether the speed of reaching small-n initial agreements may indeed improve the overall governance performance. An architecture with a cooperative or conflictive degree of fragmentation may produce solutions that fit the interests only of the few participating countries. There is no guarantee that other countries will join. A quick success in negotiating small-n agreements might run counter to the long-term success, when important structural regime elements have not sufficiently been resolved. A certain degree of instant problem solving through a small-n agreement might provide disincentives for third countries to engage in climate action and could further disintegrate the overall negotiation system. For example, McGee and Taplin argue that specific features of the Asia-Pacific Partnership reduced compliance incentives for parties to the Kyoto Protocol or may even motivate countries to leave the protocol based on utilitarian calculations (McGee and Taplin 2006).

The 1987 Montreal Protocol illustrates many of these problems: even though the protocol was negotiated relatively quickly within the OECD group, major developing countries did not accept it. Two years after adoption of the protocol, only 10 had ratified the treaty, and of the 13 developing countries whose chlorofluorocarbon consumption appeared to rise in 1987 most sharply, only Mexico, Nigeria and Venezuela had joined (Kohler *et al.* 1987). The architecture of ozone governance was thus, in the beginning, rather fragmented. In August 1989, a UN working group<sup>3</sup> hence warned that ‘for the Protocol to be fully effective ... all countries must become Parties’. Both China and India agreed to ratify the treaty only after substantial changes to its basic structure had been made. In the ozone regime, the Southern contribution to the problem was small, yet threatened to grow. In climate governance, the Southern role is much larger from the outset. Regional agreements of a few like-minded actors, in the hope that others will later follow, do not promise to bring the long-term trust and regime stability that is needed in the climate domain. An ‘institutional hedging strategy’ (Bodansky 2002) with different policies and regimes scattered around the globe might hence eventually move towards a more conflictive degree of fragmentation with conflicting norms and different actors supporting different institutions. This however might cause havoc to the larger goal of building long-term stable climate governance (Müller *et al.* 2003; Biermann 2005).

### 3.3.2 Ambition

Some strands of cooperation theory suggest that small-n agreements within a fragmented architecture might prove more progressive and far-reaching. While a

<sup>3</sup> Informal Working Group of Experts on Financial Mechanisms for the Implementation of the Montreal Protocol (1989: para. 8).

universal architecture might include all nations and ideally even reach full compliance, its eventual norms and standards could be rather low and modest. 'Narrow-but-deep' agreements that achieve substantial policy goals with relatively little participation may be superior to a situation of a less demanding regime even if it has full participation and compliance ('broad-but-shallow') (Aldy *et al.* 2003). A fragmented architecture could also increase opportunities for side-payments. Bilateral agreements among countries may allow for concessions that governments would find unacceptable to grant to a larger group of states. Such concessions could include bilateral trade concessions, the bilateral exchange of technology, or support for enhanced political influence in international organizations.

Some strands in the literature on environmental policy analysis also suggest that fragmentation and regulatory diversity increase innovation and thus overall governance performance (Jänicke and Jacob 2006). In federal political systems, for instance, regulatory competition may allow for the development of different solutions in different regulatory contexts, of which the most effective will 'survive' and be diffused to other regulatory contexts. Fragmentation may enhance innovation at the level of the firm or public agency and increase innovation in the entire system. A key tenet is the notion of diffusion of innovation, including innovations of policies, technologies, procedures and ideas. This is also central to the claim of environmentally beneficial consequences of trade, which would reduce artificial barriers to the free transfer of technologies and products and thus increase efficiency and innovation (Tews *et al.* 2003). One example of this line of thought is Stewart and Wiener, who proposed that the United States should initially stay outside the Kyoto framework and rather seek a new framework with China and, possibly, other key developing countries. This would address the world's two largest greenhouse gas emitters and allow for experimentation of alternative international climate regulatory frameworks (Stewart and Wiener 2003).

However, it is doubtful whether short-term benefits through small-n agreements will increase the long-term performance of the governance system. A quick success in negotiating small-n agreements might run counter to long-term success, when important structural regime elements (for example inclusion of the principle of common but differentiated responsibilities) have not sufficiently been resolved (Biermann 2005). At a later stage, when interest-constellations change and new situations arise, it might be difficult to reach agreement within the international community without an existing overall agreement that includes those structural elements. In addition, smaller agreements only with few like-minded countries will decrease the opportunity for creating package deals, which will minimize the overall policy acceptance and effectiveness (also Zelli and van Asselt, this volume, Chapter 6).

Economic modelling projects that compared different hypothetical universal and fragmented climate regimes – based on criteria of environmental effectiveness, cost effectiveness and cost distribution – also concluded that the more fragmented a regime is, the higher the costs are to stabilize greenhouse gas concentrations at low levels, because more ambitious reduction targets need to be achieved by a smaller number of countries (Hof *et al.*, this volume, Chapter 4). As Aldy *et al.* (2003: 378) concur, '[c]urrent understanding of the benefit and cost functions characterizing climate change suggest that the latter type of policy [broad-but-shallow] is more likely to satisfy the dynamic efficiency criterion. Since marginal emissions control costs increase steeply, a broad-but-shallow policy would result in lower overall costs.'

Similarly, economic model calculations show that emission trading brings both higher environmental effectiveness and cost effectiveness if based on a universal architecture. If one compares the relative costs of four possible architectures for emissions trading – global trading based on the Kyoto Protocol, formal linking of regional emission trading systems, indirect linkages of regional emissions trading through common acceptance of credits, and a mixed approach that combines elements of these three scenarios – then one finds that an environmentally ambitious global trading approach is best for controlling global emissions. Formal linking of emission trading systems can be a fallback option. A more fragmented architecture, for example through indirect linking, may enhance the efficiency of reduction efforts but will not lead to a comprehensive and effective response (Flachsland *et al.*, this volume, Chapter 5).

In addition, regulatory fragmentation in combination with free trade and economic competition might result in the general decline of environmental standards – a 'race to the bottom'. This hypothesis has only limited empirical support regarding current environmental policies. However, the increasing future needs of more stringent environmental policies, notably in climate governance, will also increase costs of regulation, which will then make regulatory differentials in some sectors more relevant for a 'race to the bottom' scenario. This problem is central to domestic complaints by energy-intensive industries in many countries (van Asselt and Biermann 2007). Related is the concern of a general regulatory 'chaos' in environmental policy, but also in associated areas such as energy, transport or agriculture (Massey 2008). For example, investors in the Kyoto Protocol's Clean Development Mechanism have emphasized the importance of clear signals of a long-term commitment of all actors to one stable process (Stripple and Lövbrand, this volume, Chapter 11). In sum, in particular governance architectures with conflictive types of fragmentation – that is, that do not unite all major actors in one coherent and consistent regulatory framework and that include conflicting norms and principles – are likely to send confusing messages to all, thus reducing the overall performance of the system.

### 3.3.3 Participation

Some suggest that a higher degree of fragmentation might reduce entry costs for actors, including private entities such as industry and business. The role of private actors and new forms of governance beyond the state are a key concern in recent institutional scholarship on the environment (Part II, this volume, Chapters 9–13; also Falkner 2003; Jagers and Strippel 2003; Pattberg 2005). A loose network of various institutions, many of which might be public–private, could make it easier for business actors to engage in rule-making and thus help creating regulatory systems that are easy to implement and affordable from a business perspective. In addition, a fragmented governance architecture might make it easier to broaden the coverage of relevant sectors. A positive understanding of fragmentation, in particular in its cooperative and synergistic variations, could circumvent negotiation stalemates among countries that may have been caused by the attempt of finding universal agreement. For example, the Kyoto Protocol does not yet require emission reductions from aviation and international maritime transport, whereas the European Commission took up aviation in the EU emissions trading scheme. Thus, higher degrees of cooperative fragmentation where key norms are not in conflict may allow for more and different policy approaches, which could allow for the inclusion of more relevant actors and areas than would be feasible through a more integrated but static architecture.

Yet again, serious problems may outweigh benefits. First, conflictive fragmentation, where different actors pull in different directions, may complicate linkages with other policy areas. There may be strong economic implications – in terms of international competitiveness – if one coalition of states adopts a stringent policy (for example binding emission caps), while other coalitions opt for a less rigorous way of reducing emissions (for example voluntary pledges). This, in turn, could have severe ramifications for the world trade regime that unites both coalitions under one uniform umbrella. A less fragmented architecture, on the other hand, could allow for systematic and stable agreements between the institutional frameworks of the world trade regime and climate institutions. Since a fragmented architecture may decrease entry-costs for private actors, it is also conceivable that business actors use regulatory fragmentation to choose among different levels of obligation, thereby starting a race-to-the-bottom within and across industry sectors (Vormedal 2008).

### 3.3.4 Equity

A fragmented architecture might offer solutions that are specifically tailored for specific regions and thus increase equity by better accounting for special circumstances. Reinstein, for example, proposed a bottom–up process in which

countries – similar to trade negotiations – would put on the table acceptable climate policies and measures in line with national circumstances (Reinstein 2004). Some lawyers also argue that increased fragmentation in international law is a way of accommodating different interests of states. As a result, specialized regimes may better serve the interests of governments and have higher compliance rates. On this account, Hafner (2004: 859) argues that a ‘less-than-global approach seems particularly necessary when different States clearly hold different beliefs about what basic values should be preserved by international regulation’.

Yet, fragmented architectures also raise serious concerns of equity and fairness (Winkler, this volume, Chapter 7; Shrivastava and Goel, this volume, Chapter 8). Cooperation theory assumes that bilateral and small-*n* agreements grant more bargaining power to larger and more influential countries, while large-*n* agreements allow smaller countries to enter into coalitions, such as the Group of 77 and China, that protect their collective interests from the interest of the larger countries (Biermann 1998). In the end, perceptions of inequity and unfairness are linked to policy effectiveness through its legitimacy – a governance system that is not seen as fair by all parts of the international community is likely to lack in overall effectiveness. As stressed by Benvenisti and Downs (2007: 79), fragmentation ‘functions to maintain and even extend the disproportionate influence of a handful of powerful states – and the domestic interests that shape their foreign policies – on the international regulatory order’. Fragmentation allows powerful states to opt for a mechanism that best serves their interests, in the form of forum shopping (Hafner 2000), or to create new agreements if the old ones no longer fit their interest.

In the same vein, many climate-related initiatives like the Asia-Pacific Partnership include leading industrialized and developing countries while excluding least-developed countries (Ott 2007). The investment agendas of these initiatives hence do not reflect the immediate interests of many of those countries that are most affected by climate change. The bulk of developing countries thus continue to support the multilateral approach in climate policy as in other policy domains (Shrivastava and Goel, this volume, Chapter 8). Less fragmented and more integrated architectures allow the South to count on its numbers in diplomatic conferences and gain bargaining power from a uniform negotiation position. They allow for side-payments across negotiation clusters within a policy domain and across different policies and they minimize the risk for developing countries to be coerced into bilateral agreements with powerful nations that might offer them suboptimal negotiation outcomes (Abrego *et al.* 2003). For the many smaller and medium-sized developing countries, unity is strength, and multilateralism may seem its core guarantee. Since the emergence of the climate issue, the South has therefore sought to bring all negotiations under the UN framework and to frame global warming as an overarching political problem with implications far beyond mere environmental policy.



### 3.4 Conclusions and policy recommendations

This chapter has discussed the potential consequences of different degrees of fragmentation of global governance architectures. We found that different types of fragmentation are likely to have different degrees of performance. While cooperative forms of fragmentation may entail both significant costs and benefits, we did not find convincing arguments in favour of a high, or conflictive, degree of fragmentation. On balance, conflictive fragmentation of global governance architectures puts a burden on the overall performance of the system. On the other hand, what we described as ‘synergistic fragmentation’ might often be a realistic second-best option in a world of diversity and difference in which purely universal governance architectures are more a theoretical postulate than a real-life possibility.

This raises the policy question of how to minimize extreme cases of conflictive fragmentation and how to address some of the rather negative effects of cooperative fragmentation. This policy question is particularly important for the area of climate governance. To increase synergies within UN climate governance, it seems crucial to better integrate processes under the climate convention and the Kyoto Protocol and to reduce duplication, for instance in the current parallel negotiations on technology transfer in different arenas (Zelli and van Asselt, this volume, Chapter 6). Negotiations leading to future agreements ought to address key topics – such as deforestation, technology transfer or capacity-building – in only one forum. Regarding the cooperative and partially conflictive fragmentation between UN climate governance and climate arrangements outside this umbrella, it is imperative to open these institutions to additional members. For example, the Asia-Pacific Partnership could be broadened to also include least developed countries and small-island developing states, and to ensure through formal declarations or clauses better integration with the overall UN processes. Furthermore, formal coordination between these arrangements and the UN negotiations could ensure that they work towards common objectives. The UN climate regime also needs to be better coordinated with non-environmental institutions in order to minimize conflictive fragmentation, most importantly with regard to the WTO.

Russia’s ratification of the Kyoto Protocol has evidenced that linking both arenas can create additional incentives for countries to support climate policies. Better integration can help identifying similar constellations of actors. For instance, like the climate regime, the WTO is hosting discussions on the transfer of climate-friendly goods and services in the special session of the WTO Committee on Trade and Environment (Zelli and van Asselt, this volume, Chapter 6). As long as this WTO-internal discussion is not linked to similar debates in the climate regime, a comprehensive solution is unlikely. Policy-makers have recognized this problem: in 2007, trade ministers, senior trade officials and the WTO Director-General met for

the first time during a conference of the parties to the climate convention to discuss trade-related aspects of climate change. Yet also this meeting reflected the increasing fragmentation of the climate governance domain, with only few countries – and none from Africa – represented.

Our qualitative analysis also shows that – with regard to our main appraisal question for the ‘architecture’ part of this volume – major scholarly literatures offer conflicting statements on the relative advantages and disadvantages of fragmentation. This calls, we argue, for a continuation of this line of work through more in-depth studies of fragmentation. Such studies could also provide theory-driven explanations for the causes and consequences of fragmentation of given architectures, as well as for possible changes of the degree of fragmentation over time. This chapter offers a starting point on which further research can build.

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