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The Politics of Trade and Environmental Linkages

Vice or Virtue?

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A thesis submitted to the School of Social and Political Sciences,
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Melbourne

May 2021

DECLARATION

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ABSTRACT

As international environmental problems worsen, scholarly attention has turned to the prospects of leveraging trade agreements. This study examines why and how states include environmental clauses in Preferential Trade Agreements (PTAs) to understand to what degree they promote environmental protection. Drawing on historical inquiry, econometric, and qualitative case study analysis of the East African Community PTA, the study finds that states have primarily included environmental clauses to mitigate the negative impacts of environmental measures on trade, and avoided sanctions in favour of coordination when promoting environmental protection through the PTAs. The study contributes to understanding the prospects of linkage politics in navigating gridlock in global governance.

DEDICATION

To my parents, David M. Liti and Christine M. Liti

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As the adage goes, it takes a village to raise a child; as has been completing this study. I have accrued innumerable intellectual and generosity debts along the way. I am particularly grateful to my good friend Reuben Makomere, who has engaged with this project since its inception as an intellectual sparring partner. For collegiality, numerous academic debates, and friendship, I would like to thank Dauglas Juma, Matthew Mabefam, Emmanuel Awoh, Timothy Katiba and Stephanie Campbell. Of the many other friends have contributed in various ways to the project, I would like to thank Beneth, Robert, Chiwoneso, Shattie, Stephanie, Alister, Gearóid, Franka, Chengetai, Charmaine, Vicky, Winnie and members of the African Studies Group, University of Melbourne, amongst many others.

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All errors and opinions remain mine.

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SELECTED ABBREVIATIONS

AB	Appellate Body
AEC	African Economic Community
AU	African Union
BCA	Border Carbon Adjustment
CBDR	Common but Differentiated Responsibilities
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COMESA	Common Market for East and Southern Africa
EAC	East African Community
EACO	East African Community Organization
EALA	East African Legislative Assembly
EC	European Communities
EU	European Union
EGS	Environmental Goods and Services
EMIT	Environmental Measures and International Trade
GATT	General Agreement on Tariffs and Trade
LDC	Least Developed Country
MEA	Multilateral Environmental Agreements
MFN	Most Favored Nation
MNE	Major Norm Entrepreneur (US, EU, Canada)
MP	Master Plan
NAFTA	North American Free Trade Agreement
NT	National Treatment
OUA	Organisation of African Union
PPM	Production and Process Measures
PTA	Preferential Trade Agreements
RTB	Race to the Bottom

SADC	South African Development Community
SDT	Special and Differential Treatment
SIA	Sustainability Impact Assessment
UNCED	United Nations Conference on Environment and Development
UNEP	United Nations Environment Programme
WTO	World Trade Organization

Chapter 1: Introduction

Dani Rodrik famously asked: '*What do trade agreements really do?*' (Rodrik, 2018). This study examines whether and how environmental clauses in Preferential Trade Agreements (PTAs) really promote environmental protection. How best to manage trade and environment linkages has always been a highly contested area of international politics. On the one hand, debates have centred on the persistent use of domestic environmental measures as a disguised form of protectionism – referred to as 'green protectionism'. On the other hand, environmentalists have sought ways of leveraging trade policy to promote environmental protection. These debates came to a head when the multilateral trading system was being strengthened, through the transformation of the *ad hoc* General Agreement on Tariffs and Trade (GATT) to the more institutionalised World Trade Organization (WTO) in 1995.[1]

As the GATT was being transformed into the WTO, a parallel multilateral development with significant implications was unfolding. In 1992, countries convened in Rio de Janeiro under the aegis of the United Nations Conference on Environment and Development (UNCED) at the Rio Conference - as UNCED came to be popularly known - to negotiate and agree on three landmark multilateral environmental agreements (MEAs) addressing the issues of climate change, biodiversity and desertification. These new MEAs, and the harbinger of the rise of global environmental politics, raised concerns at the GATT regarding their implications for the

[1] The GATT was adopted as an *ad hoc* institutional arrangement to manage international trade as the proposed International Trade Organization (ITO) was not forthcoming. Greater institutionalisation was central to the transformation of the GATT to the WTO (Barton et al., 2008a; Irwin, 1995).

multilateral trading system. As the Uruguay Round of negotiations under the GATT were being concluded, the debates on trade and environmental policy were rolled over to the WTO.

The inception of the WTO was only one of two significant developments that would transform the governance of international trade, including on environmental issues. At about the same time as the creation of the WTO, another type of trade agreement - PTAs - was starting to proliferate.[2] PTAs would eventually become the second pillar of the international trading system. The number of PTAs has risen from just a handful to several hundred in the last three decades. While debates on the effects of the intersection of trade and environmental policies became more contentious and were the subject of some of the most controversial rulings issued by the WTO's dispute settlement mechanism, environmental clauses were proliferating in PTAs. In line with this growth, a new body of scholarship has emerged to explain the variation in the design of environmental linkage clauses in PTAs. For instance, scholars have identified a number of variations in the design of environmental linkage clauses in PTAs. Some have categorised 32 types of linkage clauses (Jinnah & Morgera, 2013a, p. 336), while others have identified 280 different types (Morin et al., 2017, p. 365). Similar negotiation, policy and scholarly debates focusing on PTAs were, however, largely absent. This quietness suggests that PTAs provided a more amenable forum for managing these debates among a smaller number of parties.

[2] This study adopts the term PTA, following Bhagwati (2008), who amusingly justified the choice as thus: 'I use the terminology of preferential trade agreements (PTAs) rather than the earlier one of regional trade agreements (RTAs) simply because the PTAs are not always regional in any meaningful sense. For example, the U.S-Israel FTA is not regional. But the RTA terminology still persists at the WTO, which is not surprising since international bureaucratic and political usage often lags behind reality; G-77 now has more than 77 developing country members, for example. Also, I do not use the terminology "bilaterals" because many PTAs are "plurilateral" - an infectious phrase that sounds like, and is, jargon - and consist of more than two, but less than all, nations as members' (p. 1)

A plausible explanation for the variation in the design of these environmental linkage clauses is that as environmental negotiations at the WTO through the Doha Round have failed, frustrated parties have pursued environmental clauses in PTAs. However, without understanding the nature of the environmental linkage clauses, and most importantly why they have been included, we cannot draw any conclusions over whether trade via PTAs is becoming more environmentally responsive or 'greening'. It is therefore important to ascertain whether, to what extent and why some environmental linkage clauses promote objectives other than environmental protection.

To address this issue, this study addressed the following research question: *why and how have states used PTAs to address environmental policy issues?* This study seeks to address this question through an analysis of the design and implementation of environmental clauses in PTAs. This introductory chapter sets the context for the study by first presenting a review of the literature on environmental linkage clauses in PTAs in the next section. It then outlines the design, followed by conceptual framing, of the study. A preview of the main argument in the study is then presented, followed by an overview of the remaining chapters.

1.1 Literature Review

An emerging body of scholarship, as discussed in detail below, has shed light on why PTAs include environmental clauses. The studies vary in their design, from single case studies of prominent PTAs such as the North American Free Trade Agreement (NAFTA) and the European Union (EU), through to analysis of datasets based on hundreds of PTAs.

Existing explanations

Five arguments have been advanced by this literature to explain the growth of environmental linkage clauses in PTAs. Specifically, the arguments are: i) Relative bargaining power; ii) Bargaining efficiency; iii) Templating or imitation; iv) Domestic environmental groups; and v) Diffusion through socialisation. These explanations either arise from focused research on particular PTAs or represent extrapolations of more general arguments that explain PTAs. Each of these explanations is examined in turn.[3]

i) Relative bargaining power

It is a fact of international politics that great powers often leverage their significant relative bargaining power to pursue their policy objectives. In international economic negotiations, relative bargaining power takes the form of market size (Drezner, 2007a, p. 28). Major powers leverage their large markets to pursue other policy objectives. The desire of smaller powers to gain access to the markets of major powers makes them more eager to accept the major power's policy conditions. PTAs have presented an attractive policy tool for such endeavours (Postnikov, 2020). The United States (US), which has been the global superpower and architect of the post-war international economic order, has been adept at making good use of its market power to impose conditions on trading partners (e.g. Bastiaens & Postnikov, 2017; Jinnah & Kennedy, 2011; Jinnah & Morin, 2020).

[3] Often, a combination of the explanations is provided in studies on the proliferation of environmental linkage clauses in PTAs, especially in large-n analyses. Each explanation will, however, be considered separately in this section, for purposes of clarity, although there will be overlaps across some of the explanations

Indeed, the US pioneered the use of sanctioned compliance in PTAs to pursue environmental policy objectives - especially in the design and implementation of MEAs - most notably in the Montreal Protocol of 1987 (Benedick, 1998). In PTAs, the North American Free Trade Agreement (NAFTA) included a chapter on the environment and tied trade sanctions to noncompliance with the environmental commitments (Bastiaens & Postnikov, 2017, p. 848). The US has often sought environmental policy commitments that exceed those in multilateral agreements (Jinnah & Morgera, 2013a, p. 337). So vigorous has the US approach been that it has, for instance, inspired riots in target countries. A case in point is the implementation of the US-Peru PTA where '[t]he enforcement of this agreement – including its forest and land use provisions – fuelled the fire of violent protests in Bagua, Peru, that left 63 people dead' (Jinnah & Morgera, 2013a, p. 338).

Another significant trading power, the EU, has also been leveraging its large market size (Damro, 2012), including to pursue environmental policy objectives. Even though the EU's approach is less vigorous than that of the US, it has nevertheless also sought outcomes it could otherwise not secure in multilateral forums. The EU's PTAs often include commitments to implement MEAs, in addition to creating space for environmental pressure groups to engage with enforcing the commitments, such as through the Civil Society Dialogue (also known as the Forum) (Bastiaens & Postnikov, 2017, p. 853). In a further distinction, the EU often seeks *ex post* changes to environmental policies while the US always seeks *ex ante* changes to the domestic environmental policies of its trade partners (Bastiaens & Postnikov, 2017, p. 848).

But the EU has recently changed tack and is presently developing a border carbon adjustment (BCA) to address what has been referred to as 'carbon leakage'. That is, the EU is seeking to 'level

the playing field' by closing the advantage gap of cheaper imports produced by more carbon-intensive production methods in other countries (Dias & Nosowicz, 2020; Ismer et al., 2020). Such efforts have been consistently resisted especially by emerging powers that are also major exporters, such as China (Voituriez & Wang, 2011). Trading powers whose economies significantly rely on natural resources, such as Australia, have also resisted such linkages (Hurst, 2021).

While this explanation based on relative bargaining power is convincing where major trading partners are involved in a PTA, it is less suitable where there is relative power symmetry between trading partners. Given that there are numerous PTAs that do not include major trading partners, this explanation is thus limited in scope. It also does not explain the variation in the design of environmental linkage clauses in PTAs.

ii) Bargaining efficiency[4]

Bargaining efficiency has also been presented as a parsimonious explanation for the proliferation of environmental clauses in PTAs. Studies advancing this explanation have found that PTAs have been used to enhance bargaining efficiency by including non-trade issues such as labour rights, human rights and the environment (Milewicz et al., 2016). To probe whether this was a feature of major trading powers who have been adept at forum-shopping to find more efficient ways of furthering their non-trade agendas, the authors considered whether the issue was prevalent in other

[4] Bargaining efficiency is usually combined with forum-shopping especially through relative bargaining power, since the efficiency of bargaining in any single trade negotiating forum is reduced when non-trade issues are added. Major trading partners are more likely to combine such approaches to maximise all of their preferences. 'Bargaining efficiency' and 'relative bargaining power' are thus treated as distinct categories in the present chapter to illustrate their logic. Their overlap will, however, be discussed in subsequent chapters.

PTAs. They found that indeed bargaining efficiency was a common feature of PTAs, beyond those that include the major trading powers (Milewicz et al., 2016, p. 23).

Bargaining efficiency is an interesting argument, but its major limitation is treating environmental clauses as homogenous. As numerous other studies have shown, the types of environmental clauses in PTAs vary in design (e.g. Berger et al., 2020; Jinnah & Morgera, 2013b, p. 336; Morin et al., 2017, 2018). While these studies explored the question of 'green protectionism', they did not disaggregate the types of environmental provisions. This oversight poses a significant theoretical challenge to this argument, as environmental clauses vary by their purpose. It therefore cannot be assumed that all parties to a PTA negotiation would respond in the same way to all types of environmental linkage clauses, irrespective of their purpose, design, or consequence. Put differently, lumping all environmental clauses together in large-n studies makes it impossible to know whether, to what extent and why certain environmental linkage clauses are chosen over others. Moreover, it makes it difficult to ascertain whether the growth in environmental linkage clauses in PTAs are likely to make a difference from an environmental standpoint.

iii) Templating/Imitation

A related argument for the presence of environmental clauses in PTAs has centred on the use of templates or 'boilerplates' in designing international agreements (Peacock et al., 2019). Analysing 579 PTAs concluded between 1959 and 2009, Baccini et al. (2015, p. 168) argued that 'negotiators who bargain over the design of PTAs and look for an existing template can choose from at least three competing models.' The three models are: i) a shallow agreement, common with global South PTAs that only focus on trade-related issues; ii) 'Pax Europaea' which is the standard model for

regional integration; and ii) 'Pax Americana' which is Washington's preferred model (Leonardo Baccini et al., 2015, p. 168).

Similarly, a study by Peacock et al. (2019) examined 348 PTAs concluded between 1989 and 2009 using text analysis techniques. Premised on the proposition that new agreements are not always developed from scratch, but instead adopt a boilerplate, the study juxtaposed power distribution and bargaining efficiency as the main objectives of adopting the boilerplate. The study found that 'whereas boilerplate can be used for both efficiency and distributive purposes, international boilerplate is used primarily for efficiency gains and power-distribution considerations are not systemically important' (Peacock et al., 2019, p. 293). A similar study has also shown that there is prevalent copy/pasting of PTA text (Allee & Elsig, 2019).

This explanation has some major limitations. That the design of many subsequent PTAs has not been predicated on earlier PTAs poses a direct challenge to the argument. States will carefully choose which environmental clauses to include in their PTAs, especially those promoting environmental protection. If the templating/imitation argument is correct, then we should see NAFTA's model of sanctioned compliance widely adopted in all subsequent PTAs. Yet this is not the case. The EU approach is, however, relatively more prevalent than the US approach, as subsequent chapters will show.

iv) Domestic environmental groups

Domestic environmental groups have also been advanced as an explanation for the inclusion of environmental clauses in PTAs (Morin et al., 2018). Initial studies on PTAs focused on those

concluded by major trading powers, especially the US and the EU. It is therefore well documented that domestic environmental groups have been influential in prompting the insertion of environmental provisions into PTAs (Bhagwati, 2008, p. 71). Analysing the influence of domestic pressure groups on agriculture, labour and the environment, a study found that 'in each of these areas, entrenched and well-established groups comprise some of Washington's most powerful organized lobbies. It is not surprising, therefore, that these groups became formidable forces in both the negotiation and ratification of the agreement' (W. P. Avery, 1998, p. 282). Another study found similar dynamics in Canada, also a major environmental norm entrepreneur (Abelson, 1995). Similar findings obtained in the EU, where domestic pressure groups have also been quite influential in prompting the insertion of environmental provisions into the bloc's trade agreements (Princen & Kerremans, 2008, p. 113; A. Young & Peterson, 2006, p. 796). A study analysing 630 PTAs concluded between 1947 and 2016 inferred that domestic environmental groups were indeed the main drivers for the inclusion of environmental clauses in PTAs (Morin et al., 2018).

The domestic pressure groups argument highlights the influence of domestic environmental groups in select PTAs, especially those of the US, EU and Canada. Yet we know very little about whether such dynamics occur across the world. It is fair to argue that the geographical scope of the domestic environmental groups explanation remains an open question, especially given the variation in domestic political systems across the world. In a bid to analyse the effect of variation in the domestic political structures on participation in intergovernmental organisations, Minnich (2005) found that 'the structure of governing institutions and the nature of electoral systems account for much of the variation in intergovernmental organization membership' (p. 295). The study concluded that 'domestic institutions matter in determining international cooperation through

international organizations – a novel insight overlooked by most international relations theories' (Minnich, 2005, p. 295). This finding suggests the need to probe further the domestic environmental groups argument (e.g. Postnikov & Bastiaens, 2020).

v) Diffusion through socialisation

A final argument made in extant literature is that there has been a diffusion of environmental clauses in PTAs through the process of international socialisation and learning. That earlier PTAs included environmental clauses made it more likely for other PTAs to adopt them. A more recent study by Morin et al. (2019) has provided the most comprehensive attempt thus far at making the diffusion argument. The study analysed 685 PTAs signed between 1945 and 2016 against three hypotheses: i) that environmental clauses included in intercontinental PTAs are more likely to diffuse; ii) that provisions first designed by economically powerful countries are more likely to diffuse; and iii) that provisions first designed by environmentally credible countries are more likely to diffuse. The findings from the study support the first, but not the second and third hypotheses.

While research on diffusion of environmental clauses has yielded statistically significant insights, it is yet to explain why environmental clauses of intercontinental PTAs were more likely to diffuse than those driven by major economic powers or even the so-called environmentally credible countries. That the study finds a statistically significant correlation for the diffusion argument is important; however, the causal mechanisms underpinning the diffusion of particular clauses are yet to be developed further.

Key limitations of the existing explanations

Overall, three key gaps are apparent in the extant literature. First, there is limited development of general explanatory theories that can account for the full variety of environmental clauses in PTAs. Single and small-n case studies of select PTAs have been useful, but their highly contextual nature makes it challenging to generalise the theoretical insights. More recent studies based on large datasets and sophisticated statistical analysis have also yielded important insights using robust *a priori* theorising to explain why environmental clauses are included in PTAs; which also leads to empirically testable hypotheses. So, in both cases there is hypothesis testing, but the key difference is whether the hypotheses are derived from a theoretical framework that can provide a comprehensive and parsimonious explanation of variation in the design of environmental linkage clauses. This study develops and tests such a theory.

Second, many of the case studies are focused on select countries, leaving many other regional contexts unexamined. This creates a 'geographical imbalance', as case studies are often highly contextual, both regionally and locally. As has been noted, 'in an environment where evidence for improving practice is held in high esteem, generalization in relation to knowledge claims merits careful attention by both qualitative and quantitative researchers' (Polit & Beck, 2010, p. 1451). We know much about environmental policy and PTAs of the US, EU, Canada and a few other states. But we do not know much about many other PTAs, especially those from the global South. This study seeks to contribute to broadening the knowledge base of PTAs, situated in their proper context, by considering a qualitative case study of the South-South East African Community (EAC) PTA; and also a large-n quantitative study that encompasses all geographic regions.

Third, and crucially, the present study seeks to contribute to a nuanced understanding of the dynamics of trade and environmental linkages. An implicit assumption that runs through much of the literature on the proliferation of environmental linkage clauses in PTAs is that countries from the global North are often more environmentally-credible than their global South counterparts. As this study shall demonstrate in setting the historical background of the trade-environment debates and through the case study analysis, environmental concerns of global South countries are often overlooked; context matters. This is not to reject existing literature; rather, it is to point to an imbalance that needs to be rectified. In an influential piece that aptly diagnosed this imbalance, and suggested a remedy by transcending the divide between the West and the Rest, Amitav Acharya notes:

> The discipline of International Relations (IR) does not reflect the voices, experiences, knowledge claims, and contributions of the vast majority of the societies and states in the world, and often marginalizes those outside the core countries of the West. With IR scholars around the world seeking to find their own voices and reexamining their own traditions, our challenge now is to chart a course toward a truly inclusive discipline, recognizing its multiple and diverse foundations (Acharya, 2014, p. 647).[5]

1.2 Research Design

This section presents the research design of the present study. It first outlines its theoretical orientation, before detailing the specific methods used in the analysis.

[5] To be clear, the primary objective of the present study is to broaden the contextual contours of the literature on the design and inclusion of environmental linkage clauses in PTAs, and the literature it builds upon is very much valued.

Epistemological orientation

Before outlining the methods used in this study, it is important to outline the epistemological underpinnings. In general, the study is grounded in the broad tradition of empirical social scientific inquiry, which seeks to provide knowledge that is grounded in logical argument, empirical observation and measurement, and hypothesis testing, but in ways that are sensitive to historical context. The study thus combines historical inquiry with rationalist IR and public choice theory, and qualitative studies.

The study consists of three parts: context-setting; theory-building; and theory-testing through empirical analysis. The context-setting part is based on real-world historical developments rather than *a priori* assumptions. Next, a parsimonious theory of issue-linkage is developed, which is then empirically tested. The focus is on the explanatory power of the theory. In doing so, the theory focuses on what are considered to be the 'big and important' things, thus embracing parsimony (e.g. Medema, 1995, pp. 4–5; Waltz, 1979, pp. 6–12). Or as Kenneth Waltz best put it as regards developing a theory:

> Theories are sparse in formulation and beautifully simple. Reality is complex and often ugly. Predictions are not made, nor explanations contrived, by looking at a theory and inferring something about particular behaviours and outcomes from it. How could that be done when the empirical matter that must be considered in making predictions or fashioning explanations cannot be included in a theory? *A theory is an instrument used to explain "the real world" and perhaps to make some predictions about it.* In using the instrument, all sorts of information, along with a

> lot of good judgment, is needed (Waltz, 1986, p. 3, as quoted in Wæver (2009, p. 212), emphasis own).

While a key strength of parsimonious and elegant rationalist theories is that they capture the core explanatory factors, they face significant limitations. Three particular challenges faced by rational choice theories stand out: 1) *a priori* theoretical assumptions that are divorced from the real world; 2) lack of empirical context, which is often abstracted out of the picture; and 3) failure to explain key actors, their interests, explaining the origin of institutions, and how these change (Snidal, 2002, pp. 85–86). To surmount these challenges, the present study includes a historical chapter to ensure that the theoretical assumptions are anchored in real-world debates about trade and environmental linkages rather than *a priori* assumptions; and a qualitative PTA case study, which both provides a test of the theory and a more in-depth understanding of the logic of the choice of implementation mechanisms. Both remedies provide the necessary context that completes the explanation presented in the study. Overall, the approach adopted in this study is empirical and positivist, but also partly historical/interpretivist, to compensate for some of the limitations associated with striving for theoretical parsimony.

In adopting this research design, the study seeks to break new theoretical and empirical ground. Theoretically, it offers a general explanation for the variation in, and the determinants of, the design of environmental linkage clauses. Empirically, it contributes to the literature on the proliferation of environmental linkage clauses in PTAs and helps us gain a better understanding of whether PTAs are actually greening through the promotion of environmental protection, and also deepen empirical research on the environmental concerns of the global South through a case study of a PTA in the Africa region.

1.3 Trade and Environment Linkages

This section recasts the general debates on trade and environmental linkages, thus setting the broad conceptual context for the overall study. These debates can be grouped into two broad themes: green protectionism, and environmental protection through trade agreements. Each is briefly examined below, providing a crucial backdrop for the study's subsequent analysis. From these debates the two key labels of 'vice' and 'virtue' will be unpacked from both trade and environmental standpoints, before the study proceeds to analysis using these labels in subsequent chapters.

Vice: Green protectionism

Concerns over green protectionism have always dominated debates on how trade agreements should deal with environmental issues (Bhagwati, 1988). At the heart of these concerns have been debates that countries often deploy environmental measures as disguised forms of protectionism (Lottici et al., 2014). Underpinned by the norms of nondiscrimination and transparency, trade regimes have developed disciplines meant to address and even eliminate the use of discriminatory trade practices (Collins-Williams & Wolfe, 2010; Srinivasan, 2005).

A common form of protectionism is using non-tariff barriers (NTBs) to restrict or impede imports from certain countries (Ing et al., 2018; Schuenemann & Kerr, 2019a). Green protectionism through NTBs can occur when countries develop domestic environmental measures that seek to disadvantage imports by increasing the costs of compliance with local regulations. Countries routinely develop and adopt domestic environmental measures. For trade policy makers, concerns over NTBs have not been the introduction of the domestic environmental measures per se, but their

design. Specifically, domestic environmental measures with significant trade effects have been the main target (WTO, 2018). If such domestic environmental measures are designed in a manner that favours domestic industries in ways that disadvantage foreign exporters into the domestic market, they are deemed to be NTBs.

So serious is the challenge posed by domestic environmental measures that serve as NTBs that the WTO, for instance, has developed a robust notification system (WTO, 2018).[6] Through the notification system, member states can submit their draft domestic environmental measures, which have significant trade effects, for examination and comments by other members. Notification systems are designed to serve as an 'early warning system' for trade regimes, as they prevent disagreements from escalating into disputes (Gadret & Rodriguez, 2007). The Special Trade Concerns (STC) mechanism of the WTO precisely undertakes this task by allowing member states to discuss and resolve any disagreements on draft domestic measures (Busch & Pelc, 2015, p. 405). Indeed, research has shown that the STC mechanism has played a significant role in reducing the number of disagreements that end up at the WTO's formal dispute settlement system. Notifications and other policy surveillance mechanisms seek to reduce the risk of NTBs by fostering transparency (Collins-Williams & Wolfe, 2010).

Another issue that has exacerbated concerns over green protectionism has been the application of domestic environmental regulations in a discriminatory manner. Such cases often end up in dispute settlement. Disputes on discriminatory application of environmental regulations with significant trade impacts have often revolved around the use of escape clauses, especially Article XX of the

[6] https://edb.wto.org/

GATT (e.g. Chi, 2014; Moran, 2017). Escape clauses allow parties to suspend their trade obligations to address domestic exigencies (Pelc, 2009). Thus, when countries are accused of discriminatory practices and the cases are brought before a dispute panel, the defendant relies on proving that their actions were necessary. That is, the defendant must demonstrate the *necessity* of their regulatory actions through an affirmative defense that is recognised in the escape clause (Pelc, 2009, 2016a, p. 127). This has not been different for environmental issues when compared to regulations in other policy domains such as health.

Even though the WTO has only adjudicated at the Appellate Board (AB) over several cases concerning the legality of environmental regulations under Article XX, the cases have been highly contentious. Consider the case of US-Gasoline (WT/DS2/R), which was the first environmental dispute adjudicated by the WTO. In this case, Brazil and Venezuela argued that the US had introduced a discriminatory domestic environmental regulation that had higher environmental standards for gasoline imports compared to domestic industry. By applying more stringent standards, Brazil and Venezuela argued, the US was violating the norm of nondiscrimination. The dispute panel that heard the case ruled in favour of the complainants, a ruling that was upheld by the Appellate Body (Irwin, 2015, p. 250). As this case demonstrates, the trade system has sought to preserve the norms that underpin the system, especially when they have come into conflict with environmental norms. These rulings, which seek to remove environmental restrictions on trade, are seen by environmentalists as problematic because they have the effect of restricting the scope and effectiveness of domestic environmental regulation; hence they are seen as a *vice*.

Virtue: Environmental protection

Scholars on the other side of the trade and environment debate in the WTO have sought to answer a simple question: what can trade do for the environment? Contra green protectionism, this debate has focused on tapping the promise and potency of trade measures to promote environmental protection. Debates on trade policy's contribution to the environment have focused on two elements: providing incentives and ensuring compliance.

It has been argued that trade policy can be leveraged to generate incentives that contribute to environmental protection (Ciaro et al., 2007a; Ikiara & Mutua, 2006). Several incentives have been identified as being significant to the promotion of environmental protection. Liberalisation of trade in environmental goods and services (EGS) has been a key incentive. Reducing tariffs and increasing trade in EGS, it is often argued, will enhance the diffusion of, and access to, technologies that would contribute to addressing environmental challenges (Nimubona, 2012; Wan et al., 2018). Such efforts have received much diplomatic support, especially at the multilateral level. Countries have been negotiating a multilateral agreement on environmental goods and services for years under the auspices of the WTO's environmental negotiations under the Doha Round. Although these negotiations have stalled, trade liberalisation of EGS remains a key theme in debates on how trade policy can contribute to environmental protection (Wu, 2014).

Voluntary mechanisms such as eco-labels have also proliferated (Gallastegui, 2002; Walter & Chang, 2020). Such schemes are premised on market mechanisms which seek to alter the behaviour of producers and consumers. Producers would have the opportunity to cater to a broader market of customers who are environmentally conscious. Eco-labels serve this role by providing

information on how products were manufactured. Consumers can then make informed choices about the products on offer (e.g. Hwang et al., 2016; Loureiro & Lotade, 2005; van der Ven et al., 2018). The expectation is that products with eco-labels would be more attractive to consumers who are conscious about environmental protection. Products not meeting such standards would therefore be discriminated against by market forces. Other schemes such as recycling are also prevalent (Calcott & Walls, 2005).

Such schemes have, however, not been without controversy, as concerns have always arisen over the discrimination of products based on production and process methods (PPMs) (Jaspers & Falkner, 2013, p. 415). Concerns over use of eco-labels for protectionist purposes exist (e.g. Bonsi et al., 2008; Greaker, 2006a). Notwithstanding these concerns, the appeal of voluntary environmental schemes has been growing. Under the banner of fair trade, consumers have been able to assert their influence on PPMs, and producers have had incentives to cater to this growing market share. Not surprising, the use of incentives has been the most favoured by the WTO, as reflected in their embrace of a 'mutually supportive' approach to trade and environment (WTO & UNEP, 2018, p. 8).

A second, and perhaps most controversial, approach that trade policy has contributed to environmental governance has been through the use of trade measures especially in Multilateral Environmental Agreements (MEAs). Seeking to foster compliance, trade measures such as import restrictions have played a crucial role in the design of compliance mechanisms of MEAs (Eckersley, 2004a, p. 27). In fact, some of the most successful MEAs have had restrictive trade measures at the centre of their design and operation. The Montreal Protocol on Substances that

Deplete the Ozone Layer, hereafter the Montreal Protocol, has been successful in curtailing trade in such substances by phasing trade in ozone depleting substances (Brack, 1998). The Convention on International Trade in Endangered Species (CITES) seeks to prevent the illegal trade in endangered species. Trade measures are key to the implementation of CITES as its members have enacted trade restrictions on endangered species (Reeve, 2006). There are many other MEAs that rely on trade measures to varying degrees.

However, the very potency of trade measures has made them a contentious element (Althammer & Droege, 2003; Eckersley, 2004a, pp. 26–27). Trade measures per se have not been controversial when negotiated in a multilateral treaty and confined to the parties; however, the application of restrictive trade measures has been controversial when applied to nonparties, while the unilateral and extrajurisdictional application of trade measures in pursuit of environmental policy objectives has been the most contentious. Disputes have arisen from the application of such measures. The most famous dispute, perhaps, is the first Tuna case (Tuna I) (Moran, 2017; Trujillo, 2012). Displeased with the harming of dolphins by Mexican fishing fleets while catching tuna, the US imposed sanctions on tuna imports from Mexico. From an environmental point of view, the endangerment of dolphins was not acceptable, hence fishing practices had to address the issue. Mexico protested the ban and filed a dispute at the GATT. The panel that heard the dispute deemed the US ban inconsistent with the GATT as it was a unilateral action carried out beyond the US' jurisdiction. The panel, however, found the US's requirement of labelling the tuna to be consistent with the GATT. The US appealed, but the Appellate Body (AB) upheld the panel's ruling.

The Tuna I dispute, which was heard in 1991, before the establishment of the WTO, presaged subsequent debates, as environmentalists sought more room for the use of trade measures to pursue environmental policy objectives, while proponents of trade have sought to constrain this use (Moran, 2017; Skilton, 1993; Yechout, 1996). Some scholars have claimed that the early jurisprudence has had a 'Big Chill' effect on the use of trade measures in MEAs, and undermined environmental policy objectives (Eckersley, 2004a). More recent jurisprudence such as the Shrimp-Turtle case, concluded in 1998 after the WTO had been formed, appeared to be more attuned to environmental concerns by supporting unilateral trade measures under the Article XX environmental escape clause that protected species that were under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (also known as CITES); it nonetheless found that the US had discriminated against the imports of the complainants (Eckersley, 2004a, p. 26). Suggestions for the use of trade measures such as Border Carbon Adjustment (BCA) mechanisms have resurfaced in the wake of flagging multilateral efforts to address global climate change (Mehling et al., 2019). Trade measures are thus seen as a *virtue* when leveraged to promote environmental protection.

The foregoing debates on the vice and virtue of trade policy on environmental governance set the broader context for this study. Specifically, the study will examine how PTAs have dealt with the linkage of trade and environmental issues. It will examine this primarily from an environmental perspective in order to understand whether there has been a genuine process of greening in PTAs through the promotion of environmental protection. That is: *have PTAs been a tool of vice, by constraining environmental policy space for some or all parties? Or have they been a virtuous tool that has been leveraged to promote improvements in environmental governance?*

Much of the scholarly effort seeking to address these questions has traditionally focused on the WTO. Where studies have examined PTAs, they have only focused on a small number of PTAs, mostly involving major trading parties. Recent efforts have shifted focus to the hundreds of PTAs that have been concluded in the last few decades, but as the next section will show, there remain significant gaps in understanding the effects of the growing number of environmental clauses in PTAs.

1.4 The Argument

In answering the underlying research question, this study advances two inter-related arguments. First, states have primarily used their PTAs to curb green protectionism. Two-thirds of the environmental linkage clauses coded from the PTAs sought to develop mechanisms to curb the use of environmental measures for trade protectionist purposes. Only one-third of the linkage clauses promoted environmental protection. The proliferation of environmental linkage clauses, therefore, is more of a 'green illusion' than 'greening of PTAs'. In other words, states often view environmental measures with trade effects as a vice and not virtue.

The second argument is that where states have sought to leverage PTAs to enforce their environmental policy commitments, they have done so by using clauses in the PTAs as *coordination-enhancing devices* to implement environmental policy commitments, rather than as sanctions or other forms of third-party enforcement. That is, states have predominantly preferred the use of coordination to sanctioned enforcement mechanisms when fostering compliance with environmental policy commitments. In some cases, they have even explicitly included clauses forbidding the use of PTA's dispute resolution mechanisms to enforce environmental policy

commitments. Instead, states have developed coordination mechanisms, usually through the delegation of implementation of domestic and international environmental policies to government agencies, and not third parties. In such cases, diplomatic coordination is the favoured mode of fostering compliance with environmental policy commitments. Sanctions and dispute resolution mechanisms have been largely absent. Only the major economic powers, especially the US, EU and Canada have been including third-party enforcement mechanisms. The fact that the study of PTAs has been overwhelmingly focused on these parties creates the impression that this is what the bulk of PTAs are like. In sum, coordination, and not dispute resolution to address free riding, is the main challenge for states leveraging PTAs to enforce environmental policy commitments.

Environmentalists might ask: to what extent and how are these environmental clauses designed to promote environmental protection or are they doing other work? An optimistic assumption might be that the proliferation of environmental clauses in PTAs implies that such clauses necessarily promote environmental protection. But both findings challenge this overly optimist assumption, as some of the clauses are concerned with mitigating the negative impacts of environmental measures on trade. Instead, the findings suggest the need for a more general and parsimonious theory that explains all variation in the design of environmental linkage clauses in PTAs.

1.5 Overview of the Study

The historical inquiry provided in Chapter 2 sets the scene for the study. In undertaking the inquiry, I conducted a detailed examination of archival documents to reconstruct the key issues and lines of disagreement in trade and environment linkages among parties to the GATT. The analysis focused on a series of thirteen debates conducted by parties to the GATT, under the auspices of the Environmental Measures and International Trade (EMIT) working group. The debates were to

consider the relevance of the GATT in addressing the emerging global environmental challenges. By setting such a context, the chapter also lays a firm foundation for making realistic assumptions about the parties' environmental preferences in the development of the theory of issue-linkage in PTAs.

In Chapter 3, I develop the theory of issue-linkage to explain the inclusion of environmental clauses in PTAs, which underpins the empirical analysis of the study. The chapter first surveys the theoretical literature and identifies the relevant gaps and limitations. It also builds on the literature review presented in the present chapter. Development of the theory of issue-linkage is anchored on assumptions derived from the historical inquiry in the preceding chapter. The chapter builds on several theoretical strands of the literature, including international relations, international political economy, law and economics, to develop the theory of issue-linkage.

Chapters 4 and 5 mark the beginning of the empirical analysis of environmental linkage clauses in PTAs, focusing on large-n analysis. Against the historical and theoretical backdrops provided in Chapters 2 and 3 respectively, the large-n quantitative analysis seeks to ascertain the numbers and different types of clauses in PTAs that draw linkages with environmental issues (referred to as linkage clauses). Chapter 4 identifies the patterns in the proliferation of the main types of linkage clauses, while Chapter 5 uses econometric analysis to examine the drivers of variation on the linkage clauses. Survival analysis was used in the econometric analysis undertaken in Chapter 5 as it allows for an examination of change over time, a crucial issue in assessing arguments on diffusion of environmental linkage clauses in PTAs. The analyses in both chapters are based on a

novel dataset of environmental linkage clauses coded from 294 PTAs concluded between 1990 and 2019.

To probe the findings from the large-n analyses, Chapters 6 & 7 shift the empirical focus to qualitative case study analysis. The EAC represents an 'in-between' case (Seawright & Gerring, 2008), insofar as it has features that are both different and similar to the most studied cases, such as US and EU PTAs. First, it does not include major trading economies, thus relaxing the assumption of significant relative bargaining power, based on market size, as the main determining factor of linkage. The absence of the great power dynamics allows for the theoretical examination of alternative drivers of linkage, especially those identified in the statistical analysis undertaken in Chapter 5. We know much about the major trading economies - the strong get what they want through their superior relative bargaining power - but we know less about how countries leverage their PTAs to enforce policy commitments in the absence of such power asymmetries. Moreover, South-South PTAs are understudied in the literature on the inclusion of environmental linkage clauses in PTAs. The EAC presents a relevant case study for such an analysis.

Second, the EAC is similar to the EU and is the most integrated regional economic community in Africa (AU et al., 2019, p. 25), a region that is experiencing significant economic transformation by leveraging trading policy (Mangeni & Juma, 2019). In fact, the African Continental Free Trade Agreement (AfCFTA), adopted in 2018, covers the biggest geographical free trade area in the world (Shendruk, 2021). This trend has been termed as 'Africa's divergent globalisation' (Mangeni & Juma, 2019, p. 36). That the EAC PTA partner states have engaged in extensive regional cooperation on environmental policy, against the backdrop of rapid economic

development, makes this PTA an ideal case study to garner fresh insights on how the parties from the global South have leveraged the PTA to pursue environmental policy objectives. Chapter 6 examines the emergence and design of the Environment Chapter of the EAC PTA treaty, and the attendant MoU for Cooperation on Environment Management.

Chapter 7 shifts attention to several regional environmental policies designed and adopted to enforce the environmental policy commitments in the EAC PTA. Both chapters draw on extensive fieldwork conducted in 2018 at the EAC Headquarters in Arusha, Tanzania. Data for the case study analysis comprises semi-structured expert interviews with EAC officials and other key actors in the private sector and civil society; historical inquiry of archival material including treaty preparation documents (*travaux preparatoire*), policy and official documents, and the Hansard record of parliamentary proceedings in the EAC.

Overall, the mixed-methods approach allows for a comprehensive analysis of the research question. The historical inquiry presents an important backdrop for theory development. The theory of issue-linkage is grounded in the historical inquiry and it underpins the empirical analysis. To probe general patterns, the large-n statistical (descriptive and econometric) analyses provide a suitable approach, while the qualitative case study analysis allows for more detailed and contextual analysis of the patterns inferred from the large-n analysis. Combining these methods enables a more innovative, rounded and nuanced response to the research question (Small, 2011). Subsequent chapters undertake the remainder of the analysis of the present study.

Chapter 2: Historical Antecedents

Before embarking on an empirical analysis of the design and implementation of environmental clauses in PTAs, it is necessary to examine the key issues that animate the trade and environment debate. To do so, this chapter undertakes a historical overview of the most significant debate on trade and environment in the multilateral trading system. Specifically, the chapter seeks to achieve three objectives. First, to review the debate on trade and environment by focusing on the arguments advanced by member countries in the General Agreement on Tariffs and Trade (GATT) and the rationale underpinning them. It does so by showing the emergence of environmental concerns as a major issue in the multilateral trade arena and demonstrates that the repertoire of basic concerns and lines of debate have not changed. This approach is suitable because environmental issues were present at the beginning of the GATT with the inclusion of Article XX.[7] But the world has since moved on, and thus the period of focus in this chapter is a more contemporary basis for grounding the theoretical assumptions in the subsequent chapter. Thus, the chapter presents a conceptual roadmap for subsequent analyses in the study (Keohane & Goldstein, 1993).[8]

The second objective is to provide a context for deriving realistic assumptions in the development of the theory of issue-linkage in the next chapter. As noted in the preceding chapter, the theory is based on a rational choice approach. While the rational choice approach is powerful due to its parsimony, simplicity and elegance, it has inherent limitations that significantly limit its application to a study with as broad a scope as the present one. Specifically, the limitations are: 1)

[7] Please note that the word 'environment' does not appear in the text of Article XX of the GATT, only a reference to animal and plant life, and exhaustible resources

[8] Keohane and Goldstein note the importance of ideas as roadmaps and focal points, the rationale of the present chapter

a priori theoretical assumptions that are divorced from the real world; 2) lack of empirical context, which is often abstracted; and 3) failure to explain key actors, their interests, explaining the origin of institutions, and how these change (Snidal, 2002, pp. 85–86). To overcome these limitations, the historical inquiry in this chapter provides a strong basis for deriving the assumptions underpinning the theory of issue-linkage, based on governments' negotiation positions. That is, "theory must be firmly grounded in reality, and this is in two senses: the assumptions should be realistic and the theories and analysis should be pointed toward an understanding of the...system and how it actually operates" (Medema, 1995, p. 3). This chapter, therefore, seeks to lay this necessary contextual groundwork.

As multilateral trade negotiations were ongoing through the Uruguay Round (1986-1993), countries were organising the UN Conference on Environment and Development (UNCED) scheduled for 1992 in Rio de Janeiro, Brazil. Some of the issues that were discussed at UNCED had a bearing on the multilateral trading system. The GATT membership realised that it had to take the UNCED negotiations seriously, since the number of Multilateral Environmental Agreements (MEAs) was also growing.

Thus, the GATT convened a series of thirteen debates, between the years 1991 and 1993, under the aegis of the Environmental Measures and International Trade (EMIT) working group, on the implications of the proliferating MEAs for the multilateral trading system. Drawing on an extensive corpus of primary archival material on the debates on trade and environment in the GATT since its inception – the *travaux preparatoire* - and focusing on the debates at the EMIT group, this chapter will assess how GATT members sought to address environmental policy issues.

Upon an extensive search of the GATT repository on negotiation documents, one hundred and twenty-three (123) relating to these debates were identified and analysed.[9] The GATT EMIT working group debates thus serve as the case study for scoping the issues of consensus and contention on the trade and environment debate.

It shall be argued that two fault lines have provided a framework for the debate on trade policy and environmental governance.[10] On the one hand, there has been concern over green protectionism, where environmental measures may be used as disguised forms of protectionism. On the other hand, trade policy has been perceived as being able to contribute to environmental governance. Thus, both rationales for resisting (or limiting) and promoting environmental clauses shall be examined within the context of the design of environmental linkage clauses in PTAs.

In addition, it shall be demonstrated that there was broad agreement on the need to curb the use of environmental measures for trade protectionism purposes (green protectionism) and the need to foster uptake of trade supporting measures such as greater liberalisation of eco-friendly goods and services. However, the most contentious issue of the debate was on how trade measures could be used to address the problem of environmental free riders - that is, GATT members that were not parties to certain MEAs. The default position of the parties on this issue was to avoid leveraging the GATT to enforce environmental policies and instead to leave it to parties to negotiate trade restrictions in MEAs, which could not be enforced against non-parties. There was broad consensus

[9] All documents accessed through the GATT Digital Library 1947-1994, hosted by Stanford University https://exhibits.stanford.edu/gatt. I searched for the word 'environment' and restricted my search to the GATT archives. A list of all the documents that were consulted is included in the Annexure.
[10] Dialectics herein are understood in the Hegelian fashion; that is the debate on trade policy and environmental governance has been characterised by conflict and synergy

on the outright rejection of the use of unilateral, extra-jurisdictional trade measures, especially those aimed at equalising domestic environmental standards, to address the so-called 'eco-dumping'. The US was adamant in having the unilateral approach as a policy option, while Canada and the European Commission advocated for a multilateral approach to the use of trade measures, especially within the framework of MEAs. Developing countries and other developed countries such as Japan strongly rejected the use of unilateral, extra-jurisdictional trade measures to address eco-dumping'.

The rest of the chapter is structured as follows. The next section lays out the GATT's rationale for convening the series of thirteen debates as a response to the UNCED. The subsequent section examines debates on the specific agenda items that are relevant to this study, identifying the key issues emerging from the debates. The section after assesses the broader contributions of the GATT EMIT debates to the UNCED process, and the final section concludes.

2.1 The Multilateral Trading System and Environmental Policy

The Uruguay Round of negotiations were initially focused on trade issues, but parallel developments forced the GATT to pay attention to environmental issues. During the Uruguay Round, the Canadian delegation tabled a proposal in 1993 to transform the GATT into a fully-fledged multilateral institution - the World Trade Organization (VanGrasstek, 2013, pp. 57–58). Canada "was particularly well placed to put forward such a proposal because it was a member of the Quad,' and also since 'it was the smallest of that group, and the least likely to meet 'automatic' objections to any rather novel proposal" (VanGrasstek, 2013, p. 58).[11] At around the same time,

[11] The Quad refers to the Quadrilateral group comprised of the US, Canada, the EU and Japan

countries were preparing for negotiations to craft multilateral agreements on three pressing environmental issues: climate change, biodiversity, and desertification. These three sets of multilateral negotiations were being conducted under the aegis of the United Nations and christened the UNCED. The conference was to be convened in Rio de Janeiro, Brazil, in June 1992. The UNCED conference also marked the twentieth anniversary of the landmark Stockholm conference of 1972, which had been officially named the UN Conference on the Human Environment (UNCHE).

Creation of the GATT EMIT Group

The GATT had engaged in debates on environmental issues prior to the UNCED. The most important debate was during the 1972 Stockholm Conference. At the conference, the GATT reiterated its commitment to supporting mutually beneficial policy for both trade and environment (GATT, 1972b). In preparation for the Stockholm conference, the GATT created the Environmental Measures and International Trade (EMIT) working group in 1971 (GATT, 1971).[12] Mr. H. Kaya from Japan was appointed as the chairman of the EMIT group (GATT, 1972a). The GATT Director-General (DG) made a statement at the 1972 UNCHE, outlining how the GATT perceived multilateral environmental issues. The main message of the GATT DG was that trade measures should not be used for trade protectionist purposes, under the guise of environmental

[12] The functions of the Group were: i) To examine, upon request any specific matters relevant to the trade policy aspects of measures to control pollution and protect human environment, especially with regard to the application of the provisions of the General Agreement, taking into account the particular problems of developing countries; ii) To report on its activities to the Council. Founding members of the EMIT Group include Argentina, Austria, Brazil, Canada, European Communities and their Member States, India, Israel, Japan, Korea, Nigeria, Nordic countries, Switzerland, United Kingdom, United States and Yugoslavia

protection (GATT, 1972a, pp. 1–2).[13] The EMIT group was also tasked with several issues to resolve, which included the uneven distribution of remedial costs; increased consumption patterns; the costs of environmental safeguards might lead to protectionism; and the use of trade-related environmental measures (GATT, 1972b).

In addition, the GATT Secretariat had presented a paper at the UNCHE conference, which surveyed certain issues that anti-pollution measures might raise for international trade (GATT, 1972a, p. 2). The GATT DG also welcomed three proposals in the UNCHE Action Plan: i) Avoid creating barriers as a way of meeting costs of pollution; ii) Avoid environment becoming a pretext for discrimination; and iii) Need to consult on national standards and regulations, through coordination (GATT, 1972a, p. 2).

Finally, transparency of domestic environmental measures became an important issue. The DG noted that the GATT had established a "machinery" to examine trade-related aspects of anti-pollution measures, and this formed part of the GATT's practical contribution to addressing environmental problems (GATT, 1972a, p. 3). Using the machinery, members would communicate their domestic measures, aimed at addressing their environmental problems, to the GATT. In brief, the GATT Exceptions "Machinery" was the main response to the 1972 UNCHE conference. The

[13] The Press Statement made several points. First, the DG noted the overlap between the Stockholm Conference with the GATT mandate (p. 1). The DG also foresaw a future use of domestic environmental regulatory measures that could be detrimental to trade (p. 1). Crucially, the DG noted the need to guard against green protectionism: 'What is important from GATT's point of view is that where measures are taken in the environmental field - whether on the local, national, regional or international plane - there will be need to ensure that these measures are not in effect used for protective purposes. This is the aspect in which GATT is directly concerned, both since its main purpose is to secure, through negotiation, the reduction of trade barriers and because of obligations of GATT member governments in the field of trade policy under the General Agreement' (p. 2). The GATT DG also called for a mutual approach towards trade and environment, and a differentiation towards developing countries (p. 2).

"Machinery" was discretionary in nature and was available when the need arose. The EMIT group, however, became dormant afterwards, perhaps underscoring the GATT's ambivalence to actively contributing to environmental policy objectives.

Reviving the GATT EMIT Group

The GATT could not, however, ignore the UNCED conference. At the centre of the UNCED negotiations was the issue of how to reconcile environmental and development policy objectives. The Brundtland Report of 1987 had attempted to synthesize the divergent policy views into the concept of sustainable development. In effect, sustainable development placed the environment and development on equal footing. While this was a useful compromise for consensus-building, efforts to operationalise it proved quite challenging.

Since trade had a strong bearing on the development dimension, the GATT had to be actively engaged in the UNCED negotiations. Moreover, the GATT's membership had transformed remarkably since 1972, as it later included many developing countries who prized development and saw trade policy as an important tool towards this end (Narlikar, 2004, p. 15). The GATT, therefore, had to take a more proactive approach on environmental issues (GATT, 1992f). Debates around trade and environment revolved around two questions: i) the consistency of MEAs with the GATT; and ii) the purpose and consequences of trade measures in MEAs (GATT, 1993w, p. 9).

Attempts to revive the EMIT group were kickstarted with a suggestion by the Executive Director of the United Nations Environment Programme (UNEP) (GATT, 1988, p. 2).[14] As a follow-up, a formal proposal for the activation of the EMIT group was tabled in the GATT in 1990 by several delegations during the Uruguay Round Negotiations (GATT, 1990a).[15] To ensure formal consideration, the delegation of Austria, on behalf of EFTA, called for the inclusion of the item "Trade and Environment" in the agenda of the forthcoming GATT Council meeting (GATT, 1991a). After the Council meeting, the Chair was asked to convene a structured debate at the Council 'to identify measures taken on environmental grounds which could affect trade and development in the light of the provisions in GATT and Tokyo Round instruments'(GATT, 1991b).[16] The EMIT group was given a clear mandate to tackle the environmental dimension of the GATT, especially on how the institution could contribute to the UNCED process. A decision by the GATT Council of Representatives lay down the agenda and Terms of Reference (ToRs) for

[14] In the communication on the adverse trade effects of environmental measures, the Executive Director of UNEP said 'I believe that it may be opportune therefore for GATT to activate the Group on Environmental Measures and International Trade to monitor the impact on trade of environmental regulations and ensure fairness, non-discrimination, adequate notification and information exchange in trade practices. Simultaneously, GATT, UNCTAD and UNEP should explore ways of intensifying technical cooperation to developing countries in need to meet environmental standards of importing countries for their major exports subjected to stringent environmental regulations' (p. 2)

[15] The delegations of Austria, Finland, Iceland, Norway, Sweden and Switzerland suggested a Ministerial Statement to be made by Ministers. Three specific requests were made on the potential contents of the Ministerial Statement: i) Undertake a study on the relationships between environmental policies and the rules of the multilateral trading system; ii) Engage in the Rio Conference preparatory work by UNEP; and iii) Convene the EMIT Group in 1991 under an updated mandate to be decided by the Council of the GATT

[16] The debate session would be informal, its resolutions non-binding, and would be based on the following five points: i) Relationship between environmental policies, trade policies and sustainable development, including further liberalisation of trade; ii) Identification of measures taken on environmental grounds that directly or indirectly affect international trade; iii) identification of sectors of particular interest to developing countries, taking into account their trade, financial and development needs, in which any trade may be affected as a result of environmental policy measures; iv) trade provisions in international environmental instruments; principles and concerts adopted or under discussion; and v) Identification of GATT Articles and Tokyo Round instruments relevant to trade measures taken for environmental purposes

the EMIT group (GATT, 1991d, 1994d, pp. 23–24).[17] The Council decision adopted the following agenda, which the EMIT group consequently took up:

(a) trade provisions contained in existing multilateral environmental agreements (e.g. the Montreal Protocol on Substances that Deplete the Ozone Layer, the Washington Convention on International Trade in Endangered Species and the Basle [sic] Convention on the Control of Transboundary Movement of Hazardous Waste and their Disposal) vis-à-vis GATT principles and provisions;
(b) multilateral transparency of national environmental regulations likely to have trade effects;
(c) trade effects of new packaging and labelling requirements aimed at protecting the environment (GATT, 1991c, 1994d, p. 18).[18]

The GATT EMIT debates

Overall, thirteen debate sessions were convened by the EMIT group, under the chairmanship of Ambassador H. Ukawa of Japan (GATT, 1991c). The first meeting of the Group, which was held on 27 November 1991, attracted the participation of 46 delegations, but only one of them - Sweden - had a representative from an environment ministry (GATT, 1992a).[19] Five of these sessions took place prior to the UNCED conference, while eight took place after. What was crucial about these

[17] The ToRs of the group were: i) To examine upon request any specific matters relevant to the trade policy aspects of measures to control pollution and protect human environment especially with regard to the application of the provisions of the General Agreement taking into account the particular problems of developing countries; and ii) To report on its activities to the Council. The GATT Council decision was annexed to EMIT Chairman's second report

[18] Agenda items quoted directly from the document. The first EMIT group meeting was scheduled for 27 November 1991, and was headed by Ambassador Hidetoshi Ukawa (japan) as Chairman. The agenda of the EMIT group was set by the GATT Council on 08 October 1991, and the meeting was open to all Contracting Parties (p. 18)

[19] Sweden 's delegation included a representative from the Assistant Undersecretary, Ministry of Environment

debates is that they seriously considered, for the first time, how the GATT could promote environmental policy objectives, as opposed to merely accommodating them through its Article XX, which allowed trade restrictions for environmental purposes as exceptional measures when certain narrow conditions were met (discussed in more detail below).

These debates would also touch on the importance of safeguarding the multilateral trading system. Overall, the debates covered the broad themes of green protectionism that had to be mitigated to protect the GATT, and also how the GATT could actively contribute to the pursuit of environmental protection (GATT, 1991e).[20] This approach to the analysis of the issues was best captured in a speech by the GATT DG Arthur Dunkel at a conference on Business and Environment (GATT, 1992b).[21] The speech called on governments to develop constructive links between trade and environmental policy-making. The speech was given in Bangkok at a conference on Business and the Environment organised by the International Herald Tribune and the Thailand Development Research Institute. The DG also noted that a healthy economy must go hand-in-hand, and then posed the question: *Are the environment and the world trading system inevitably on a collision course? (emphasis own).* In response, the DG outlined three key points for consideration: i) Issues of international harmonisation of domestic environmental standards;

[20] The report of the 1st EMIT group meeting called for analytical work to lay the groundwork for discussions, which would not be 'freewheeling' discussions. Importantly, it was noted that the group was not a negotiating forum

[21] The press release by the GATT DG, Arthur Dunkel, called on governments to develop constructive links between trade and environmental policy-making. The speech was given in Bangkok at a conference on Business and the Environment organised by the International Herald Tribune and the Thailand Development Research Institute. The DG also noted that a healthy economy must go hand-in-hand. The DG also posed the question: *Are the environment and the world trading system inevitably on a collision course? (emphasis own).* In response, the DG outlined three key points for consideration: i) Issues of international harmonisation of domestic environmental standards; ii) Preference for multilateral environmental solutions, including the use of trade measures; and iii) Focus on nondiscriminatory use of environmental regulations. The DG also highlighted the importance of the three points especially support through technical assistance for developing countries

ii) Preference for multilateral environmental solutions, including the use of trade measures; and iii) Focus on non-discriminatory use of environmental regulations. The DG also highlighted the importance of the three points especially support through technical assistance for developing countries

Additionally, the GATT Secretariat produced a factual note on trade and environment that would form the analytical basis of the GATT EMIT debates (GATT, 1992c). Finally, during the second EMIT group session, delegations agreed on the basic principles that would guide their discussions (GATT, 1992d, p. 2).[22] In other words, the EMIT group considered the use of trade policy for both issues of green protectionism and environmental protection, a compromise that would include the priorities of the various countries (GATT, 1992c). Much of the debate was conceptual and based on several non-papers by delegations and factual notes prepared by the GATT Secretariat (GATT, 1992j). The rest of the chapter examines these debates in the EMIT group in detail, drawing out their conceptual contours to set the 'baseline' for an analytical mapping of the parties' preferences in negotiating environmental clauses in PTAs, which will serve as a theory to be tested, a task taken up by empirical subsequent chapters in this study.

2.2 Emergent Conceptual Issues

As foreshadowed above, even though many issues were discussed, the two conceptual issues of curbing green protectionism, and leveraging trade policy to pursue environmental policy objectives, were the most prominent.

[22] Principles that would guide the Group's work were: i) Self-restraint in the use of trade measures for environmental purposes; ii) Precautionary principle not a legitimate reason for GATT-inconsistent environmental measures; iii) Particular problem of developing countries; iv) Any conflicts with GATT rules to be settled in GATT and not unilaterally; v) the Group should not attempt to harmonise or set environmental standards for the purposes of reducing trade distortions or conflicts (p. 2)

a) Green protectionism: Safeguarding the multilateral trading system

Since its inception, the main approach of the GATT to environmental policy had been through the use of exceptions. Article XX of the GATT outlined general exceptions that contracting parties could invoke to attend to domestic exigencies. But as the second agenda item of the EMIT group mandate shows, issues of enhancing transparency in the use of environmental policies also arose and would recur in subsequent debates. This section examines how the GATT articulated its rationale as an agreement designed to facilitate non-discriminatory trade. This would be through enhanced transparency and laying out conditions for 'escape' from trade rules to address domestic environmental issues without risking abuse of the GATT exceptions. In other words, the section examines how the GATT sought to curtail green protectionism.

Escape: The challenge of efficient breach

As has been noted, the GATT's main approach to dealing with environmental policy issues had been to circumscribe them within trade rules. Contracting parties could suspend their obligation in a bid to address pressing domestic challenges, but in doing so they had to meet certain conditions. This approach was termed as 'tolerance and safeguards' (GATT, 1993w, p. 9). Article XX of the GATT outlined the conditions under which contracting parties could use the exceptions. By pursuing a balanced approach, the GATT would provide the necessary policy space for contracting parties to address pressing domestic environmental issues, but also ensure that the leeway was not abused by being deployed for protectionist and discriminatory policy objectives. In short, Article XX of the GATT sought to address the challenge of efficient breach (Pelc, 2010, 2016a, p. 125).

Origins of Article XX

Article XX has its origins at the inception of the GATT. The GATT's existence has been famously termed as an accident, as it was originally intended as a temporary negotiating forum (Winham, 1990, p. 796). Attempts to ratify the Havana Charter, which would have led to the creation of the first multilateral trade organisation - the proposed International Trade Organization (ITO) - had foundered. Since the US Senate could not ratify the Havana Charter, on the grounds that it would cede significant sovereignty to the organisation, the ITO became stillborn (Pigman, 1998, p. 76). The GATT, an *ad hoc* institutional arrangement, therefore emerged as the only forum for multilateral trade negotiations. Thus, even though the GATT was not a fully-fledged institution, it persisted for more than four decades (Barton et al., 2008b, p. 42).

Conceptually, the groundwork for carving out exceptions to respond to domestic policy exigencies was laid down through a proposal aimed at addressing the problems of long-term contracting (UN, 1948b).[23] A proposal for inclusion of an exception clause covering the environment, in the negotiations on the GATT, was introduced by the delegations of France, Belgium, Netherlands and Belgium, in 1947 (UN, 1947a). Negotiations on the creation of the GATT were taking place at the UN Economic and Social Council (ECOSOC). The rationale for the suggestion was the restoration of wording that had been proposed but dropped earlier in the negotiations (UN, 1947a). Modelled on the logic of Chapter V of the Havana Convention, the exact phrasing for the proposal

[23] Article 23 on Exceptions to the Rule of Non-discrimination. Norway raised the problem of long-term contracting (stabilisation of commodity prices) and the principle of non-discrimination

was: “Necessary to protect human, animal or plant life or health, if corresponding domestic safeguards under similar conditions exist in the importing countries” (UN, 1947a, p. 1).[24]

A broader connection between the exceptions and constraints in the domestic policy space in the GATT was suggested by the delegation of Iraq (UN, 1948a).[25] But there was a need to include safeguards to prevent abuse of the exceptions. Therefore, the delegation of Italy proposed the introduction of conditions that had to be fulfilled in the use of the exceptions (UN, 1947b). These conditions were presented as part of a set of proposed amendments of the Draft Charter of the GATT (UN, 1947a, 1947b, 1948a).

Also, the delegation of Norway proposed that the exceptions should be temporary in nature, and based on non-discrimination (GATT, 1954; UN, 1948b).[26] It can be argued that Norway’s suggestion of a non-permanence of exceptions sought to drastically reduce their usage, thus lowering the costs incurred to affected parties from the discriminatory nature of the actions taken under the exceptions. The exceptions and safeguards eventually comprised Article XX of the GATT, with clauses (b) and (g) covering various aspects of the environment. But at a broader level, the GATT was struggling with finding a balance between escape clauses and non-discrimination. The GATT Secretariat was thus tasked with investigating the issue, and it released a report detailing its findings in 1950 (GATT, 1950).

[24] Note that the Chapter V of the Havana Charter was concerned with ‘Restrictive Business Practices’ hence a search for efficient breach

[25] Delegation of Iraq’s proposal on Article XX(d): “to prevent any Member from taking any action in respect of trade which serves a political purpose contrary to the essential interests of that Member."

[26] Article 23 on Exceptions to the Rule of Non-discrimination. Norway raised the problem of long-term contracting (stabilisation of commodity prices) and the principle of non-discrimination. Canada also tabled a proposal which focused on balance of payment as a heuristic on how to best design an efficient breach system

Operationalising Article XX

Once Article XX was in place, attention shifted towards operationalising it. Of conceptual importance was specifying the criteria under which contracting parties could justify their invocation of the exceptions. To address this issue, the GATT Executive Secretary launched a process of justification of exception lists and tabled the requisite guidelines in 1964 (GATT, 1964d). This also served as the commencement of the necessity test in the GATT, in practice (GATT, 1964d).[27] Building on the preliminary experience, the GATT Executive Secretary subsequently released a report with more guidelines to assist contracting parties in the justification of their exceptions lists (GATT, 1964g). Given the sensitivity of the issue, the Executive Secretary released additional guidelines to address it, as per the request of Contracting Parties (GATT, 1964f).[28]

Based on these arrangements by the Executive Secretary, contracting parties also sought to elaborate an 'efficient breach' mechanism (GATT, 1965).[29] Through a landmark proposal, the US delegation suggested two conceptual rationales to underpin the justification of exceptions lists (GATT, 1964g). The first was that the criteria for justification should be based on qualitative and not quantitative aspects; and the second was a preference for a multilateral to bilateral approach of negotiations on justification of exceptions (GATT, 1964g).[30] The proposals by the US would mark

[27] Noted that the process of justification of exceptions lists would begin on 09 December 1964, also the commencement of necessity tests through justification of the exceptions lists

[28] Specifically, the additional guidelines called for delegations to: i) provide general statements on lists; ii) discussion of what further information is needed; iii) discussion of particular products; and iv) discussion of negotiating procedures

[29] The GATT ES released a programme of meetings for the examination of partial exceptions lists

[30] The US expressed doubt on the usefulness of quantitative assessment of justification. The US proposal was based on two convictions: i) Preference for qualitative aspects; ii) Negotiations to be concluded on a

a critical conceptual juncture in the turn towards qualitative approaches to 'efficient breach', a model that would also underpin the exceptions under Article XX (GATT, 1972a).[31]

In effect, the GATT had developed a well-established system of "efficient breach", whereby it allowed contracting parties to derogate from their obligations under the treaty to address domestic policy exigencies. These derogations were, however, subject to certain criteria, especially the demonstration of necessity of the measures, to prevent their abuse (GATT, 1992h, p. 8). The onus of proof of necessity was thus an important aspect, since it favoured free trade as the default position, and the party invoking the exception had to demonstrate necessity and, therefore, bear the onus or burden of making the case. The GATT thus sought to preserve the multilateral trade system by having a trade-first approach, and greatly reducing the costs that would be incurred from the measures taken under the exceptions. For decades after its inception, the GATT maintained this 'tolerance and safeguards approach' (GATT, 1993w, p. 9). No wonder the agenda for the revived EMIT group did not include exceptions as an item in its agenda, as it was considered a settled matter.

multilateral and not bilateral basis (p. 1). The US proposal was on the justification of exceptions lists. Related, the US proposed three categories of exceptions: i) Technical; ii) Mandatory (domestic legislation); and iii) Economic (national interest) (p. 2). The US also noted that the majority of items on lists focused on domestic legislation and tied them to the logic of the escape clauses (exceptions)-domestic exigencies (p. 2). Further, the US proposal argued that the Economic exceptions were of greatest interest for the negotiations (serious economic injury or an impairment of the national security) (p. 3). Finally, the US proposal noted the need to keep an eye on non-tariff barriers (NTBs) and their impairment of nullification of tariff cuts (p. 7) - this perhaps pre-empted the Law of Constant Protection.

[31] Indeed, at the Stockholm UNCHE, the GATT DG referred to this "Machinery", which was discretionary in nature, and was available when the need arose. It was also based on multilateral consultations before the implementation of domestic legislation (p. 3). For a discussion elaborating on the distinction between quantitative and qualitative remedies to escape, see Pelc (2010).

Transparency: An early warning system

As much as the GATT was keen to engage in the UNCED process and contribute towards environmental policy objectives, it also had to reckon with challenges that might threaten its very rationale and existence. The abiding concern for the GATT was that countries would increasingly resort to using domestic environmental measures as disguised forms of protectionism and discrimination - green protectionism. Even though Article XX of the GATT carved out space for contracting parties to attend to their domestic policy exigencies, there was still the danger of 'hidden' forms of discrimination through disguised and unnecessary obstacles to international trade (GATT, 1994a).[32]

To address this challenge, the GATT had created a transparency system which contracting parties could use to notify other members of draft domestic regulations that they were intending to introduce. Agenda item (b) of the EMIT group outlined the need for enhanced multilateral transparency, which would require contracting parties to notify their members of domestic measures with trade effects. The focus for the agenda item was to explore 'multilateral transparency of national environmental regulations likely to have trade effects' (GATT, 1994d). The GATT Secretariat also produced a factual note analysing the extent of notifications in the GATT (GATT, 1992e).[33] The Note would provide the conceptual basis for the deliberations on this agenda item.

[32] A report by the GATT Secretariat examined the use of the 'unnecessary obstacles to international trade' found that they were primarily about protection of domestic production

[33] Three types of policy instruments to implement environmental technical requirements and standards were identified: i) Border restrictions; ;;I Internal taxes and other charges; iii) Laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products

Several transparency mechanisms had been developed in the GATT. The Transparency Mechanism of the Agreement on Technical Barriers to Trade offered a useful early warning system (GATT, 1992f, p. 23).[34] Additionally, the Text of the Functioning of the GATT System (FoGS) foresaw the creation of a registry of notifications (GATT, 1992f, p. 14). It was suggested that any new transparency mechanism should be based on three considerations: i) be administratively manageable; ii) Avoid duplication of transparency requirements; and iii) have a narrow scope as per other policy areas (GATT, 1992n, p. 19).[35] Thus, transparency systems would serve the purpose of sharing information to reduce the adverse effects of trade; assisting traders to adjust; and preventing disputes through prior notice and consultations (GATT, 1993g, p. 13).[36] It was therefore clear that there was a need to ensure that the transparency mechanisms of the GATT were administratively manageable.

Origins of transparency mechanisms in the GATT

Prior to the GATT EMIT debates, the GATT had developed some transparency mechanisms, largely based on notification of measures. The first notification system emerged when the Executive Secretary of the GATT convened a session for contracting parties to table their list of exceptions in 1964 (GATT, 1964a).[37] This would be the first design iteration of a notification system, albeit an *ad hoc* one. The Executive Secretary released further guidelines (GATT, 1964b) and a report to assist contracting members with the notification exercise (GATT, 1964e). Conceived as a clearing house, the *de facto* notification system would serve as the main transparency mechanism of the GATT (GATT, 1964b).

[34] As suggested by the delegation of Sweden
[35] As presented by the delegation of the EC
[36] As suggested by the delegation of Hong Kong
[37] Tabling of Exceptions List at the office of the Executive Secretary at 5:30pm on 16 November 1964

The Executive Secretary viewed the new transparency system as a major achievement, and consequently released a statement announcing the new communication system for exceptions (GATT, 1964c, p. 1).[38] In tandem, a subsequent system of justification of the exceptions list would also commence during the tabling of the exceptions lists at the office of the GATT Executive Secretary (e.g. see GATT, 1984, 1990b, 1990d). Even though the notification system was broad, it would feature significantly in the EMIT debates.

Since the existing notification system of the GATT had been deemed inconvenient, strengthening the broader transparency mechanism was one of the items of negotiations for the Uruguay Round (GATT, 1989a, 1990c).[39] The UNCED brought to the fore the environmental dimension at the GATT, and the EMIT group was tasked with looking into it. Initial discussions at the EMIT focused on the adequacy of the GATT's transparency provisions to capture domestic environmental regulations that had significant trade effects. This was based on the rationale that as domestic environmental policies became more prevalent, and that they could have significant negative trade effects, there was a need to notify them to the GATT. As neoliberal institutionalism cooperation theory posits, information exchange is critical for effective cooperation (Keohane, 1984, pp. 92–95).

[38] Part of the press release read: 'On 16 November 1964 those countries which are participating in the Kennedy Round on the basis of the rules relative to linear reduction were called upon to table their exceptions lists at the GATT secretariat' (p. 1)

[39] Presentations by representative of the International Plant Protection Convention (IPPC) and Food and Agriculture Organization (FAO) at the Uruguay Round negotiations highlighted some of the experiences and challenges with development of notification systems on Sanitary and Phytosanitary Standards (SPS): Notification and administrative compliance challenges of developing countries due to limited capacity, hence the need for technical assistance; important restrictions to be based on phytosanitary necessity and thus on scientific basis; a need for increased compliance with the provisions of the IPPC concerning information exchange; and need for harmonisation of national SPS standards

Gaps in the GATT transparency mechanisms

Unsurprisingly, much progress was attained on this agenda item, as the focus was on safeguarding the multilateral trading system. In assessing the scope of the then existing transparency measures in the GATT, there was general agreement that the provisions provided a good foundation. There were, however, gaps in the GATT transparency framework. The main provisions on transparency mechanisms in the GATT included the Article X of the GATT; the 1979 Understanding Regarding Notification, Consultation, Dispute Settlement and Surveillance; transparency provisions of various Tokyo Round Agreements, particularly the Agreement on Technical Barriers to Trade (TBT) and Uruguay Round provisions. The need for strengthening the transparency system of the GATT was made by the GATT members (GATT, 1992d, p. 6). An analysis of the notification requirements in MEAs also sought to identify best practices that could be incorporated into the GATT (GATT, 1993v).

Several gaps were identified, and the proposed remedies sought to bring into the purview of the GATT domestic environmental measures that had significant trade effects (GATT, 1992l, p. 4).[40] Focus was on measures with significant trade effects to 'ease the administrative burden of notification' (GATT, 1992f, p. 15).[41] Even though there was broad agreement on the need to close the transparency gaps, contracting parties were also conscious of the problem of making the transparency system administratively unmanageable, as this would also create compliance

[40] The GATT Secretariat's Factual Note made three key points: i) Identified gaps in existing transparency mechanisms in the GATT; included a proposal to create a central registry that would act as a special notification mechanism for the GATT; and also 'it has been noted that trying to gather information on all trade-related environmental measures could make the [notification] task unmanageable' (p. 4)

[41] As noted by the delegation of India

problems (GATT, 1992d, p. 6). The major gap identified was that some environmental measures, which had significant trade effects, were out of the scope of the existing multilateral transparency system of the GATT. These included: i) economic instruments; ii) measures taken by sub-federal government authorities and by the private sector; and iii) voluntary measures. Moreover, it was observed that notification systems in the GATT did not cover national environmental measures based on MEAs, leading to a suggestion for the development of a notification system that would address this issue (GATT, 1992d, p. 3).[42] This would be part of a broader GATT registry of national environmental measures, to be updated when necessary (GATT, 1992d, p. 6).

To keep the transparency system manageable, it was agreed that the notification requirements of environmental policy measures should not exceed those of other policy measures (GATT, 1993c, p. 24).[43] The notification measures would also apply only to measures with significant trade effects to avoid administratively unmanageable situations (GATT, 1993h, p. 16).[44] Still, there was a need to close some of the gaps (GATT, 1993v),[45] even though some delegations were not fully convinced of the necessity of doing so (GATT, 1993a, p. 36).[46] One of the major gaps was that of voluntary environmental measures, which had been proliferating, but were not subject to formal

[42] Observation by the delegation of Sweden
[43] The delegation of Brazil noted that there was 'no need to subject environmental measures to stricter notification disciplines than those affecting other trade-related measures' (p. 24)
[44] As proposed by the delegation of Mexico
[45] Suggestions for closing the transparency gaps, as per the Secretariat Note, included: some elements of the draft Final Act of the Uruguay Round may address some of the gaps; the TBT Agreement would address subnational and PPM-related notifications; Single undertaking would widen TBT Agreement to all contracting parties; FOGS text foresaw a central registry for notifications; a review of notifications in the TPRM, where governments would establish environmental enquiry points similar to those established under the TBT Agreement; additional interpretive decisions or understandings on GATT transparency provisions, akin to Decision on Article 2.5 of the TBT Agreement regarding labelling
[46] Especially the delegation of Mexico

notification requirements. The major concern with the voluntary measures was that they could have significant trade effects.

The delegation of Brazil made a novel suggestion: the establishment of enquiry points. The enquiry points would serve as the clearinghouse for all types of environmental measures, and this would enable foreign firms to access the crucial information. Inspiration for the idea of enquiry points was drawn from the TBT Agreement, which had a similar institutional arrangement. Foreign firms would thus avoid the costs incurred through information asymmetry. The suggestion for enquiry points was well received, albeit with a caveat that it should not amount to creating additional administrative burdens (GATT, 1993g, p. 10, 1993w, p. 21). Moreover, it was noted that lack of definition of the term 'environment' invalidated the need for environmental enquiry points (GATT, 1993g, p. 11).[47]

Once the transparency gaps had been identified, as presented in a Note by the GATT Secretariat (GATT, 1993v),[48] discussions shifted towards identifying the trade effects of the various environmental measures that were proliferating (GATT, 1993a, p. 37).[49] It soon became clear that identifying all the various measures and developing a generic framework to deal with them was

[47] As noted by the delegation of the US

[48] The gaps included: handling requirements for packaging and waste (especially state and municipal governments); labelling and eco-labelling schemes (criteria for getting a label); eco-labelling schemes based on product life cycle and transparency of PPMs; general environmental measures taken by sub-federal governments, private organisations and independent organisations; economic instruments and regulations (government interventions); No GATT notification requirements for domestic taxes (and vague rules on border tax adjustment etc; No GATT notification requirements on for objectives of subsidies; Article XX may relieve a party from all transparency obligations, including Article X; and the coverage of environmental measures as GATT did not define the word 'environment'

[49] The delegation of Mexico suggested that the Secretariat should develop a Note on the key gaps in transparency requirements in the GATT

infeasible. A case study approach was thus adopted, where some delegations presented their environmental schemes, and the relevant domestic regulatory landscape. Analysis of the case studies led to the conclusion, which was widely accepted, that it was preferable to adopt an *ex-ante* notification approach, to the *ex-post* approach that was the norm in the GATT. The *ex-ante* approach would allow all the interested parties, including governments and the private sector, ample time to contribute to the design of the domestic environmental measures (GATT, 1993a, p. 40). This would be modelled along the approach established by the TBT Agreement. *Ex-post* mechanisms, such as the Trade Policy Review Mechanism (TRPM), which had been established during the Uruguay Round, would help in identifying any compliance challenges.

While this agenda item was not contentious, as compared to the others, the debate on the multilateral transparency of national environmental regulations was permeated by dire warnings on the need to safeguard the multilateral trading system. The transparency mechanism would act as an early warning system for the multilateral trading system (GATT, 1992f, p. 23).[50] A broad transparency mechanism, based on a robust notification system, would not be an end in itself, but would serve as a 'means to build confidence in and provide security and stability to the multilateral trading system, to minimise trade restriction and distortion, to assist private sector operators to adjust to changing trading policies, and to prevent disputes from arising' (GATT, 1994d, p. 9). But as the delegate from Switzerland succinctly articulated, it would be "difficult and perhaps dangerous to establish a notification system requiring notification of all types of measures" (GATT, 1993g, p. 2). Concerns over an administratively burdensome system permeated the discussions, given that they could be a source of compliance problems (GATT, 1993c, p. 26,

[50] As noted by the delegation of Sweden

1993g, p. 2).[51] High administrative costs and the concerns over the discriminatory domestic environmental measures loomed large in the debates on this agenda item.

b) Environmental protection: Leveraging trade policy

How could the GATT contribute to promoting environmental protection? This was perhaps the most contentious question that the delegations engaged in the EMIT debates had to wrestle with, especially within the context of the UNCED. Since the EMIT group was activated to engage with the challenges posed by UNCED, and to also contribute to the process, two of the items on the group's agenda dealt with the question.

Conceptually, the two agenda items can be categorised as 'synergy' (Agenda item 'c') and 'enforcing compliance' (Agenda item 'a') issues.[52] The former sought to examine how newly proliferating schemes such as eco-friendly packaging and labelling could be used to foster environmentally friendly production and consumption behaviour. It sought a 'win-win' approach using incentives to encourage parties to adopt synergistic trade and environmental policies. The other agenda item on 'enforcement' sought to examine how trade measures could contribute to the design and implementation of Multilateral Environmental Agreements (MEAs) to enhance their

[51] The delegation of Egypt argued that 'transparency requirements should be applied only to measures with trade effects. On publication and notification, efforts should be made to avoid administrative duplication and overload, as this could be counterproductive' (p. 2). The delegation of Switzerland noted that it was 'difficult and perhaps dangerous to establish a notification system requiring notification of all types of measures' (p. 2)

[52] Agenda (a) trade provisions contained in existing multilateral environmental agreements (e.g. the Montreal Protocol on Substances that Deplete the Ozone Layer, the Washington Convention on International Trade in Endangered Species and the Basle [sic] Convention on the Control of Transboundary Movement of Hazardous Waste and their Disposal) vis-à-vis GATT principles and provisions; and (c) trade effects of new packaging and labelling requirements aimed at protecting the environment"

effectiveness. The latter issue was more contentious since it sought to leverage trade measures to pursue non-trade objectives, creating a tension rather than synergy with trade objectives. The rest of the section analyses these conceptual issues in detail, as debated in the GATT EMIT group, in detail.

Synergy: Fostering eco-friendly trade

Delegations commenced discussions on this agenda item by noting that there had been a proliferation of eco-friendly schemes on packaging and labelling. This was understood as a good example of trade's contribution to environmental policy, but one that could have negative trade effects as these schemes were not adequately captured by the existing GATT mechanisms. The agenda item clearly stated the objective of using incentives: 'trade effects of new packaging and labelling requirements aimed at protecting the environment' (GATT, 1991c).[53] It was clear that the schemes contributed to environmental protection (GATT, 1992m, p. 26).[54] The eco-friendly trade measures, however, generated several challenges, especially on their adverse effects on trade (GATT, 1992m, p. 25).[55]

Adverse trade effects of eco-friendly measures

The key question, therefore, was how not only to encourage the uptake of such schemes, but to also mitigate their adverse trade effects. Since there was general appreciation that the schemes

[53] GATT Council document laying out the ToRs of the EMIT group

[54] A factual note by the GATT Secretariat concluded that the schemes were partially successful, and their main objectives were: i) Change in consumer behaviour; ii) Change in manufacturing behaviour; and iii) Positive change in the environment (p. 26)

[55] In addition, the GATT Secretariat's factual note (Ibid) also outlined the main adjustment costs as including the costs of adjustment for foreign firms; and the unequal access to the schemes especially by developing countries (p. 25)

were an important environmental policy instrument, the focus of the debate shifted to identifying the various trade effects and ways of mitigating them (GATT, 1993f).[56] This was crucial since it was also acknowledged that the negative trade effects could be indeed quite high, hence the need to bring them within the purview of the appropriate GATT disciplines. Moreover, this was a sore point due to the ongoing trade disputes between Mexico and the US over the labelling of canned tuna (Tuna I), which eventually led to formal disputes under the GATT in 1991 (WT/DS386/7) (Trujillo, 2013, p. 536). The key costs identified were: i) loss of market access and competitiveness for foreign firms that did not have access to the schemes; and ii) impinging upon state consent and domestic policy autonomy through extraterritoriality by exporting domestic environmental standards through measures on production and process methods (PPMs). To address these questions, several principles and strategies were proposed and discussed (GATT, 1992n).[57]

As regards access to markets by foreign firms, it was noted that even though there was a proliferation of eco-friendly packaging and labelling schemes, some countries did not have access to the schemes (GATT, 1993l). This made products without eco-labels, for instance, less competitive in export markets, as consumers would be more inclined to purchase products that meet eco-friendly criteria (GATT, 1992m, p. 25). While much of the debate had proceeded amicably, there was a bit of tension when the Brazilian delegation complained about unfair imposition of eco-friendly criteria on their timber exporters by the European Commission (EC).

[56] Note by the GATT Secretariat. Difficulties faced by overseas suppliers included: different packaging requirements in different markets they supply; Insufficient information on destination market's packaging requirements; short deadlines for meeting new packaging requirements. Proposed solutions included ensuring the greatest transparency available; and ensuring national treatment for overseas suppliers in their access to local programmes.

[57] The principles and strategies included: i) Basis of sound scientific evidence; ii) Grace/transition period for developing countries; iii) and Support for developing countries in harmonisation through international ecological standards

Of particular concern was that the EC's eco-labelling regulations discriminated against Brazilian timber exports. While this minor diplomatic spat was eventually resolved through bilateral negotiations, the issue at the heart of the complaint was shared by many delegations, especially those with less sophisticated schemes.

Strengthening the synergistic eco-friendly measures

Since the schemes varied widely across countries, the challenge was how to make it easier especially for exporting firms to navigate the myriad of schemes (GATT, 1992f, p. 15). One proposed solution was the harmonisation of international standards (Ibid).[58] Given that the topic was quite technical, it was suggested that representatives from international standard setting institutions should be invited to share their expertise. Thus, experts from the International Trade Commission (ITC) and the International Organisation for Standardisation (ISO) were invited to make a presentation (GATT, 1993b). International harmonisation of standards was considered and debated. It was noted that even though harmonisation was desirable, it was infeasible in practise, given the immense variation of domestic schemes. There were also costs associated with the harmonisation of standards (GATT, 1992d, p. 7).[59] A more feasible approach of mutual recognition of standards was proposed, as it would also allow governments to devise their own schemes that would incorporate their values and objectives (GATT, 1993g, p. 30).[60]

A related concern on the sources of adverse trade effects concerned the design of *voluntary* eco-friendly packaging and labelling schemes. While it was noted that the GATT had rich experience

[58] As advanced by the US delegation
[59] As noted by the delegation of New Zealand
[60] As proposed by the delegation of Sweden

in mandatory technical requirements designed by governments, it did not have much experience in voluntary schemes. This was crucial since voluntary schemes could have significant trade effects. A suggestion was made to engage foreign firms in the design of the domestic standards, but the limits of such an approach quickly became apparent. Debate on the issue persisted, and it was largely driven by the question of how to mitigate the infusion of protectionist requirements especially by domestic industry. There were also calls for support for developing countries to lower the barriers to access such schemes, through technology transfer and assistance, to access the foreign markets and to ease administrative burdens (GATT, 1992j, p. 13).[61] It was also suggested that large trading nations had a special responsibility in supporting smaller ones (GATT, 1993g, p. 22).[62]

The increasing use of economic instruments especially on the recovery, re-use, recycling or disposal of packaging (3R) was also identified as a source of adverse trade effects. The GATT was not well equipped to deal with this type of scheme, as it was more used to the technical standards addressed by the TBT Agreement. What was of greatest concern were the adverse effects such regulations could have for foreign firms, which could not afford implementing the 'take back' obligations of such schemes (GATT, 1993c, pp. 34–35). Since some regulations banned the use of certain packaging materials, foreign suppliers found it quite expensive to seek alternatives, especially in countries that did not provide such options. Despite these concerns, economic instruments were identified as being less trade restrictive than regulatory ones (GATT, 1992o).

[61] As noted by the delegation of Brazil
[62] As argued by the delegation of Poland

But perhaps the most controversial element of discussions on this agenda item was the concern over the use of PPM regulations to 'export' domestic environmental standards. As most eco-friendly packaging and labelling schemes were based on life-cycle assessment, there were concerns that governments would use such measures to try and influence the domestic environmental standards of exporting countries. At worst, 'differentiation of "like products"' based on PPMs would dismantle the two main pillars of the GATT - Most Favoured Nation and National Treatment, and the multilateral trading system' (GATT, 1993o, p. 21).[63] Debate on this issue hinged on the GATT's concept of 'like products' (GATT, 1992f, p. 16).[64] While it was noted that governments were free to design their own regulations, the issue of whether they should extend those regulations to imported products raised concerns over violation of state consent and domestic policy autonomy. A related concern was that such schemes would discriminate against imports from countries that were deemed 'environmentally unconscious' - a subjective assessment.

Coming up with a generic framework against which to address the foregoing conceptual issues proved challenging (GATT, 1993j),[65] so delegations resorted to a case-by-case analysis (e.g. GATT, 1993c, pp. 38–39, 1993h, p. 10, 1993i, 1993n).[66] They shared their experiences in designing and assessing the various schemes, while trying to identify the adverse trade effects (GATT, 1992l).[67] The exercise was more informative than analytical, as most of the challenging

[63] As opined by the delegation of India
[64] As noted by the delegation Sweden
[65] The GATT Secretariat had undertaken a generic analysis of trade measures of labelling requirements and concluded that: i) Many of the trade effects were the result of possible administrative weaknesses in the international trade system; ii) International harmonisation of environmental labelling programs may also provide a potential solution (e.g. ISO standards); and iii) Harmonisation through mutual recognition was important, especially in addressing the varying national schemes
[66] E.g., the delegations of Austria, Poland and Germany presented their schemes as case studies
[67] The delegation of the US shared their presentation on two types of schemes: voluntary, and compulsory/legally mandated schemes

issues were flagged for future examination. And of course, debates at the UNCED also influenced the EMIT group's discussions on this agenda item. The special situation of developing countries, whose exporting firms did not have much capacity, was highlighted. Moreover, the issue of PPMs was identified as especially important for developing countries, as they had different PPM standards, which were often at a distinct disadvantage especially when viewed in the context of eco-friendly schemes developed in industrialised countries.

Overall, the proliferation of eco-friendly schemes as an environmental instrument was welcome, but it was stressed that the adverse trade effects of the schemes should be analysed and mitigated. After all, such schemes offered a synergistic approach that was mutually supportive of both trade and environmental policy objectives. There was broad support from both developing and developed countries for synergistic trade approaches, especially through technology transfer and eco-friendly trade. Some developing countries, especially major emerging economies such as Brazil, had however raised concern over regulatory barriers to accessing the markets of developed countries.

Enforcing compliance: Trade measures as the perfect weapon?

Predictably, the most contentious issue at the EMIT group debates was the first agenda item: 'trade provisions contained in existing multilateral environmental agreements.' As the UNCED conference was negotiating three Multilateral Environmental Agreements (MEAs), the issue at hand was how trade measures could support their implementation. Contrary to the conventional wisdom implicit in the literature, the GATT did not oppose the use of trade measures in MEAs *per se*. In fact, the delegations at the EMIT group meetings unanimously welcomed the GATT's

contribution towards the successful resolution of global environmental challenges by acknowledging the importance of the use of trade measures to enforce MEAs. That is, trade measures designed within the context of MEAs would be perceived as consistent with trade rules.

The free rider problem

The use of trade measures in pursuant of MEA objectives, however, would necessitate solving a very thorny issue: *the free rider problem*. The debate on the free rider problem revolved on two conceptual issues: i) the unilateral, extra-jurisdictional application of environmental measures; and ii) the application of MEA trade measures to non-parties. Based on these conceptions, two contending definitions of an environmental free rider emerged, respectively. The first was that a country could deem another as a free rider if the latter was perceived to have lower domestic environmental standards, which gave them a competitive edge in international trade. The second definition of a free rider was a GATT member that was not a party to a certain MEA.

At the outset, though, delegations generally agreed that global and/or transboundary environmental problems should be addressed through a multilateral approach (GATT, 1992d, p. 3). Unilateral, extra-jurisdictional approaches, especially under Article XX, were rejected (GATT, 1992n, p. 3),[68] and the Tuna I panel report was referenced as an illustrative example of the illegitimacy of the approach in the GATT (GATT, 1992d, p. 3, 1992n, p. 33).[69] Furthermore, it was noted that the

[68] As noted by the delegation of Sweden, which also reiterated Principle 11 of the Rio Declaration emphasized

[69] The US delegation countered by noting that there was a need to appreciate the practical limitations of multilateral solutions, e.g. obtaining MEAs took time; difficulties in reaching agreement. A US official who was involved in the negotiations of the Montreal Protocol shared their experience to buttress the point

GATT did not offer legal recourse to address environmental free-riding (GATT, 1992n, p. 31).[70] That is, the GATT did not have the appropriate mechanisms to deal with countries that were perceived as environmental free rider s. It was therefore clear that coordination should take place through the relevant environmental regime rather than via the GATT. After all, two of the aforementioned Principles guiding the EMIT group's work touched on the coercive use of trade measures to enforce environmental policy commitments (GATT, 1992d, p. 2).[71] Overall, the two principles called on GATT members to avoid using unilateral and extra-jurisdictional trade measures in MEAs to equalise domestic environmental standards. In other words, use of trade measures to harmonise domestic environmental standards, except for the parties to the MEA, was deemed inappropriate by the GATT EMIT group.

While the use of trade measures in MEAs was uncontentious, the unilateral use of such measures for environmental policy purposes was highly contentious, as earlier noted (GATT, 1992d, p. 1). Of specific concern was the *ad hoc* unilateral application of trade measures to export domestic environmental standards beyond a country's jurisdiction (GATT, 1992d, p. 3).[72] This issue was salient as the EMIT debates were taking place in the aftermath of the GATT panel ruling of the Tuna I dispute, where the US had been deemed to violate GATT rules by attempting to apply its domestic environmental regulations beyond its jurisdiction (GATT, 1992f).[73] Indeed, many

[70] The delegation of Argentina noted that, from the GATT point of view, free riders would be those who have reneged on their MEA obligations or collectively agreed environmental measures

[71] The two principles are: Self-restraint in the use of trade measures for environmental purposes...v) the Group should not attempt to harmonise or set environmental standards for the purposes of reducing trade distortions or conflicts

[72] The delegation of Sweden noted that MEA trade measures were not per se subject to GATT rules, but the resultant national environmental measures were subject to the rules

[73] The three principles that would guide the Group's work, touched on forum-shopping, and they were: i) Multilaterally agreed solutions should take precedence over unilateral ones in trade and the environment; ii) Shared desired to show that the GATT framework of rules could accommodate legitimate

delegations took turns to refer to the Tuna I panel report in condemning unilateral, extra-jurisdictional actions (GATT, 1993o, p. 9).[74]

The Chairman of the EMIT group captured the nature of the debates on the agenda item in his report to the GATT council:

> '[d]iscussions in the Group have focused on two areas where the most challenging questions were raised. They relate to the use of trade measures to help protect environmental resources that do not fall within the national jurisdiction of any one or more contracting parties nor necessarily affect solely or directly their own environments, and on trade provisions of MEAs that apply separately to non-parties (i.e. countries not signatories to an MEA who for legitimate or other reasons have decided not to join)' (GATT, 1994d, p. 4).

Addressing the free rider problem

So how could the GATT contribute to addressing the free rider problem? The first step was examining the extent and type of trade provisions in MEAs. The GATT secretariat was tasked with developing an analytical report to examine these issues. The report found that out of more than one hundred and fifty (150) MEAs, only seventeen (17) included trade provisions. Moreover, three models of trade provisions based on control were identified (GATT, 1992g).[75] Further analysis by

environmental concerns and that the GATT did not present or create unreasonable obstacles or barriers to a party's pursuit of environmental priorities; iii) and that the common view that the use and competence of GATT in this area was limited and did not include the setting of environmental standards

[74] The US delegation pushed back on the rejection of extra-territoriality, arguing that they 'disagreed that differences in countries' environmental standards raised questions of 'extra-territoriality' (p. 9)

[75] The three models of trade control identified in the MEAs were: i) **Model I**: Issuance of export certificates/import permits; ii) **Model II**: Prohibition of certain activities; and iii) **Model III**: Control of domestic production and consumption. Analysis conducted by the GATT Secretariat, as requested by delegations

the GATT Secretariat and the US delegation sought to advance the discussions by providing a firm analytical foundation for informed decisions about what types of trade measures were appropriate, from a trade perspective (GATT, 1992n, p. 33).[76] An immediate conclusion was that trade measures had not been prevalent in MEAs, but it was noted that their future use should not be precluded, especially given the increasingly challenging global environmental problems.

Addressing the two questions on the free rider issue stood as key to resolving the free rider problem. The first was the question of extra-jurisdictional measures. Under what conditions could the extra-jurisdictional application of trade measures pursuant to the MEAs be consistent with GATT rules? A key issue that arose in answering this question was that of the hierarchy or precedence of international agreements (GATT, 1992n, p. 1).[77] A conceptual framework of trade measures was suggested by the Canadian delegation, as a basis for analysing the rationale and purpose of trade measures (GATT, 1992h, p. 2).[78] In order to resolve any conflicts between the

[76] The US delegation identified four purposes of MEA trade measures: i) Achieve environmental policy objectives; ii) Encourage participation in MEAs; iii) Address the free rider problem; and iv) Address the special concerns of developing countries (p. 32). On the other hand, the GATT Secretariat identified four types of measures: i) Prohibition of trade in controlled products between parties to an agreement; ii) Prohibition of imports of controlled substances from third parties; iii) quantitative restrictions (QRs) on trade in controlled products containing or manufactured with controlled substances (p. 33)

[77] As outlined in the non-paper prepared and presented by the Swedish delegation on the relationship between GATT principles and MEAs, which concluded that there was o clear distinction on the hierarchy of MEAs vis-a-vis the GATT (p.1)

[78] In the conceptual framework developed by the delegation of Canada, five types of trade measures were identified: i) Unilateral discrimination (Trade measures which are an extension of domestic jurisdiction); ii) Unilateral, extra-jurisdictional measures (Trade restrictions aimed at conservation of natural resources not present in the jurisdiction of the country applying the measures); iii) Free rider (Trade restrictions intended to press other countries to accept particular environmental standards or join an MEA); iv) Competitiveness (Trade restrictions aimed at 'equalising' differences between the cost of environmental protection between the home and foreign markets in response to concerns about competitiveness; and v) PPMs (Trade restrictions directed against products made or abstained in an environmentally unfriendly manner

GATT and MEAs, it had to be determined which of the agreements took precedence.[79] After an initial exploration, the delegations at the EMIT group decided to abandon the approach. Caution was raised on the need to avoid judging the MEAs *per se*; attention should however be on their trade provisions. But the main conclusion drawn from this discussion was that so long as the trade measures were clearly articulated in MEAs, they were deemed legitimate for application amongst its parties (GATT, 1992n, p. 3).[80] Afterall, it was noted, the obligation of states to cooperate via multilateral agreements was a basic principle of international law, and that unilateral action was undesirable and should be a measure of last resort (GATT, 1992n, p. 12).[81]

But what about the application of the trade measures to non-parties to MEAs - the so-called free rider s? This was the second question that had to be addressed, and it was referred to as the 'non-parties' question in shorthand. The first task in addressing this question would be to determine how the rights of GATT contracting parties, who were non-parties to MEAs, could be addressed. Part of the answer to this question was technical, and the delegation of New Zealand took it upon itself to undertake the analysis (GATT, 1993u). The New Zealand analysis found that general application of trade measures in MEAs did not necessarily lead to greater effectiveness of MEAs. Rather, using trade measures that were designed to address both producers and consumers of the harmful substances being regulated was the most effective approach. The inclusion and use of trade measures should therefore be congruent with the nature of the environmental problem being

[79] The Vienna Convention on the Law of Treaties contains clear rules for resolving conflict between treaties and which should prevail: a later treaty should prevail over an earlier treaty between the same parties and more specific provisions in treaties should prevail over more general provisions

[80] The Swedish delegate posed the question: '*Was penalisation actually a viable means to achieve wider participation in an MEA, or was it "big stick" diplomacy? (p.4).* The delegation of India emphatically rejected the use of discriminatory measures and/or extraterritorial trade measures to pursue environmental objectives

[81] As opined by the delegation of Austria

addressed (GATT, 1993u, p. 6) .[82]The analysis concluded that the relevance of trade measures in MEAs depended on the nature of the transboundary environmental problem. There was, therefore, no 'one-size-fits-all' solution to the 'non-parties' problem.

Potential solutions to the free rider problem

The free rider problem was indeed challenging, and several suggestions to address it were put forward. A crucial challenge was defining a free rider. Some delegations argued that the concept of a free rider was only appropriate when non-parties actively countervailed collective environmental efforts, whether at the regional or multilateral level (GATT, 1993a, p. 27).[83] Others similarly argued that non-membership in MEAs did not amount to being a free rider , as parties could opt out of MEAs due to legitimate reasons (GATT, 1993a, p. 34).[84] As discussions on this issue stagnated, the delegation of Austria prepared a submission synthesising the discussions on the agenda item with a view to advancing progress (GATT, 1993t).

A key concern raised over the free rider problem was that 'the concept of "common but differentiated responsibilities" of States and "equitable sharing of the costs to protect the environment" would be circumvented if a country could take unilateral trade restrictions aimed at changing the environmental policies of another country, while ignoring the costs imposed on that country by trade restrictions. In adopting unilateral trade restrictions in situations where international consensus building is cumbersome, legitimate environmental objectives could run

[82] The analysis by the delegation of New Zealand concluded thus: 'What this paper does suggest, however, is that in the context of measures applied to a substance or product the effects of discrimination are not immediately obvious and in a number of instances may not act to further the environmental objective of an MEA' (p. 6)
[83] As argued by the delegation of Sweden
[84] As argued by the delegation of India

the risk of being kidnapped by protectionist aspirations' (GATT, 1993t, p. 3). Transgression of the norm of sovereignty by violating state consent and domestic policy autonomy was indeed a high adjustment cost that states did not entertain (Krasner, 1999, p. 7).[85]

Several suggestions to address the free rider problem were advanced (GATT, 1993t).[86] Two of the suggestions stood out, as delegations keenly explored them : i) creating an 'environmental window' through Article XX of the GATT (GATT, 1989b, p. 2);[87] and ii) obtaining a GATT waiver through Article XXV. In the first approach, the delegation of the European Communities (EC) proposed a collective interpretation of Article XX of the GATT (GATT, 1992o).[88] Such an interpretation would include inserting the word 'environment' into Article XX (b) (GATT, 1992o).[89] But this suggestion raised several issues, especially the concern that it would provide for a broad scope to include unilateral, extra-jurisdictional actions that aimed at exporting domestic environmental standards (GATT, 1993a, p. 10).[90]

[85] Krasner discusses the more general issue of state consent to international agreements

[86] The suggestions included: Insertion of the term environment' into Article XX; Collective interpretation; A trumping clause privileging environment over trade in case of a conflict; A waiver procedure; Introduction of a approval procedure akin to Article XX (h); and shifting of the burden of proof in disputes in favour of the environment.

[87] Before the revival of the EMIT group, the delegation of Peru had made a suggestion for the inclusion of the clause 'Protection of the environment' to the list of GATT Article XX exceptions

[88] A submission by the EC delegation on the GATT and the trade provisions of MEAs. The proposal outlined three criteria for collective interpretation of Article XX: i) A number of MEAs envisaged the application of trade controls as song parties to an agreement; ii) There are different types of environmental problems addressed or to be addressed through MEAs; and ii) the Group was carrying out an important discussion on the rationale for using trade measures within the framework of an MEA . Justification for the use of MEA trade measures against non-parties to be based on substantive and formal criteria. Finally, the interpretation would be guided by the three concepts of non-discrimination, disguised restriction on trade, necessity, and the concept of an MEA

[89] As suggested by the EC proposal

[90] As raised by the delegation of Hong Kong

Also debated was how the 'same conditions' test in the headnote/chapeau of Article XX would be applied to non-parties (GATT, 1993a, pp. 23–24).[91] Another challenge was finding a formula for future MEAs, if such an approach was undertaken. MEAs varied in design, depending on the environmental problem they sought to address (GATT, 1993h, pp. 17–19).[92] Hence, the challenge was defining what constituted a 'legitimate' MEA (GATT, 1992d, p. 5, 1992h, p. 13).[93] Another issue was that of specificity; that is how specific should trade measures be to warrant their extra jurisdictional application? MEAs with ambiguous trade measures were considered a challenge, as they could be used to legitimate such extra-jurisdictional actions (GATT, 1993h, p. 17, 1993o, p. 14)[94] The concepts of proportionality and least trade-restrictive were also analysed by the GATT Secretariat, especially their history in the GATT and their relevance to the design of trade measures in MEAs (GATT, 1993p).[95] Eventually, the 'environmental window' approach was deemed infeasible.

The second option was the suggestion for the use of waivers under Article XXV of the GATT. Proposed by the delegation of Hong Kong, this approach was initially received more warmly than

[91] The US delegation argued that being a non-party to an MEA did not nullify the issue of 'same conditions', hence the need to determine whether Article XX did not accord different treatment to MEA-related measures. The US concluded that the Group might be operating on a faulty premise as regards collective interpretation of Article XX, hence the need for a new approach (p. 24)

[92] Factors relevant to what constitutes an MEA: i) Aegis of negotiations, which should broad and representative (e.g. the UN); ii) Level of participation representative of the countries concerned by the issue; iii) open for accession by all governments on terms equitable amongst original signatories; iv) Broad geographical scope; and v) Should comprise countries at different levels of development

[93] The delegation of India suggested the inclusion of negotiation under the aegis of the UN, and the inclusion of both developed and developing countries, as additional criteria

[94] The issue of specificity was raised by the delegation of Sweden: MEAs without clear specificity could be misused for unilateral action. The delegation of Canada emphasised that the specificity a major issue of 'genuine multilateral consensus'

[95] The report noted that the two concepts were relatively new to GATT law

the 'environmental window' approach (GATT, 1993q).[96] To provide a basis for discussions, the GATT Secretariat subsequently prepared a Note summarising the GATT's experiences with Article XXV waivers (GATT, 1993s). The Note found that the GATT waiver had been previously used in the GATT (Ibid). Advantages of the waiver included that it fit the scale of the remedy; it would avoid the need for the GATT to agree upon general criteria for future MEAs; it would be safeguarded by the two-thirds voting majority (comprising of more than half the contracting parties); and the onus to convince others would be on those requesting the waiver, in tandem with the tradition of the GATT (GATT, 1993s, 1994d).

Also, the waiver could be a proxy for international consensus, the preferred approach to addressing transboundary and/or global environmental challenges (GATT, 1993o, p. 15).[97] Limits of the waiver approach, however, became apparent. Of immediate concern was whether MEAs should be treated as exceptions. Since Article XXV of the GATT waiver was considered as the 'exception of last resort', the question at hand was whether all the GATT provisions had been exhausted prior to its invocation (GATT, 1993e, p. 2).

Also challenging was the temporary nature of GATT waivers under Article XXV, as a report by the Secretariat on the issue indicated. Given that addressing environmental challenges required long time horizons, the GATT waiver did not seem suitable. It was also noted that the waiver could be subject to challenge especially by non-parties to MEAs, thus bringing to the fore the ominous question of the hierarchy between GATT and MEAs. But perhaps the most devastating argument

[96] This could include addition of a clause allowing for the use of MEA trade measures under Article XX, akin to Article XX (h) on commodities agreement
[97] As noted by the delegation of Canada

made against the waiver approach was that if a global environmental agreement was indeed perceived to address a significant and wide-reaching transboundary environmental problem, then most GATT contracting parties would be signatories to the MEA, thus nullifying the need for a waiver in the first instance.

A third option of using trade measures to pursue unilateral, extra-jurisdictional environmental measures, by offsetting differences in domestic environmental standards, was outrightly rejected. It was observed that countries had different environmental standards, and this was not necessarily a problem. Hence, the so-called problem of 'eco-dumping' was deemed illegitimate (GATT, 1992k, p. 40).[98] A few delegations, especially the US and Canada, tried to make the case for exceptional grounds for addressing 'eco-dumping', but such proposals were strongly rebuffed by the other delegations, especially developing countries. Their rationale for the pushback was that transboundary environmental problems included issues of disproportionate rights and obligations, as embodied in the Common but Differentiated Responsibility (CBDR) principle found in three MEAs: the ozone regime; climate regime; and the Convention on Biodiversity (CBD). Terming differences in domestic environmental standards as 'eco-dumping' and thus adopting unilateral and extra-jurisdictional trade measures was considered unacceptable by almost all delegations, including the EU and Canada - the main proponents of addressing the free rider problem through trade measures.

Developing countries rejected any efforts towards international harmonisation of domestic environmental standards, decrying the high 'social costs' they would incur. The Tuna I panel report

[98] The delegation of Malaysia urged for the debate on equivalence of environmental standards to be excluded from the Group's discussions

was referenced severally in underscoring that offsetting the so-called 'eco-dumping' was not consistent with GATT rules. Concerns over the temptation for forum-shopping by major economies, and the effect on the GATT rights of smaller trade-dependent countries were also raised (GATT, 1993a, p. 17).[99] Emergent issues such as the use of border tax adjustments (BTAs) were raised, with a view to understanding their implications (GATT, 1993w, p. 30).[100]

It was therefore apparent that there was an outright rejection, by most parties, of a 'carte blanche' unilateral and extra-jurisdictional approach to use of trade measures to pursue environmental policy objectives (GATT, 1992d, p. 4). Instead, there was a preference for the use of trade measures pursuant to MEAs, especially if negotiated under the auspices of the United Nations (Ibid).[101]

Thus, the main conclusion from the debate on the free rider issue is that the default position of the parties was to avoid leveraging the GATT to enforce environmental policies, and instead to leave it to parties to negotiate trade restrictions in MEAs, which could not be enforced against non-parties. As shall be apparent in subsequent chapters, this approach of addressing free riding through PTAs enforcement mechanisms such as third-party adjudication has largely been avoided by most parties to PTAs.

[99] As the delegation of Canada noted, 'the...recognition that the pursuit of such approaches would tend to permit larger and less trade-dependent countries to have an undue influence on the values and internal policies of smaller and more trade-dependent ones' (p. 17)
[100] The delegation of Sweden requested a Secretariat Paper on BTAs
[101] As noted by the delegation of Argentina

2.3 The UNCED Effect

Beyond the original three agenda items that the EMIT group was tasked with discussing, a fourth agenda item was added in due course. The EMIT group was tasked with contributing to the GATT's input into the UNCED process, and subsequent follow-up work (GATT, 1993b, 1993d).[102] The EMIT group also kept track of developments in other international organisations, especially at the UN Conference on Trade and Development (UNCTAD). Through a decision by the GATT Council of Representatives, the EMIT group was tasked with following up on specific items in Chapter 2B of Agenda 21, which sought to make trade and environment policies mutually supportive (GATT, 1993m).[103] To do so, the EMIT Chair convened an informal session for delegations to contribute to development of the report of the work of the Group and UNCED follow-up work to the GATT Council (GATT, 1993r).

In all, the strongest connection between the UNCED and the EMIT group's work focused on fostering international cooperation through MEAs and the rejection of unilateral, extra-jurisdictional measures in the pursuit of environmental policy objectives. The speech by the GATT DG at the UNCED captured these elements (GATT, 1992i), which he reiterated in his valedictory speech (GATT, 1993k). The GATT DG reiterated Principle 12 of the UNCED that trade and environment as mutually supportive. He also noted that reconvening of the EMIT group was a response to the UNCED, and that the GATT was keen on supporting the acceleration towards sustainable development especially for developing countries. The DG summed up his speech by noting that "variety is the spice of trade", especially the variation of domestic environmental standards.

[102] Suggestion by the Chair on informal consultations on follow-up work
[103] GATT Secretariat Report on the follow-up work.

It was noted that the analytical work undertaken by the EMIT group had anticipated many of the issues raised at the UNCED (GATT, 1993o).[104] The guiding principles of the UNCED were, therefore, compatible with the philosophy of the GATT (GATT, 1993a, p. 1).[105] Most importantly, two interrelated aspects which touched on state consent as the basic principle of international law and domestic policy autonomy were emphasized: unilateral, extra-jurisdictional action; and eco-dumping. Some delegations reiterated that the 'Group should first confirm basic principles and recommendations contained in Agenda 21, such as, in their view, the rejection of extraterritoriality and unilateralism as the common basis and point of departure for further work in the Group' (GATT, 1993o, p. 22, 1994d, p. 16).[106] Targeting developing countries through such measures was also rejected by some delegations (GATT, 1993o, p. 33).[107] Several delegations also emphasized that UNCED, through Paragraph 2.22(e) of Agenda 21, covered 'a particularly delicate subject warranting careful attention since the use of trade measures to counter notions of *"eco-dumping", if legitimised and put into practice, could undermine the very foundations of the international trading system*' (GATT, 1994d, p. 16, emphasis own).[108]

[104] As the summary of the EMIT group chairman's concluding statement on UNCED follow-up work noted: consensus building, international cooperative and sustainable development concepts for the group's work; Suggested consolidating and including the UNED follow-up as a single agenda item; and noted that the Group's original agenda was a good basis for the GATT's contribution to the UNCED follow-up activities on trade and the environment

[105] Three conclusions from the UNCED, discussed in the 7th EMIT meeting that was convened in the aftermath of UNCED: i) Trade and environment policies should be mutually supportive in the pursuit of sustainable (p. 1) development; ii) UNCED conclusions supported fully the Tuna I panel report; and iii) There was need to clarify the role of the GATT in dealing with trade and environmental issues (p. 1)

[106] The delegation of Brazil emphasized Chapter 2 of Agenda 21;

[107] The delegation of Thailand highlighted such actions against developing countries

[108] Principles 11 and 12 of the Rio Declaration also address the issue of 'eco-dumping' and harmonisation of domestic environmental standards

Instead of unilateral, extra-jurisdictional application of trade measures, international cooperation and consensus through MEAs were preferred in the pursuit of environmental policy objectives (GATT, 1992h, pp. 5, 7).[109] Through this approach, trade measures could be designed in a manner that was congruent with the global environmental problem being addressed, in line with Principle 12 of the Rio Declaration.[110] MEAs thus emerged as the preferred forum for addressing transboundary and/or global environmental problems (GATT, 1992n, p. 16),[111] while unilateral trade sanctions were rejected. Moreover, the special needs of developing countries could also be taken on board through such multilateral forums (GATT, 1993g, p. 29).[112] Incentives such as financial and technological assistance were, therefore, preferred to 'harsh restrictions and punitive trade measures' especially when addressing the so-called 'free rider ' problem (GATT, 1992h, p. 8, 1993c).[113] Other emergent issues were identified as a basis for further work. The successful conclusion of the Uruguay Round was thus identified as the biggest contribution of the GATT to the UNCED process, especially in pursuit of sustainable development. The concept of sustainable development was later inserted into the preamble of the Marrakesh Agreement that established the

[109] The delegation of Mexico captured this sentiment clearly: 'Environmental problems of a transboundary or global nature must be tackled and resolved through internationally agreed consensus based on scientific foundation. Unilateral measures based on arbitrary or subjective judgments could not be considered legitimate...Extraterritorial measures should not be in any way considered legitimate when they have not been multilaterally agreed or when the country applying them had not taken the same measures domestically' (pp. 5-7)

[110] Principle 12 of the Rio Declaration states "States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. *Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus*" (emphasis own)

[111] The delegation of India noted that 'the UNCED provided abundant proof that MEAs were possible, and that the concept of extraterritoriality should be replaced by the concept of multilateralism' (p. 16)

[112] As suggested by the delegation of Korea

[113] As suggested by the delegations of Korea and Mexico

WTO. Trade sanctions were deemed as an illegitimate compliance mechanism, unless used within the context of MEAs.

Due to the imminent conclusion of the Uruguay Round, the EMIT group wound up its activities with a final meeting on 27 January 1994 (GATT, 1994d).[114] Documents that had been generated during the EMIT group debates were derestricted and made public (GATT, 1994b).[115] The GATT EMIT group had focused on laying the analytical groundwork for its successor organisation - the WTO. The Chairman of the EMIT group tabled his final note on the group's work (GATT, 1994c), as well as a final report to the GATT Council of Representatives (GATT, 1994d). A decision by the Trade Negotiations Committee drew up a work programme for the successor group (GATT, 1994d, p. 17), which later became the Committee on Trade and Environment (CTE) of the World Trade Organization (WTO).

In sum, there was broad consensus amongst the GATT EMIT members on the need to curb green protectionism and to foster the uptake of synergistic measures such as trade in eco-friendly goods and services. The most contentious issue, however, was the use of trade measures to enforce environmental policies. There was strong pushback especially by developing countries, as they resisted attempts by some developed countries, in particular the US, to use unilateral, extra-jurisdictional measures to equalise domestic environmental standards under the guise of addressing the so-called 'eco-dumping' problem. Instead, there was broad consensus that trade measures should be designed within the framework of MEAs, as the latter were emblematic of international

[114] The Chair thanked the group for a commendable job (p. 17)
[115] In a bid to build public confidence and spur more analytical and focused and informed debates on trade and the environment

consensus. As will be shown, the most interesting element in the subsequent analysis of PTAs is how states have leveraged them to address the environmental free rider problem.

The main conceptual issues emanating from the foregoing discussion in this chapter are summarised in Table 2.1 below.

Table 2. 1 Conceptual dimensions of the trade-environment debate

Conceptual theme	Key issue	Favoured remedy
Green protectionism	Use of domestic environmental measures as disguised forms of protectionism (as Non-Tariff Barriers)	Enhanced multilateral transparency of domestic environmental measures with significant trade effects, through notification and policy surveillance
	Discriminatory application of domestic environmental measures	Efficient breach mechanisms: that is, carving out policy space for domestic exigencies, but requiring justification
Environmental protection	Proliferation of voluntary environmental measures that have significant trade effects	Foster the uptake of the measures such as through trade liberalisation in environmental goods and services, plus coordinating efforts through international standardisation bodies
	Enforcement of MEAs by resort to trade measures, necessary because certain parties decline to be parties to the MEA (free rider problem)	Rejection of unilateral, extra-jurisdictional trade restrictive measures. Instead, preference for international coordination especially using trade measures within MEAs

Note: These themes are crucial to developing the theory of issue-linkage in the next chapter, and its subsequent application to the analysis of PTAs in the empirical chapters. Specifically, the themes will be used to ground theoretical assumptions.

The issues identified in Table 2.1 above serve as the basis for the typology of environmental linkage clauses found in PTAs that is developed in the next chapter. In addition, the causal logic of the theory of issue-linkage developed in the next chapter, that is the rationale that underpins the choice of different environmental linkage clauses, is grounded in the real-world history of the trade-environment nexus in the GATT. As noted in the opening section of this chapter, such an approach addresses the limitations of the rational choice approach, namely by providing a rich context for the parsimonious theory (Snidal, 2002, p. 94). Thus, the primary purpose of this chapter is to provide the most relevant historical context from which to derive the building blocks for an explanatory theory of environmental issue-linkage for PTAs.

2.4 Conclusion: Branching Points

Prior to the proliferation of PTAs, there had been a major debate in the GATT on how the multilateral trading system should deal with the emerging global environmental challenges. The debate specifically examined how the GATT could contribute and respond to the UNCED process. In response, the GATT activated the dormant EMIT Working Group to examine the environmental dimensions of UNCED on behalf of the GATT. Based on an agenda comprising three items, debates in the EMIT group for the first time considered an active role for the GATT in addressing global environmental challenges, through multilateral environmental agreements (MEAs). There were, however, caveats to this support: so long as countries did not misuse MEA trade measures in pursuit of protectionist policy objectives.

The key conceptual insight of this chapter is that the GATT did not undermine efforts to address global environmental challenges, as is often claimed in literature. Rather, it sought to limit the abuse of trade measures meant to pursue green protectionism. Contracting parties at the GATT

preferred coordination through international standards, as espoused by MEAs, to the use of sanctions to enforce unilateral and extra-jurisdictional environmental policies. State consent and domestic policy autonomy was the most important concern, as states were wary of having their domestic environmental policy choices violated through unilateral, extra-jurisdictional measures by other states.[116]

Furthermore, the issue of harmonisation of domestic environmental standards, through unilateral, extra-jurisdictional trade measures, to address the so-called 'eco-dumping' problem, was highly contested and generally rejected by most delegations. As shall be demonstrated in subsequent empirical chapters, the issues, lines of argument and responses are the same for PTAs as they were for the GATT.

When the GATT was transformed into the WTO, the attention of scholars and other analysts shifted to how the CTE, and also the jurisprudence of the WTO on disputes filed on environmental grounds, would deal with the growing need to address environmental challenges. Not surprisingly, there has been much controversy on whether the WTO has undermined or supported environmental policy objectives. This shall, however, not be the focus of the present study. In any event, the conceptual issues raised in this chapter have simply reappeared in the environmental negotiations under the Doha Round, which have stalled. So, with no new multilateral trade agreements post-Uruguay Round, the action has shifted, so to speak, to the PTAs. The focus will now turn to

[116] A critic might point out that this ignores their transboundary environmental effects AND the competitive advantages they enjoy at the expense of others. The nuanced point that came out of the EMIT Group debates, however, was that the various transboundary environmental problems have some unique features, which are reflected in their respective MEAs. Trade measures designed within the framework of MEAs were thus preferred to unilateral, extra-jurisdictional trade measures. International consensus was thus prized over discretionary unilateral actions.

whether and how PTAs have addressed the conceptual issues relating to the linkage of trade and environmental concerns outlined in the present chapter, commencing with the development of a theory to explain the design and variation of environmental linkage clauses in PTAs in the next chapter.

Chapter 3: A Theory of Issue-linkage

As the GATT was being transformed into the World Trade Organization (WTO), a parallel pillar of international trade was unfolding. Preferential Trade Agreements (PTAs), which had been few, began to proliferate, especially during the 2000s. In tandem, PTAs began to increasingly include environmental clauses, indicating that trade and environmental linkages were an important issue that had spilled over into PTAs.

An interesting pattern was emerging, where environmental linkage clauses were not only increasingly included in PTAs, but also increasingly varying in their design. To analyse these developments, scholars have mapped and classified the clauses. Some scholars have identified 32 types of environmental clauses in the EU and American PTAs (Jinnah & Morgera, 2013a, p. 336), while others have identified as many as 280 types of environmental clauses (Morin et al., 2017, p. 365). While these efforts have been important in understanding the design of these clauses, a more fundamental theoretical question persists: *what explains the inclusion of, and variation in, the design of the environmental linkage clauses found in PTAs*?

To answer this question, this chapter develops a theory of issue-linkage. It specifically addresses three key gaps in the research on the inclusion and variation in the design of environmental linkage clauses in PTAs, as outlined in the literature review undertaken in the introductory chapter. The first gap is the lack of clear account of conceptual classification, rather than a listing or grouping, of the variety of environmental linkage clauses. Perhaps this is due to the dominance of empirical over conceptual analysis on the topic, especially in the coding and empirical analysis. The second

gap is the absence of a concise and coherent analytical typology of environmental linkage clauses. The wide variation of the categories of linkage clauses in the literature, from 32 to 280, begs for a more fundamental task of generating the analytical typology. The third gap is the absence of a clear causal logic that accounts for the inclusion and variation of the linkage clauses. The theory of issue-linkage developed in this chapter is intended to fill all these gaps.

In addressing these gaps, this chapter makes three concomitant theoretical contributions. First, it introduces the concepts of *policy externalities* and *adjustment costs* to the analysis of issue-linkage. These concepts are offered as the most parsimonious drivers of variation in the way environmental issues are linked to trade. It then derives an analytical typology of categories of linkage clauses from these two concepts. Finally, the chapter explains the conditions under which the linkage categories can be expected to occur and vary. Developing the theory of issue-linkage lays a firm theoretical foundation for subsequent empirical testing and analyses which are undertaken in the remaining chapters. The theory is formulated in the most parsimonious terms in this chapter; it will be further specified following testing in the empirical chapters.

The rest of the chapter is organised as follows: The next section examines the main strands of extant literature on regime interaction and identifies the relevant gaps. This section therefore expands upon the key points made in the Introduction chapter. In doing so, it explains the sources of inspiration for the theory of issue-linkage developed in the present chapter. The subsequent section then introduces the key concepts of policy externalities and adjustment costs, the underlying theoretical assumptions, and then connects them to derive the analytical typology of linkage clauses. Section three outlines the scope conditions under which the linkage clauses are

adopted and vary in design and develops the main hypotheses. Section four summarises the main alternative explanations that shall be tested alongside the theory developed in this study. In conclusion, section five considers the empirical implications of the theory of issue-linkage on the design of environmental linkage clauses in PTAs, to the extent that the identified theoretical conditions apply.

3.1 Theoretical Recapitulation

Analysing issue-linkage in negotiations, regime negotiations and linkage between international regimes has been a decades-long endeavour by scholars of international relations. Over that period, two key strands of theoretical literature on issue-linkage have emerged: in bargaining tactics amongst states; and linking of regimes by states. Each of the strands shall be examined in turn below.

Bargaining tactics

Arthur Stein's seminal paper 'The Politics of Linkage' made an early and significant contribution to understanding how states used linkage of issues in negotiations and bargaining for tactical purposes. Within the context of cooperative games, Stein argued that states linked issues through three main strategies: coercion; threat-inducement; and mutual linkage (Stein, 1982, p. 62). Stein's study was an important contribution to an emergent body of rationalist literature on international cooperation exploring the strategies states use for cooperation (Axelrod & Keohane, 1985, p. 227; Haas, 1980; Martin, 1995; Oye, 1985, p. 11). The core theoretical insight of this strand of literature was that states often use linkage of issues, or prospects of doing so, as leverage for pursuing their interests in international cooperation.

Such analyses also focused on a small number of cases, such as two actors, and were also based on formal modelling. More recent studies have identified additional types of linkage strategies but are still premised on linkage as a strategic negotiation tactic. Moreover, the focus of such literature is narrow in scope, and is often limited to specific bargaining episodes. I examine two of these studies below.

Two other pieces of literature are closest to the objectives of the present chapter. Using game theory, Maggi (2016) identifies linkage via enforcement, negotiation or participation (p. 1). As Maggi puts it:

> 'there is "enforcement linkage" if a violation of an agreement in area A is punished with sanctions (also) in area B; there is "negotiation linkage" if agreements in areas A and B are negotiated jointly (i.e. in the context of a single bargain), as opposed to separate bargains; and there is "participation linkage" if the threat of sanctions in area A is used to encourage participation in an international agreement in area B' (p. 2)

While this approach is insightful, it does not tell us much about the design of linkage clauses in PTAs - especially as outcomes of negotiations.

Related, Leebron (2002) explores the arguments for and against linking trade and environmental regimes. Leebron then classifies them into substantive linkage, strategic linkage, sanction linkage, and regime borrowing. Finally, and crucially, the author suggests "that while the claims for linkage ought to be given significant weight, more creative (and looser) modalities for linkage should be sought so that the conflicting concerns can be better accommodated" (Leebron, 2002, p. 5).

Linking international regimes

The second strand of literature shifted the level of analysis from an individual negotiation setting to the international regime level. Under the broad banner of regime theory, scholars sought to explain how individual international regimes formed; and perhaps more important for the present analysis, how regimes interact (e.g. Haggard & Simmons, 1987). This literature specifically examined different forms of regime interaction, including overlap (Rosendal, 2001), fragmentation (Biermann et al., 2009; Leal-Arcas, 2011; Pickering et al., 2017; M. Young, 2012), collision (Blome et al., 2016a; Dunoff, 2016), interplay (Böhmelt & Spilker, 2016; Eckersley, 2009; Oberthür & Stokke, 2011; Stokke, 2001; O. Young et al., 2008), complexity (Drezner, 2009a; R. O. Keohane & Victor, 2011; Makomere & GUO, 2016; Morin et al., 2017) and strategic linkage (Johnson & Urpelainen, 2012). Other studies have examined, for example, linkage tactics in trade negotiations (Davis, 2004), nuclear arms treaty negotiations (Poast, 2013), across international organizations (Mikulaschek, 2018) and human rights (Hafner-Burton, 2005a).

The emphasis of this literature has been on developing analytical tools and frameworks for understanding regime interaction. Most of this work has focused on developing typologies of interaction, not causal explanations of the various kinds of regime interaction.[117]

[117] Development of this literature did not all happen at once. The focus on regime interaction came after scholarship on regime formation, implementation and effectiveness.

Key theoretical gaps

While the foregoing literature on international regime interaction, broadly defined, lays a good theoretical foundation for the present study, it reveals three main gaps. First, there is an overemphasis on regime conflict. In most instances, the focus of the literature has been on how to manage conflicts emanating from the interaction of regimes (Faude & Groβe-Kreul, 2020). As an illustration of this focus, a recent special issue on regime interplay focused on issues of conflict (Kreuder-Sonnen & Zürn, 2020). The positive effects of regime interaction remain understudied, since positive effects may in some circumstances compensate for negative ones, so it is necessary to examine both to gain a clearer picture of the incentive structures facing states in negotiating linkage clauses.

Second, the costs incurred in responding to the effects of regime interaction have been largely overlooked. Analysis has instead focused on the effects of interaction, but not on the costs of addressing them. As shall be apparent in the subsequent sections of this chapter, the costs of addressing the effects of regime interaction have a significant analytical influence on how parties design linkage clauses and therefore should be incorporated into an explanatory theoretical framework of issue-linkage. Third, the conditions under which various types of issue linkage are adopted remain under-examined. That is, the connection between the policy effects of regime interaction on national policy *and* the attendant costs of addressing them remain under-theorised.

In building the theory of issue-linkage, this chapter offers a parsimonious analytical framework of the problem structure of issue-linkage that can elucidate the incentives and disincentives facing states in issue-linkage negotiations. It does so by grounding the theoretical analysis on the

inclusion and variation in the design of environmental linkage clauses in PTAs. This is not yet another literature review but rather a discussion of how to put together the building blocks of the theory of issue-linkage. The chapter first introduces the concepts of *policy externalities* and *adjustment costs*. These two concepts comprise the main features of the problem structure of issue-linkage. The chapter then develops an analytical typology of linkage clauses, drawing from the interaction of policy externalities and adjustment costs. The resultant four linkage categories represent the types of environmental linkage clauses found in PTAs. The categories are presented in a 2 x 2 matrix.

The final contribution involves theorising the conditions under which the linkage clauses are introduced by parties and the variation in their design. The chapter also lays out a causal logic and derives hypotheses, grounded on the insights from the historical context provided in the previous chapter. Overall, I develop a theory of issue-linkage that has the potential to explain not only whether linkage is likely to occur, but also what particular types of linkage can be expected. In other words, the theory should have explanatory value because it seeks to uncover the underlying causal logic. The next section addresses the first gap by describing the key features of the problem structure of issue-linkage.

3.2 The Problem Structure of Issue-linkage

To develop a theory that explains the inclusion and variation of the environmental linkage clauses, we first have to undertake the more fundamental task of identifying the key features of the problem. In other words, it is necessary to understand the problem structure of issue-linkage. Doing so entails identifying and conceptualising the key features that characterise issue-linkage.

The problem structure of issue-linkage exhibits two key features: how to manage policy externalities; and adjustment costs. The policy externalities feature seeks to explore the emergent effects from the linkage of issues that would normally be covered in a separate regime, in this case the inclusion of environmental issues in PTAs. Adjustment costs, on the other hand, examine the costs incurred by the parties in addressing these policy effects. Combined, the two features comprise the problem structure of issue-linkage. Each of the features is examined in turn below.

Policy externalities

Policy externalities refer to the unintended effects (positive or negative) on third parties or on general welfare flowing from the implementation of a policy. Applied to regime negotiations, policy externalities refer to the policy effects of linking trade and environmental issues through PTAs.

The concept of externalities has been widely used in the social sciences, especially in Economics, International Relations (IR) and Political Science. It has been used to examine the (un)intended consequences of one economic activity by one actor on (an)other actor(s). Or in a broader sense, it has been used to analyse the effects of economic activities on the welfare of society.

In his classic treatise *The Economics of Welfare*, Arthur Pigou brought the concept of externalities into the mainstream of economic analysis (Pigou, 1920). Pigou's basic but seminal insight was that the actions of an actor can have general welfare effects - externalities (Pigou, 1920, p. 183). These externalities can be negative (inducing 'harm') or positive (generating 'benefits').

Externalities are therefore conceptualised as a form of market failure, which require remedial actions by policy makers to mitigate harms, and to generate and protect benefits, respectively.

Pigou's ideas on externalities have been explored in other domains such as trade (Bown & Crowley, 2006), finance (Holcombe & Sobel, 2001), agriculture (Pretty et al., 2001), banking (Smolyansky, 2019), and climate change (Ostrom, 2012), among others. Consider some classic concrete examples of externalities. A tanning factory that dumps toxic waste in a nearby river renders the water unusable by the local community, e.g., for drinking. The factory therefore generates a negative externality. Conversely, consider the development of vaccines which build immunity against certain diseases. Governments can subsidise the development and deployment of vaccines to make it cheaper for the public to access them. The government would be generating a positive externality, with the policy benefits being a safer and healthier public. These two examples reveal the underlying logic of externalities: harms (negative externalities) or benefits (positive externalities) falling on third parties (bystanders).

Analogously, Pigou's insights are very much salient to the present study of issue-linkage. What is of paramount interest here are the effects of trade and environment linkages *on the parties to PTAs*. This section builds on Pigou's insights to contextualise the concept of *policy externalities* in relation to linkage clauses. That is, it examines the main policy externalities emanating from the linkage of trade and environmental regimes, focusing on PTAs as the locus of linkage.

Negative policy externalities arise when there is conflict arising from the interaction of two regimes. In our case, negative policy externalities occur when there is conflict between PTAs and

environmental regimes. Here I interpret regimes in a broad sense to include not only international environmental regimes but also domestic environmental regimes (both national and subnational). As I note below, the domestic environmental regime may relate to a particular MEA, but not necessarily. That is, it might cover an environmental problem that is not the subject of an MEA.

Since PTAs - and trade policy more fundamentally - embody the notion of non-discrimination and transparency amongst parties, any environmental measures deemed to conflict with these notions are considered to generate negative policy externalities from a trade policy perspective. As outlined in the previous chapter, environmental measures in conflict with the notion of non-discrimination are said to foster protectionism, while those breaching transparency are often referred to as non-tariff barriers (NTBs) - a form of protectionism.[118]

In a broader sense, from the trade standpoint, both types of negative policy externalities are rolled together into the critique of 'green protectionism' (Campbell & Coombes, 1999; Lottici et al., 2014). That is, green protectionism is the use of environmental measures to undermine trade liberalisation (Laplante & Garbutt, 1992). By undermining trade liberalisation, green protectionism is said to generate negative policy externalities for trading partners.

Positive policy externalities, by contrast, arise when one regime is used to generate positive policy benefits for another regime. In the case of issue-linkage, and from an environmental standpoint, policy externalities entail the use of clauses in PTAs to promote environmental policy objectives. The rationale underpinning this approach is that PTAs can yield not only trade benefits, but also

[118] Even though trade policy can have negative externalities on environmental policy objectives, negative policy externalities as used in this study are from the trade perspective.

environmental benefits (e.g. Bastiaens & Postnikov, 2017; Berger et al., 2017; Jinnah, 2011; Jinnah & Morin, 2020; Organ & Williams, 1994).

An example of generating positive policy externalities includes the use of PTAs to foster trade liberalisation in Environmental Goods and Services (EGS) (Ciaro et al., 2007b; Ikiara & Mutua, 2006; Nimubona, 2012). By increasing trade in EGS, countries can have enhanced access to much needed technologies to address environmental challenges (Hu et al., 2020; Nimubona, 2012). Since this approach is in tandem with the logic of trade liberalisation, it is quite prominent in trade negotiations, but not without challenges (Ciaro et al., 2007b; Khatun, 2012; Wu, 2014). The negotiations at the WTO for an Environmental Goods and Services Agreement is a clear example of such a win-win approach (Ciaro et al., 2007b; Wu, 2014).[119]

Another example of using PTAs to generate positive policy externalities is to foster compliance with environmental policy commitments. To ensure that parties to PTAs meet their international environmental obligations, it is common for PTAs to include linkage clauses reiterating the parties' commitment to the implementation of MEAs to which they are also parties. Some clauses apply to the domestic level by requiring no relaxation - and sometimes even strengthening – of domestic environmental regulations and commitments (Eliste & Fredriksson, 2004; Porter, 1999; Prakash & Potoski, 2012; Sheldon, 2006). As the preceding chapter noted, this approach can be contentious especially when backed with sanctions or other costs of noncompliance. But the basic conceptual

[119] Although the negotiations have encountered challenges, EGS - at least in principle - are a widely accepted approach. See Wu (2004) for a detailed discussion on the key challenges impeding negotiations of the Environmental Goods and Services Agreement at the WTO.

point is that PTAs can be used to ensure environmental commitments are enhanced, thereby generating a positive policy externality from an environmental standpoint.

To summarise, environmental linkage clauses in PTAs that address negative policy externalities seek to mitigate green protectionism that restricts trade, while those that seek to generate positive policy externalities seek to promote environmental protection. As has been earlier noted, theoretical literature on issue-linkage has emphasised negative policy externalities (policy conflicts) and largely overlooked positive policy externalities (policy benefits).

Having defined the first feature of the problem structure of issue-linkage, let me now turn to the second one: adjustment costs

Adjustment costs

Addressing policy externalities incurs costs. I shall refer to them as *adjustment costs* here. Adjustment costs are incurred by parties to PTAs when mitigating negative policy externalities or generating positive policy externalities to fulfill the requirements of environmental linkage clauses in PTAs. Since green protectionism (a negative policy externality) is undesirable, from the trade perspective, the remedy would be to curb it. Adjustment costs would be incurred by parties as they seek to mitigate green protectionism.

Linkage clauses that promote environmental protection generate positive externalities in terms of general welfare (and especially for green *demandeurs* to PTA negotiations) but they incur adjustment costs for parties that are required to make changes to be compliant, which may vary

depending on the level of development of the respective parties. Remarkably, the literature on issue-linkage in general, and environmental clauses in PTAs in particular, has largely overlooked the component of adjustment costs. Yet, the inclusion of adjustment costs is essential to understand both the presence and types of environmental linkage clauses that are acceptable to parties.

The oversight of adjustment costs in the analysis of regime interaction, though, is not surprising. A similar oversight took place decades ago as the notion of externalities became mainstream in economic studies. Pigou and his followers had also overlooked the conceptual and analytical utility of the costs of addressing externalities (Demsetz, 1996). For them, an assumption of an 'omniscient and omnipotent government' - which would penalise negative externalities and incentivise positive externalities - solved the problem of costs (Demsetz, 1996, p. 567).

The Pigouvian approach to externalities was therefore incomplete. In his famous article 'The Problem of Social Cost', the economist Ronald Coase argued that costs incurred in addressing externalities were not trivial (Coase, 1960). Coase identified two conditions that had to be met in effectively addressing externalities: assignment of property rights and responsibility to those generating the externality; and incurring transaction costs that are not too high to prevent the parties from addressing externalities.

Being critical of excessive government intervention, Coase argued that 'transaction costs', as he called them, were important as an analytical device (Coase, 1960, p. 850). Crucially, he argued that private actors could address externalities if the transaction costs were manageable. Only by including transaction costs could one have a more complete treatment of the issue of externalities

- a positive-cost model; that is, the net positive cost to all parties in the negotiation. Coase had earlier made the basic point that firms exist to address transaction costs inherent in market transactions (Coase, 1937, p. 390). It is important to note, however, that what might work as manageable for the parties may not serve public welfare. Thus, policy measures that serve trade interests, such as challenging some environmental measures, may impair the ability of governments to implement such measures of public interest. In short, environmental protection will still be under-provided if left to private contracting parties.

In addition, the actors themselves could bargain and decide on the allocation of 'property rights'. Coase argued that this was feasible given the reciprocal nature of externalities (Coase, 1960, pp. 836–837). A Coasean bargain would therefore solve the 'transaction costs' issue from the standpoint of the negotiating parties, through the allocation of property rights and responsibilities on the externalities, and through specifying the bearers of the transaction costs.

Not surprising, Coase's article on 'The Problem of Social Cost' is the most cited law review article in history (Demsetz, 1996, p. 555).[120] It has played a central role in law, especially in the resolution of cases emanating from issues of externalities. But his seminal point on the positive-cost model has often been misconstrued and understood 'backwards' in theoretical terms. That is, many scholars have misunderstood Coase to mean that his insights apply to a world of no transaction costs; Coase argued otherwise. For Coase, most situations involving externalities are not those of perfect market competition, where market forces address the externalities which he saw as a zero-cost model (McCloskey, 1998). Rather, most situations involving externalities required the

[120] https://www.law.uchicago.edu/lawecon/coaseinmemoriam/problemofsocialcost

relevant actors to incur certain costs to address the externalities. Hence, the focus of analysis on externalities should be to examine how transaction costs of compliance affect the resolution reached by the parties to the transaction. In other words, the Coase theorem argues that understanding the role of transaction costs was critical to the analysis and resolution of externalities in negotiations.

Noting the unrealistic assumption of not considering the costs of addressing an externality, Coase remarked: 'In order to carry out a market transaction, it is necessary to discover who it is that one wishes to deal with, to inform people that one wishes to deal and on what terms, to conduct negotiations leading up to a bargain, to draw up the contract, to undertake the inspection needed to make sure that the terms of the contract are being observed, and so on. These operations are often extremely costly, sufficiently costly at any rate to prevent many transactions that would be carried out in a world in which the pricing system worked without cost' (Coase, 1960, p. 850).

International regimes serve as the main means of addressing transboundary negative externalities. Hence, like private contracting parties in the market, parties to international agreements (such as a PTA) have to undertake the task of addressing transboundary externalities. In addressing these externalities, they will incur costs. Coase's two conditions would be met, as parties to a PTA would take up responsibility to address the externalities (akin to the allocation of property rights), as well as incur the attendant costs to be compliant with the terms of the agreement. It is posited that bargaining in the form of negotiations over environmental clauses in PTAs would yield an efficient linkage outcome since the Coasean logic of addressing externalities is reciprocal in nature (Coase,

1960, p. 837). That is, a Coasean bargain that includes transaction costs would be necessary to address the policy externalities.

In developing the concept of adjustment costs, I incorporate Coase's insights on the importance of transaction costs as an analytical tool to understand negotiations. In negotiating an international agreement, such as a PTA, parties incur "sunk costs" that would be incurred in its implementation (Abbott & Snidal, 1998). Sunk costs are costs that are expended and cannot be recovered. Herein, sunk costs represent the costs of implementing commitments to remain compliant with PTAs. Including environmental commitments in PTAs would necessitate commitment of additional resources to implement them. Likewise, since the realm of international politics is characterised by anarchy - the absence of a central world government to address externalities - parties to an agreement have to bear the costs (institutional costs) (Abbott & Snidal, 1998, p. 23; Koremenos & Betz, 2012, pp. 766–768; Lipson, 1991, pp. 507–508).

Related, the third parties impacted by the externalities - whether positive or negative - bear the "political" costs and benefits of PTAs (Bland & Nikiforakis, 2015; Holcombe & Sobel, 2001). Green protectionism, for instance, would hinder access to export markets by exporting firms (e.g. Mehling et al., 2018; Schuenemann & Kerr, 2019). Moreover, a negative economic welfare effect of green protectionism would be an increase in the prices of consumer goods due to discrimination against cheaper imports, based on discriminatory environmental measures (Levinson, 2017, p. 23; Sharma & Kushwaha, 2019). By contrast, better environmental quality, as promoted by leveraging PTAs to enforce environmental commitments, would be enjoyed by society, whether domestic or transboundary (Morin & Jinnah, 2018).

In both cases, the costs of mitigating negative policy externalities (green protectionism), and generating positive ones (environmental protection), incur adjustment costs, which serve as an important conceptual tool in analysing the interaction of regimes (broadly understood) and understanding the types of environmental linkage clauses that are chosen by the parties.

Types of adjustment costs

There are two types of adjustment costs that flow from the acceptance of environmental clauses in PTAs: institutional costs; and political costs. Institutional costs are akin to private costs (in the Coasean sense), and they are incurred by parties in addressing policy externalities. Administrative costs are the most salient type of institutional costs, and usually take the form of drawing on bureaucratic resources (Michaelowa, 2017). Such administrative costs may include notifying fellow parties to the PTA of draft domestic environmental measures before their adoption (Ghodsi & Michalek, 2016). At the WTO, similar mechanisms exist whereby member countries notify their draft environmental measures, which are collated as part of the WTO Environmental Database.[121]

Institutional costs can also be incurred when generating positive environmental externalities. To ensure that environmental commitments included in PTAs - be they domestic or international - are met, parties need to establish appropriate mechanisms of oversight. A common type of mechanism is one that includes implementation and review of environmental commitments. Often, specific government offices are delegated the task of ensuring implementation and conducting review. Information exchange is a crucial component of such mechanisms (Williams, 2021). The basic

[121] https://edb.wto.org/

point, though, is that there are implementation costs associated with meeting the environmental commitments included in PTAs.

Let me now turn to political costs. In the Coasean sense, political costs are akin to the costs of externalities borne by third parties. For our present purposes, third parties can include domestic political groups, such as trade interest groups or domestic environmental groups (Lechner, 2016a). When negative policy externalities are generated in the form of green protectionism, domestic interest groups (especially exporters) will lobby their governments to ensure the barriers to exports are eliminated (Rodrik, 2018, p. 78). For example, eco-labels have been much contested, especially over concerns that they may be designed in ways that favour domestic producers (Greaker, 2006b). Firms exporting to markets with eco-labels would have to bear a higher cost relative to local firms in the export market.

Domestic political costs can also be salient when generating positive policy externalities. Domestic environmental groups, especially in major economies such as the EU and the US, have been active in lobbying for the use of PTAs to promote environmental protection (Lai, 2007; Postnikov, 2019; Shaffer, 2005).. Securing support from these groups is critical to policymakers from those countries. Failure to promote environmental protection through PTAs can be costly, in terms of domestic political support, if environmental groups represent large constituencies.

However, environmental clauses in PTAs may also generate political costs for governments. Exporting firms in developing countries have often been critical of stringent environmental standards being included in PTAs (Spilker et al., 2018, p. 513). Opposition by the exporting, or

even importing firms, may arise from the high costs associated with complying with the environmental standards (Greaker, 2006b; Schuenemann & Kerr, 2019b). It is therefore common for PTAs concluded by developing countries (so-called South-South PTAs) to exclude (stringent) environmental standards.

Political costs can also take the form of erosion or loss of future political autonomy (Pauwelyn & Hamilton, 2018; Richardson & Stähler, 2019). It is commonly agreed that sovereignty is one of the cardinal norms in international relations.[122] While entering into international agreements automatically erodes future political autonomy, as states agree to be bound by the rules of the agreement, they would be keen to safeguard certain aspects of their political autonomy. That is why, in theory, international agreements include escape clauses that grant relief to states to derogate on their obligations (Basedow, 2017; Beshkar & Bond, 2016; Pelc, 2009, 2016a).

The political costs of restrictions on national political autonomy are also prevalent in the trade and environmental debates. In international trade agreements, and as demonstrated in the preceding chapter on Historical Antecedents, states have been keen to ensure that they have ample room to introduce and implement domestic environmental regulations. Article XX of the GATT is perhaps the most famous exception, and it includes clauses relating to the environment.[123] In terms of linkage, therefore, states often reserve domestic regulatory policy space (Blümer et al., 2020).

[122] Voluntarily entering into an international agreement is an exercise of sovereignty not an abrogation of it. What I mean here is future political autonomy. States are always free to withdraw from an agreement, so their sovereignty remains intact.
[123] As previously noted in the Introduction chapter, the word 'environment' is not mentioned at all in GATT Article XX text; only the protection of 'human, animal or plant life or health', and measures relating to the conservation of exhaustible natural resources.

Article XX is important because of the domestic values which regulatory autonomy are supposed to guard, with which PTAs might clash.

Levels of adjustment costs

Overall, and regardless of type, adjustment costs can vary in two ways: they can be high or low. The degree of costs, therefore, matters. In the debates on trade agreements and environmental policy, the degree of costs is more significant in shaping the nature of environmental linkage clauses than the mere presence of costs. In elaborating the connection between policy externalities and adjustment costs, the next section will provide more detail on how high and low costs arise.

Low adjustment costs approximate Coase's *zero transaction costs model*. In this model, Coase argued that transaction costs to address externalities are minimal or even non-existent, since market forces resolve them during transactions (Coase, 1960, p. 850). That is, there is a presumption of market efficiency (Coase, 1937, pp. 390–391, 1960, p. 850; Demsetz, 1996, p. 567).[124] For our present purposes, and as shall be demonstrated in subsequent sections, there are some kinds of policy externalities that incur low adjustment costs.

High adjustment costs, on the other hand, are akin to Coase's *positive transaction costs model*. In this telling, which was Coase's main theoretical insight, transaction costs are central to addressing many forms of externalities. In economic terms, these costs are borne by private participants and

[124] Just as transaction costs were overlooked by economists when analysing externalities (Demsetz, 1996; McCloskey, 1998), adjustment costs have been overlooked by regime interplay theory scholars. A core argument of this chapter is that indeed, there are types of issue-linkage that incur minimal to negligible adjustment costs, there are those that incur high adjustment costs. But the basic point is the need to incorporate adjustment costs, and their variation, into regime theory

not the ‘omniscient government’ envisioned by Pigou. In the context of the present study, these are those significant costs necessary to mitigate negative externalities and generate positive policy externalities. Hence, the overall importance of adjustment costs in the analysis of regime interaction.

3.3 Theorising Issue-linkage

Having introduced policy externalities and adjustment costs, it is now necessary to examine how they connect for parties negotiating environmental linkage clauses in PTAs. This section develops a theory of issue-linkage that seeks to explain these connections. It does so in two parts. The first part outlines the main assumptions of the theory and connects the concepts of policy externalities and adjustment costs, to derive an analytical typology of linkage clauses. The second section outlines the causal logic behind the analytical typology and develops the relevant hypotheses.

Assumptions & analytical typology

The two core assumptions underpinning the theory of issue-linkage are:

1. Interaction of issues generates policy externalities
2. Addressing the policy externalities incurs adjustment costs

It is important to recall that regime interaction may occur on one to two levels: interaction between the PTA and an MEA and/or between the PTA and domestic environmental regimes. Often the domestic regime may relate directly to an MEA, but not necessarily.

Since there are positive and negative policy externalities, and high and low adjustment costs, we can derive a 2 x 2 matrix to illustrate their interaction. Table 3.1 below presents the analytical typology derived from the interaction of policy externalities and adjustment costs. The categories represent the types of environmental linkage clauses found in PTAs based on the expected bargain between the parties.

Table 3. 1 Analytical typology of environmental linkage clauses in PTAs

		Policy externalities	
		Negative	***Positive***
Adjustment costs	***High***	Transparency	Synergistic
	Low	Escape	Enhancement

The causal logic of the theory of issue-linkage

As is evident from the foregoing discussion, the addition of adjustment costs to regime interaction enables a more comprehensive analysis of the incentives facing the parties to PTA negotiations. Overall, issue-linkage follows two logics: managing policy conflicts and generating policy benefits. For our present study, environmental linkage clauses in PTAs that manage and generate policy externalities entail curtailing green protectionism and promoting environmental protection, respectively. Each logic embodies the interaction of policy externalities and adjustment costs. Transparency and Escape clauses seek to curb green protectionism, while Synergistic and Enhancement clauses seek to leverage PTAs to promote environmental protection. The next section explains the underlying causal logic that produces these different clause types.

Trade-first: Green protectionism

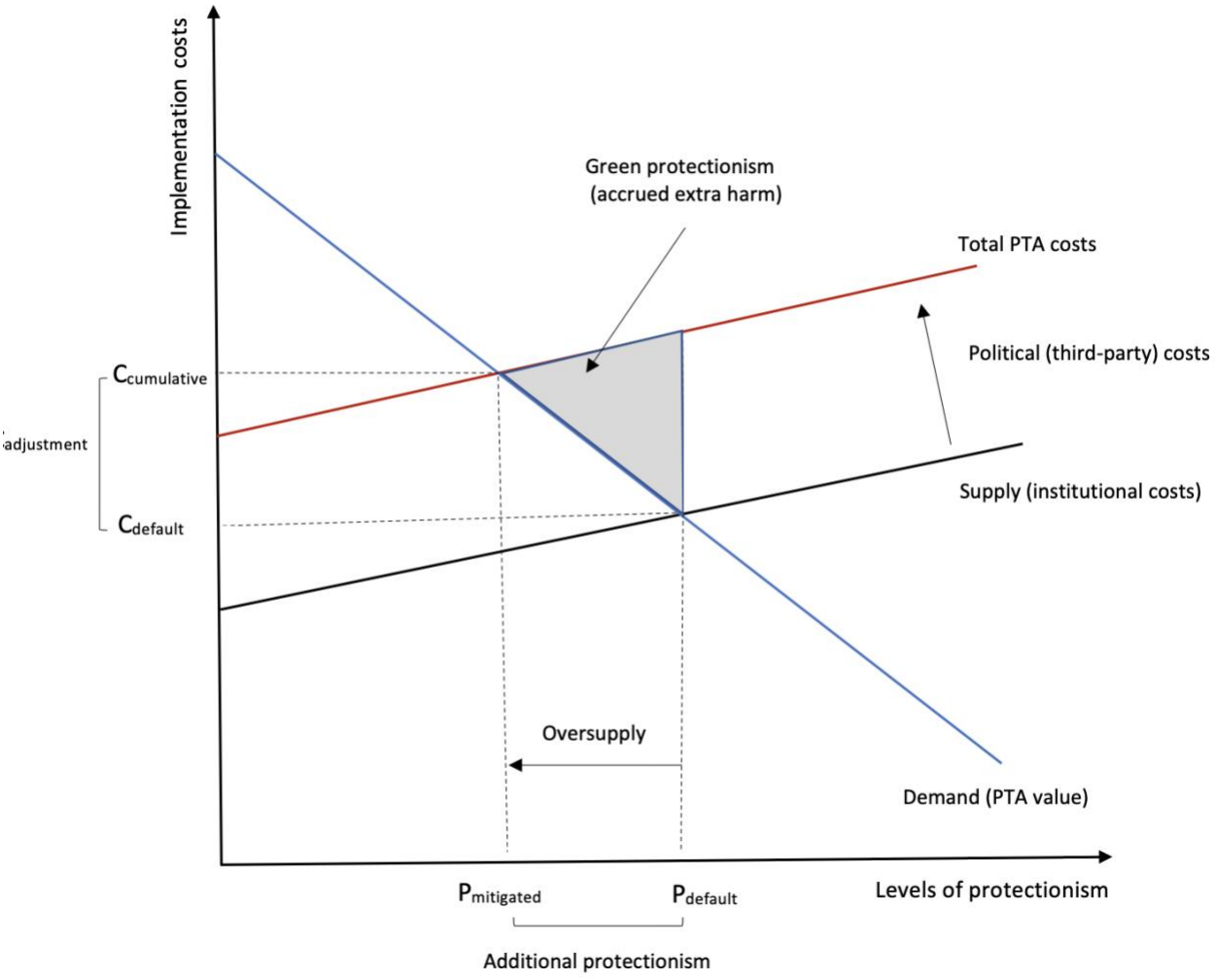
One logic that environmental linkage clauses in PTAs embody is that of curbing green protectionism. As highlighted in the previous chapter and above, a long-running concern from the perspective of trade policy has been the use of environmental measures as disguised forms of trade restrictions - green protectionism (Greaker, 2006b; Laplante & Garbutt, 1992; Levinson, 2017; Lottici et al., 2014).

Green protectionism occurs when states use their domestic environmental measures as disguised forms of protection (in the form of non-tariff barriers) or apply the measures in a manner that discriminates against imports. Clauses that seek to curb green protectionism target the use of Non-Tariff Barriers (NTBs) to trade and the discriminatory application of domestic environmental measures. Transparency and Escape linkage clauses address each of these problems respectively.

While both clauses are premised on mitigating negative policy externalities in relation to trade, their difference is in the variation in the level of adjustment costs. Transparency clauses are preferred when there are high adjustment costs, while Escape clauses are preferred when there are low adjustment costs. But before we examine each of the clauses in turn, let us first unpack the main logic of green protectionism.

Figure 3.1 below illustrates the logic of curbing green protectionism through issue-linkage.

Figure 3. 1 Issue-linkage model of curbing green protectionism.



Green protectionism is mitigated by reducing its "oversupply" of protectionism, and the attendant costs of doing so.

Figure 3.1 above should be interpreted in the following way. The X-axis represents the 'Level of protectionism' while the Y-axis represents the 'Implementation costs' of a PTA. The main point embodied in Figure 3.1 is given that there is an "oversupply" of potential protectionism in the form

of domestic environmental measures with significant trade effects, costs will be incurred in bringing the measures within the purview of the PTA and restricting their use.

Green protectionism emanates from the "oversupply" of protectionism. The primary objective of a PTA is to facilitate trade liberalisation. But since some members may use domestic environmental measures as disguised forms of protectionism, parties to a PTA aim to curb this potential abuse by bringing such measures within the purview of PTAs. That is, absent their inclusion in PTAs, such domestic environmental measures would by default have the potential to be used for protectionist purposes. "Oversupply" of green protectionism emerges from such a scenario. Of particular concern are domestic environmental measures with significant trade effects.[125] Major economies, who represent big export markets, are more likely to deploy green protectionist measures (Schuenemann & Kerr, 2019b).

To curb green protectionism, parties will include linkage clauses in PTAs that try to 'discipline' such domestic environmental measures. If the problem is an "oversupply" of protectionism, then the remedy would be to reduce the supply. Transparency and Escape clauses perform this function.

Green protectionism represents a marginal increase in the levels of protectionism. Environmental clauses in PTAs on green protectionism seek to curtail it. But before delving deeper into the causal logic of green protectionism and the subsequent difference in the design of clauses due to the variation of adjustment costs, let us first unpack the main components of the logic.

[125] It is important to note that not all domestic environmental measures are to be brought under the purview of PTAs. Rather, this would only apply to those measures with significant trade measures. The 'administrative burden' argument, raised at the GATT EMIT debate, underscores the concerns over high adjustment costs involved with notifying all types of domestic environmental measures

As mentioned, Figure 3.1 illustrates a linkage model of reducing an "oversupply" of protectionism, and the attendant adjustment costs, where[126]:

Pmitigated is the mitigated level of protectionism, after curbing the potential use of green protectionism through the inclusion of trade-first linkage clauses

Pdefault is the default level of protectionism, which includes green protectionism, absent trade-first linkage clauses

Cdefault are the default costs of implementing the PTA, absent trade-first green protectionism linkage clauses

Cmitigated are the cumulative costs of implementing the PTA, inclusive of trade-first green protectionism linkage clauses

Supply (institutional costs) are the costs incurred by parties to a PTA in mitigating negative policy externalities (including green protectionism). These correspond to *institutional adjustment costs.*

Political costs are the costs incurred by 'third-parties', such as loss of export market share by exporting firms and higher prices for consumers on imported goods (i.e., erosion of benefits of trade liberalisation), from the impacts of green protectionism. These correspond to *political adjustment costs for the parties to PTAs.*

[126] In overall interpretation of the graph, the demand for protectionism falls as the costs of mitigating them rise. That is, parties to a PTA will only permit certain types of protectionism up to the point where their cost does not exceed the benefits of the PTA. For our present purposes, the potential of green protectionism exists de facto, hence the need to bring it into the purview of PTAs through linkage. Hence the need to reduce the "oversupply" of protectionism. The shaded area (Green Protectionism) indicates the "welfare loss" in value of PTAs (trade liberalisation) due to green protectionism

Total costs are those associated with the impacts of green protectionism and are the sum of supply (institutional) costs and political (third-party) costs. Total costs, in essence, represent the overall welfare costs of green protectionism, i.e.,

$$\text{Total costs} = \text{Institutional costs} + \text{Political costs} \quad (1)$$

Demand (PTA value) are the benefits, accrued from protectionism, to an individual party to a PTA. The demand for protectionism falls as the costs of mitigating it rises.

In addition, the following conditions apply:

Pdefault > Pmitigated, where the levels of mitigated protectionism, Pmitigated, through inclusion of green protectionism clauses, are lower than the default costs that don't consider green protectionism, Pdefault.

Cmitigated > Cdefault, where the cumulative costs of mitigating protectionism, Cmitigated, are higher than the default costs that don't include green protectionism, Default, (by bringing domestic environmental measures with significant trade effects within the purview of the PTA).

So, how does mitigating green protectionism generate adjustment costs? Consider the default level of protectionism that has been considered in a PTA, Pdefault, which does not include green protectionism. The costs of mitigating the default levels of protectionism, Pdefault, would correspond to the default costs, Cdefault. Absent any action, parties can avail themselves of green protectionist measures. Hence, to remove this possibility, a PTA will include linkage clauses to bring such domestic environmental measures, which have significant trade effects, under the

purview of the PTA. In effect, this lowers the levels of protectionism from Pdefault to Pmitigated. That is, the "oversupply" of protectionism, in the form of green protectionism, is remedied.

But in reducing the protectionism levels from Pdefault to Pmitigated, costs are incurred. Additional costs arise when the implementation costs increase from Cdefault to Cmitigated. The difference between the two costs of implementation (i.e Cmitigated-Cdefault) amounts to adjustment costs. Herein, adjustment costs are incurred in mitigating green protectionism.

Linkage aimed at curbing green protectionism will therefore only be feasible if the costs of doing so (institutional costs) are less than the overall welfare costs generated by green protectionism (total costs). Put differently, parties to a PTA will commit to ensuring that they establish and implement mechanisms meant to curb green protectionism only if the costs of doing so are less than the overall costs impacted by green protectionism. That is,

When [institutional costs < total costs], trade-first linkage clauses will be adopted (2)

Such trade-first mechanisms include, for example, notification and policy surveillance of domestic environmental measures with significant trade effects, as embodied by Transparency linkage clauses, to mitigate the use of such measures as Non-Tariff Barriers (NTB). In the domestic application of such measures, the Escape clauses allow for such regulatory action, but impose costs (institutional costs) by requiring the demonstration of the necessity of implementing the domestic environmental measures (Pelc, 2016a, pp. 124–126).

Since our focus is on "oversupply" of protectionism, the "supply" curve is of particular interest. The supply curve (institutional costs) represents the marginal costs incurred by each party in mitigating additional sources of protectionism, while external costs are the impacts of green protectionism impacted on third parties such as trade interest groups and consumers (political costs). Bringing domestic environmental measures that may be potential sources of protectionism under the scope of the PTA disciplines reduces the costs of the former, while constraining their use reduces their "demand". But doing so incurs private (institutional) costs, which take the form of institutional (administrative) actions by parties to a PTA to mitigate green protectionism.

To mitigate green protectionism, therefore, the objective is to shift the supply (institutional costs) curve to the "total costs" curve. In doing so, the external costs (political costs) are absorbed by parties to a PTA. The resultant implementation costs of a PTA include those incurred in curbing green protectionism. But since the costs vary, there is a need to examine how mechanisms that incur high adjustment costs vary from those incurring low adjustment costs. Importantly, variation between high and low costs is due to the varying levels of institutional costs.

Since the political costs of green protectionism are taken to be largely the same, the institutional costs incurred from Transparency and Escape clause mechanisms vary significantly:

For *Transparency clauses*,

Total costs = Institutional costs + Political costs, where institutional costs are high (3)

For *Escape clauses*,

Total costs = Institutional costs +Political costs, where institutional costs are low (4)

Institutional costs are the main source of variation between the adjustment costs of Transparency and Escape linkage clauses. In a graphical and relative sense, the high adjustment costs (Transparency clause) will be closer to the costs of mitigating the policy spillovers, Cmitigated, while the lower adjustment costs (Escape clause) will be closer to the default costs of implementing the PTA, Cdefault. Both adjustment costs lie between the default, Cdefault, and mitigating costs, Cmitigated, as earlier mentioned. The next section explores this dynamic by outlining the logic underpinning Transparency and Escape clauses. Thus,

Adjustment costs (Transparency) > Adjustment costs (Escape) (5)

Transparency clauses

As noted in the analytical typology, Transparency clauses arise when high adjustment costs are incurred in mitigating negative policy externalities (green protectionism). Specifically, the high adjustment costs arise due to the high institutional costs of notification and policy surveillance of domestic environmental measures that have trade effects.

As the preceding chapter on Historical Antecedents has shown, a major source of concern for delegations at the GATT was on developing a transparency mechanism that would prevent the adoption of domestic environmental measures as a disguised form of protectionism. So significant were the concerns that such protectionist measures were deemed to be a threat to the multilateral trading system. Debates on how to address these concerns were happening as NTBs were

becoming a major issue in international trade (de Melo & Solleder, 2020). Jagdish Bhagwatti's Law of Constant Protection succinctly summed up these concerns: 'If you reduce one kind of protection, another variety simply pops up elsewhere' (Bhagwati, 1988, p. 53).

In response, the Uruguay Round of the GATT, which led to the establishment of the WTO, developed an elaborate transparency mechanism, based on notification and policy surveillance.[127] This Transparency mechanism would require WTO members to notify any *draft* domestic environmental measures that had significant trade effects. Doing so would provide other WTO members an opportunity to comment and make input into these measures before they were adopted. The WTO established the Environmental Database, wherein hundreds of notifications on draft environmental measures with significant trade effects are made every year.[128]

Another rationale for the Transparency mechanisms at the multilateral trading system (MTS) was to pre-empt and prevent disputes based on environmental measures (Fontagné et al., 2005, p. 1418). Notification of domestic environmental measures, which had the potential to be used to pursue green protectionism, would allow for any potential issues to be addressed, before they could escalate into a fully blown dispute.

In effect, the Special Trade Concerns (STC) mechanism was developed to act as the 'early warning system' that would prevent further disputes (Busch & Pelc, 2015, p. 405). By allowing fellow members to make their inputs into potentially problematic domestic environmental measures, the

[127] For details, see the 'Transparency: An Early Warning System' section of the preceding chapter, Historical Antecedents
[128] https://edb.wto.org/

STC has prevented many such issues from escalating to disputes that would require the engagement of the WTO's dispute settlement mechanism. Indeed, empirical evidence has shown that the STC has been instrumental in preventing such disputes (Busch & Pelc, 2015, p. 406; Horn et al., 2013, p. 13).

Analogously, PTAs have adopted similar mechanisms through Transparency linkage clauses. These clauses include notification and/or policy surveillance requirements. They also often appear under the 'Technical Barriers to Trade' section of the PTA text. For a concrete example, consider the text of the PTA between Singapore and China which embodies the Transparency linkage logic[129]:

> CHAPTER 7
>
> TECHNICAL BARRIERS TO TRADE,
>
> SANITARY AND PHYTOSANITARY MEASURES
>
> ARTICLE 54
>
> Transparency
>
> 1. The Parties shall notify each other through their respective TBT and SPS enquiry points, under the TBT Agreement and the SPS Agreement, of any new technical regulation and SPS measure related to the trade of products in accordance with the TBT Agreement and the SPS Agreement, or any change to them. Each Party shall allow at least sixty (60) days for the other Party to present comments in writing on any notification except where considerations of health, safety,

[129] https://www.enterprisesg.gov.sg/-/media/ESG/Files/Non-Financial-Assistance/For-Companies/Free-Trade-Agreements/CSFTA/Legal-Text/Chapter-7-Technical-Barriers-to-Trade-Sanitary-and-Phytosanitary-Measures.pdf

environmental protection or national security arise or threaten to arise to warrant more urgent action (emphasis own).

2. Each Party shall make available to the other Party, electronically or in any other form, up-to-date publications on technical regulations and any relevant conformity assessment procedures that are cited in, or may be used to comply with, those technical regulations. Each Party shall make known to the other Party the relevant standards that are cited in, or may be used to comply with, those technical regulations.

We can therefore derive the following hypothesis for Transparency clauses:

H1: When mitigating negative policy externalities that incur high adjustment costs, states will adopt Transparency linkage clauses

The high adjustment costs accrue from the 'administrative burden' of notifying and conducting policy surveillance on draft environmental measures with significant trade effects. In the application of such environmental measures, however, states have found a way of significantly lowering the institutional costs. The next section outlines how they have managed to do this, through Escape clauses.

Escape clauses

As earlier mentioned, Escape clauses are adopted to mitigate negative policy externalities (green protectionism) that incur low adjustment costs. This is the major distinction with Transparency clauses. But why, exactly, are the adjustment costs low? One answer could be that Escape clauses

incur low institutional (administrative) costs. But in order to fully appreciate this logic, we need to examine in deeper detail the design of Escape clauses.

The preceding chapter showed that the initial attempt by GATT members to address environmental issues was through carving out the domestic regulatory space. This space would allow GATT member countries to derogate from their trade obligations in order to respond to pressing domestic environmental issues. This regulatory space, however, was not unconstrained. Rather, it included criteria that had to be met for the use of the Escape clauses to be valid (Pelc, 2016a, p. 124). In other words, use of the domestic regulatory space was constrained. Article XX of the GATT embodies this logic (Eckersley, 2004a, p. 25). The text of GATT Article XX is reproduced below[130]:

> Article XX
>
> General Exceptions
>
> Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:
>
> (b) necessary to protect human, animal or plant life or health;
>
> (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption[131]

[130] Only paragraphs related to the environment have been included. The 'efficient breach' mechanism is clearly apparent, wherein a party to the PTA can avail itself to the environmental exception subject to ensuring its actions are justifiable and are not a disguised form of protectionism

[131] https://www.wto.org/english/res_e/booksp_e/gatt_ai_e/art20_e.pdf

Underlying this logic of constrained regulatory space is the notion of 'efficient breach' (Pelc, 2010, p. 636). That is, domestic regulatory space is carved out in an agreement, but the validity of its use is subject to certain criteria being met (Pelc, 2009). For our present purposes, the main objective is to prevent the application of domestic environmental measures in a manner that discriminates against imports, in favour of domestic industry.

It is therefore not surprising that Escape clauses found in PTAs embody the logic of Article XX. That is, they embody the logic of efficient breach. In effect, this approach significantly lowers the adjustment costs in general, and institutional costs in particular. Since the events that necessitate the invocation of Escape clauses are meant to be rare and exogenous (beyond the ability of states to control them), the concomitant institutional (administrative) costs of developing "paperwork" (Pelc, 2016a, p. 40), used to refer to the documentation of the justification for invoking the exception, are quite low.[132]

Moreover, the high costs emanating from resultant disputes based on discriminatory application of domestic environmental measures contribute to lowering the abuse of escape clauses. While the first environmental dispute under the GATT was based on discriminatory environmental measures - the first Tuna-Dolphin case of 1991 (Skilton, 1993) - and generated significant political debate and tensions, there have only been nine such disputes in the multilateral trading system - three

[132] Pelc (2016, p. 40) points to the paradox of states '"seeking paperwork": in their effort to manage expectations, governments are drawn not to the cheapest and easiest flexibility options, *but rather to those that best allow them to convey the exogenous hard times driving them to escape*' (emphasis own). The expected low frequency of invocation of such clauses indeed lowers the (administrative) costs of Escape clauses.

under the WTO and six under the GATT.[133] It is therefore remarkable that only a small number of such disputes have arisen, underscoring the point of low adjustment costs.

The reason for this low number is that the STC mechanism has done much of the 'heaving lifting' by flagging potentially problematic domestic environmental measures and enabling states to amicably resolve concerns before they escalate into a full dispute. Therefore the 'efficient breach' logic embodied in Escape clauses in PTAs significantly lowers adjustment (institutional) costs.

An example of an Escape clauses in a PTA is presented below, drawn from the Australia-Peru PTA[134]:

> CHAPTER 28
>
> EXCEPTIONS AND GENERAL PROVISIONS
>
> Section A: Exceptions
>
> Article 28.1: General Exceptions
>
> 1. For the purposes of Chapter 2 (National Treatment and Market Access for Goods), Chapter 3 (Rules of Origin and Origin Procedures), Chapter 4 (Customs Administration and Trade Facilitation), Chapter 6 (Sanitary and Phytosanitary Measures), Chapter 7 (Technical Barriers to Trade) and Chapter 16 (State-Owned Enterprises and Designated Monopolies), Article XX of GATT 1994 and its interpretative notes are incorporated into and made part of this Agreement, mutatis mutandis.

[133] https://www.wto.org/english/tratop_e/envir_e/edis00_e.htm

[134] https://www.dfat.gov.au/sites/default/files/chapter-28-exceptions-and-general-provisions.pdf, Only paragraphs related to the environment have been included. It is therefore clear that even though the Article allows carving out domestic regulatory space, there are conditions to be met by members in order for their actions to be deemed consistent with trade law.

> 2. The Parties understand that the measures referred to in Article XX(b) of GATT 1994 include *environmental measures* necessary to protect human, animal or plant life or health, and that Article XX(g) of GATT 1994 applies to measures relating to the conservation of living and non-living exhaustible natural resources.
>
> 3. For the purposes of Chapter 9 (Cross-Border Trade in Services), Chapter 11 (Temporary Entry for Business Persons), Chapter 12 (Telecommunications), Chapter 13 (Electronic Commerce)2 and Chapter 16 (State-Owned Enterprises and Designated Monopolies), paragraphs (a), (b) and (c) of Article XIV of GATS are incorporated into and made part of this Agreement, mutatis mutandis.3The Parties understand that the measures referred to in Article XIV(b) of GATS include ***environmental measures*** necessary to protect human, animal or plant life or health (emphases own).

We can derive the following hypothesis to explain Escape clauses:

H2: When mitigating negative policy externalities that incur low adjustment costs, states will adopt Escape linkage clauses

Having outlined the logic underpinning the mitigation of green protectionism and the attendant costs, let us now turn to the opposite objective: leveraging PTAs to generate environmental benefits. The next section takes up this task.

Promoting environmental protection

States at times seek to leverage PTAs to generate environmental benefits, especially promoting environmental protection. As was apparent in the preceding chapter, PTAs can be used in two

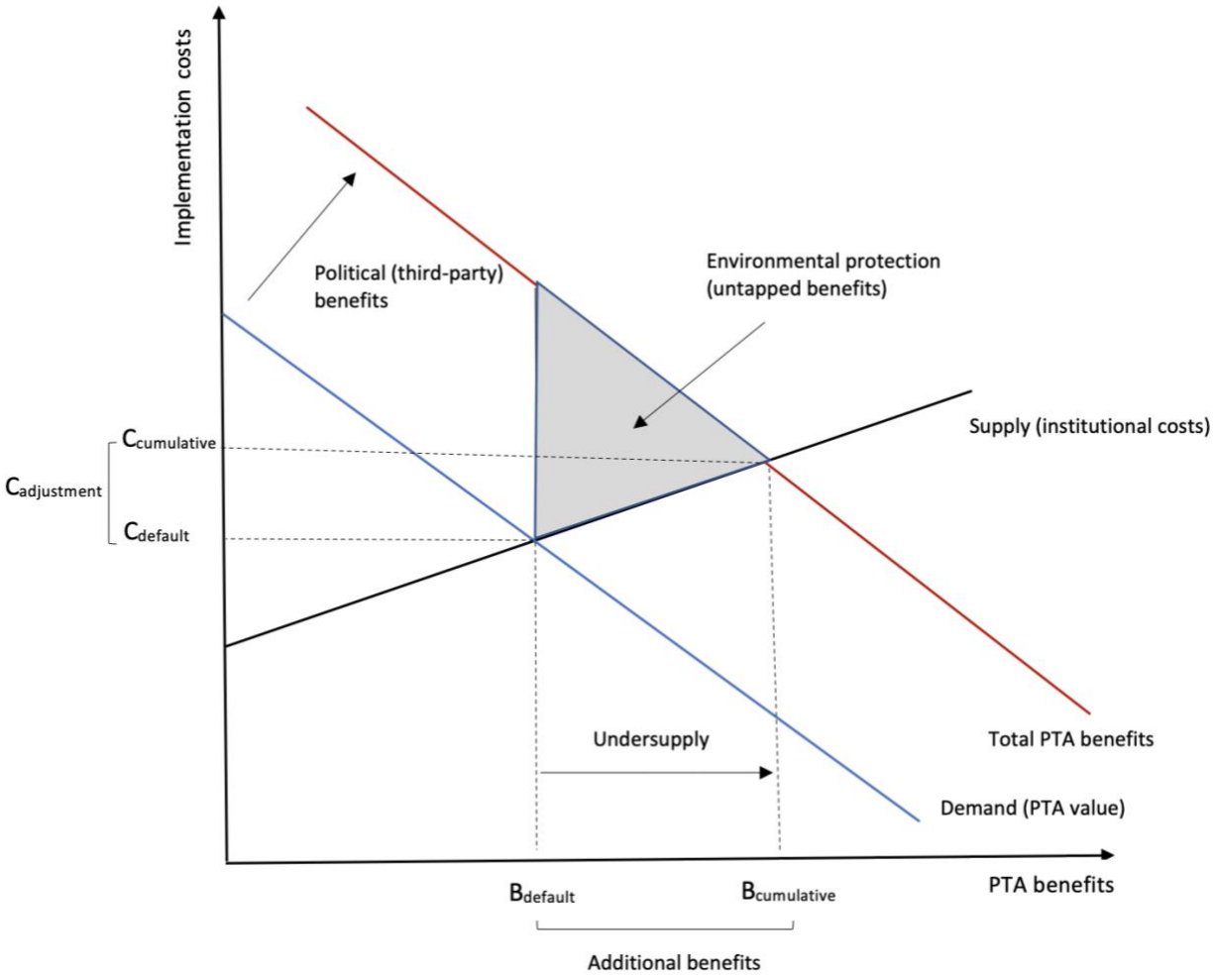
main ways to generate environmental benefits. One approach includes the use of market-oriented mechanisms that have the dual purposes of trade liberalisation while also promoting environmental protection. Trade in environmental goods and services (EGS) is a prominent example. The second approach involves the use of adverse trade measures and other mechanisms to foster compliance with domestic and international environmental policy commitments.

PTAs are an attractive policy tool for various reasons, which shall be explored in detail in this section. The fundamental rationale, however, is that in addition to trade liberalisation, PTAs can be used to generate other benefits. For the present purpose, the additional benefit would be environmental protection, in this case, to deal with an "undersupply" problem from an environmental standpoint. The full potential of PTAs - of providing benefits in addition to trade liberalisation - remains untapped (Morin & Jinnah, 2018). If the problem is one of undersupply of environmental protection, then the remedy is generating additional environmental benefits. Specifically, using PTAs to promote environmental policy objectives does exactly that.

States will therefore include linkage clauses that embody the logic of environmental protection. Synergistic linkage clauses seek to promote trade liberalisation in EGS and other market-oriented, voluntary mechanisms, while Enhancement clauses that promote compliance with, and even improvement in, domestic and international environmental policy commitments.

Figure 3.1 below represents a visual representation of the logic of leveraging PTAs to generate environmental benefits.

Figure 3. 2 Issue-linkage model of leveraging PTAs to generate environmental benefits.



Environmental protection is promoted by redressing "undersupply" and the attendant costs of doing so.

In general, Figure 3.2 should be interpreted in the following way. The X-axis represents the marginal benefits accrued from a PTA, while the Y-axis represents the marginal cost of implementing the PTA. What is of interest, for our present purposes, is to increase the benefits that can be accrued from a PTA. One way of doing so would be to use the PTA to generate environmental benefits, in addition to trade liberalisation and other benefits. To this effect, states

will include environmental protection linkage clauses, i.e. Synergistic and/or Enhancement linkage clauses.

Figure 3.2 above illustrates a linkage model of redressing an "undersupply" of PTA benefits, and the attendant costs of doing so, where[135]:

Bcumulative are the cumulative benefits accrued from a PTA, upon inclusion of environmental protection linkage clauses

Bdefault are the default benefits accrued from a PTA, absent environmental protection linkage clauses

Cdefault are the default costs of implementing the PTA, absent those of generating environmental benefits

Cmitigated are the cumulative costs of implementing the PTA, including the implementation of environmental protection linkage clauses

Supply (institutional costs) are the marginal costs incurred by parties to a PTA in generating positive policy externalities (including environmental protection). These correspond to *institutional adjustment costs*

[135] In overall interpretation of the graph, the demand for extra PTA benefits falls as the costs of generating them rise. That is, parties to a PTA will only seek additional benefits through a PTA up to the point where their cost does not exceed the extra benefits. For our present purposes, the potential of environmental protection exists, hence the need to leverage the PTA to generate it through linkage. Thus the need to remedy the "undersupply" of PTA benefits. The shaded area (Environmental protection) indicates the "welfare gain" in value of PTAs (the additional benefits of environmental protection).

Political benefits are the benefits accrued to third parties, such increased market share for environmentally-friendly goods and services (for importers and exporters), and improved environmental conditions for the public., due to positive policy externalities These correspond to *political adjustment costs*

Total benefits are accrued from leveraging a PTA to generate environmental benefits and are the sum of private (PTA value) benefits and political benefits to third parties (from environmental protection). Total benefits, in essence, represent the overall welfare benefits of leveraging a PTA to promote environmental protection, i.e.,

$$\text{Total benefits} = \text{PTA value} + \text{Political benefits} \quad (6)$$

Demand (PTA value) are the benefits accrued from a PTA, to an individual party to the PTA. The demand for benefits falls as the costs of generating them rise.

In addition, the following conditions apply:

$B_{cumulative} > B_{default}$, where the cumulative benefits of PTAs, including environmental ones, $B_{cumulative}$, are greater than the default benefits (absent environmental protection clauses), $B_{default}$

$C_{cumulative} > C_{default}$, where the cumulative costs of generating environmental benefits, $C_{cumulative}$, are higher than the default of costs that don't include implementation of environmental protection clauses, $C_{default}$

So, how does generating environmental benefits from leveraging PTAs incur adjustment costs? Absent the inclusion of environmental protection clauses, benefits accrued from a PTA would be Bdefault. But since there is an "undersupply", and additional benefits can be generated from the PTA, states will include environmental protection clauses to realise these extra benefits.

Addressing the "undersupply" increases the 'marginal' benefits of a PTA to Bcumulative. The shaded 'Environmental protection' area illustrates the environmental benefits that are to be accrued upon the inclusion of environmental protection linkage clauses; that is, the untapped potential for leveraging the PTA to pursue environmental policy objectives.

Generating the additional environmental benefits (i.e. Bcumulative - Bdefault), however, incurs additional implementation costs; adjustment costs. To generate the default benefits, Bdefault, the attendant implementation costs are Cdefault. But since we need to generate additional benefits (Bcumulative - Bdefault), the costs of implementation increase from Cdefault to Ccumulative. The difference between Cdefault and Ccumulative amounts to the adjustment costs of generating the additional positive policy externality (environmental benefits).

For linkage promoting environmental protection to be feasible, however, the additional benefits accruing from the PTA (total value, environmental benefits) must outweigh the costs of generating them (supply, institutional costs). In other words, parties to a PTA will only commit to generating benefits whose value outweighs the costs incurred in generating them. That is,

When [Total value > institutional costs], states will adopt environmental protection linkage clauses (7)

Mechanisms for generating environmental benefits include market-oriented ones such as trade liberalisation in environmental goods and services (Ciaro et al., 2007b; Ikiara & Mutua, 2006; Nimubona, 2012), use of eco-labels and other voluntary mechanisms (Du, 2020; Prakash & Potoski, 2012).

Such mechanisms also include measures aimed at ensuring that domestic and/or international environmental commitments are met or enhanced. Mechanisms for the latter can include institutional arrangements for coordination, dispute resolution, or even the application of adverse trade measures such as trade restrictions. The basic point, however, is that states will only adopt pro-environment clauses where the costs of implementing these mechanisms is outweighed by the welfare benefits accrued from environmental protection.

Given that the focus of the present section is on the "undersupply" of PTA benefits, the "demand" curve is of particular interest. The objective is to "stimulate" demand for additional benefits from a PTA. The supply (institutional costs) curve represents the marginal costs incurred by parties in generating PTA benefits.

Demand falls as the costs of producing additional costs rise. Institutional costs (supply curve) in this case take the form of institutional (administrative) costs of generating the benefits. Political benefits on the other hand represent political benefits enjoyed by third parties who are in this case

domestic interest groups (increased market share for eco-products for trading firms, and meeting the normative policy objectives of domestic environmental groups).

In order to generate additional (environmental) benefits from PTAs, the objective is to increase demand for the benefits. This can be realised by shifting the demand (PTA benefit) curve up to the point of the "Total value" curve. In doing so, parties to a PTA increase the scope of benefits from trade liberalisation (their primary policy objective) to include additional benefits to be enjoyed by third parties (domestic interest groups). States therefore absorb the costs of generating the environmental benefits.

Akin to green protectionism, the variation in the adjustment costs of environmental protection clauses is due to the differences in the institutional (administrative) costs. Low adjustment costs are incurred in Synergistic clauses since the bulk of institutional costs are borne by private parties.

In the case of eco-labels, for instance, non-state actors have taken the lead in designing relevant standards for the sector. International standard setting groups such as the ISO, business associations and even civil society organisations have taken up the tasks of designing and implementing voluntary mechanisms aimed at fostering trade in eco-friendly products (e.g. Prakash & Potoski, 2006). States therefore do not have to incur any costs in the implementation of such schemes. But when they do, the costs are often minimal, as they may include developing supporting regulations. The bulk of implementation costs are, however, borne by third parties.

By contrast, states bear much of the institutional costs associated with Enhancement clauses. Since the focus of these clauses is on regulatory standards set and adopted by states - such as domestic environmental regulations and MEAs - it is incumbent upon the states to implement and meet these commitments. Enforcing these commitments incurs high administrative costs (Spiller & Tommasi, 2008; Thompson, 1999), as shall be demonstrated later in this section. Thus,

For *Synergistic clauses*,

Total value = Political benefits - institutional costs, where institutional costs are low (8)

For *Enhancement clauses*,

Total value = Political benefits - institutional costs, where institutional costs are high (9)

Again, institutional costs are the main source of variation between Synergistic and Enhancement linkage clauses. Political benefits are taken as largely equivalent for both linkage clauses. In a graphical and relative sense, the high adjustment costs (Enhancement) clause will be closer to the cumulative costs of implementing the PTA, Ccumulative, while the lower adjustment costs (Synergistic) will be closer to the default costs, Cdefault. Both adjustment costs lie between Ccumulative and Cdefault.

Moreover, and in the Coasean sense of transaction costs, Synergistic linkage is akin to the *zero-transaction cost model*, due to low costs, while Enhancement linkage resembles the *positive-transaction cost model*, due to high costs. That is, the Synergistic linkage clauses incur lower adjustment costs compared to Enhancement linkage clauses. To reiterate, the difference in the

adjustment costs is due to the relatively higher institutional costs of implementing Enhancement linkage clauses. Let us now examine each of the two linkage clauses in detail.

Synergistic clauses

Synergistic linkage clauses in a PTA embody a 'win-win' logic, wherein they generate benefits for both trade and environment policy objectives. Increasing trade in environmental goods and services (EGS) and the use of eco-labels open up new markets and increase existing ones, hence promoting the overarching objective of a PTA - trade liberalisation (de Melo & Solleder, 2020; Ikiara & Mutua, 2006). In tandem, such environmentally friendly goods also help to address environmental challenges such as pollution (Hu et al., 2020; Nimubona, 2012). In doing so, they generate trade and environmental benefits. Importantly, Synergistic linkage clauses are based on market-oriented instruments, whose implementation is largely voluntary (Prakash & Potoski, 2006, 2012).

Synergistic clauses incur low adjustment costs to parties to a PTA simply because they are largely implemented by third parties. Consider the case of eco-labels. The rise of environmental consciousness has drawn sharp attention especially to the production methods that are detrimental to the environment. Consumers, especially in industrialised countries, have demanded for eco-friendly products (Du, 2020; Hwang et al., 2016; Sharma & Kushwaha, 2019; Staples et al., 2020; Verbruggen et al., 1995).

To indicate their environmental responsibility and commitment, firms seeking to tap into this growing market of environmentally conscious consumers often adopt eco-labels. The eco-labels

contain critical information indicating that a product was manufactured in an environmentally-sound manner. The expectation is that upon reading the eco-labels, consumers will discriminate against other products, by purchasing those with eco-labels.

Similarly, trade liberalisation in EGS also incurs low institutional costs to the parties to a PTA. All they have to do is to include the relevant EGS in the tariff liberalisation schedules. After lowering or eliminating the tariffs on EGS, parties to the PTA do not need to take additional measures. Not having to undertake subsequent costly measures in essence lowers the institutional costs of trade liberalisation of EGS.

For an example of Synergistic linkage clauses, consider the US-Korea PTA below:

> CHAPTER TWENTY
>
> ENVIRONMENT
>
> ARTICLE 20.5: MECHANISMS TO ENHANCE ENVIRONMENTAL PERFORMANCE
>
> 1. *The Parties recognize that flexible, voluntary, and incentive-based mechanisms can contribute to the achievement and maintenance of high levels of environmental protection,* complementing the procedures set out in Article 20.4. As appropriate and in accordance with its law, each Party shall encourage the development and use of such mechanisms, which may include:
>
> (a) mechanisms that facilitate voluntary action to protect or enhance the environment, such as:
>
> (i) partnerships involving businesses, local communities, non-governmental organizations, government agencies, or scientific organizations;

(ii)voluntary guidelines for environmental performance; or

(iii) voluntary sharing of information and expertise among authorities, interested parties, and the public concerning methods for achieving high levels of environmental protection, voluntary environmental auditing and reporting, ways to use resources more efficiently or reduce environmental impacts, environmental monitoring, and collection of baseline data; or

(b) incentives, including market-based incentives where appropriate, to encourage conservation, restoration, and protection of natural resources and the environment, such as public recognition of facilities or enterprises that are superior environmental performers, or programs for trading permits or other instruments to help achieve environmental goals.

2. As appropriate and feasible and in accordance with its law, each Party shall encourage:

(a) the maintenance, development, or improvement of performance goals and standards used in measuring environmental performance; and

(b) flexible means to achieve those goals and meet those standards, including through mechanisms identified in paragraph 1.[136]

It is therefore clear from the above examples that much of the implementation of the Synergistic clauses is the responsibility of third parties, especially the private sector (trading firms). All that the parties to the PTA have to do is to stimulate and support such initiatives.

We can derive the following hypothesis to explain Synergistic linkage clauses:

[136] Emphasis own. The important point to note is that there parties to the PTA have a minimal role to play in the implementation of these mechanisms, apart from creating the supportive condition

H3: When generating positive policy externalities that incur low adjustment costs, states will adopt Synergistic linkage clauses

Enhancement clauses

In contrast to Synergistic clauses, the logic underpinning Enhancement clauses is one of ensuring states comply with their environmental policy commitments. The commitments can be domestic and/or international. In more conventional terms, Enhancement clauses would be termed as embodying a logic of 'prescriptive regulation' sometimes backed up by enforcement measures. Such clauses seek to avert a 'Race to the Bottom' through derogation from domestic environmental standards to foster trade (Aisbett & Silberberger, 2020; Eliste & Fredriksson, 2004; Porter, 1999; Sheldon, 2006).

As aforementioned, Enhancement clauses incur a higher adjustment cost in their implementation, compared to Synergistic clauses. To recall, the difference in adjustment costs between Synergistic and Enhancement clauses is in the institutional costs component. While parties to a PTA have little to no responsibility in the implementation of Synergistic clauses, they bear the primary responsibility in the implementation of Enhancement clauses.

It is therefore not surprising that Enhancement clauses have been the most sensitive and controversial of all clauses. As the preceding chapter showed, there was near-universal opposition by states to the use of adverse trade measures (such as trade restrictions) in trade agreements to enforce MEAs and to export or equalise domestic environmental standards. A similar logic applies

to the inclusion of dispute resolution mechanisms to enforce the environmental commitments (Guzman, 2005, p. 587; Poulsen, 2020). Enforcement, therefore, has been at the centre of the debates (Abebe & Ginsburg, 2019).

Theoretically, and as Figure 3.2 and equation 9 above show, states will only include Enhancement clauses in their PTAs when the institutional costs of doing so are outweighed by the total benefits. Hence, we saw a rejection of use of adverse trade measures to attach costs to noncompliance with MEAs and perceived inadequate domestic environmental standards. We should expect a similar reaction to the use of sanctioned enforcement (attachment of costs to noncompliance). That is,

If institutional costs > total benefits (environmental protection), linkage will not be adopted

(10)[137]

Instead of unilateral and extra-jurisdictional application of trade measures to address the so-called 'free rider' problem at the GATT EMIT, there was general preference for *coordination*. At the international level, coordination would take the form of MEAs that may include trade measures, as appropriate. At the domestic level, each party would commit to not lowering its domestic environmental standards; that is, engaging in a race to the bottom. What is important to note about coordination is the absence of costs for noncompliance.

[137] Non-linkage in this case takes the form of avoiding a certain type of clauses, such as excluding the application of a PTA's dispute settlement mechanism to an Environment chapter/environmental commitments. A clause embodying such an exemption can be worded as follows: 'Neither Party shall have recourse to [dispute settlement chapter] for any matter arising under this [Environment] Chapter''. In similar situations, but where parties include institutional arrangements, they adopt a relatively softer approach of diplomatic coordination for implementation of the environmental commitments. What is crucial to note is the absence of sanctions

To codify this rejection of unilateral and extra-jurisdictional application of adverse trade measures to pursue environmental policy objectives, states included Principles 11 and 12 of the Rio Declaration of 1992, which read as follows[138]:

> Principle 11
>
> States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries.
>
> Principle 12
>
> States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus.

138 https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_CONF.151_26_Vol.I_Declaration.pdf

These concerns have been clearly reflected in PTAs. Consider below the institutional arrangements section of the Environment chapter of the China-Korea PTA, which embodies a coordination approach[139]:

CHAPTER 16

ENVIRONMENT AND TRADE

Article16.8: Institutional and Financial Arrangement

1. Each Party shall designate an office within its administration which shall serve as a contact point with the other Party for the purpose of implementing this Chapter.

2.A Party may through the contact points request consultations regarding any matter arising under this Chapter.

3. The Parties hereby establish a Committee on Environment and Trade (hereinafter in this Chapter referred to as the "Committee"). The Committee shall comprise senior officials from within the administrations of the Parties.

4. The Committee shall meet when deemed necessary to oversee the implementation of this Chapter.

5. The Parties recognize that adequate and sustainable financial resources are necessary for the implementation of this Chapter, and these resources should be made available.

[139] http://fta.mofcom.gov.cn/korea/annex/xdzw_en.pdf

Article16.9: Non-Application of Dispute Settlement

Neither Party shall have recourse to Chapter 20 (Dispute Settlement) for any matter arising under this Chapter.[140]

Now, contrast the approach adopted in the China-Korea PTA (above) with the US-Korea PTA approach below. Leveraging its significant relative bargaining power, the US has always adopted sanctioned enforcement of environmental commitments in their PTAs, by attaching costs to noncompliance[141]:

CHAPTER TWENTY

ENVIRONMENT

ARTICLE 20.6: INSTITUTIONAL ARRANGEMENTS

1. The Parties hereby establish an Environmental Affairs Council. The Council shall comprise appropriate senior officials from each Party, including officials with environmental responsibilities.

…

ARTICLE 20.9: ENVIRONMENTAL CONSULTATIONS AND PANEL PROCEDURE

[140] Emphasis own. What is remarkable, and clearly telling, is the nonapplication of the PTA's dispute settlement mechanism to the enforcement of the environmental commitments. Theoretically, this indicates that for the two parties (China and Korea), application of the dispute settlement mechanism to the environmental commitments (institutional costs) would have been too high and outweighed the benefits of environmental protection. To lower the institutional costs, the parties to the PTA excluded the dispute settlement mechanism

[141] https://ustr.gov/sites/default/files/uploads/agreements/fta/korus/asset_upload_file852_12719.pdf

1. A Party may request consultations with the other Party regarding any matter arising under this Chapter by delivering a written request to the contact point that the other Party has designated for purposes of this Article. The request shall contain information that is specific and sufficient to enable the Party receiving the request to respond. Unless the Parties otherwise agree, consultations shall commence promptly after a Party delivers a request for consultations to the other Party's contact point.

2. The Parties shall make every attempt to arrive at a mutually satisfactory resolution of the matter and may seek advice or assistance from any person or body they deem appropriate. If the matter arises under Article 20.2 or under both that Article and another provision of this Chapter, and involves an issue related to a Party's obligations under a covered agreement, the Parties shall endeavor to address the matter through a mutually agreeable consultative or other procedure, if any, under the relevant agreement, unless the procedure could result in unreasonable delay.

3. If the consultations fail to resolve the matter, either Party may request that the Council be convened to consider the matter by delivering a written request to the other Party's contact point referred to in paragraph 1. The Council shall convene promptly and endeavor to resolve the matter expeditiously, including, where appropriate, by consulting governmental or other experts and having recourse to such procedures as good offices, conciliation, or mediation. When the matter arises under Article 20.2 or under both that Article and another provision of this Chapter and involves an issue relating to a Party's obligations under a covered agreement, the Council shall:

(a) through a mechanism that the Council establishes, consult fully with any entity authorized to address the issue under the relevant agreement; and

(b) defer to interpretative guidance on the issue under the agreement to the extent appropriate in light of its nature and status, including whether the Party's relevant laws,

regulations, and other measures are in accordance with its obligations under the agreement.

4. If the Parties have failed to resolve the matter within 60 days of the delivery of a request for consultations under paragraph 1, the complaining Party may request consultations under Article 22.7 (Consultations) or refer the matter to the Joint Committee pursuant to Article 22.8 (Referral to the Joint Committee) and, as provided in Chapter Twenty-Two (Institutional Provisions and Dispute Settlement), thereafter have recourse to the other provisions of that Chapter.

5. Neither Party may have recourse to dispute settlement under this Agreement for a matter arising under this Chapter without first seeking to resolve the matter in accordance with paragraphs 1 through 3.[142]

6. In a dispute arising under Article 20.2, or under both that Article and another provision of this Chapter, that involves an issue relating to a Party's obligations under a covered agreement, a panel convened under Chapter Twenty-Two (Dispute Settlement) shall in making its findings and determination under Article 22.11 (Panel Report):

(a) consult fully, through a mechanism that the Environmental Affairs Council establishes, concerning that issue with any entity authorized to address the issue under the relevant environmental agreement;

(b) defer to any interpretative guidance on the issue under the agreement to the extent appropriate in light of its nature and status, including whether the Party's relevant laws, regulations, and other measures are in accordance with its obligations under the agreement; and

[142] While the US-Korea FTA allows access to the PTA dispute settlement system upon exhaustion of all the other mechanisms (Article 20.5 (5)), the basic remains: there are costs attached to noncompliance, and these include sanctions. Emphasis own

> (c) where the agreement admits of more than one permissible interpretation relevant to an issue in the dispute and the Party complained against relies on one such interpretation, accept that interpretation for purposes of its findings and determination under Article 22.11.

The US and China are the two largest economies in the world, respectively. Both countries therefore have considerable market power, which they can use as relative bargaining leverage. But there is a significant difference in their approaches to ensuring compliance with environmental policy commitments because of the different levels of domestic regulations. For the US, the use of sanctions to ensure credible commitments is key, while for China the emphasis is on diplomatic coordination and avoiding the use of sanctions. As shall be demonstrated in the empirical chapters of this, this distinction is important, but it has been overlooked by extant literature on the inclusion of environmental linkage clauses in PTAs, with a focus on a credible-commitments approach and overlooking coordination mechanisms.

For the purposes of the present study, the distinction between coordination (absence of sanctions) and credible commitments (attendant costs to noncompliance) shall be drawn. Addressing this distinction, between coordination and credible commitments, is critical to our understanding of whether parties have indeed leveraged the 'full force' of PTAs to pursue environmental policy objectives, or whether they have tempered this potency, through Enhancement clauses.

We can derive the following hypothesis to explain Enhancement linkage clauses:

H4: When generating positive policy externalities that incur high adjustment costs, states will adopt Enhancement linkage clauses

A final note is in order. Power asymmetries among the parties to a PTA negotiation is not explicitly incorporated into the theory of issue-linkage. As the preceding chapter showed, there was not much disagreement on three linkage clauses: Transparency, Escape and Synergistic. But there was considerable disagreement on Enhancement clauses especially on the use of sanctioned compliance mechanisms such as adverse trade measures. It is therefore safe to assume that a rule-based approach largely applies to all clauses, given the broad consensus. However, power asymmetry will be considered as an alternative theoretical explanation, especially in the analysis of Enhancement clauses.

The development of the theory in the preceding sections has focused on policy externalities and adjustment costs. Other aspects of international politics, such as relative bargaining power, domestic politics, values and norms, have only been touched upon in a peripheral manner. This is intentional. To develop a clear but powerful theory, I have adopted a parsimonious approach, focusing on 'a small number of big and important things' (Waltz, 1986, p. 329). The additional elements become important in the specification and testing of theory (Wæver, 2009, p. 209), which shall be done in the empirical chapters. Or as Kenneth Waltz put it in justifying parsimony, "A theory must then be constructed through simplifying...Simplifications lay bare the essential elements in play and indicate the necessary relations of cause and interdependency-or suggest where to look for them" (Waltz, 1979, p. 10). In addition, alternative theoretical explanations shall also be tested. The next section gives a brief overview of the alternative explanations.

3.4 Alternative Explanations

The foregoing theory of issue-linkage provides the most comprehensive yet parsimonious explanation of the occurrence and variation of environmental linkage clauses in PTAs. There are other theoretical explanations in the extant literature on the inclusion of environmental linkage clauses in PTAs as discussed in the introductory chapter; but they are less comprehensive as they only cover certain aspects of issue-linkage. They will be nonetheless be tested against this theory in the following empirical chapters. But for comparative purposes, each of the alternative explanations are introduced, albeit briefly, below to highlight their scope and their limitations compared to the theory of issue-linkage outlined above.

Imitation theory holds that states will imitate earlier international agreements when designing new ones (Leonardo Baccini et al., 2015). In this telling, states will therefore have a 'template' or 'boilerplate' developed from previous agreements upon which they develop new agreements (Peacock et al., 2019). If this is the case, then we should expect to see environmental linkage clauses being copy-pasted, leading to institutional isomorphism (DiMaggio & Powell, 1983). That is, over time, most PTAs should have a similar pattern on the inclusion of environmental linkage clauses (Allee & Elsig, 2019).

Bargaining efficiency theory is another alternative theoretical explanation. It is premised on the logic that states will combine several issue areas into one PTA. In addition to trade, PTAs will include other issue areas such as environment and human rights (Milewicz et al., 2016). If this is the case, then we should see states increasingly lumping together several issue areas in their PTAs to improve bargaining efficiency.

Major environmental norm entrepreneurs have also been identified as the main driver of the inclusion of environmental linkage clauses in PTAs (Bastiaens & Postnikov, 2017; Jinnah & Morin, 2020; Postnikov, 2020). Specifically, major trading partners (environmental norm makers) such as the US, Canada and the EU have been leveraging their PTAs to promote the inclusion and implementation of Synergistic and Enhancement linkage clauses - a carrots and sticks approach, respectively. According to this approach, we should therefore expect to see these linkage clauses being more prevalent in PTAs with the major environmental norm entrepreneurs.

Domestic environmental groups have also been associated with the inclusion of the environmental agenda in PTAs (Abelson, 1995; W. P. Avery, 1998; Lechner, 2016a; Morin et al., 2018; Princen & Kerremans, 2008; A. Young & Peterson, 2006). In this theoretical explanation, the inclusion of Enhancement linkage clauses is primarily due to the influence of domestic environmental groups. An expectation of this theory is that we should see PTAs whose parties have active domestic environmental groups to be more likely to include Enhancement clauses.

Power asymmetries through greater relative bargaining power will also be explored. While major environmental norm entrepreneurs have promoted their preferred environmental norms through their PTAs, other major trading partners such as China have included environmental linkage clauses in their PTAs (Berger et al., 2017). This alternative explanation will test the significance of greater relative bargaining on the inclusion of particular environmental linkage clauses in PTAs, by focusing on market concentration (Drezner, 2007a, p. 34).

Finally, there is a theoretical argument that environmental linkage clauses found in PTAs are due to their diffusion across continents (Morin et al., 2019). The authors conclude that 'institutional factors matter more for the diffusion of environmental provisions in PTAs than agency factors: the type of PTA and the type or provision in question are more relevant for explaining diffusion than who is inserting a new provision' (Morin et al., 2019, p. 2616). It is not clear what these institutional factors are, but the broader point of intercontinental diffusion of environmental clauses will be tested in the empirical analysis.

The empirical chapters of this thesis will rigorously test the alternative theoretical explanations, against the theory of issue-linkage developed in this chapter.

3.5 Conclusion

Linkage of regimes is a common feature of international politics. In tandem, many PTAs include environmental clauses, which vary in design. While there is a growing body of literature on environmental linkages in PTAs, the occurrence and variation in design of the linkage clauses remains under-theorised and therefore under-explained. Moreover, there is a lack of the holistic conceptualization of linkage clauses grounded in the theory of issue-linkage.

It is within this context that this chapter has developed a theory of issue-linkage. The chapter first introduced the key concepts of *policy externalities* and *adjustment costs*. It then developed an analytical typology of environmental linkage clauses found in PTAs. The categories are drawn from the interaction of policy externalities and adjustment costs. The chapter also theorised the conditions under which the linkage clauses occur and vary. In doing so, the chapter developed a

theory of issue-linkage and provided a typology of clauses grounded in this theory. Finally, the chapter outlined the main alternative theoretical explanations, which shall be tested alongside the theory of issue-linkage in subsequent empirical chapters. Overall, by developing the theory of issue-linkage, the chapter has laid the theoretical foundation for the rest of the study.

Chapter 4: The Green Illusion

By the time PTAs began their growth in the early 1990s, debates on how they should deal with environmental issues had arguably reached the peak. As the Historical Antecedents chapter has demonstrated, at the turn of the last decade of the twentieth century, the multilateral trade system was struggling with how to deal with the developments emanating from the burgeoning multilateral environmental regimes. As the GATT was being transformed into the WTO, a parallel development was taking place: the proliferation of PTAs, the second pillar of the international trading system, was taking off. PTAs increasingly included environmental linkage clauses. This chapter examines the proliferation of environmental linkage clauses in PTAs. The analysis deploys descriptive statistical analysis and is based on a novel dataset of environmental clauses developed for the present study. In doing so, the chapter describes proliferation trends of the dependent variable (types of environmental linkage clauses) and marks the first empirical chapter of the study focusing on PTAs.

Two key arguments are advanced in this chapter. First, the primary objective of environmental clauses in PTAs has been to curtail green protectionism. The empirical findings in the chapter show that two-thirds of the environmental clauses in PTAs concern green protectionism, challenging the assumption that the increasing inclusion of environmental linkage clauses in PTAs necessarily promotes environmental protection. Second, states have predominantly used their PTAs as coordination-enhancing and not credible-commitment devices in enforcing their environmental policy commitments. The reluctance of states to leverage the full enforcement mechanisms of the PTAs, instead creating alternative institutional arrangements to enable

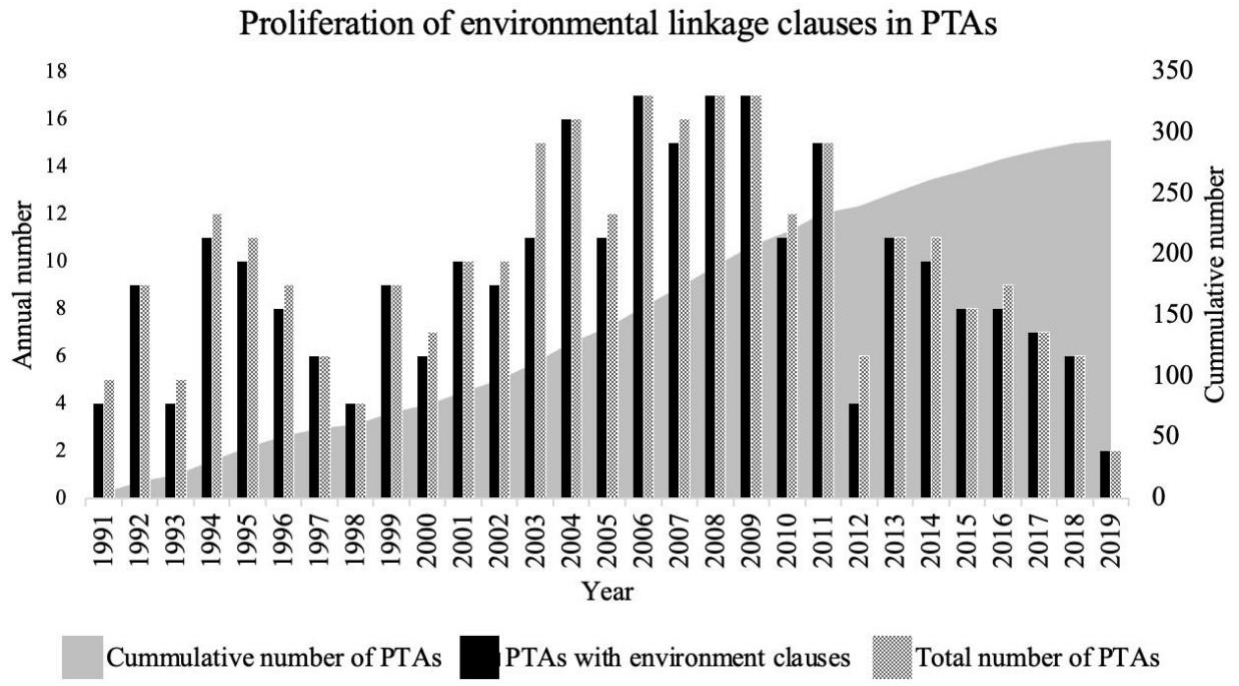
coordination of implementation of domestic and international environmental policy commitments, underscores this point. Both findings challenge the assumption that the proliferation of environmental linkage clauses in PTAs necessarily promotes environmental protection, as well as the attendant optimistic but underexamined expectation that states are increasingly turning to PTAs to leverage their strong compliance mechanisms to enforce environmental policy commitments.

To elaborate on these arguments, the following sections provide quantitative (descriptive statistical) analysis on the patterns of proliferation of the environmental linkage clauses. Section 1 gives an overview of the existing datasets mapping environmental clauses in PTAs. It also outlines the coding of the novel dataset developed and used for the present study and draws distinctions with existing databases. Section 2 presents the descriptive statistics of the dataset, organised around each of the four linkage clauses developed in Chapter 3 (Theory). Section 2 presents a summary of the chapter and concludes.

4.1 Coding Environmental Linkage Clauses

There has been a proliferation of environmental clauses in PTAs, as indicated in Figure 4.1 below.

Figure 4. 1 Trend in proliferation of environmental linkage clauses in PTAs.



Source: Author. Environmental linkage clauses in PTAs have been consistently proliferating.

As scholars have recently turned their focus to analysing how PTAs address environmental policy issues, they have also developed requisite datasets. Initial efforts focused on select PTAs, mapping the environmental provision in PTAs especially of major trading partners. Such datasets were relatively small, such as the one developed by Jinna and Morgera (2013) coding the environmental

provisions in US and EU PTAs. They found a total of 32 types of environmental provisions.[143] Similar small-scale efforts have examined the inclusion of environmental provisions in PTAs of emerging economies. Berger et al. (2018) examined the 48 PTAs concluded by China, India, Indonesia, Brazil, and Mexico, where they found 'a trend towards more environmental content' (Berger et al., 2017). A key limitation of these two datasets is that they only focused on PTAs of a few countries, thus excluding hundreds of other PTAs

The WTO has also undertaken a mapping effort coding all the environmental provisions in PTAs notified to the institution (Monteiro, 2016). Monteiro maps environmental content of 270 PTAs notified between 1957 and 2016. The author finds that a 'common feature of all environment-related provisions, including environmental exceptions, is their heterogeneity in terms of structure, language and scope.'. What is interesting however is that Monteiro downplays the significance of 'Exception' clauses in PTAs by not considering them as substantive environmental clauses (Monteiro, 2016, p. 6). Yet as the theory of issue-linkage developed in the preceding chapter showed, Escape clauses in fact play a crucial role in international agreements.

The most comprehensive mapping exercise thus far used the dataset called the Trade and Environment (TREND) dataset (Morin et al., 2017). TREND covers 685 PTAs signed between 1945 and 2016. A total of 283 types of environmental clauses are identified. TREND is a remarkable dataset, but it was not used for the present study for several reasons. First, the coding approach adopted for the present study is based on the analytical typology of linkage clauses

[143] Jinnah and Morgera (2013), p. 332. Please note that authors do not use any analytical typology to classify the clauses, which they call 'provisions'. The only apparent criteria for categorisation was that the clauses are related to MEAs.

outlined in Chapter 2 (Theory of Issue-linkage). Only four analytical categories of linkage clauses (Transparency, Escape, Synergistic and Enhancement) are considered for the present study, an approach that significantly differs from that adopted by Morin et al., who code about 300 different types of environmental clauses in PTAs.[144] It is therefore challenging to analyse that many environmental linkage clauses. Deriving fewer (four) analytical categories within which all the environmental clauses can be categorised significantly simplifies the analysis.

Also, coding the clauses into the four analytical categories required contextual reading and coding of the clauses, an approach that would be difficult to achieve using a dataset developed using a different coding approach. Third, the present study does not seek to examine the proliferation of environmental linkage clauses in the universe of PTAs, as this is an empirical task beyond the capacity and resources of the author. Instead, it seeks to test the utility of the theory developed in the study and its application to a substantial sample of PTAs and case study.

All PTAs examined in the present study were read in totality, with attention paid to context, as opposed to more efficient text-searching methods (using relevant software) that usually eschew context and nuance. Future studies can extend the present one by examining more PTAs. A crucial distinction between previous datasets is that the dataset developed for the present study is that the coding is based on *a priori* theorising; this necessarily entails the use of fewer analytical categories that are conceptually distinguished and related to enable a parsimonious explanation of the variation in the design of environmental linkage clauses. In effect, this makes the dataset highly contingent on the theory developed in the preceding chapter. Importantly though, the present study

[144] https://klimalog.die-gdi.de/trend/about-trend.html

seeks to complement the previous initiatives by coding the data in a new way; it does not seek to supplant them or deny their value. All along, the findings that are based on the existing datasets have been examined vis-à-vis those of the present study. Overall, the main distinction between the present study and other analogous coding initiatives is that the former is highly contingent on the theory of issue-linkage as articulated in Chapter 3, and it seeks to address the all-important theoretical question: *why and how have states used PTAs to address environmental policy issues*? The answer to this question will shed light on the more general policy question: what do the environmental linkage clauses really do? That is, what component of linkage clauses actually serve to advance environmental protection? In addition, the present study focuses on the entire range of environmental linkage clauses.

Coding the dataset

As explained above, the present dataset was coded along the four analytical categories derived from the theory of issue-linkage developed in Chapter 3. A total of 299 PTAs signed between 1990 and 2019 were coded. The year 1990 was chosen as a starting point for the analysis of PTAs since that is when PTAs began proliferating, but also because PTAs were one of the two 'branching points' emanating from the transformation of GATT and the EMIT debates that took place during this period. There is already a rich body of scholarship examining how the WTO - the first pillar of the international trading system - has dealt with environmental policy issues. By placing the analysis of environmental linkage clauses in PTAs in a broader historical context, the ultimate aim is to provide a more fine-grained assessment of the trend where states are increasingly including environmental linkage clauses in PTAs.

Clauses were coded as Transparency linkage clauses if they included an obligation for the parties to the PTA to communicate to the rest of the parties, often through notification, all environmental measures with significant trade effects. Clauses also requiring the exchange of information on domestic environmental measures with trade effects were also included in this category. Transparency clauses allow for information exchange, and this might also include policy surveillance. The main objective of these clauses was to enhance transparency through generations and availability of pertinent information, hence mitigate use of environmental measures as disguised barriers for protectionism, in the form of non-tariff barriers (NTBs).

Transparency clauses in the PTAs are based on two main international standards. Technical Barriers to Trade (TBT) were the most common types of international standards used, as they clearly outline which types of domestic environmental measures fall under this category. Sanitary and Phytosanitary (SPS) measures were also used to guide notification of environmental measures. Only SPS clauses that explicitly mentioned the word 'environment' were, however, considered.[145] As can be recalled from the *Historical Antecedents* chapter, TBT and SPS were identified as the preferred international standards to guide notification of environmental measures with trade effects.

Three types of clauses were coded as Escape linkage clauses. General exception clauses that included the environment were coded under this category. Exception clauses embody the logic of efficient breach: they allow parties the room for escape to address domestic exigencies, but the escape is constrained by requiring a demonstration of necessity. In short, the escape has to be

[145] Some studies such as Morin et al. (2018) do not code SPS clauses, yet it is apparent that such clauses play a crucial role in the notification of domestic environmental measures with adverse trade effects.

justified. Exception clauses coded from the PTAs are often moulded on Article XX of the GATT; they either explicitly refer to Article XX or their language and logic are very much similar.[146]

Related, exception clauses that related to investment were also included in the Escape linkage clauses category. Exception clauses covering investment explicitly state that parties can escape their obligations to address domestic exigencies, and that these actions do not necessarily amount to regulatory-taking through indirect expropriation. Viewed thus, such clauses aim to insulate the parties from disputes that may be filed by investors (Tienhaara, 2009, 2018). They are also a response to the increasing inclusion of investment chapters in PTAs (Usynin & Gáspár-Szilágyi, 2018).

Finally, clauses in the preamble signalling the importance of environmental protection in PTAs were included in the coding. While preambular clauses are not as sophisticated as escape clauses, they still embody an 'escape' logic, whereupon parties can unilaterally invoke them for policy purposes that may be contrary to the main objectives of agreement (Orgad, 2010, pp. 726–731).[147] Preambles are thus used to interpret the meaning of the clauses in an agreement where there may be ambiguity in the parties' intent, precisely because they are a signal of intent. Importantly, PTAs

[146] The protracted debate in the GATT EMIT group on whether the word 'environment' should be inserted into the Article XX headnote/chapeau formulation illustrates the legal importance of the word 'environment'. Exception clauses that included formulations such as 'plants and animals' but excluded the word 'environment' were not included in the coding of Notification clauses. Hence, we have ended up with fewer Notification clauses due to this strict coding criteria.

[147] Orgad develops a typology of three types of preamble clauses: a ceremonial preamble, an interpretive preamble, and a substantive preamble. Crucially, Orgad notes that the 'classification is not clear-cut, and some preambles fall into more han one category' (p. 722, footnote no. 52). But the crux of the logic is that preambles have an important legal status, and they can be invoked by parties.

that included preambular clauses on environmental protection also invariably included exception clauses, thus preserving the consistence of the coding approach.[148]

Four types of clauses were coded as Synergistic linkage clauses. Recall that Synergistic clauses seek to simultaneously promote trade and environmental policy objectives. They identify 'flexible' ways that trade policy can contribute towards environmental policy objectives. Clauses advocating for the increased trade liberalisation in environmental goods and services (EGS) were coded as Synergistic clauses. Increased trade in EGS, as the logic goes, would enhance the capacity of states to access technologies for environmental protection, but also increase trade. Only clauses promoting the use of EGS in their main text were included.[149]

Clauses that included voluntary mechanisms that can be adopted by traders, were also included under this category. Voluntary mechanisms often take the form of eco-labels, which seek to generate information on the environmental sustainability of products, thus providing an incentive for producers to adopt such certification schemes for greater market share, and allowing consumers to exercise their purchasing power to reward eco-friendly products (Grankvist et al., 2004; Hwang et al., 2016; Loureiro & Lotade, 2005).

[148] Discretionary clauses, especially exceptions, have not been accorded much significance in the literature on environmental linkage clauses in PTAs. In fact, they are always treated as persistent manifestations of copying of PTA templates. But as Chapter 2 (Theory) and Chapter 3 (on GATT EMIT debate) clearly demonstrated, discretionary clauses play a very important role. Kyrsztof Pelc's excellent empirical analysis on the design and use of Article XX of the GATT adds further credence to the importance of discretionary clauses.

[149] It is important to note that PTAs can liberalise trade in EGS by cutting tariffs and including the EGS items in tariff schedules. Such provisions were not included in the analysis; only the explicit mention of EGS in the main text was coded.

Support, through technology, finance and other forms, for implementation of environmental commitments was also coded as Synergistic. Through Synergistic clauses, economies with relatively greater capacity pledge assistance to states with lesser capacity (Leonardo Baccini & Urpelainen, 2012; Vijil, 2014). Support could take different forms such as financing, technology and sharing of best practices, but the rationale is helping build capacity of the target countries. A final type of Synergistic clause that was considered was differentiation, whereby obligations to implement environmental policy commitments would be contingent on the capacity of the various parties. This approach allows for flexibility of commitments based on capability (e.g. see Woolcock, 2014).

Coding for Enhancement linkage clauses was the most challenging, as it required keen attention to the theoretical expectations outlined in Chapter 3. Careful attention was paid to Enhancement clauses to ensure that the coding was consistent with the logic of this dimension as encapsulated in the four-cell matrix on the types of environmental linkage clauses.[150] Based on the theoretical explanations of Enhancement outlined in Chapter 3, three types of Enhancement clauses were identified. The first was Salient focal points, which identify points of coordination in enforcing commitments. Clauses were coded as Salient focal points if they included commitments to uphold and/or improve domestic environmental policy commitments, as well as the implementation of Multilateral Environmental Agreements (MEAs). Domestic and/or international environmental standards (MEAs) are significant salient focal points, as they identify 'conspicuous' and 'correct' loci for policy coordination (for the original definition of a focal point, see Schelling, 1981, p.

[150] Most literature on this topic has focused on the credible commitments approach - sanctioned enforcement - which is common in PTAs of the US, EU and Canada (e.g. See Batiens and Postnikov, 2014; Postnikov, 2019; Jinnah and Morgera 2013). Other forms of enforcement have often been overlooked, yet they are more prevalent, as shall be demonstrated in subsequent sections.

57).[151] Domestic standards that called for non-derogation of domestic environmental standards to attract investment or bolster trade, and at times a requirement to *improve* the level of domestic environmental protection, were coded as Salient focal points.

Second, mechanisms for exchange of information and follow-up to ensure implementation of environmental policy commitments were also coded, and labelled Coordination Mechanisms (McAdams, 2015, Chapter 5).[152] Implementation Review mechanisms involve self-delegation to agencies in partner states, but not to third parties. Taken together, both Salient focal points and Implementation Review, which both eschew sanctioned compliance, comprise a coordination-enhancing mechanism.[153] The coordination-enhancing mechanisms are manifested in two main ways: i) law's *coordinating function* (through salient focal points); and ii) law's *information function* (revealing expected behaviour/compliance) (McAdams, 2015, pp. 5–6).[154] Taken together, Salient focal points and Information mechanisms comprise the coordination-enhancing device of PTAs, in pursuit of environmental policy commitments.

Third, clauses that include third-party institutional arrangements, such as dispute resolution or civil society consultative mechanisms (as in the case of EU PTAs), were coded as Third-party

[151] The word 'correct' as used herein indicates that these standards are the most convenient of several competing alternatives such as sanctioned enforcement. That is, they are the most feasible option for parties with varying preferences. Hence the word 'correct' has not been used in a normative sense to connote the 'best' option

[152] Coordination Mechanisms allow for sharing of information as guided by the salient focal point. McAdams explores the connection between salient focal points and generation of information related to compliance

[153] See Chapter 3 (Theory) for the detailed theoretical exposition on the Expressive Power of Law, under the Enhancement clauses subsection

[154] A combination of Salient focal points and Coordination Mechanisms comprise the coordination-enhancing enforcement of PTAs, as used in this study

Enforcement linkage clauses. These clauses either leverage the PTA's dispute settlement mechanism, or create alternative institutional arrangements, for third-party dispute resolution. Thus, third-party enforcement linkage clauses turn PTAs into credible-commitment devices for environmental policy commitments. As shall be demonstrated in subsequent sections, the theoretical distinction between PTAs as coordination-enhancing vs credible-commitments device is critical to evaluating whether environmental linkage clauses actually promote environmental protection especially through Enhancement clauses.

Table 4.1 below presents a summary of the coding criteria for the linkage clauses.

Table 4. 1 Summary of coding of the types of linkage clauses.

Transparency	**Escape**	**Synergistic**	**Enhancement**
TBT standards	Preambular clause	Environmental goods and services	Salient focal points
SPS standards	General exception clause (à la GATT Article XX)	Voluntary mechanisms	Coordination mechanisms
	Exception clause on Investment (including Regulatory-taking)	Support for Implementation	Third-party enforcement
		Differentiation	

Source: Author. Note: These four linkage categories serve as the dependent variable for this study

4.2 Descriptive Analysis: Vice or Virtue?

The green illusion: A trade-first approach

Let us now turn to the analysis of the environmental linkage clauses. Three hundred (300) PTAs concluded over the last three decades (1990-2019) were analysed. Overall, the analysis reveals that about two-thirds (67%) of all the linkage clauses coded seek to curtail green protectionism; that is, these were Transparency and Escape clauses that seek to mitigate the effects of domestic environmental measures that might have adverse trade effects. Only one-third (33%) of the clauses promote environmental protection. What we therefore have is a 'Green Illusion', and not the 'Greening of PTAs' as might be implied from the proliferation of environmental linkage clauses in PTAs. Key to reaching this conclusion is the theoretical distinction between the guarding against green protectionism (Transparency and Escape) and promoting environment protection (Synergistic and Enhancement) clauses. Thus, minimising green protectionism to protect trade was a much bigger priority than restricting trade to protect the environment. By appreciating the theoretical significance of green protectionism clauses, which are often overlooked in the literature, we can gain significant theoretical insights into why states include such clauses in their PTAs. Table 4.2 below shows the percentage of PTAs with particular linkage clauses.

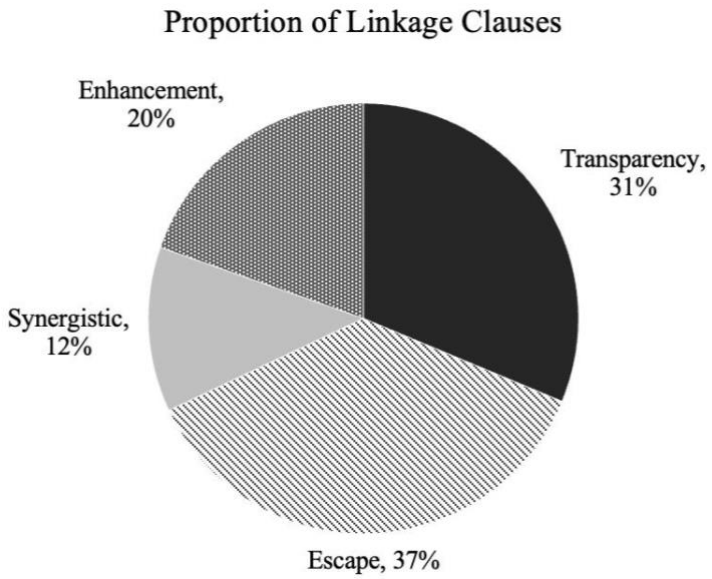
Table 4. 2 Percentage of PTAs with particular linkage clauses.

	Transparency	**Escape**	**Synergistic**	**Enhancement**
Number of PTAs	170	116	68	92
Percentage of PTAs (%)	57	39	23	31

Source: Author. Note: Total number of PTAs coded for the dataset is three hundred (300). It is apparent that Transparency clauses have proliferated the most, as more than half the PTAs include them. In contrast, Enhancement clauses are only found in less than one-third of the PTAs. Even fewer PTAs include Synergistic clauses. An immediate conclusion is that fostering environmental protection (through Synergistic and Enhancement clauses) is only a secondary objective of environmental linkage clauses in PTAs.

Figure 4.2 below shows the proportion of the various environmental linkage clauses in PTAs.

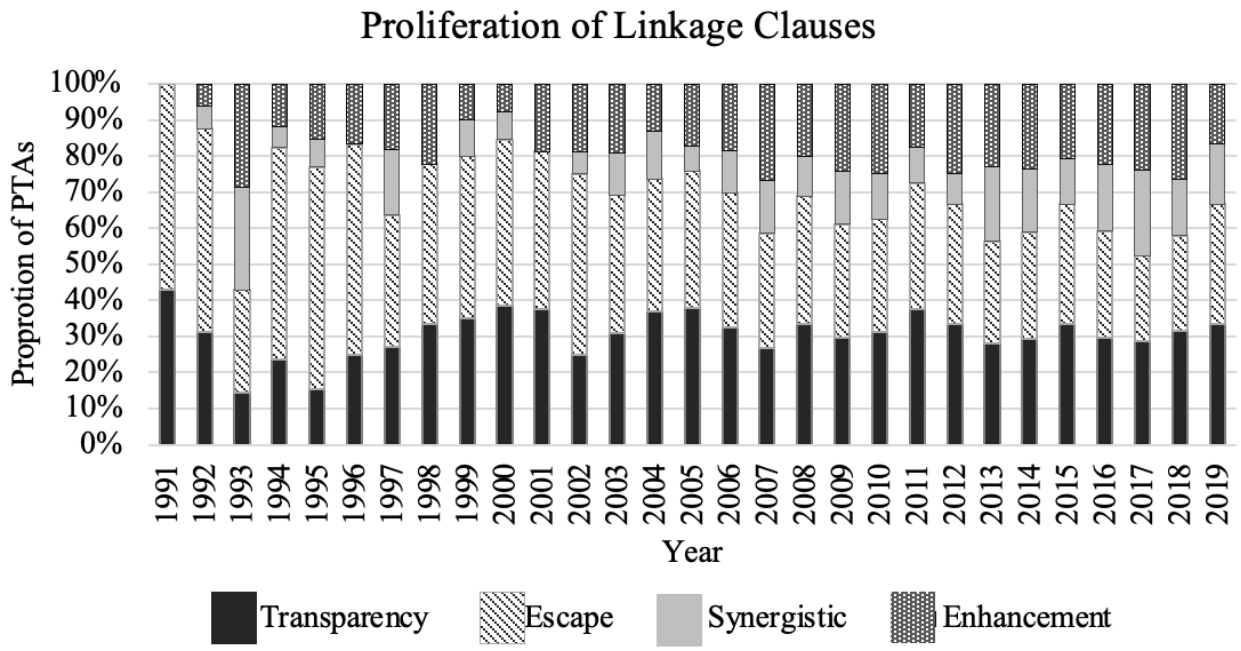
Figure 4. 2 Proportion of the four environmental linkage clauses.



Source: Author. Green protectionism (Transparency and Escape) clauses are the most prevalent.

Figure 4.3 below shows the proliferation of these clauses over time.

Figure 4. 3 Proliferation of the various types of environmental linkages clauses in PTAs.



Source: Author. Overall, Transparency and Escape clauses comprise the majority of the environmental linkage clauses in PTAs.

These findings indicate that the overriding objective of the inclusion of environmental linkage clauses in PTAs has been to curtail green protectionism by mitigating adverse trade effects generated by introduction and application of domestic environmental measures that have significant trade effects. In other words, states have primarily included environmental linkage clauses in PTAs to mitigate the use of domestic environmental measures as non-tariff barriers, as well as their discriminate application.

Concerns over green protectionism are not new, and they underscore the persistence of the issues that emerged during the GATT EMIT debates, as recounted in Chapter 2 (Historical Antecedents). As Enhancement clauses account for only one-fifth (20%) of all the linkage clauses, it is apparent that states have been reluctant to leverage trade policy to advance environmental policy objectives.

The low adoption of Synergistic clauses, perhaps, underscores this trend. That is, states have largely avoided using carrots and sticks of trade policy to foster environmental policy objectives. Subsequent sections explore these trends in detail.

The enduring shadow of green protectionism

Jadgish Bhagwati famously coined the law of constant protection, noting that: 'If you reduce one kind of protection, another variety simply pops up elsewhere' (Bhagwati, 1988, p. 53). The proliferation of clauses on green protectionism is indicative of this concern. To build on this insight, these findings show that when there are efforts towards environmental protection, then efforts to mitigate green protectionism pop up.

Transparency linkage clauses

Turning to Transparency linkage clauses, a major concern of trade agreements has always been the use of domestic regulatory measures to create barriers for imports. So serious is this concern that the lack of adequate information on domestic environmental measures with trade effects was termed as an existential threat to the (multilateral) trade system during the GATT EMIT debates (GATT, 1994a).[155] A notification system was incorporated by the GATT, and later taken up by the WTO, to enhance the transparency of information on such measures.[156] Similarly, PTAs have included Notification clauses embodying the logic. The Chile-China PTA, for example, includes the following clause:

[155]A report by the GATT Secretariat that examined the use of the 'unnecessary obstacles to international trade' and found that they were more about protection of domestic production than environmental protection

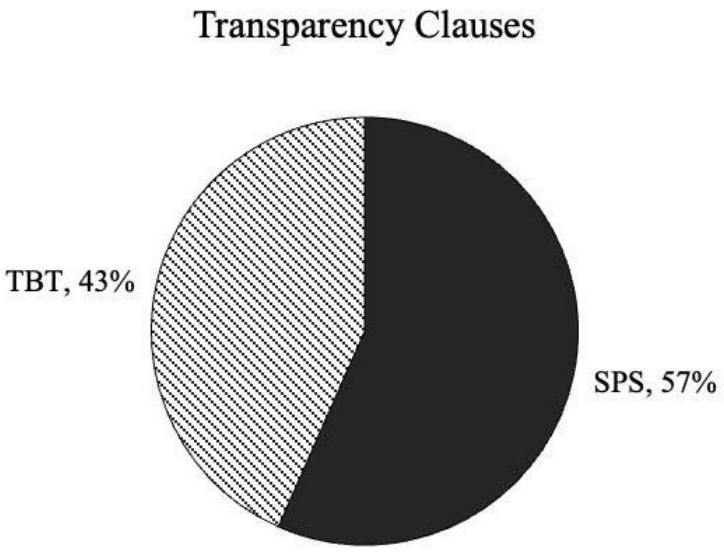
[156] WTO Environmental Database serves this purpose: https://edb.wto.org/

> "Each Party shall *notify* electronically to the other Party's enquiry point, established under Article 10 of the TBT Agreement, at the same time it submits its notification to the WTO Secretariat in accordance with the TBT Agreement…(b) its technical regulations and conformity assessment procedures adopted to address urgent problems of safety, health, *environmental protection* or national security arising or threatening to arise"[157]

But determining which domestic environmental measures should be notified has always been a major challenge. Hence the need for states to share *draft* environmental measures to allow fellow parties to comment on them before their adoption (WTO, 2018, p. 18). Debates in the GATT EMIT group did not fully resolve the issue, but there was clear preference for international standards, rather than more demanding domestic standards. The use of domestic enquiry points is also provided for by both TBT and SPS Agreements, to facilitate clarification of draft domestic environmental measures and any other pertinent information (WTO, 2018, pp. 18–19). As Figure 4.4 below shows, TBT and SPS standards were the most common forms of notification, with an almost equal frequency of use.

[157] Emphasis own; Article 99: Transparency of the Chile-China PTA

Figure 4. 4 Types of Transparency linkage clauses in PTAs.



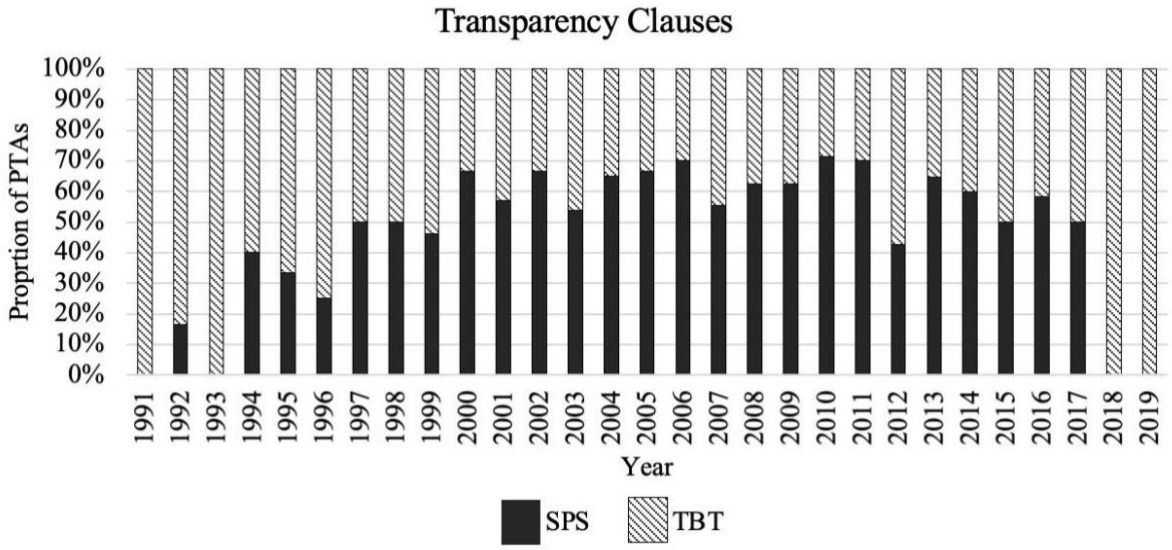
Source: Author. It is apparent that there is an almost equal frequency of use of these two international standards.

The GATT had developed a TBT notification system, based on the TBT Agreement, which was strengthened and incorporated into the WTO in the form of the Information Management System (IMS) (WTO, 2018, p. 23). As the WTO's Director General outlined the logic of enhancing transparency through notification, 'Transparency is essential to everything that we do at the WTO. It is vital to ensure the predictability and stability of the multilateral trading system' (WTO, 2018, p. 3). The TBT Agreement 'aims to ensure that technical regulations, standards, and conformity assessment procedures are non-discriminatory and do not create unnecessary obstacles to trade. At the same time, it recognises WTO members' right to implement measures to achieve legitimate policy objectives, such as the protection of human health and safety, or protection of the environment. The TBT Agreement strongly encourages members to base their measures on

international standards to facilitate trade. Through its transparency provisions, it also aims to create a predictable trading environment'.[158]

Viewed over time, as Figure 4.5 below shows, we can see that TBT standards were initially the preferred international standards for notification. But over time, use of SPS became more prevalent, suggesting an increased concern on the use of SPS measures as disguised barriers to trade.

Figure 4. 5 Proliferation of Transparency linkages clauses in PTAs.



Source: Author. There is a discernible proliferation of SPS clauses over time, thus indicating the growing concerns over the use of these standards as disguised barriers.

Reliance on TBT and SPS also allows PTAs to take advantage of some of the mechanisms developed under these international standards. Beyond providing relevant information for traders and other interested parties, Transparency clauses also perform the crucial function of preventing

[158] https://www.wto.org/english/tratop_e/tbt_e/tbt_e.htm

disputes, by acting as an 'early warning system'. They do so by acting as a 'detector' that can identify potentially contentious draft environmental measures. Allowing for comments and inputs into draft environmental measures with trade effects ensures that such risks are mitigated. TBT and SPS Agreements precisely include such kinds of detectors, and they have been developed into a mechanism called Special Trade Concerns (STCs) (Busch & Pelc, 2015, p. 405). STC are defined as an *'informal* form of resolution of trade conflicts' over TBT and SPS measures (Horn et al., 2013, p. 1, as quoted in Busch and Pelc, p. 406).

STCs allow for the detection and resolution of potential disputes before they can make their way to the main dispute settlement mechanism. By introducing a *selection bias,* STCs effectively limit the number of disputes that would otherwise end up before panels and the Appellate Body (AB) (Busch & Pelc, 2015, p. 405). In this way, STCs also act as a 'sieve', by filtering out 'minor' disputes before they escalate to the panel and/or AB levels.[159] Indeed this point was raised during the GATT EMIT debates, whereby Parties emphasized the need to limit the number of disputes through *ex ante* notification of draft domestic environmental measures. Perhap underscoring the importance of STC, developing countries have been more frequent users of STC, relative to their trade volume. By contrast, developing countries have been less frequent users of the main dispute settlement mechanism - consultations, the Panel and AB.(Horn et al., 2013, p. 13). This trend for developing countries can be construed as a strategy for reducing regulatory barriers usually erected by industrialised countries (Wilson et al., 2005, p. 868).

[159] When Busch and Pelc (2015) conducted their analysis, they found that STCs significantly outnumbered formal disputes: 379 STCs based on TBT vs 47 dispute settlement cases; and 350 STCs based on SPS vs 40 dispute settlement cases (p. 406)

In addition to pre-empting disputes, the use of TBT and SPS standards provide for greater exchange of relevant information (WTO, 2018, p. 18). Each party that had adopted the TBT and SPS Agreements is required to establish a national enquiry point to act as a conduit for information when requested. As the official guide to the use of enquiry points in the WTO notes, each party to the TBT and or SPS Agreement has

> 'to establish an enquiry point capable of answering questions relating to its implementation of TBT transparency obligations. Enquiry points thus have a central role in facilitating access to information. For many members they have become not only a place to respond to questions but a focal point for the implementation of the TBT Agreement, a *coordinating hub*. In this sense, enquiry points are very much at the heart of the implementation of the TBT Agreement' (WTO, 2018, p. 5, emphasis own).

The issue of enquiry points has been an important one, especially for the availability of information on voluntary environmental measures, as chapter 3 indicated.

Overall, TBT and SPS international standards have provided a useful mechanism for states to foster information exchange, thus enhancing transparency and stability of the international trading system. By providing mechanisms to mitigate the adverse trade effects of draft domestic environmental measures, TBT and SPS standards have become quite prevalent in PTAs. This underscores the important need for , and role of, information exchange as regards draft domestic environmental measures with trade effects in PTAs. Hence the predominant prevalence of Transparency clauses in PTAs.

Escape clauses: The problem of efficient breach

While notification of draft domestic environmental regulations, with adverse trade effects, through Transparency clauses has not been a controversial issue *per se*, the application of these regulations has, however, generated much controversy. Thus, the latter is the core of the concerns expressed by critics of the trade system, who often claim that trade agreements and institutions, especially the WTO, have sought to undermine environmental policy objectives by privileging trade, and proponents of the trade regime who argue that the WTO in particular, is not the appropriate forum for setting environmental policy. The discriminatory use of the escape clauses has also been the major source of environment-related disputes at the GATT and WTO (Moran, 2017).

Often viewed as the crown jewel of the trade regime and the envy of other regimes, the WTO dispute settlement system has been the focus of much of this debate. When the Uruguay Round of multilateral trade negotiations concluded with the establishment of the WTO, its dispute settlement was also strengthened and formalised to address some of the shortcomings in GATT. It was therefore only a matter of time before the WTO dispute system had to adjudicate a dispute involving environmental measures.

Why are Escape clauses so controversial, then? Perhaps an example of a famous dispute would illustrate the logic and sources of controversy on the (mis)use of Escape clauses. The famous Gasoline dispute reignited the debate on how the trade regime dealt with environmental issues. Brazil and Venezuela filed the case, alleging that the respondent - the US - had introduced new domestic environmental regulations that sought to keep out highly polluting gasoline. The bone of contention was, however, not the introduction of the domestic regulation *per se*, but its

discriminatory application. By applying higher standards to exporters compared to domestic industries, the US was alleged to have used the regulation as a disguised form of protectionism and discrimination (Irwin, 2015, p. 250). The complaint in this case was the restriction of gasoline imports from Venezuela and Brazil.

At the centre of the Gasoline dispute was the issue of whether the US had properly used Article XX of GATT, which laid out exceptional conditions under which parties could suspend their trade policy obligations to address exogenous domestic issues, especially the environment under section (g) on 'exhaustible natural resources'. The Panel set up to adjudicate the dispute ruled against the US, requiring them to bring the gasoline regulation into conformity with GATT rules by applying it without discrimination against imported gasoline. On appeal, the Appellate Board upheld the decision of the Panel (Irwin, 2015, p. 250).

Critics of the GATT and later the WTO were of course upset with the decisions of the Panel and AB, and used the decision as evidence that the multilateral trading system was using its dispute settlement system to undermine domestic environmental policy objectives (Strom, 1997, p. 249).[160] Subsequent rulings by the WTO on disputes based on environmental grounds underscored the orientation of the emergent jurisprudence towards setting a high threshold for the necessity of application of domestic environmental regulations, in conformity with international trade rules (Eckersley, 2004a, p. 25). What is of greater interest about this and subsequent cases, and for our present purposes, is the logic underpinning the justifications offered by the GATT and WTO jurisprudence: states need domestic regulatory space, but the use of this tool is qualified by

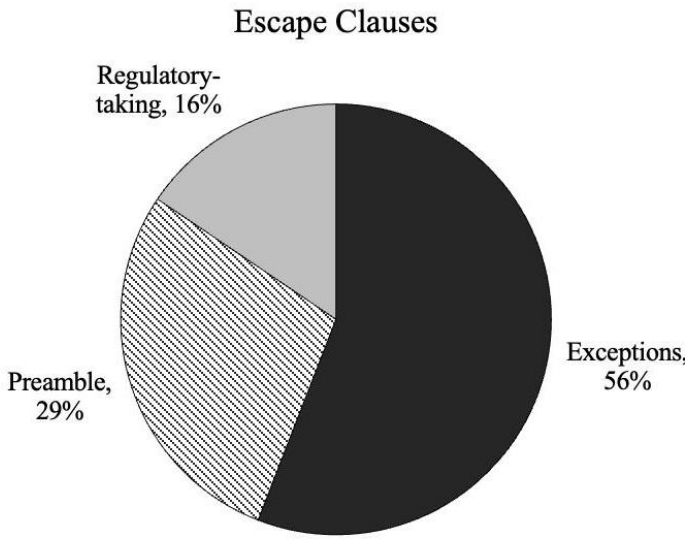
[160] Strom provides a detailed legal interpretation of the dispute

requiring it not to be discriminatory. This efficient breach of Escape clauses is underpinned by the notion of 'affirmative defence', whereby '[w]hile it is always up to the complainant to establish the violation it alleges, it is thus up to the party invoking the exception, usually the defendant in a dispute, to prove that it merits the conditions set out in [the escape clause]' (Pelc, 2016a, p. 125).

With these initial background debates lingering, it is not surprising that states have included Escape clauses in their PTAs. Much of the controversy has, however, been on the balance between states having sufficient room for implementing domestic regulations while also preventing the abuse of the clauses: that is, the problem of efficient breach (Pelc, 2010). That Escape clauses account for most environmental linkage clauses (37%) indicates their importance in the trade and environmental policy nexus. Yet, extant scholarship has paid little attention to the importance of these clauses especially in environmental linkage clauses in PTAs.[161] As Figure 4.6 below shows, Escape clauses in PTAs usually take three forms: exceptions; preambular clauses; and regulatory-taking clauses.

[161] Most datasets on environmental linkage clauses in PTAs often overlook the importance of escape clauses, e.g. Monteiro (2016)

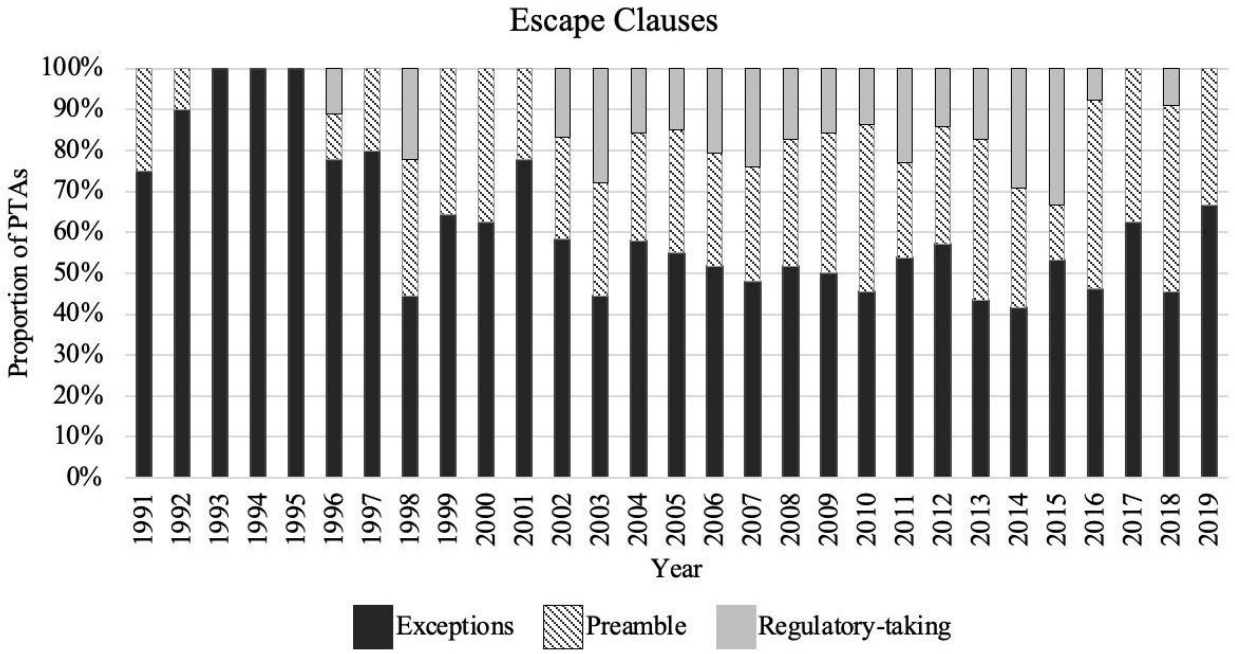
Figure 4. 6 Types of Escape linkage clauses in PTAs.



Source: Author. Exceptions, usually modelled after Article XX of GATT, are most dominant. Regulatory-taking clauses indicate concerns over investor-state disputes in PTAs.

It is also apparent that exception clauses comprise the bulk of the Escape clauses. Modelled after Article XX of the GATT, the exception clauses embody the logic of efficient breach: allowing parties to derogate their obligations to address domestic policy issues, but also preventing abuse of the clauses by quiring demonstration of necessity. Viewed in a temporal scale, exceptions clauses have been most dominant, but preambular clauses and regulatory-taking clauses have also been on the rise, as Figure 4.7 below shows.

Figure 4. 7 Trends in Escape linkage clauses in PTAs.

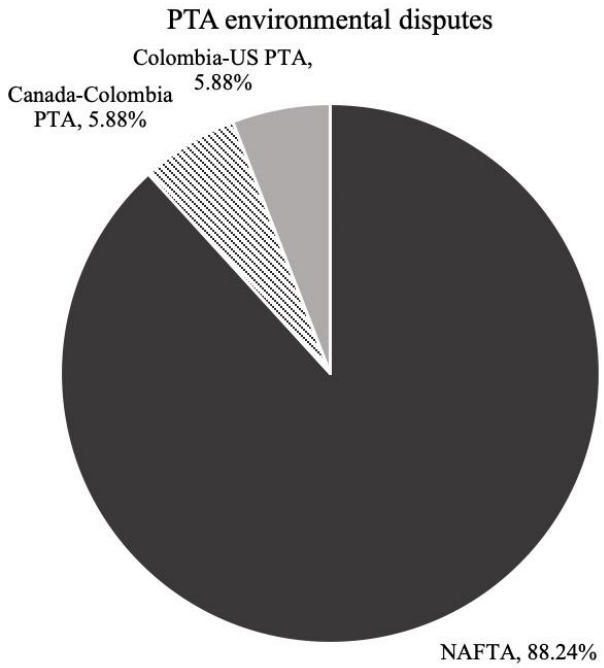


Source: Author. Escape clauses (Exceptions and regulatory-taking) account for the majority of Escape clauses.

While the logic of the standard escape clauses is clear, the rise of regulatory-taking clauses deserves closer analysis. That is, why are PTAs increasingly including clauses that allow for 'escape' from investment obligations, and what makes these clauses distinct from the standard escape clauses *à la* Article XX? The answer lies in the rise of investor-state disputes, which also touch on domestic environmental regulation. A recent trend in the investment regime brought renewed focus on the impact of jurisprudence from international economic law on the application of domestic environmental regulations (Bonnitcha, 2014, p. 113; Condon, 2015; Côté, 2014; Tienhaara, 2009, 2018). The rise of arbitration disputes filed by foreign investors against states, often through Investor State Dispute Settlement (ISDS), has drawn attention to the impact of domestic environmental regulations on foreign investments. The main issue of concern for the arbitration cases filed by the foreign investors has been that some domestic environmental

regulations have negatively impacted the foreign investments, especially assets, amounting to (in)direct expropriation. As Figure 4.8 below shows, the rise in ISDS cases has been in tandem with the rise in exception clauses carving out domestic regulatory space for states, thus shielding their actions from claims of expropriation.

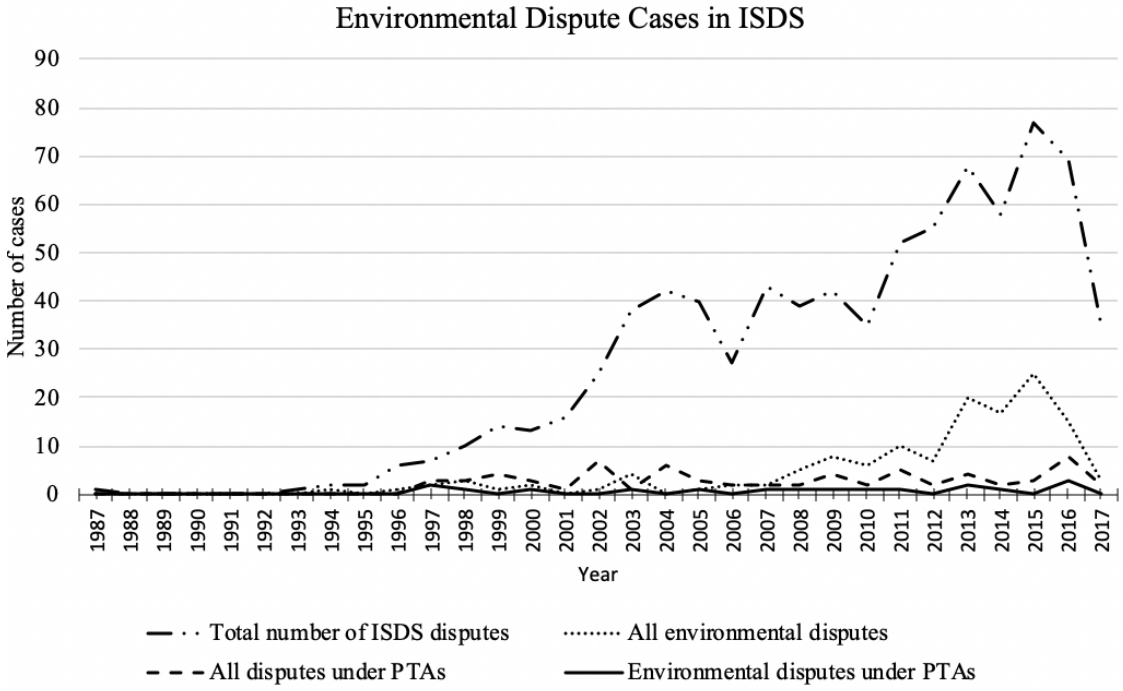
Figure 4. 8 PTA-based environmental disputes.



Source: Author, with data from UNCTAD. Major environmental norm entrepreneurs (especially US and Canada) account for all the environmental disputes.

Over time, there has been an increase in the number of disputes, as Figure 4.9 below indicates.

Figure 4. 9 Trends in PTA-based environmental disputes.



Source: Author, with data from UNCTAD. There is a rising trend in the increase of such disputes.

But perhaps the most significant distinction between ISDS disputes and traditional trade disputes is the cost of awards. For while traditional trade disputes can be resolved through authorisation of trade sanctions, and the costs of award fungible, ISDS arbitral awards often run into billions of dollars (Franck, 2007, p. 1; Gallagher & Shrestha, 2011; Poulsen, 2015, p. 3; Rosert, 2014). Even more striking, and to the surprise of many governments, is that ISDS awards could be enforced by seizure of the assets of the respondent state should it not fulfil the award to the claimant. Moreover, the test of necessity for ISDS is whether the domestic environmental regulations indeed amount to expropriation, compared with the trade regime's test of non-discrimination. Kyla Tienhaara has brilliantly chronicled the rise of ISDS claims based on domestic environmental regulations (Tienhaara, 2009).

Moreover, given the rise of investment chapters in PTAs, negotiators have also been including clauses that explicitly stated that domestic environmental measures do not necessarily amount to indirect expropriation, as a basis for filing ISDS disputes. The Australia-China PTA of 2015, for instance, includes an Investment chapter with such provisions on expropriation, as expressed in Article 9.8, which is worth reproducing at length below:

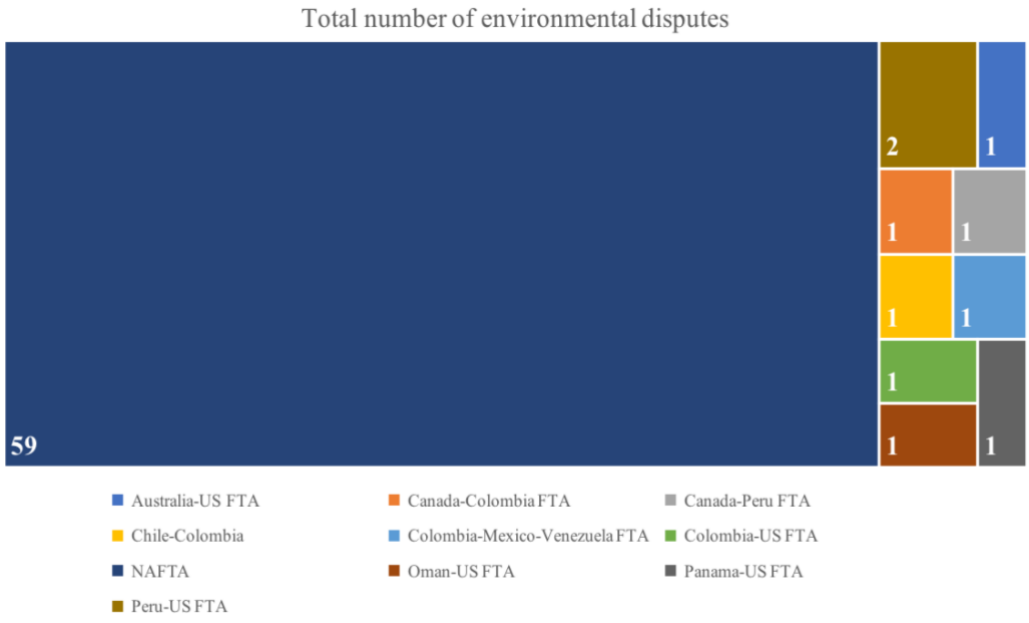
> ARTICLE 9.8 GENERAL EXCEPTIONS
>
> 1.For the purposes of this Chapter and subject to the requirement that such measures are not applied in a manner which would constitute arbitrary or unjustifiable discrimination between investments or between investors, or a disguised restriction on international trade or investment, nothing in this Agreement shall be construed to prevent a Party from adopting or enforcing measures:
>
> (a)necessary to protect human, animal or plant life or health;...
>
> 2.The Parties understand that the measures referred to in subparagraph 1(a) include environmental measures to protect human, animal or plant life or health, and that the measures referred to in subparagraph 1(d) include environmental measures relating to the conservation of living or non-living exhaustible natural resources.[162]

It is important to note that even though many of the ISDS cases based on environmental regulations have been based on Bilateral Investment Treaties (BITs), a handful of cases have been filed under PTAs, especially NAFTA, as Figure 4.9 above illustrates. Figure 4.10 below illustrates the specific

[162] Australia-China PTA, https://dfat.gov.au/trade/agreements/in-force/chafta/official-documents/Documents/chafta-chapter-9-investment.pdf

PTAs under which the environmental disputes were filed, where major trading partners such as the US and Canada dominate.

Figure 4. 10 Proportion of investment disputes filed based on PTAs.



Source: Author, with data from UNCTAD. NAFTA by and large accounts for a significantly huge number of disputes, underscoring the highly legalistic approach of the US and Canada. Furthermore, most of the other PTAs include the US.

Finally, the inclusion of preambular clauses can be understood as a 'signal' that the parties to the PTA understand the importance of environmental protection. Preambular clauses might be invoked as parties implement their trade agreements (for examples where the preamble has been invoked, see Orgad, 2010, pp. 720, 721, 725, 731). Often, preambular clauses will be accompanied by exception clauses, as the latter are more elaborate since they embody the logic of efficient breach. Escape clauses are therefore an 'insurance policy' for states when they have to implement domestic environmental measures that might have adverse trade effects, thus triggering disputes. States, however, seek to prevent the abuse of Escape clauses by attaching conditions to their use.

Greening through synergy and enforcement?

Turning to Environmental Protection (Synergistic and Enhancement) clauses, only about one-third (32%) of all the clauses sought to pursue this objective. This is a striking finding, as it indicates that states have primarily included linkage clauses to mitigate the adverse trade effects emanating from environmental policy, and not to necessarily promote environmental protection. This is an important context within which to examine the environmental protection clauses. Importantly, the use of Synergistic clauses has been quite limited, as they account for only 12% of all environmental linkage clauses. Crucially, only 20% of the clauses seek to pursue enforcement of environmental policy commitments through Enhancement clauses. But as we shall see, the logic underpinning Enhancement clauses is different from the approaches predominantly adopted by major powers such as the US and the EU, which the literature has focused on. But let us first examine Synergistic clauses, before turning to Enhancement clauses.

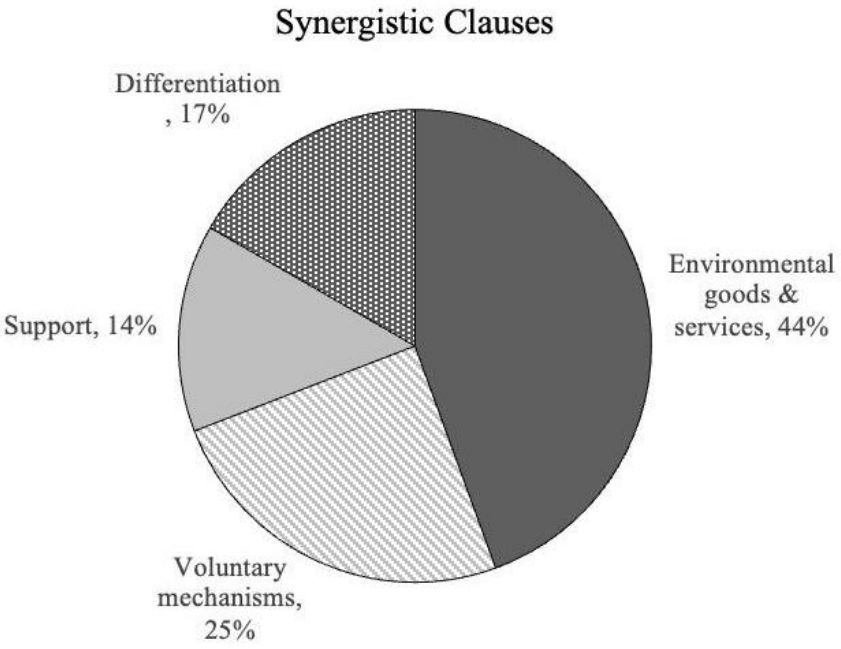
Win-win approaches: Synergistic clauses

Synergistic clauses seek to simultaneously pursue trade and environmental policy through 'win-win' logic. By enhancing trade in these goods and services (EGS) through trade liberalisation, mutual benefits will be accrued by increasing trade while also enhancing access of ESG especially by states with limited capacity to address domestic environmental issues (Berger et al., 2017; Wan et al., 2018). Voluntary mechanisms, on the other hand, can induce eco-friendly products through improved production and process methods (Jaspers & Falkner, 2013, p. 415). These trends are analogous to debates and negotiation efforts towards the adoption of an Environmental Goods and

Services Agreement at the WTO, which is yet to come to fruition (Ciaro et al., 2007b; Wu, 2014; Yoo & Kim, 2011).

Unsurprisingly, environmental goods and services (EGS) were the most common type of Synergistic clauses, accounting for 44% of the Synergistic clauses. Arguments supporting and promoting the use of EGS are premised on the notion that many states struggle with addressing their environmental problems primarily due to lack of access to the appropriate technology. By fostering trade liberalisation in EGS, such states would thus be able to acquire these technologies at affordable prices. In effect, various initiatives have been launched to foster the diffusion of EGS, through trade and environment partnerships. Technology development and transfer is a key theme in international environmental diplomacy, and trade plays a key role towards achieving this objective (Nimubona, 2012; Wan et al., 2018). But the limited adoption of this approach is puzzling, as Synergistic clauses overall account for only 12% of all environmental linkage clauses. Figure 4.11 below shows the proportion of Synergistic clauses.

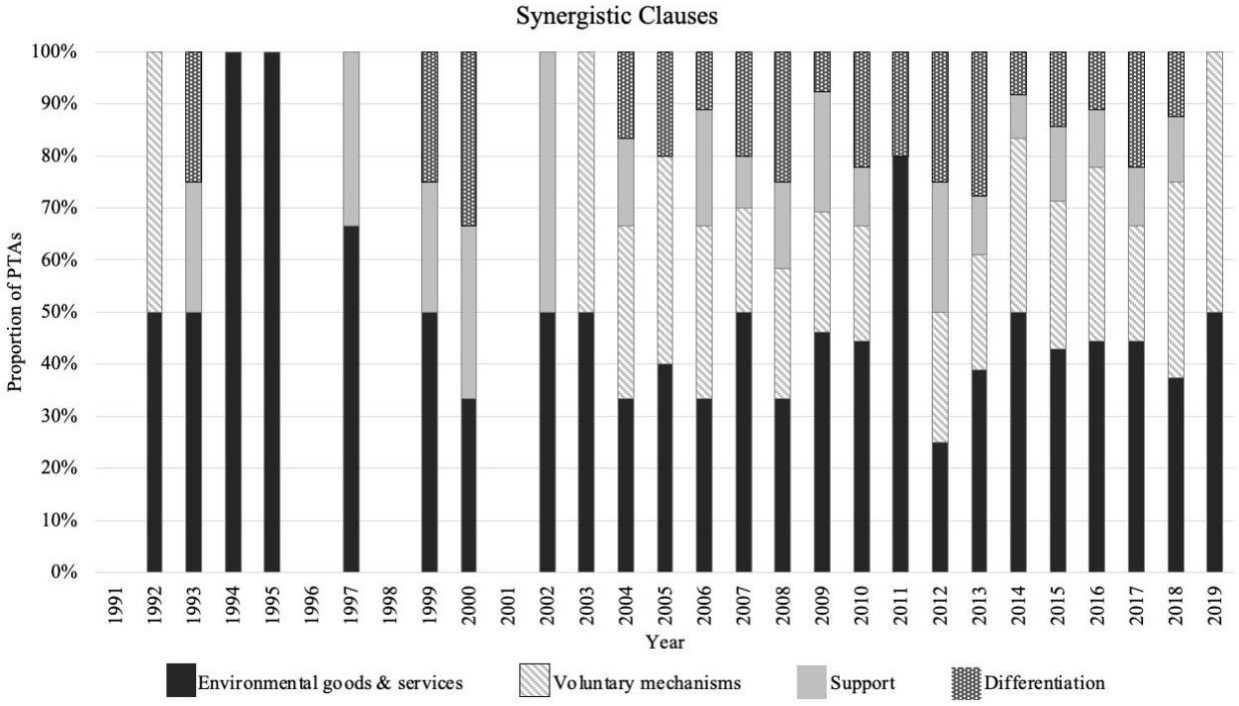
Figure 4. 11 Types of Synergistic linkage clauses in PTAs.



Source: Author. Environmental goods and services dominate Synergistic clauses.

Empirical research has contributed to solving this puzzle, as it has indicated that least development countries have in fact had high tariffs for imports of EGS (Khatun, 2012). An important caveat is in order, though: the present analysis only focused on the explicit mention of EGS in the main text of PTAs, and it is therefore possible that there has been greater liberalisation of EGS included in liberalisation schedules of PTAs, but not recognised explicitly in the main text. Viewed over time, EGS and voluntary mechanisms dominate the Synergistic clauses, as Figure 4.12 below shows.

Figure 4. 12 Proliferation of Synergistic linkage clauses.



Source: Author. EGS and voluntary mechanisms dominate.

Voluntary mechanisms are the second-most common type of Synergistic clauses, comprising one-quarter 25%. Voluntary mechanisms often take the form of eco-labelling and other self-regulating mechanisms for firms such as voluntary standards (Kirton & Trebilcock, 2017; Marx, 2018). Eco-labels are the most common forms of these voluntary mechanisms (Bonsi et al., 2008; Greaker, 2006a). As the preceding chapter demonstrated, eco-labels and other flexible mechanisms were preferred to command-and-control regulations, as they created new markets while at the same time promoting environmental protection. The key assumption of this approach, which is common in US, Canadian and EU PTAs, is that firms will respond to consumer preferences, especially on environmental sustainability. For firms, such an approach is often favourable since they do not have to incur significant costs of compliance that arise from prescriptive regulatory approaches. It is also anticipated that a growing market for eco-friendly products would induce more eco-friendly

production methods and processes, although empirical studies testing this hypothesis have yielded mixed results (Bonsi et al., 2008; Cashore & Stone, 2014; Gallastegui, 2002; Loureiro & Lotade, 2005). In the US-Colombia PTA, for instance, the Environment chapter includes clauses on flexible, voluntary mechanisms, as reproduced below:

> Article 18.4 Mechanisms to Enhance Environmental Performance
>
> 1. The Parties recognize that *flexible, voluntary, and incentive-based mechanisms* can contribute to the achievement and maintenance of environmental protection, complementing the procedures set out in Article 18.4, as appropriate, and in accordance with its law and policy, each Party shall encourage the development and use of such mechanisms, which may include:
>
> (a)mechanisms that facilitate voluntary action to protect or enhance the environment, such as:
>
> (i) partnerships involving businesses, local communities, non-governmental organizations, government agencies, or scientific organizations,
>
> (ii)voluntary guidelines for environmental performance, or
>
> (iii) voluntary sharing of information and expertise among authorities, interested parties, and the public concerning: methods for achieving high levels of environmental protection, voluntary environmental auditing and reporting, ways to use resources more efficiently or reduce environmental impacts, environmental monitoring, and collection of baseline data; or
>
> (b) incentives, including market-based incentives where appropriate, to encourage conservation, restoration, sustainable use, and protection of natural resources and the environment, such as public recognition of facilities or enterprises that are superior environmental performers, or programs for exchanging permits or other instruments to help achieve environmental goals.

2. As appropriate and feasible and in accordance with its law, each Party shall encourage:

(a) the maintenance, development, or improvement of performance goals and standards used in measuring environmental performance; and

(b) flexible means to achieve such goals and meet such standards.[163]

Differentiation clauses accounted for 17% of all Synergistic clauses. Differentiation allows for parties to undertake commitments commensurate with their capability. By this definition, parties with greater capability would take up greater commitment, and vice-versa for those with lesser capacity. The notion of differentiation is not new to trade and environment, as in the former it is articulated through the concept of Special and Differential Treatment (SD&T) (Kennedy, 2005; Kishore, 2014; Ornelas, 2016) while in the latter it is through the notion of Common But Differentiated Responsibilities (CBDR) (Rajamani, 2011, 2018). PTAs, especially those concluded by the EU, have included clauses that differentiate between the levels of economic development of Parties. Such clauses give greater flexibility to less developed countries when implementing their environmental obligations, coupled with a pledge - or even obligation - by the more developed states to support the former in implementing the commitments. What is apparent from the trend in Figures 4.11 and 4.12 above is the increasing use of differentiation in PTAs as regards implementation of environmental commitments, but it should be noted that EU PTAs account for a significant proportion of these clauses. There is no discernible proliferation effect of these clauses over time.

[163] Emphasis own, US-Colombia PTA, https://ustr.gov/sites/default/files/uploads/agreements/fta/colombia/asset_upload_file644_10192.pdf

The third most common Synergistic clause in PTAs is the focus on support for implementation of environmental commitments. The basic idea behind this type of clause is that parties that are more capable offer support to other parties. This support can take many forms, including but not limited to financial, technical and even informational support, most emblematic being Aid for Trade (Leonardo Baccini & Urpelainen, 2012; Prowse, 2010; Vijil, 2014). There is also no discernible proliferation of this clause, indicating that it has not been widely adopted. As it accounts for only 14% of all the Synergistic clauses, it is apparent that most parties have not taken up the notion of support as being integral to leveraging trade policy to address environmental problems. This is in contrast to many international environmental regimes, where support through finance, technology and capacity is integral to the regime design (Abdel-Latif, 2015; Berger et al., 2017; McGee & Wenta, 2014). It is interesting to note that not all major environmental norm entrepreneurs have also adopted this approach to foster environmental protection. EU PTAs account for the bulk of these clauses, and China's PTAs are also increasingly adopting this approach.

Overall, states have deployed Synergistic clauses, albeit to a limited extent, especially when compared to Enhancement clauses which are discussed in the following section. This is a striking finding since it would be expected that the 'WTO consensus' on mutually-supportive approaches to trade and environmental policy would be reflected in PTAs (Ciaro et al., 2007b). But perhaps a cautionary note is that the present analysis examined Synergistic clauses in the main text of PTAs, and not liberalization schedules of PTAs. Still, the small proportion of Synergistic clauses is interesting. Perhaps this might be linked to the insights from some recent studies that cast doubts on the positive effect of trade liberalisation in environmental goods and services on environmental protection (Hu et al., 2020; Nimubona, 2012; Wan et al., 2018). Since Synergistic clauses are the

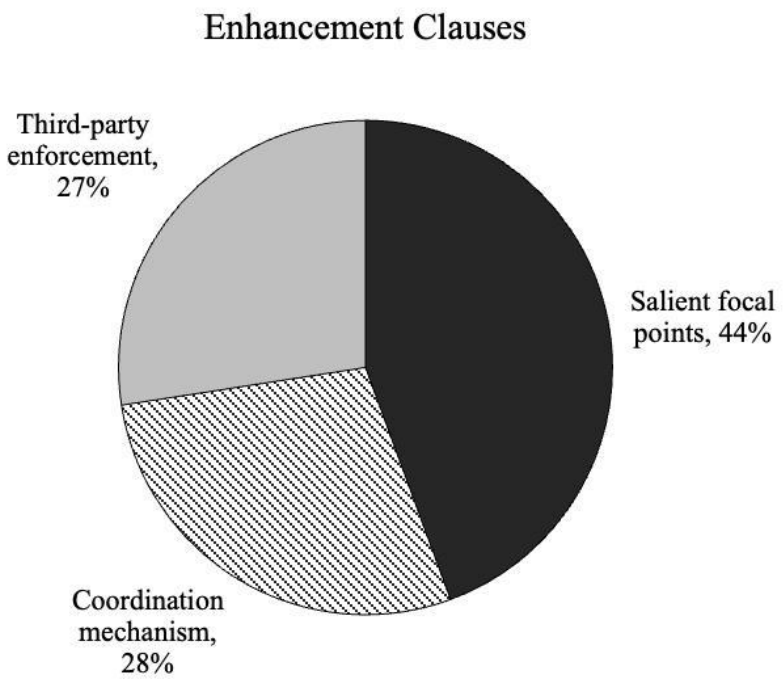
most prevalent in PTAs that include major trading partners - especially the US, Canada and the EU - they can be understood as 'carrots' especially towards less developed countries. These carrots, however, have often been accompanied by 'sticks' through sanctioned enforcement by the major trading partners, as will be shown in the following section.

Fostering compliance: Enhancement clauses

The most contentious debate on the use of trade policy to promote environmental protection has been on the use of trade sanctions and other forms of sanctioned compliance (Brandi, 2013). Often perceived as the 'nuclear option', the use of trade sanctions to promote environmental protection has always been resisted on the grounds that it would do more harm than good especially for less developed countries (Brandi, 2013; Chimni, 2000). As the Historical Antecedents chapter demonstrated, so serious is the concern on the use of trade sanctions to pursue unilateral and extra-jurisdictional environmental policies that Principles 11 and 12 of the landmark Rio Declaration on Environment and Development explicitly forbade the use of trade sanctions under two main contexts: beyond a state's jurisdiction; and in a unilateral manner.

Since the GATT and subsequently the WTO rejected the use of unilateral, extra-jurisdictional trade measures to pursue environmental policy objectives, would we expect the PTAs to adopt a similar approach or change course? The short answer is to adopt a similar approach. As the analysis of the PTAs in this study shows, only 20% of all the clauses were Enhancement clauses. But even more remarkable is that the use of sanctioned enforcement (through third-party enforcement) is quite limited, accounting for only 27% of the Enhancement clauses, as Figure 4.13 below shows.

Figure 4. 13 Enhancement clauses.



Source: Author. Surprisingly, Third-party enforcement (sanctioned compliance) clauses are the least adopted in PTAs, indicating that most states are not interested in fully leveraging PTAs' formidable enforcement mechanisms. There is therefore a preference for coordination (salient focal points + coordination mechanisms) to credible commitments (third-party sanctioned enforcement).

Three specific types of Enhancement linkage clauses were analysed, embodying two main approaches to ensuring compliance (credible commitments, and coordination). The first approach is credible commitments through sanctioned compliance, an approach common and dominant in rationalist IPE literature (Poulsen, 2020, p. 1). Based on rationalist theory of cooperation, this approach holds that sanctions are useful and important in ensuring that parties comply with their commitments as outlined in international agreements (Abbott & Snidal, 2000, pp. 425, 440; Koremenos, 2016, pp. 2, 57; Koremenos et al., 2001, p. 765). Or as one legal scholar has aptly put it: '[in] the vision of law that dominates economics-influenced legal theory, law imposes sanctions to solve problems of cooperation. On this view, the *problem* to be solved is the absence of

cooperation and the *solution* law provides is the imposition of sanctions' (McAdams, 2000a, p. 1650, emphasis own).

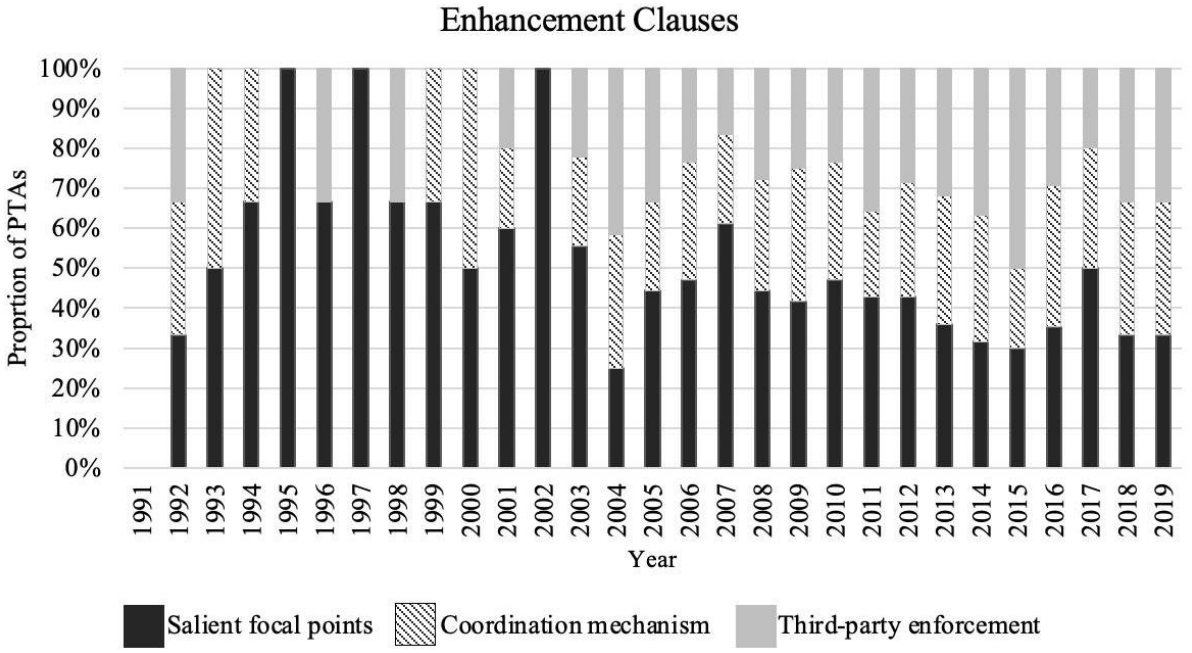
By attaching *ex ante* and/or e*x post* costs to noncompliance, it is in the best interests of states to comply with their treaty obligations (Kerner, 2009, p. 74; Poulsen, 2020, p. 2). Through the credible commitments approach, we should therefore expect to see states leverage the formidable compliance mechanisms of PTAs to enforce environmental policy commitments. Disputes are often resolved through adjudication by third parties. This 'nuclear' option would thus be more attractive than the softer compliance approach often adopted by MEAs. Clauses under this category were labelled as 'Third-party Enforcement'.

The second approach to ensuring compliance is coordination using focal points and information-generation mechanisms. Such an approach has been termed as a coordination-enhancing mechanism (McAdams, 2015). The coordination-enhancing mechanism approach is based on the theoretical proposition that 'law has expressive powers independent of the legal sanctions threatened on violators and independent of the legitimacy the population perceives in the authority creating and enforcing the law...Law deters and incapacitates, but it also *coordinates* and *informs'* (McAdams, 2015, pp. 6–7, emphasis in original). Thus, states use law to generate salient focal points to allow for coordination of their actions, and to create mechanisms to generate information that would induce a change in behaviour, without using sanctions to foster compliance. This approach of coordination is always presented in contrast to sanctioned compliance.

Coordination-enhancing mechanisms have two main components: salient focal points; and information-generation mechanisms. The concept of focal points was originally formulated by Thomas Schelling to illustrate how some choices stood out from alternatives, thus offering a 'salient' coordination point (Schelling, 1981, p. 57). Salient focal points allow for the identification of a 'correct' point of coordination, and the information-generation mechanisms allow for follow-up to ensure compliance. Domestic and international environmental standards (especially MEAs) are the most used salient focal points in PTAs. Clauses embodying this approach were categories and labelled as 'Salient focal points' and 'Coordination mechanisms', as they identify points of coordination and mechanisms for generating information on compliance, respectively. Crucially, such mechanisms do not include sanctions. That the coordination-enhancing clauses account for about 73% of the Enhancement clauses is striking, as it goes against the approaches adopted by major powers such as the US and the EU which include the use of sanctioned enforcement and pressure by third-parties such as the civil society to foster environmental protection. It therefore seems that states prefer to use PTAs as coordination-enhancing and not credible-commitment devices in enforcing environmental policy commitments.

Viewed over time, as Figure 4.14 below shows, it is apparent that even though there is a discernible proliferation of sanctioned compliance, these clauses have only accounted for about 30% of the Enhancement clauses on average. Coordination-enhancing clauses (salient focal points and implementation review) have been consistently dominant.

Figure 4. 14 Proliferation of Enhancement clauses.



Source: Author. Coordination-enhancing clauses (salient focal points + Coordination Mechanisms) have been predominant, but there is a slight recent proliferation of sanctioned enforcement (Third-party enforcement) clauses.

What explains the preference for coordination over sanctioned compliance? The short answer is that states have often and deliberately avoided fully leveraging PTAs' compliance mechanisms to enforce environmental policy commitments. The debates in the GATT EMIT group, as chronicled in the Historical Antecedents chapter, clearly reveal that the use of sanctioned compliance was not a preferable option. Rather, the use of international coordination (e.g. through MEAs) was preferred in addressing transboundary and global environmental challenges. Principles 11 & 12 of the Rio Declaration on Environment and Development affirmed this approach. Principle 12 was more explicit on this point by stressing the importance of international consensus when designing environmental measures to address transboundary or global environmental problems.[164] The use

[164] Principle 12 of the Rio Declaration states 'States should cooperate to promote a supportive and open international economic system that would lead to economic growth and sustainable development in all

of international coordination through MEAs was therefore the preferred solution. To understand this trend requires elaboration of coordination-enhancing mechanisms.

In his seminal text Strategy of Conflict, as earlier noted, Thomas Schelling introduced the concept of salient focal points (Schelling, 1981). Salient focal point is a basic but powerful concept. The main insight behind salient focal points is that they allow actors to coordinate. Suppose a group of tourists visiting Melbourne would like to meet up for a group activity. Not knowing the city well, they will most likely choose a landmark where they can all meet. As you may have guessed, chances are that they will choose Flinders Street Station as the meeting point, since it is a landmark that stands out - it is salient. Analogously, environmental policy issues have been very contentious, as global climate governance demonstrates.

A key problem has been identifying the 'correct' standard to use. As the debates in the GATT EMIT group demonstrated, states have different priorities and views on how trade policy should be leveraged to enforce environmental policy commitments. Yet despite the disagreements, MEAs were largely accepted as a forum for coordinating the use of trade measures to enforce environmental policy commitments, as they embody international consensus. MEAs can thus be viewed as international environmental standards that act as salient focal points. After all, most PTAs reiterate the need to implement MEAs, but they do not attach costs to noncompliance, such as linking to PTA dispute mechanisms to enforce their implementation. Beyond the use of MEAs

countries, to better address the problems of environmental degradation. Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade. *Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided*. Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus' (emphasis own)

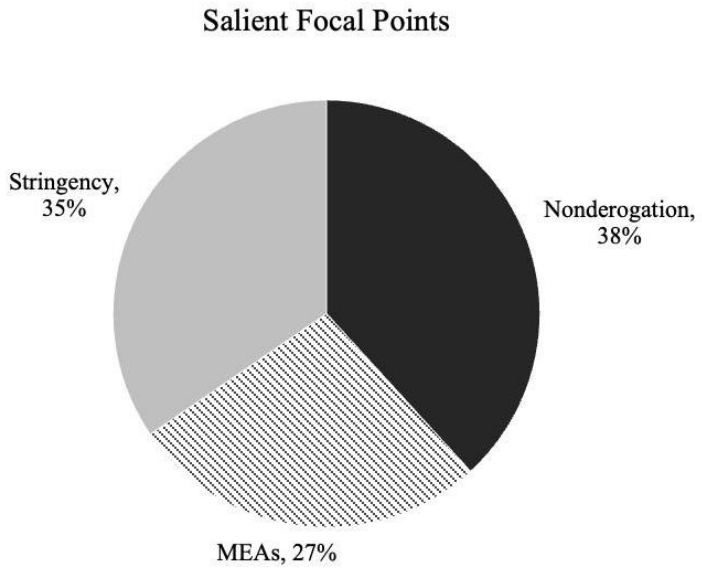
as international standards, an analogous debate has been going on about what has been termed as 'the race to the bottom' (RTB) phenomenon. RTB holds that states will relax their environmental standards to attract investments (Dong et al., 2012; Eskeland & Harrison, 2002). Domestic environmental standards thus act as another 'salient focal point', especially since they preserve domestic contexts that often vary across countries.

Salient focal points are prevalent as they also offer less contested points of coordination. MEAs, for instance, signify international consensus. Indeed, as the GATT EMIT debates and Principle 12 of the Rio Declaration show, international consensus is the most preferred option when considering the use of trade measures to enforce environmental policy commitments. A common criticism of trade agreements is that they constrain the use of trade measures in MEAs, leading to the 'Big Chill' (Eckersley, 2004a, pp. 26–27). Yet as the GATT EMIT debate showed, there was no rejection of trade measures *per se*.

Rather, emphasis was on the proper design of trade measures, preferably within the context of MEAs, to mitigate their misuse for protectionist purposes. International consensus on the design of trade measures in MEAs would thus allow for consideration of various elements relevant to the environmental problem at hand, and also avoid using such trade measures to undermine the trade rights of nonparties to MEAs, who may not have joined the MEAs for legitimate reasons. MEAs thus serve the function of indicating that international consensus and not unilateral, extrajurisdictional use of trade measures, is the most appropriate way of using trade measures to address transboundary and global environmental challenges. That is, design and use of trade measures in MEAs was contingent on the nature of the environmental problem at hand. As Figure

4.15 below shows, MEAs accounted for 27% of all salient focal point clauses, and there has been a discernible proliferation in their use.

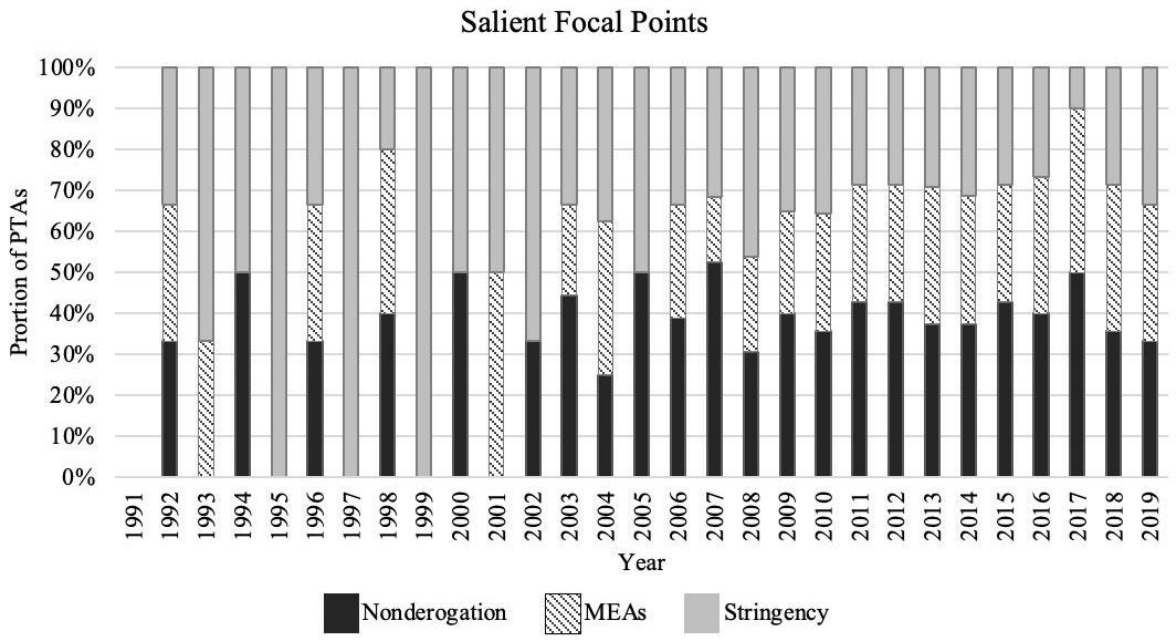
Figure 4. 15 Proportion of salient focal points in Enhancement clauses.



Source: Author. Domestic environmental standards (nonderogation + stringency) dominate. MEAs account for only one-third of the clauses, indicating that international standards have been the second-best option.

Viewed over time though, as Figure 4.16 below shows, there has been a slight proliferation of MEAs.

Figure 4. 16 Proliferation of salient focal points in Enhancement clauses.



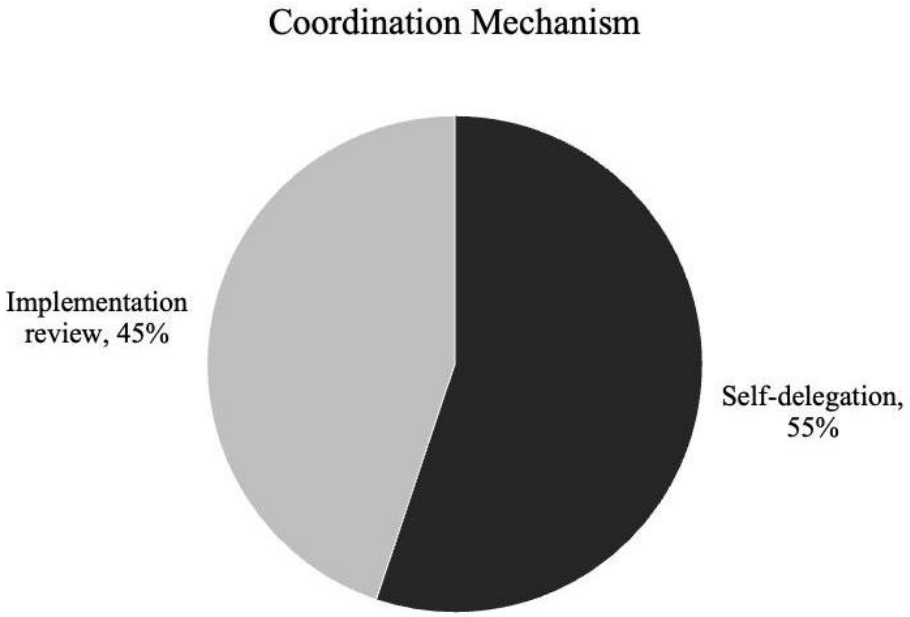
Source: Author. Even though domestic standards dominate, there is a proliferation of MEAs as focal points.

Domestic environmental standards, on the other hand, includes nonderogation of environmental standards, and strengthening the stringency of the standards. Non-derogation requires parties not to relax their domestic environmental standards to attract investment especially from footloose capital (Dong et al., 2012; Eskeland & Harrison, 2002). By identifying domestic environmental standards as a focal point, and generating information against relaxing these standards, the behaviour of parties can be altered if they adhere to these standards. Non-derogation are the most popular salient focal point clauses, as they account for 38% of them. Related, stringency indicates that parties should strive to improve their domestic environmental standards. The expectation of parties to improve their domestic environmental standards is quite clear, and these clauses account for 35% of all the salient focal point clauses.

In addition to identifying the salient focal points, coordination-enhancing clauses also generate information on expected behaviour on compliance. Crucially, coordination mechanisms include neither sanctions nor adjudication of disputes by third parties. In other words, coordination mechanisms only serve the purpose of identifying points of coordination and generating the pertinent information on compliance. Diplomatic coordination, and not sanctions, is the *modus operandi* of coordination mechanisms, as coordination mechanisms typically emphasise the resolution of disputes through diplomatic means such as Good office, Conciliation and Mediation, and not through third-party enforcement. Coordination mechanisms thus comprise the identification of focal points and the concomitant institutional arrangements to generate information on compliance (McAdams, 2015, Chapter 5).

Typical coordination mechanisms include the generation of relevant compliance information by parties (Implementation review), and self-delegation of enforcement to government agencies and not third parties. Hence, there is simultaneous self-delegation and review of compliance information based on the identified salient focal points. Figure 4.17 shows the types of Coordination mechanisms deployed in PTAs to enforce environmental policy commitments.

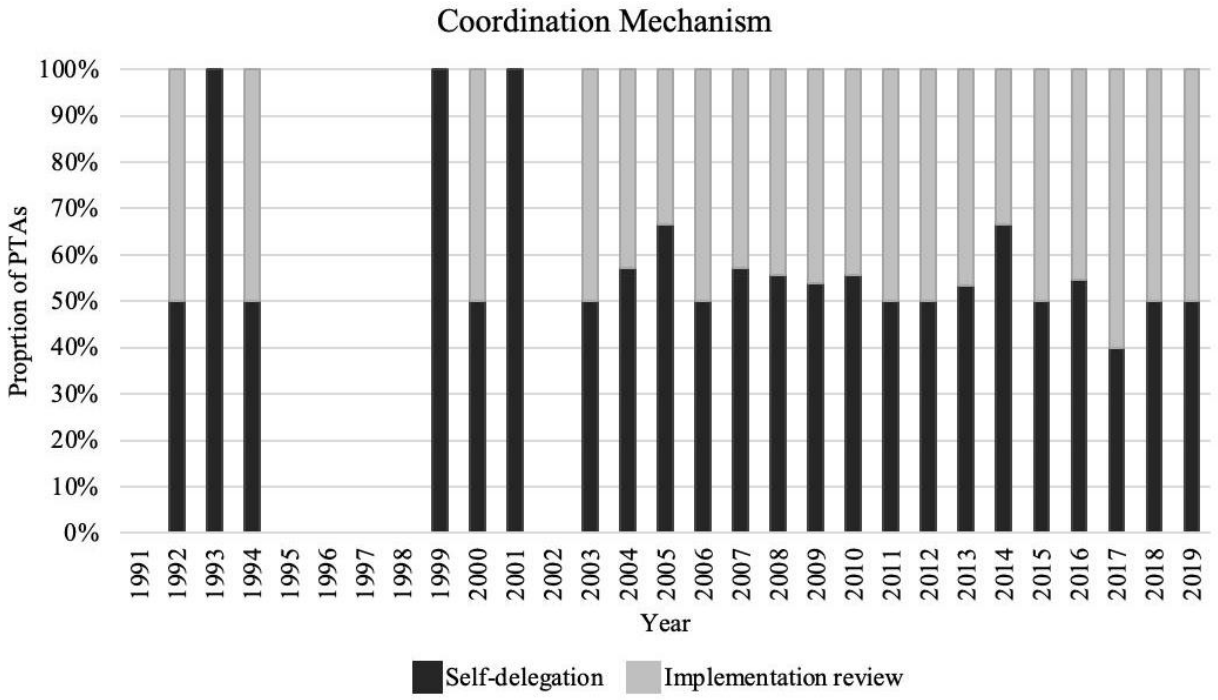
Figure 4. 17 Proportion of Coordination Mechanisms in Enhancement clauses.



Source: Author. It is apparent that states usually combine self-delegation and develop implementation review mechanisms in developing coordination mechanisms to ensure compliance with environmental policy commitments.

Viewed over time, as Figure 4.18 below shows, the trend over time.

Figure 4. 18 Proliferation of Coordination Mechanisms in Enhancement clauses.



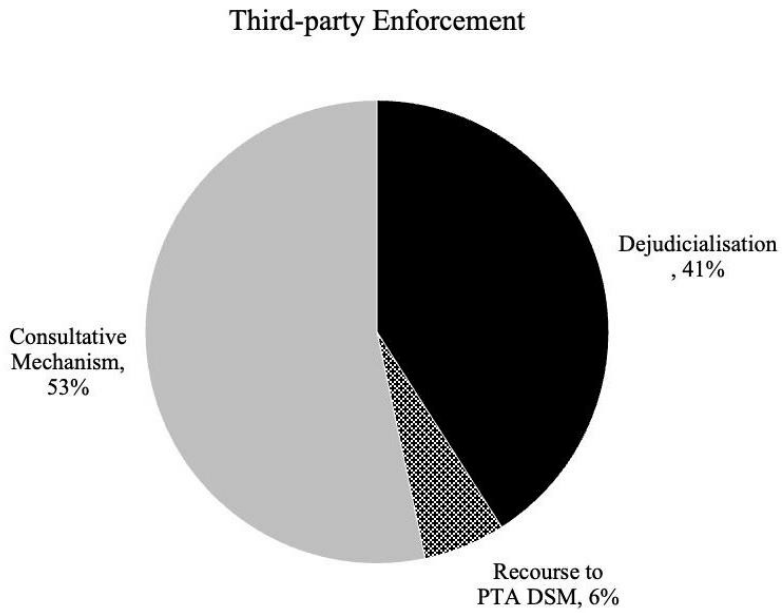
Source: Author. There is an apparent balance between delegating government offices to coordinate implementation of environmental commitments in PTAs, as well developing mechanisms to review implementation.

Preference for coordination over credible-commitment mechanisms to ensure compliance with environmental policy commitments through PTA is indeed a striking if not puzzling finding, especially in the context of IPE. But there are analogous examples, especially in BITs, that challenge the dominance of credible-commitment theoretical approaches in IPE. As Lauge Poulsen has convincingly argued and demonstrated, the literature on BITs has been dominated by the credible commitment through sanctioned compliance narrative. Yet the formative stages of the BIT regime did not include sanctioned compliance, as it only identified appropriate standards that would be used to resolve investor-state disputes through diplomatic channels (Poulsen, 2020). Poulsen's findings go against the received wisdom on the centrality of credible commitments in the IPE literature on BITs; the same seems true for PTAs and environmental policy. The next

chapter will unpack the theoretical drivers of this trend, but it is sufficient to say that enforcement of environmental policy commitments through PTAs has been by coordination and not through sanctioned compliance mechanisms.

While Third-party enforcement clauses account for about 27% of Enhancement clauses, a closer examination reveals an even more fascinating insight. PTAs have adopted softer approaches to sanctioned compliance even when designing the requisite institutional arrangements. As Figure 4.19 below shows, linkage to the PTA dispute settlement mechanisms is rare (6%); there is preference for consultative mechanisms (53%) that seek to exhaust all other avenues of dispute resolution before embracing sanctioned enforcement; and explicit decoupling of the PTAs's dispute settlement mechanism from enforcement of environmental policy commitments (47%) - an approach knowns as 'dejudicialization' (Abebe & Ginsburg, 2019). Only the major trading partners, especially the US and Canada have sought to leverage the PTA's dispute settlement mechanism to enforce environmental policy commitments, largely driven by influence from domestic environmental interest groups concerned with the race to the bottom in domestic environmental standards due to trade liberalisation (Avery, 1998; Postnikov, 2014). Figure 4.19 below shows the various modes of Third-party enforcement of environmental policy commitments adopted in PTAs.

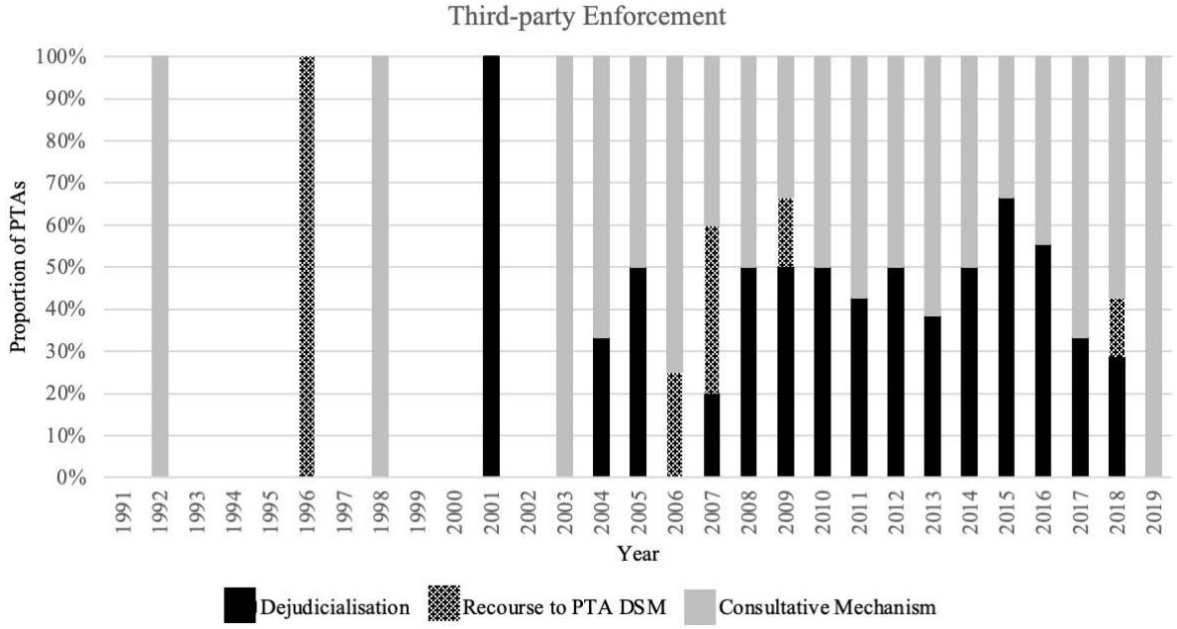
Figure 4. 19 Proportion of Third-party Enforcement mechanisms in Enhancement clauses.



Source: Author. Dejudicialization and consultative mechanisms dominate, but there is very limited linkage to the PTA's dispute settlement mechanism to ensure compliance.

Viewed over time, as Figure 4.20 below shows, the trend of eschewing the PTA's dispute settlement mechanism trend has been persistent.

Figure 4. 20 Proliferation of Third-party Enforcement mechanisms in Enhancement clauses.



Source: Author. Resource to PTA's dispute settlement mechanism is very rare thus indicating a clear reluctance to its use by states that are parties to PTAs.

The explicit avoidance of leveraging PTA's compliance mechanisms, and the emphasis on dejudicialization, also indicates a strong opposition to transgressing the norm of non-sanctioned compliance that is predominant in MEAs (Evers, 2017).[165] Only the major western environmental *demandeurs* with large markets who can get away with including these clauses (such as the US and Canada) have been consistently adopting sanctioned compliance for environmental commitments in PTAs. The EU prefers to use third-party consultative mechanisms, especially the civil society consultative mechanism, to enforce the environmental policy commitments (Martens

[165] Evers (2017) generates a typology of four types of norm transgressions: rejection, adaptation, inclusion and exclusion. A rejective transgression 'rejective transgression occurs when an outsider violates the regulative aspect of a norm to embrace their exclusion from international society and imbue it with positive' (pp. 789-790). The 'rejective' type is therefore the most relevant for dejudicialisation, as it indicates an explicit refusal to leverage the PTA's dispute settlement mechanism to enforce environmental policy commitments; this might also be understood as an effort not to undercut the concessions and benefits gained in the relatively more flexible MEAs especially by developing countries.

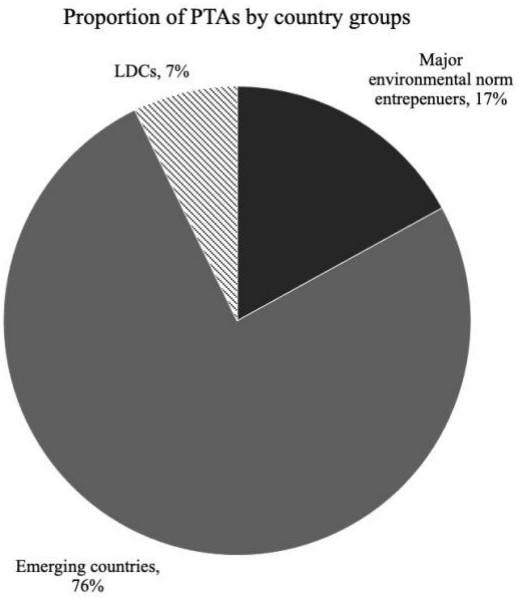
& Oehri, 2018; Orbie et al., 2016). Recall that sanctioned enforcement of environmental commitments was strongly resisted in the GATT EMIT debates, especially extra-jurisdictional, unilateral enforcement, but the major reading partners such as the US and Canada have adopted such measures in their PTAs. In short, states have been reluctant to leverage PTAs to 'transgress' norms dominant in environmental regimes, or articulate norms that erode sovereignty through sanctioned enforcement, as this would otherwise undercut the relatively more flexible MEA enforcement system (Brandi, 2013).

What the foregoing findings and discussion on ensuring compliance with environmental policy commitments through PTAs, through Enhancement clauses, reveal is that states have deliberately eschewed using PTAs as credible-commitment devices in enforcing environmental policy commitments. Instead, they have leveraged them as coordination-enhancing devices. Of all the findings in this chapter, this is the one that mounts a considerable challenge to the assumption that the growing trend of including environmental linkage clauses in PTAs necessarily promotes environmental protection. But when viewed against the backdrop of the GATT EMIT debates, as outlined in the Historical Antecedents chapter, this finding is not that surprising. It is beyond the scope of the present chapter to explore the drivers of this trend, a task that shall be undertaken in the subsequent chapters. But what is instructive here is the need to rethink and re-examine compliance mechanisms especially within the context of environmental linkage clauses in PTAs. These findings resurface the famous puzzle: is the good news about compliance good news about cooperation? (Downs et al., 1996).

Proliferation across country groups

Finally, are the trends in the proliferation of linkage clauses in PTAs consistent across the various country groups? Answering this question would set an important context for the subsequent chapter which explores the drivers of the variation of linkage clauses. As a start, Figure 4.21 shows the proportion of PTAs by country groups.[166]

Figure 4. 21 The proportion of PTAs by country groups analysed in this study.



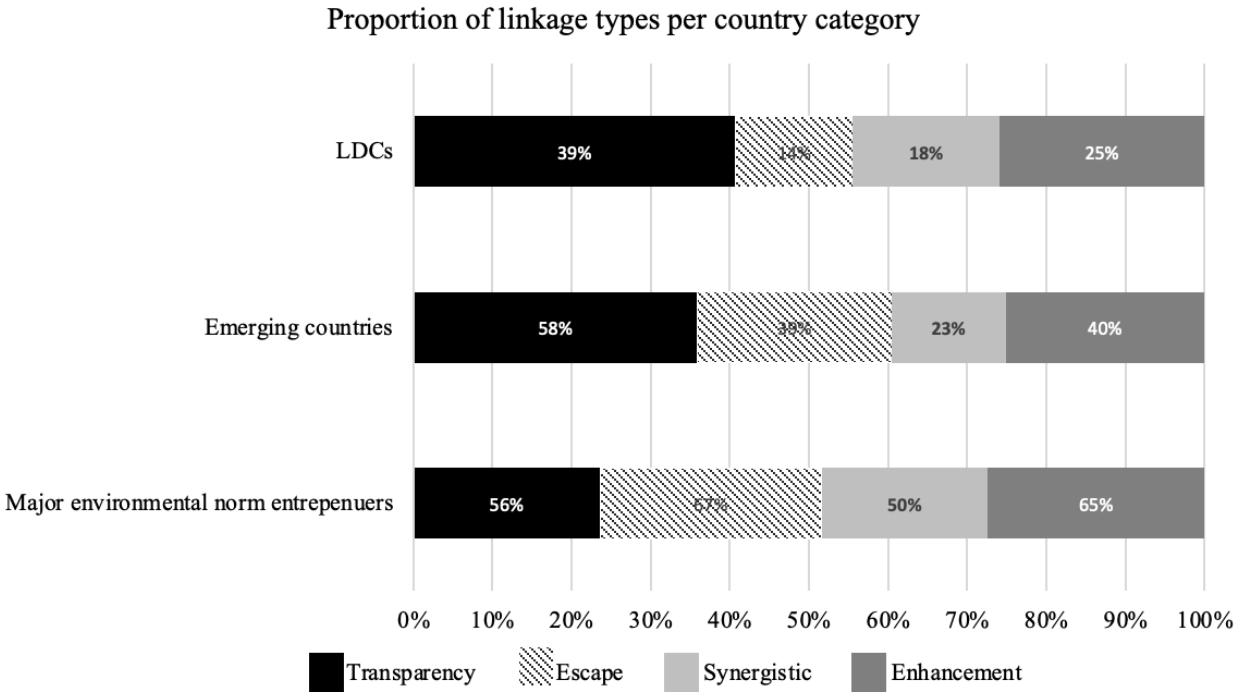
Source: Author. Emerging countries have concluded the biggest share of PTAs.

Below, we see a reflection of the countries' positions in the GATT EMIT debate replaying in PTAs, thus indicating the persistence of the fault lines.

[166] The concept of major environmental norm entrepreneurs (US, EU & Canada) is articulated in detail in the subsequent chapter. Suffice for the present purposes is that the countries in the category have been the main proponents of leveraging trade policy to pursue environmental policy objectives.

As Figure 4.22 below shows, PTAs of all three country groupings of LDCs, Emerging economies and major environmental norm entrepreneurs have predominantly used their PTAs to curtail green protectionism through Transparency and Escape linkage clauses.

Figure 4. 22 Proportion of linkage types by country category.



Source: Author. Linkage clauses on curbing green protectionism dominate in all country categories, but major environmental norm entrepreneurs (US, EU & Canada) have a higher proportion of linkage clauses that seek to promote environmental protection compared with the other two country categories. The figure should be interpreted this way: 65% of the PTAs of major environmental norm entrepreneurs, for instance, included Enhancement clauses in their PTAs; relative to other clauses, Enhancement clauses account for slightly less than 30% of all clauses of major environmental norm entrepreneurs.

On closer examination of Figure 4.22 above, there are some important distinctions amongst the country categories. Major environmental norm entrepreneurs had a greater proportion of environmental protection clauses than the other country groups. Specifically, 65% of all the PTAs of the major environmental norm entrepreneurs included Enhancement clauses, compared to 40%

for Emerging economies and a paltry 25% of PTAs that included at least one LDC member state. Again, this is not a surprising finding, as the major environmental norm entrepreneurs dominated the EMIT group debates, seeking to set the contours of the debate and advocating for more proactive use of trade policy to foster environmental governance. Emerging economies and LDCs had strongly opposed the environment protection approach, especially the unilateral and extra-jurisdictional use of trade sanctions to enforce environmental policy commitments. They were, however, receptive to, and even later in the debates advocated for, the use of Synergistic approaches. MEAs, and not trade agreements, as the latter group of countries had argued, are the appropriate forum for addressing transboundary and global environmental problems. Use of PTAs as credible-commitment devices to enforce environmental policy commitments is strongly reflected in the PTAs of the major environmental norm entrepreneurs (Bastiaens & Postnikov, 2017).

Turning to green protectionism clauses, more than half of PTAs of major environmental norm entrepreneurs and Emerging economies included such clauses. While preservation of domestic regulatory space through Escape clauses was the main concern of the major environmental norm entrepreneurs, the problem of notification and domestic environmental regulations with adverse trade effects through Transparency clauses was predominant for Emerging economies and LDCs.

So, what do these findings suggest? For the major environmental norm entrepreneurs, the domestic regulatory space is crucial for their pursuit of domestic environmental measures. In a way, this can be understood as an attempt by the major environmental norm entrepreneurs to shield themselves from litigation by their partners (Charnovitz, 2007, p. 695). After all, major environmental norm

entrepreneurs account for the majority of trade disputes based on environmental measures.[167] But for Emerging economies and LDCs, the main concern has been bringing into discipline the regulatory barriers of export markets, especially through the use of domestic environmental measures as non-tariff barriers (NTBs) by major trading partners (Schuenemann & Kerr, 2019; Verbruggen et al., 1995). Availability of information on the domestic environmental measures would allow for policy surveillance to deter the use of the domestic environmental measures as disguised barriers for trade (Salzman, 1997, p. 19). The implications of these findings across country groups will become more apparent in the next chapter, when exploring the drivers of variation in the design of environmental linkage clauses.

4.3 Conclusion

A common feature of PTAs is that they are increasingly including environmental linkage clauses, which can lead to the assumption that such clauses usually promote environmental protection. But is this true? As this chapter has demonstrated, most of the environmental linkage clauses in PTAs seek to curtail green protectionism. Only one-third of the clauses promote environmental protection. Even more remarkable is the reluctance by states to fully leverage the enforcement mechanisms of PTAs in pursuit of environmental policy objectives. Instead, they have predominantly used PTAs as coordination-enhancing and not credible-commitment devices in enforcing environmental policy commitments.

The foregoing findings indicate that the main objective of the environmental linkage clauses is to mitigate the adverse impacts of green protectionism, and not to foster environmental protection.

[167] The US, EU and Canada account for eight of the nine environmental disputes adjudicated by the multilateral system: 3 under the WTO and 5 under the GATT. See the list here: https://www.wto.org/english/tratop_e/envir_e/edis00_e.htm

When states have used PTAs to pursue environmental policy objectives, they have avoided leveraging the PTAs' full compliance mechanisms. What we have, therefore, is not a trend of 'greening of PTAs', but a 'green illusion'. The next important question is: what has been driving this pattern of linkage? The next chapter explores this question in detail, through rigorous econometric analysis. Specifically, the chapter will test the significance of policy externalities and adjustment costs in shaping the design of environmental linkage clauses, as posited by the theory of issue-linkage developed in Chapter 3, alternative theoretical explanations will also be tested.

Chapter 5: Explaining the Variation in the Design of Environmental Linkage Clauses

This chapter analyses the drivers of variation in linkage clauses. It does so by testing the theory of issue-linkage, focusing on the performance of the explanatory/independent variables. Alternative hypotheses are also tested.

Two arguments are advanced in the chapter. First, institutional costs (regulatory capacity) are the proximate driver of variation of environmental linkage clauses in PTAs. Second, there has been a diffusion of Synergistic and Enhancement clauses (especially coordination mechanisms), primarily driven by major economic powers (US, EU and Canada). Recall that these two clauses only comprise one-third of all environmental linkage clauses as outlined in the preceding chapter. Thus, to the extent there has been greening, it has been driven by these major economies. Overall, the chapter stresses the importance of institutional costs in issue-linkage.

The rest of the chapter is organised as follows. The first section recounts the main empirical studies that have been undertaken to explain the diffusion of environmental linkage clauses. The second section presents the operationalisation of the explanatory variables, while the third section outlines the method of analysis. Section four presents the results and a subsequent discussion, while section five concludes.

5.1 A Review of Empirical Analyses

Scholars have recently examined the drivers for inclusion of environmental linkage clauses in PTAs. Initial accounts focused on a handful of PTAs, while subsequent accounts focused on datasets comprising hundreds of PTAs. As foreshadowed in Chapter 1, five explanations have been advanced by this literature: i) relative bargaining power; ii) bargaining efficiency; iii) templating/imitation; iv) domestic environmental groups; and v) diffusion through socialisation. This review section will unpack these explanations in detail.

i) Relative bargaining power

Major trading powers such as the US, the EU and Canada, often leverage their relative bargaining power to shift and lock-in environmental policy commitments in their trade agreements (Abbot, 1993; Bastiaens & Postnikov, 2017; Cihelkova, 2012; Jinnah & Morgera, 2013a). Forum shopping by major trading powers is mainly about exporting domestic environmental preferences because of a strong domestic environmental lobby and an expressed commitment to certain environmental values.

Having failed to achieve its objectives in the multilateral trade institutions, especially the WTO during the Uruguay Round of Negotiations, the US pioneered the use of PTAs to achieve environmental policy objectives by including implementation of MEAs in the North American Free Trade Agreement (NAFTA), and linking their enforcement with the dispute settlement mechanism of the agreement (Jinnah & Morin, 2020). By doing so, the parties to NAFTA could potentially lose their trade preferences if they fail to implement the environmental commitments in the agreement. Canada also adopted a similar approach as the baseline template for its

subsequent agreements. The EU also includes ratification and implementation of MEAs, and other environmental policy objectives in its PTAs, such as conducting Sustainability Impact Assessments (SIAs) (Mbeva & Makomere, 2015).

The rationale for using PTAs to advance environmental policy objectives is that the greater relative bargaining power of the Major environmental norm entrepreneurs allows them to shift issues from forums such as MEAs (Postnikov, 2014). Even though the major environmental norm entrepreneurs often have same bargaining resources in both forums, the key difference is that MEA negotiations typically entail a large number of parties, and developing countries usually form a majority and their development and justice concerns tend to play a bigger role, whereas in PTAs, the number of parties (n) is small. So a major trading power can use their relative bargaining power to greater effect in bilateral and trilateral negotiations than in medium or large-n multilateral negotiations (Huggins, 2017; Scholtz, 2009).

The US, which has not ratified the UN Convention on Biodiversity (CBD), nonetheless used the US-Peru PTA to pursue biodiversity policy objectives that went beyond what Peru had committed to in its ratification of CITES (Jinnah & Morgera, 2013a, p. 326). So vigorous was the enforcement of the provisions in the US-Peru PTA that riots broke out in parts of Peru where citizens opposed enforcement of provisions against logging of certain tree species (Jinnah & Morgera, 2013a, p. 326). This can be explained by the fact that the US accepted the biodiversity protection provisions in the UN Convention on Biodiversity but not the provisions regarding the utilisation of biodiversity (Eckersley, 2004b, p. 38). Similar attempts to introduce environmental and other issues in the negotiation rounds that were to be launched during the infamous Seattle WTO

Ministerial Conference in 1999 were strongly objected to by developing countries (Khagram et al., 2002; J. Smith, 2001).

ii) Bargaining efficiency

Some scholars have argued that States often include non-trade related clauses for bargaining efficiency. By clustering issue areas into one agreement, negotiators save time and resources, compared to negotiating the issue areas separately (Davis, 2004; Morin & Jinnah, 2018; Poast, 2013). The logic of cost-benefit analysis underpins this argument, whereas states link the attainment of multiple policy objectives of two or more issue areas (Leebron, 2002; Maggi, 2016; Stein, 1980).

PTAs often include trade-related and unrelated issue areas, such as human rights (Hafner-Burton, 2005b), labour (Postnikov & Bastiaens, 2017), the environment (Morin et al., 2018), among others. Two arguments have been advanced to explain the logic of bargaining efficiency through linking of issue areas in PTAs. First, linking issue areas lowers endogenous bargaining costs. Endogenous costs can take the form of financial resources, such as logistical costs of negotiations, as well as time. For countries with limited institutional capacity, clustering issue areas in one agreement allows efficient use of their resources, compared with negotiating separate agreements for each issue area. An empirical study that analysed 522 PTAs argued that there was ample evidence that endogenous costs were the main explanatory factor for linking issue areas such as the environment, labour and human rights in PTAs, and not fears of protectionism or coercion by more economically powerful States (Milewicz et al., 2016, pp. 22–23).

Related studies have identified up to 280 different types of environmental provisions in about 600 PTAs, and argued that the proliferation is due to the attraction of the PTA as an appropriate linkage instrument (Jinnah & Morgera, 2013a; Morin et al., 2017, p. 365).[168] What 'appropriateness' means in this case remains unclear. If this explanation is to serve a systemic purpose, then there should be no significant temporal variation. The diffusion of environmental provisions in PTAs, where it is expected that more recent PTAs are more likely to include environmental clauses than older ones, presents a major challenge to the bargaining efficiency argument. As some scholars have argued, there has been a diffusion - not just proliferation- of environmental provisions in PTAs (Morin et al., 2019).

A major limitation of this argument is that environmental linkage clauses are lumped together, thus making it difficult to discern precisely which types of clauses are being analysed. In addition, lumping environmental linkage clauses together with those from other policy areas obscures the nuances of the debates on trade and environmental linkages.

iii) Templating/Imitation

Other scholars argue that negotiators often imitate initial agreements by copying their templates. This 'imitation' or 'templating' eventually leads to similar designs of PTA arguments. An analysis of over 600 PTAs for instance identified three 'models' of PTA templates: the US model; the EU model; and the Southern model (Leonardo Baccini et al., 2015, pp. 170–172). The US model comprises PTAs that have similar issue areas and design of the Dispute Settlement Mechanism akin to US PTAs. Canada's PTAs are a clear example of the US model. EU model PTAs are often

[168] Jinnah and Morgera (2013) identified about 32 different types of provisions in US and EU PTAs, while Morin et al. (2017) identified 280 types of provisions

focused on deep integration, such as Customs Union, as they seek to enhance cooperation beyond trade. The Southern model comprises shallow PTAs which have few issue areas other than trade; their focus is trade liberalization. Other studies have shown that PTA text is heavily borrowed from WTO Agreements (Hoekman & Mavroidis, 2015). Where some studies have claimed a diffusion effect given the similarity of many of the environmental clauses, they have not demonstrated a temporal variation (Berger et al., 2017).

The above argument is undermined by recent research that has shown that states adopt existing environmental clauses while innovating new ones (Morin et al., 2017). These authors suggest that the process of adoption of existing environmental clauses and the introduction of new ones have increased the complexity of the trade regime in general. Morin et al. (2019) identify 280 different types of environmental clauses coded from 680 PTAs; they do not however clearly outline the causal mechanisms leading to the variation in the design of the linkage clauses.

iv) Domestic environmental groups

Domestic politics often influence the design of international agreements, following the logic of Putnam's two-level games (Putnam, 1988). According to this explanation, including the environmental clauses in PTAs is largely influenced by US domestic environmental groups, starting with NAFTA. Concerned with the potential environmental impacts of trade liberalization through NAFTA, the US domestic environmental groups lobbied the US Congress to ensure that NAFTA had strong provisions that would ensure the contracting parties to the agreement maintain high environmental standards. Congress passed a bill, the Trade Promotion Agreement, to ensure that all subsequent US PTAs included strong enforcement mechanisms for the environmental

policy objectives. Later efforts by US trade officials to relax these environmental commitments failed, such as when the US Trade Representative tried to do so when negotiating the US-Peru PTA (Postnikov, 2019, p. 191). While it is the US's superior relative bargaining power that gets the environmental policy issues into the final PTA texts, domestic environmental groups nevertheless play a crucial role in preference formation by getting the issues into the negotiating agenda in the first place (Postnikov, 2019, p. 192).

Similar dynamics have been at play in the EU, where domestic environmental pressure has ensured that it is the EU's policy that all the PTAs it negotiates include strong commitments to promote environmental objectives. Since the EU has higher environmental standards than many other countries, the main objective is to ensure that their negotiating partners with lower environmental standards do not relax them further to attract footloose multinational corporations, especially in the form of foreign direct investments. Moreover, PTAs offer a more effective bargaining platform where major economies can leverage their superior bargaining power vis-à-vis smaller economies to pursue and enforce other policy objectives. The US, EU and Canada often include the ratification and implementation of MEAs in their PTAs, to an extent that is not always possible in the large-n multilateral environmental negotiations, where bargaining power is more diffuse in the form of negotiating coalitions, and where each country has one vote and where they are outnumbered by developing countries (Bhagwati, 2008, p. 79).

Accepting the demands of domestic interest groups, which often have significant domestic political influence, prompts policy makers to 'tie their hands' by locking-in such policies to insulate themselves from domestic politics (Bagwell & Staiger, 2001; Ehrlich, 2007; Fearon, 1997; Milner

& Rosendorff, 1996). While there is ample empirical evidence on the influence of domestic environmental groups in the advanced economies such as the US, EU, and Canada, there is limited systemic evidence of such dynamics especially in developing countries. For example, economies that are highly dependent on export of commodities largely based on the extractive industry, and agriculture, have often resisted inclusion of environmental commitments, among others, in international trade agreements, especially at the GATT and later at the WTO (Alam, 2005; Bhagwati & Srinivasan, 1995; Lechner, 2016b; Shahin, 1999; Wu, 2014). A major limitation of this argument is the assumption that domestic environmental groups are more influential than other interest groups, such as trade lobby groups, in trade negotiations. A significant body of literature reveals that this is not always the case, since trade interest groups in some trading partners have greater domestic political influence than environmental groups (Lechner, 2016b).

v) Diffusion through socialisation

A fourth explanation in the literature is that environmental clauses included in intercontinental PTAs are more likely to diffuse (Morin et al., 2019). In the study, the authors tested three hypotheses: i) that environmental clauses included in intercontinental PTAs are more likely to diffuse; ii) provisions first designed by economically powerful countries are more likely to diffuse; and iii) provisions first designed by environmentally credible countries are more likely to diffuse. These findings are insightful for transcontinental PTAs, but they do not account for the proliferation of environmental linkage clauses in PTAs whose parties are from the same continent. Moreover, the causal mechanisms driving the intercontinental diffusion of the linkage clauses are not very clear, in addition to the lack of disaggregation of the various types of environmental linkage clauses.

Overall, there are two limitations in the forgoing literature. First, while the arguments do not clearly explain the variation in the design of clauses that seek to curb green protectionism and distinguishing them from those that seek to promote environmental protection. There is therefore a gap in understanding the factors driving this variation. Second, and related, the arguments do not exhaustively account for the various mechanisms through which environmental protection clauses lead to the greening of PTAs, thus limiting their generalisability. These two limitations suggest the need for a generalisable explanation of the drivers of the variation in the design of environmental linkage clauses in PTAs, a task undertaken in subsequent sections.

5.2 Operationalizing variables

Since the empirical analysis in this chapter seeks to explain the variation in the design of linkage clauses, and their diffusion (or lack thereof), we need to identify and operationalise the key variables. The dependent variable - that which is to be explained - is the environmental linkage clause itself. The four linkage clauses - Transparency, Escape, Synergistic and Enhancement - are thus the main dependent variables.

Independent (explanatory) variables - which are the drivers of variation in the design of environmental linkage clauses - were operationalised along two categories: policy externalities; and adjustment costs. Variables capturing alternative explanations were also operationalised.[169]

[169] In operationalising the variables, measures of average and differences in dyads were adopted, following the conceptual underpinning of the variables. Where average measures were adopted, measures of differences were used to test for robustness of the variables, and vice versa.

a) Theory of Issue-linkage

This section outlines the operationalisation of key variables of the theory of issue-linkage.

Policy externalities

Positive policy externalities were operationalised in two ways. Negative policy externalities for PTAs would arise through green protectionism, which would impede trade liberalisation, and were operationalised in two ways. We should see concerns over green protectionism being more pronounced for bigger export markets; that is, the bigger the size of the export market, the greater the concerns over green protectionism by exporters (Schuenemann & Kerr, 2019). Market size was calculated as the aggregate size of the economies of the PTA members, in terms of Gross Domestic Product (GDP).[170] Data on GDP was sourced from the World Bank Development Indicators (WDI).[171] The variable was then labelled *GDP Aggregate*.

Related, a PTA member that controls a significantly large share of total market size of the PTA would be considered to have greater relative bargaining power. Relative bargaining power was operationalised through the adoption of distribution of economic power in the PTAs as a proxy. As empirical evidence has demonstrated '[b]y virtue of their size, large states are likely to be vested with disproportionate market power. They can exploit their monopoly power using tariffs, as well as quotas and other NTBs that duplicate a tariffs effect' (Mansfield & Busch, 1995, p. 728). Market concentration was measured using the Herfindahl-Hirschman Index (HHI), which calculates

[170] GDP Aggregate for a certain year was calculated as the sum of the GDP of all PTA members
[171] World Bank Development Indicators, Gross domestic product (GDP), current US$: https://data.worldbank.org/indicator/NY.GDP.MKTP.CD

concentration of GDP (market size) in a PTA. The index ranges from 0 to 1; values closer to 1 indicate a higher market concentration in a PTA (Drezner, 2009b, p. 67; Smith, 2000, p. 159).

Positive policy externalities were operationalised in terms of environmental protection. To measure commitment to domestic environmental protection, and concerns over relaxation of domestic environmental standards, the difference in the domestic environmental protection levels of the PTA members was adopted. Specifically, the difference between the domestic environmental protection levels was measured by calculating the difference between the highest and lowest levels in a PTA. The logic behind this approach is that in PTAs with large differences in the levels of domestic environmental protection, concerns over the race to the bottom (RTB) should be greater. PTAs with bigger differences in the stringency of environmental standards should be more likely to include clauses that promote environmental protection. Domestic environmental protection was operationalised through the *Environmental Performance Index* (EPI) developed by Yale University researchers (for studies that have used the index, see Andonova et al., 2017, p. 260; Bastiaens & Postnikov, 2017, p. 855).

Another type of positive policy externality - commitment to international environmental protection - was operationalised through the membership of Multilateral Environmental Agreements (MEAs) as a proxy measure. The total cumulative number of MEAs ratified by the PTA members was calculated using data from the International Environmental Agreements (IEA) dataset developed by Rolland Mitchell.[172] The expectation is that PTAs with parties that have ratified a higher number of MEAs would be more likely to adopt clauses that promote environmental protection.

[172] Data from Ronald B. Mitchell. 2002-2018. International Environmental Agreements Database Project (Version 2018.1). Available at: http://iea.uoregon.edu/.

Adjustment costs

Several types of political adjustment costs were operationalised. Liberal institutionalist theories have demonstrated the importance of domestic politics in international politics (Keohane & Milner, 1996; Mansfield et al., 2007; Mansfield & Milner, 2012; Moravcsik, 1997). Domestic pressure groups are especially influential, hence policy makers usually seek to "tie their hands" through international agreements to assuage these groups. That is, 'a principal way that a leader generates costly signals in crises is by creating audience costs that would be suffered if the leader backed down or backed away from a public threat or warning issued in a crisis. Audience costs arise chiefly from the reaction of domestic political audiences interested in whether foreign policy is being successfully or unsuccessfully handled by the leadership' (Fearon, 1997, p. 69). The variable *Veto players* was used, and it ranges between 0 and 1 on the Political Constraint Index, with higher values indicating greater constraints of domestic politics on policy makers.[173] Average values of *Veto players* in PTA were used. The variable measures political adjustment costs.

We should expect domestic trade interest groups to push for reduction of trade barriers in export markets. PTAs with members whose economies are highly exposed to trade, like commodity and agricultural exporters who are price takers and not price makers, should be more likely to include clauses seeking to curb green protectionism, but oppose inclusion of clauses promoting environmental protection. African states, which are highly reliant on agricultural and natural resource exports, have often complained that the EU at times uses environmental regulations as disguised forms of market restrictions (Schuenemann & Kerr, 2019). *Trade dependence* variable

[173] The Political Constraint Index (POLCON) Dataset: https://mgmt.wharton.upenn.edu/faculty/heniszpolcon/polcondataset/

was operationalised by calculating the ratio of trade (imports+exports) to GDP; that is (Trade/GDP). Aggregate figures for each PTA were considered. The variable measures economic costs.

Regulatory capacity is another political adjustment cost that was considered, to measure institutional costs. As the GATT EMIT group debates in Chapter 2 demonstrated, the administrative capacity necessary to ensure notification of domestic environmental measures was a persistent issue. We should therefore expect states with higher regulatory capacity to be more likely to include Transparency clauses. Regulatory capacity is also important for Escape clauses, as states that have invoked the clauses often "seek paperwork" to demonstrate that they have followed the logic of "efficient breach" (Pelc, 2010, 2016a, p. 40). We should also expect states with higher regulatory capacity to be more likely to adopt Escape clauses. The average value of the World Bank's *Regulatory Quality Index* of all members in a PTA was used, as it captures the capacity of governments to implement policies and regulations and is therefore a good proxy for regulatory capacity.[174] The variable ranges from 0 to 100, with higher values indicating higher regulatory capacity.

b) Alternative explanations

In addition to the theoretical explanations of this study, alternative explanations in the literature which have been reviewed in the introductory chapter, as well as control variables, were analysed.

[174] Calculated with data from https://datacatalog.worldbank.org/regulatory-quality-estimate-0

Major environmental norm entrepreneurs: In international economic affairs, relative bargaining power is usually understood as market size. States with significantly large economies, which serve as export markets for their partners, are considered to have greater bargaining leverage (Drezner, 2007b, p. 57; Hirschman, 1980; Krasner, 1976, p. 322). The US, Canada and the EU have been major proponents of the need to leverage PTAs to foster compliance with environmental policy commitments. In other words, these states have been major environmental norm entrepreneurs (e.g. see Bastiaens & Postnikov, 2017; Jinnah & Morgera, 2013a; Jinnah & Morin, 2020). To operationalise the variable *Major environmental norm entrepreneurs*, PTAs that included either of these states were coded 1 those without were coded 0. This variable would allow us to examine whether the 'greening of PTAs', through the promotion of environmental protection clauses, is primarily driven by the Major environmental norm entrepreneurs.

Major emerging economies (China): In a similar vein, some scholars have argued that some major emerging economies such as China have also leveraged their relative bargaining power in promoting environmental protection in their PTAs (Berger et al., 2017). If this is the case, then we should see states that have greater relative bargaining power leveraging it to promote environmental protection through their PTAs, akin to the Major environmental norm entrepreneurs. Including this explanatory variable in the analysis allows for the examination of whether China has also been leveraging its significant relative bargaining power to promote environmental protection through its PTAs. PTAs that include China as a member were coded 1, while those without were coded 0. The variable is labelled *China*.

Domestic environmental groups: Domestic environmental groups were also included in the analysis. Following the argument advanced by Morin and Jinnah (2018), this explanation holds that domestic environmental groups have been driving the 'greening of PTAs' through the inclusion of clauses promoting environmental protection. We should therefore see PTAs where such groups are influential, relative to trade lobby groups, being more likely to include environmental protection clauses, but less likely to include clauses addressing green protectionism. Measuring domestic environmental groups is however a challenging task. It has, however, been argued that domestic environmental groups are more likely to thrive in more democratic states (Morin et al., 2018, p. 122). If this is the case, we should then see PTAs with members with higher levels of democracy being more likely to include environmental protection clauses. To measure this explanation, the variable *Regime type* computed from the Polity IV database was used to test the hypothesis that domestic environmental groups were the proximate driver of inclusion of environmental clauses in PTAs.[175]

Bargaining efficiency/Imitation: The explanation of bargaining efficiency was calculated using the *PTA Depth* variable (Dür et al., 2014a). The bargaining efficiency argument holds that states will combine several issues and negotiate them together, as opposed to separately, as the former is a more efficient approach. The *PTA Depth* variable ranges from 1-7, with higher values indicating 'deeper' PTAs covering several trade-related issues. A corollary argument is that clustering the issue areas in a single agreement would also lead to path-dependence, with subsequent PTAs being more likely to adopt such an approach. If this argument is correct, then we should see a diffusion effect as most PTAs mimic NAFTA's environment-first template (Milewicz et al., 2016). Scholars

[175] Computed from Polity Score, and varies between 0-10.

of institutional design would call this isomorphism (Croucher & Woelert, 2018; DiMaggio & Powell, 1983). Similarly, the *PTA Depth* variable also measured whether the states were simply copy/pasting them from older PTA templates (Allee & Elsig, 2017).

Level of development: Concerns over relaxing of domestic environmental standards to attract foreign investment - also known as the Race to the Bottom (RTB) - have featured prominently in trade and environment debates. The main argument behind this theory is that lower income states will be more likely to engage in RTB especially in competition for limited footloose foreign investment capital. To assess this theory, the average GDP per capita of each PTA was calculated. The empirical expectations are that PTAs that have a lower value of GDP per capita will be less likely to adopt Compliance clauses, more likely to adopt Incentive clauses, and also more likely to adopt Trade-first clauses. Data for *GDP per capita* was drawn from the World Bank Development Indicators database.[176]

OECD: As an additional measure of wealth, PTAs including at least one member of the OECD were coded 1, and 0 for those without. The OECD has been a pioneer in advocating for the inclusion of Environment-first clauses in PTAs, and it also comprises wealthy countries (OECD, 2007). While there may be an overlap with *level of development*, the OECD variable allows for the distinctive examination of whether OECD members have been promoting the inclusion of environmental protection clauses in PTAs that include OECD members.

[176]Data from World Bank Development Indicators, GDP per capita (Constant 2010 US$), https://data.worldbank.org/indicator/NY.GDP.PCAP.KD

Rule of law*:* Upholding the rule of law plays an important part in the design of trade agreements (Duina & Breznau, 2002). Some scholars have stated that environmental clauses in PTAs from more environmentally credible trading partners are more likely to diffuse through (Morin et al., 2019). The authors argue that 'countries with a strong environmental credibility record are more likely to see the environmental provisions that they have originally designed to be duplicated by other countries. If environmentally credible countries are considered "norm entrepreneurs," they might prompt other countries to take up their standards' (Morin et al., 2019, p. 2607). We would therefore expect PTAs with parties that seek to uphold the rule of law, through ensuring environmental commitments especially those in MEAs are upheld, more likely to include environmental protection clauses. To assess this argument, the difference between the highest and lowest levels of Rule of Law in a PTA was calculated. Data was drawn from the World Bank's Governance Indicators. The greater the difference in rule of law amongst parties to a PTA, the more likely the inclusion of such clauses.

Size of membership: The variable *Members* seeks to capture the dynamics of the number of negotiation partners. Some scholars have argued that cooperation is easier amongst fewer members (Earnest, 2008), while others have argued to the contrary (Victor, 2006). These two possibilities are tested as regards prospects of linkage. The variable was calculated by counting the number of parties to a PTA.

Regional effects: Finally, regional interdependence was also included to account for regional effects. Regionalism has been an important dimension of international politics (Acharya, 2007, 2011). To account for regional contextual effects, this variable considers PTAs that share the same

region. The WTO categorises PTAs according to whether all members come from one of the defined geographical regions, or whether there are cross-regional members. PTAs that had cross-regional membership were coded 1, while those where all members came from one region were coded 0.

Table 5. 1 Summary of key independent/explanatory variables

Explanatory measure	Proxy measure	Variable
Policy externalities		
Negative policy externalities		
Market size (Aggregate)	GDP Aggregate	Export market size in a PTA
Market concentration	GDP Concentration	Concentration of export market in a PTA
Positive policy externalities		
International environmental policy commitments	Cumulative Number of MEAs (Average)	Commitment to international environmental norms
Domestic environmental differences	EPI Difference	Avoidance of race to the bottom
Adjustment costs		
Institutional costs	Regulatory Capacity	Measure of institutional capacity to foster linkage
Economic costs	Trade Dependence	Measure of economic costs of linkage, including to export and import firms
Political costs	Veto Players	Measure of dynamics of domestic politics
Alternative explanations		
Major environmental norm entrepreneurs	US, EU or Canada	Effect of relative bargaining power of major trading economies

Domestic environmental groups	Regime Type	Proxy for domestic environmental groups, which should be more active in more democratic states
Regional effects	Cross-regional PTA	Measures regional effects of PTAs
Bargaining efficiency	PTA Depth	Measures whether deeper PTAs more likely to include linkage
Wealth	OECD	Effect of OECD members in a PTA
Major emerging economies	China	Effect of China on linkage
Commitment to upholding the rule of law	Rule of Law	Measure of effect of commitment to the rule of law on linkage
Level of development	GDP per capita (log)	Measure effect of level of development
Negotiation dynamics	Size of membership	Number of PTA members

Note: Only PTAs notified to the WTO, and signed between 1990-2018, were considered. [177]

Summary statistics of the main explanatory variables are presented in Table 5.2 below.

[177] While this dataset is clearly smaller than comparative ones, especially DESTA and TRENDS, we can still yield important insights. Moreover, this dataset was developed before DESTAand TRENDS became publicly available, and it is coded entirely differently in line with the analytical framework used in this thesis. These limitations notwithstanding, insights from this study can be tested against the DESTA and TRENDS databases, since the major difference between the datasets is empirical. Teams with greater human resource capacity can therefore extend the analytical framework developed in this study to the broader DESTA and TRENDS databases; I welcome such efforts. Crucially, analyses in the present and subsequent chapters are to be interpreted within this context.

Table 5. 2 Summary statistics of key explanatory/independent variables

	Observations	Mean	Standard Deviation	Minimum	Maximum
GDP Aggregate (log)	6,916	27.67	1.99	0	30.63
EPI Difference	3,440	13.35	9.83	0	51.85
Regulatory quality	4,429	61.61	19.46	9.23	99.51
Rule of law	4,445	29.20	20.34	0	86.62
Trade dependence	6,059	80.99	41.39	15.07	304.15
Veto players	5,880	0.50	0 .21	0	0.86
Regime type	5,876	4.96	4.27	-10	10
GDP per capita (log)	6,025	9.59	0 .75	7.29	11.20
Cross-regional PTA	6,916	0.61	0 .48	0	1
GDP Concentration	6,188	0.72	0 .28	0.01	1
Size of membership	6,916	5.87	7.56	1	34
Major environmental norm entrepreneurs (MENE) (US, EU, Canada)	6,916	0.22	0 .41	0	1
MEAs Cumulative	6,526	61.98	25.48	0	136
OECD	6,916	0.59	0 .49	0	1
PTA Depth	6,006	3.55	2.25	0	7
China	6,916	0.06	0 .23	0	1

5.3 Econometric Analysis

Once the data was organised into the dataset, it was analysed using statistical modelling. This section presents an overview of the methods and results.

Method: Time-to-event statistical model

A time-to-event statistical model, also known as survival analysis, was used since it is the most suitable technique for testing the dynamic theory of issue-linkage. Specifically, the Cox proportional hazards model was used in this study.[178] The Cox model provides three key advantages critical to the design of this study. First, it allows for the measurement of explanatory variables *relative* to each other, as the theory of issue-area linkage would expect. This is important because the theory measures the explanatory power of each of its components relative to each other, to identify the *proximate* theoretical driver of linkage.

Second, the Cox model assumes that the explanatory variables are proportional to each other. This proportionality assumption allows for the evaluation of competing explanations (explanatory variables) and provides remedies for those variables that violate this assumption. Third, and crucially, the Cox proportional hazards model assumes a dynamic causal logic that varies over time; hence, it can measure diffusion effects. Equation 1 below presents the Cox proportional hazards model:

[178] I would like to thank Dr. Thomas Hale (University of Oxford) for assistance with the Cox proportional hazards analysis

$$h(t_i) = h_0(t)e^{X_i\beta} \qquad (1)$$

where t_i is the duration before signing of a PTA_i, X_i is a vector of independent/explanatory variables, and β represents their corresponding coefficients. The left hand side of the equation, $h(t_i)$, is the probability that PTA_i will include a certain linkage type at time t.

While the proportional hazards assumption is the core of the Cox model, scholars have noted that many studies often overlook the assumption, leading to incorrect inferences (Hale, 2015, p. 17; Licht, 2011, p. 227). All the models in this study underwent rigorous tests of the proportionality assumption by regressing Schoenfeld residuals. Violation of the proportionality assumption was remedied by multiplying the violating variable with a time interaction variable.[179] Following correction, inflated variables tend to lose their significance, and vice versa for underestimated variables.

Following Hale (2015, p. 18), the Cox proportional hazards model was then modified to incorporate the adjusted variables, as depicted in Equation 2 below:

$$h(t_i) = h_0(t)e^{[X_i\beta+(X_i\ln(t))]} \qquad (2)$$

[179] Correcting for violation of the proportionality assumption ensures that we can assess the explanatory power of the variables relative to each other, over time. This captures the dynamic causal logic of the theory of issue-linkage

Results

Four models were estimated, and the results can be interpreted as follows. First, hazard values with a value greater than 1 indicate a higher likelihood of the (linkage) event occurring, while values below 1 indicate a lower likelihood; a value of 1 indicates that the variable has no effect on the likelihood of linkage. Second, several variables violated the proportionality assumption. Hazard values with inflated values will tend to lose significance over time. The adjusted results are reported in Table 5.3 below, and the hazard values indicate how a given variable is likely to influence linkage, relative to the other explanatory variables.

Table 5. 3 Results of Cox proportional hazards analysis (without robustness checks)

	Transparency	**Escape**	**Synergistic**	**Enhancement**
Policy Externalities				
GDP Concentration	1.07 (0.412)	**1.36**** **(0.176)**	1.23 (0.289)	0.93 (0.542)
GDP Aggregate (log)	**1.10**** **(0 .0449)**	1.10 (0.148)	**1.19**** **(0.098)**	**1.15**** **(0.073)**
EPI Difference	1.00 (0.003)	1.00 (0.003)	1.00 (0.006)	1.00 (0.004)
Cumulative number of MEAs (Average)	**1.00**** **(0.003)**	1.00 (0.003)	1.00 (0.005)	1.00 (0.005)
Adjustment Costs				
Regulatory Capacity (Institutional costs)	**1.01***** **(0.004)**	**1.01***** **(0.004)**	1.00 (0.013)	**1.09***** **(0.033)**
Trade Dependence (Economic costs)	**1.00*** **(0.001)**	**1.00*** **(0.001)**	1.00 (0.001)	1.00 (0.001)
Veto players (Political costs)	0.803 (0.207)	1.139 (0.384)	0.610 (0.339)	1.262 (0.536)

Alternative Explanations

Major environmental norm entrepreneurs (MENE) (US, EU, Canada)	0.86 (0.089)	1.04 (0.102)	**1.51*** (0.207)**	**1.32** (0.172)**
Regime Type	0.93 (0.053)	**0.90* (0.047)**	0.97 (0.034)	1.02 (0.097)
Cross-regional PTA	**1.40*** (0.154)**	1.12 (0.106)	**2.03** (0.613)**	1.00 (0.152)
Bargaining efficiency (PTA Depth)	1.02 (0.0186)	**1.03* (0.019)**	1.07 (0.050)	1.03 (0.035)
OECD	0.93 (0.096)	0.95 (0.095)	1.15 (0.230)	**0.78* (0.111)**
China	**0.72* (0.128)**	**0 .72** (0.107)**	0.75 (0.220)	0.91 (0.699)
Rule of Law	1.00 (0.005)	0.99 (0.006)	1.00 (0.012)	**0.97*** (0.007)**
GDP per capita	**0.66*** (0.088)**	**0.69*** (0.096)**	0 .74 (0.273)	0.98 (0.256)
Size of membership	**0.989* (0.006)**	**0.981*** (0.005)**	0.973*** (0.009)	**0.979*** (0.007)**

Note: * p<0.10; ** p<0.05; *** p<0.001. GDP = gross domestic product; GDP pc= gdp per capita; OECD= Organisation for Economic Co-operation and Development; Numerical values close to 1 show no effect, higher than 1 show an increased likelihood, and less than 1 a decreased likelihood of linkage. Numbers in bold are statistically significant. Hazard ratios, and not coefficients, are reported.

Several robustness checks were conducted to ensure that the statistical models reported in Table 5.3 were reliable. The variable MEAs cumulative was replaced with the annual number of MEAs concluded by PTA members each year. To test the robustness of the Regulatory Capacity variable, it was replaced by the Government Effectiveness, with data drawn from the World Bank Governance Indicators.[180] The variable EPI was replaced with the Sustainable Society Index

[180] The Government Effectiveness variable captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of

(SSI).[181] Finally, the Regime type variable was replaced with the Voice and accountability variable, which is developed by the World Bank Governance Indicators.[182] Variables that passed the robustness tests are listed in Table 5.4 below, while the results of the actual models are found in the Annexure.

policy formulation and implementation, and the credibility of the government's commitment to such policies

[181] http://wikiprogress.org/data/dataset/datatables

[182] https://datacatalog.worldbank.org/search?query=%20voice-and-accountability-estimate-0

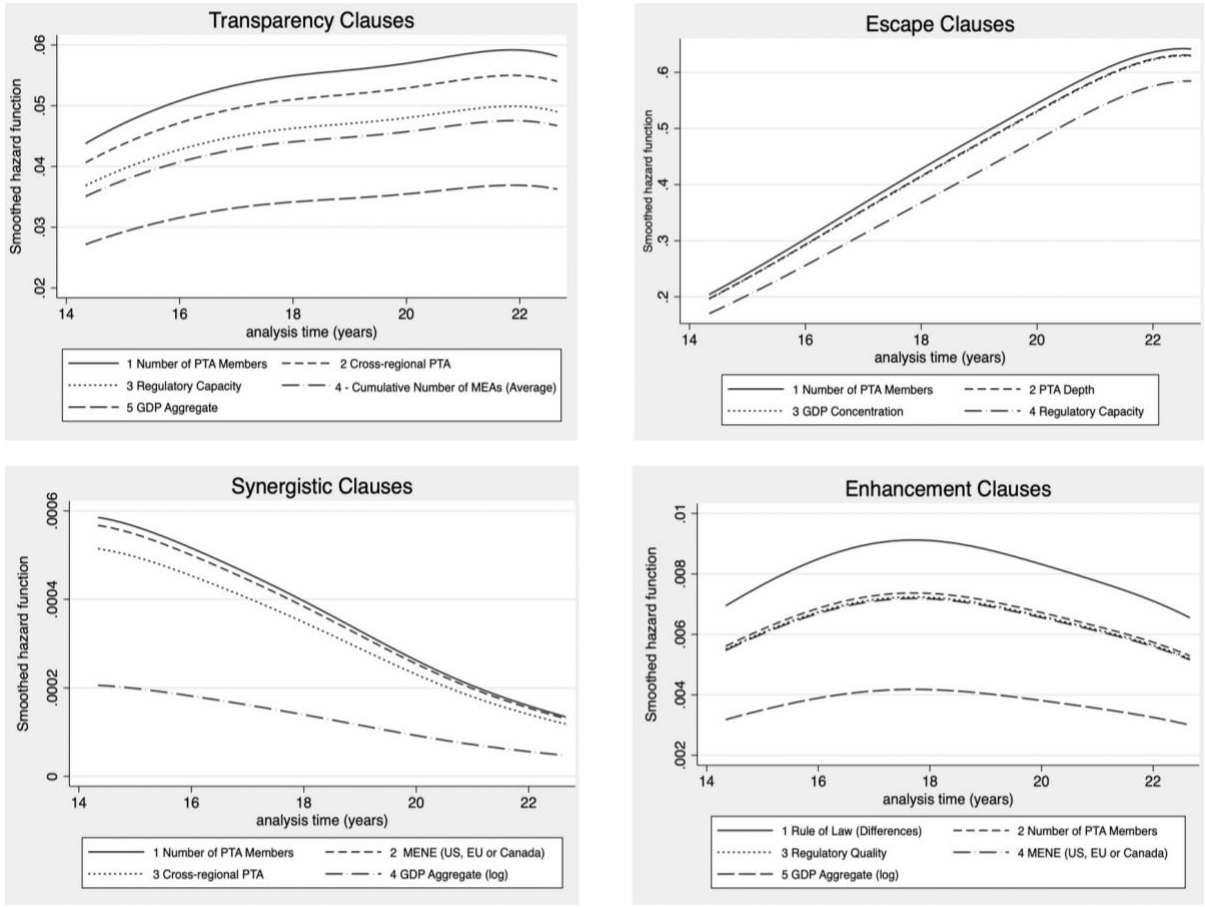
Table 5. 4 Overall summary of the statistically significant variables, upon robustness testing

	Transparency	Escape	Synergistic	Enhancement
Policy Externalities				
GDP Concentration		✓ (+)		
GDP Aggregate	✓ (+)		✓ (+)	✓ (+)
EPI Difference				
Cumulative number of MEAs (Average)	✓ (+)			
Adjustment Costs				
Regulatory Capacity (Institutional costs)	✓ (+)	✓ (+)		✓ (+)
Trade Dependence (Economic costs)				
Veto Players (Political costs)				
Alternative Explanations				
Major environmental norm entrepreneurs (US, EU, Canada)			✓ (+)	✓ (+)
Regime Type				
Cross-Regional Diff.	✓ (+)		✓ (+)	
PTA Depth		✓ (+)		
OECD				
China				
Rule of Law				✓ (-)
GDP per capita				
Size of membership	✓ (-)	✓ (-)	✓ (-)	✓ (-)

Note: '+' shows a positive effect/increased likelihood (e.g. PTAs with greater concentration of market power in one member country will be more likely to include Escape clauses), while '-' denotes a negative effect/lower likelihood (e.g. PTAs where there is a greater difference in members' Rule of Law commitment are less likely to include Enhance clauses). '✓' denotes a statistically significant relationship

Even though we are interested in analysing the effects of the variables over time, the numerical values reported in Table 5.3 above only indicate the 'risk' (likelihood) of linkage. It would, however, be better to see the substantive effects of the variables relative to each other, and over time. Visual representations to capture this dynamic effect were generated. To do so, variables in the models that are statistically significant were selected, and generated hazard curves for a hypothetical PTA-dyad using mean values of each variable (Hale, 2015, p. 20). For binary variables, the number 1 was adopted, rather than the average value, for theoretical clarity. Thus, for a variable such as Major environmental norm entrepreneur, only the presence of a Major environmental norm entrepreneur in the PTA, denoted by the number 1, would be visualised. Figures 5.1 - 5.6 present the graphical representation of the statistically significant models.

Figure 5. 1 Drivers of variation in the design of environmental linkage clauses in PTAs.

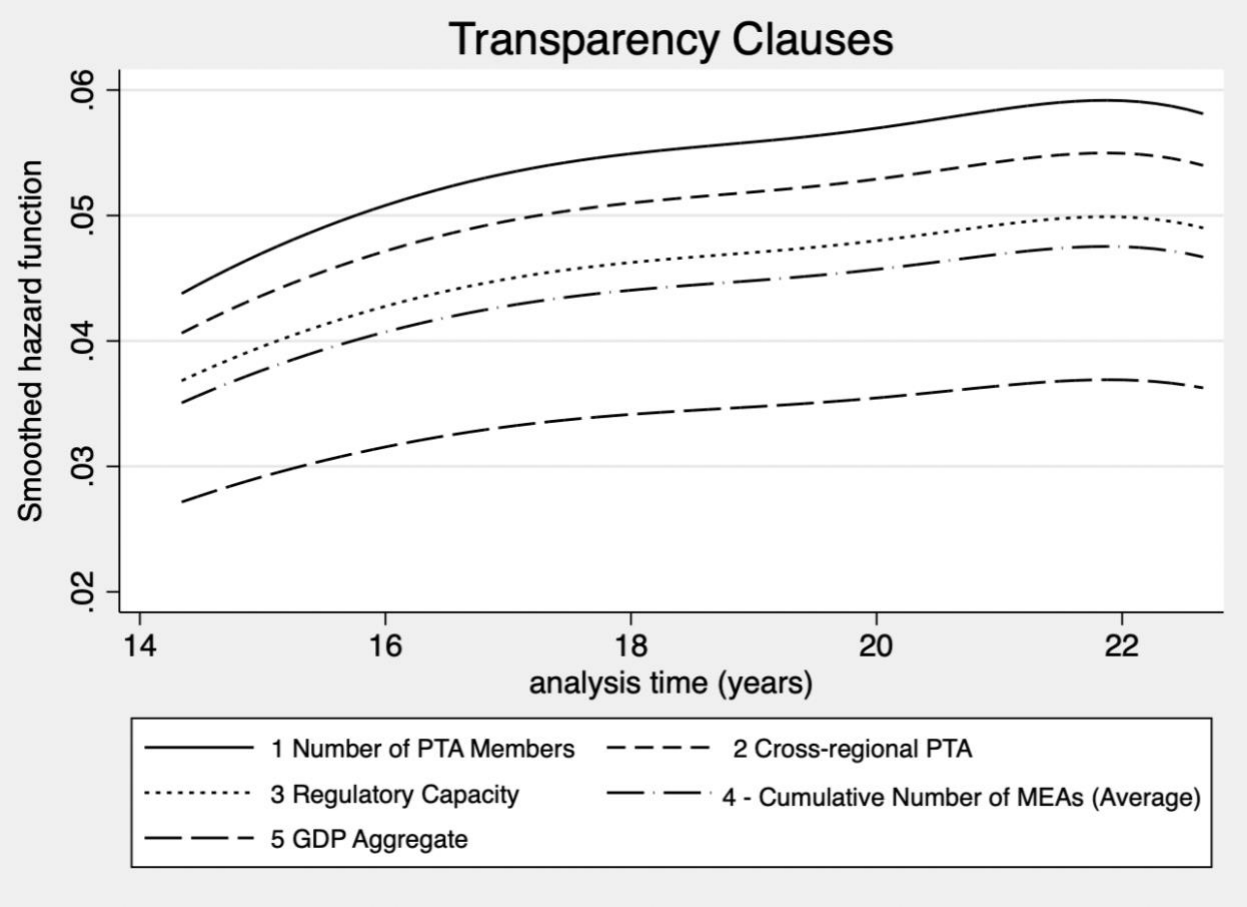


The x-axis is the number of years; only later years are captured. Higher curves indicate higher impact of variables, and falling curves indicate a diffusion effect, as the variables lose their significance over time. By contrast, rising curves indicate that the variables are gaining significance; that is, they are growing more important. Only statistically significant variables were plotted.

Figure 5.1 should be interpreted as follows. For example, the number of PTA Members, Major environmental norm entrepreneurs, bigger aggregate markets and cross-regional PTA have been the most significant variables driving the uptake of Synergistic clauses, and the falling curves indicate a diffusion effect as the variables become less significant over time. That is, the Synergistic clauses are proliferating in PTAs, regardless of the effect of these variables. Conversely, PTAs that have fewer members, that are deeper, have less market concentration and lower regulatory capacity are more likely to include Escape clauses.

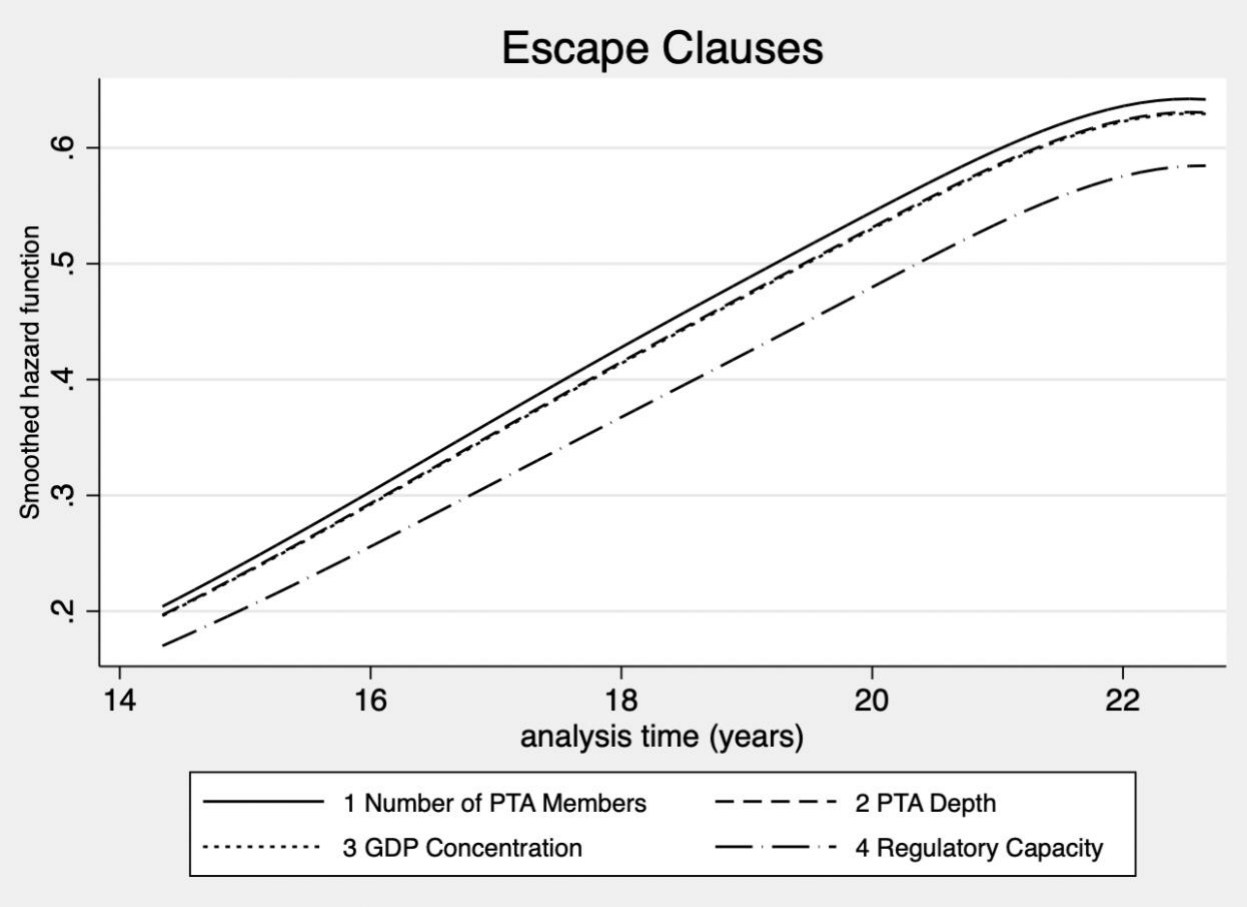
Overall, the main finding, as depicted in Table 5.4 above is that negative policy externalities GDP Aggregate - market share and GDP Concentration - market share concentration) and institutional costs (Regulatory Capacity) are the main drivers of variation in linkage clauses. Remarkably, the positive policy externalities have no significant effect; that is, the average cumulative number of MEAs adopted by PTA members, and differences in their domestic environmental standards, have no effect on the likelihood of inclusion of Synergistic or Enhancement clauses. Each of the findings, as per particular linkage clauses, is presented below in turn.

Figure 5. 2 Drivers of Transparency clauses.



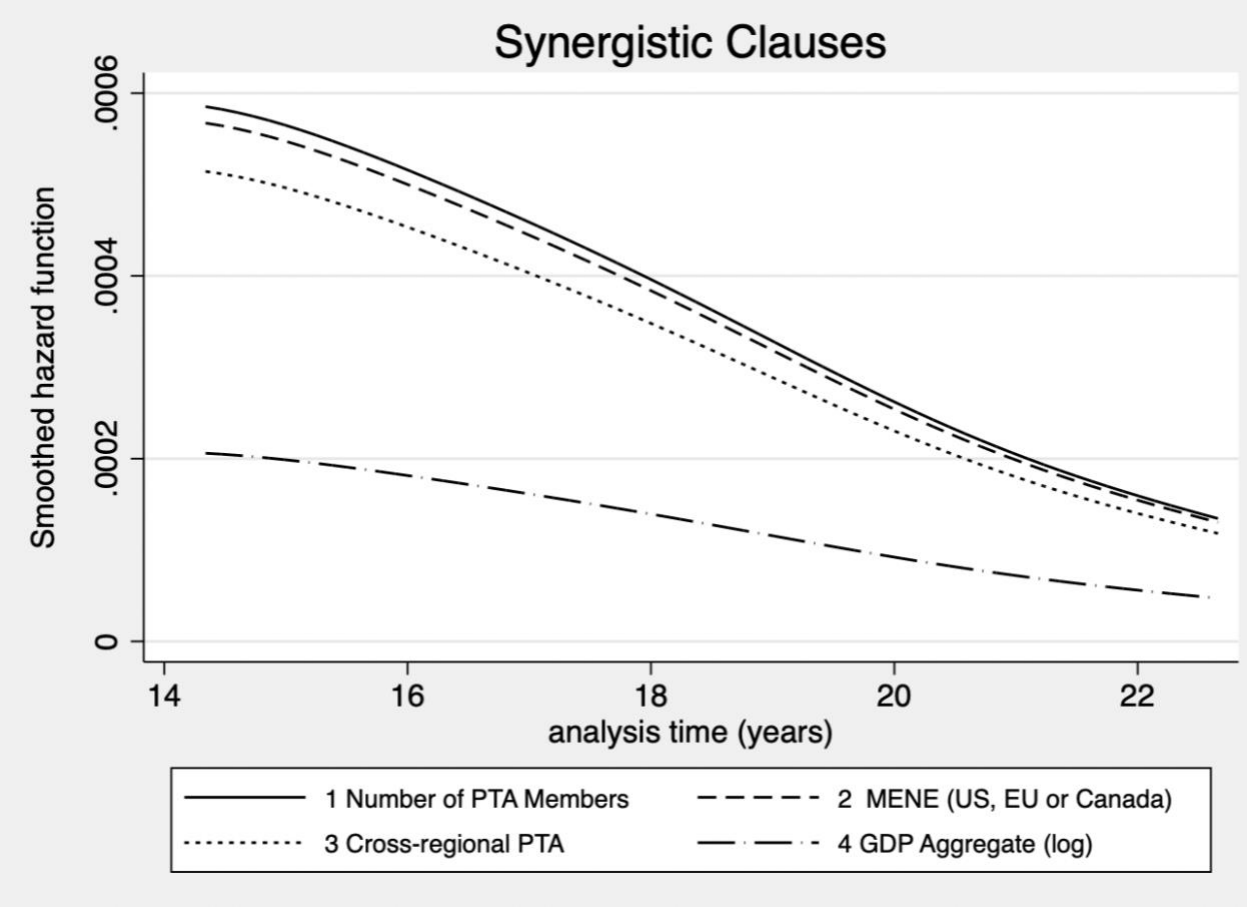
Overall, all the statistically significant variables have been growing in importance over time. Cross-regional PTAs with fewer members, who have concluded a higher number of MEAs on average and with a higher regulatory capacity, on average, are more likely to include Transparency linkage clauses in their MEAs. Such PTAs include members who represent a bigger market share on aggregate (GDP Aggregate).

Figure 5. 3 Drivers of Escape clauses.



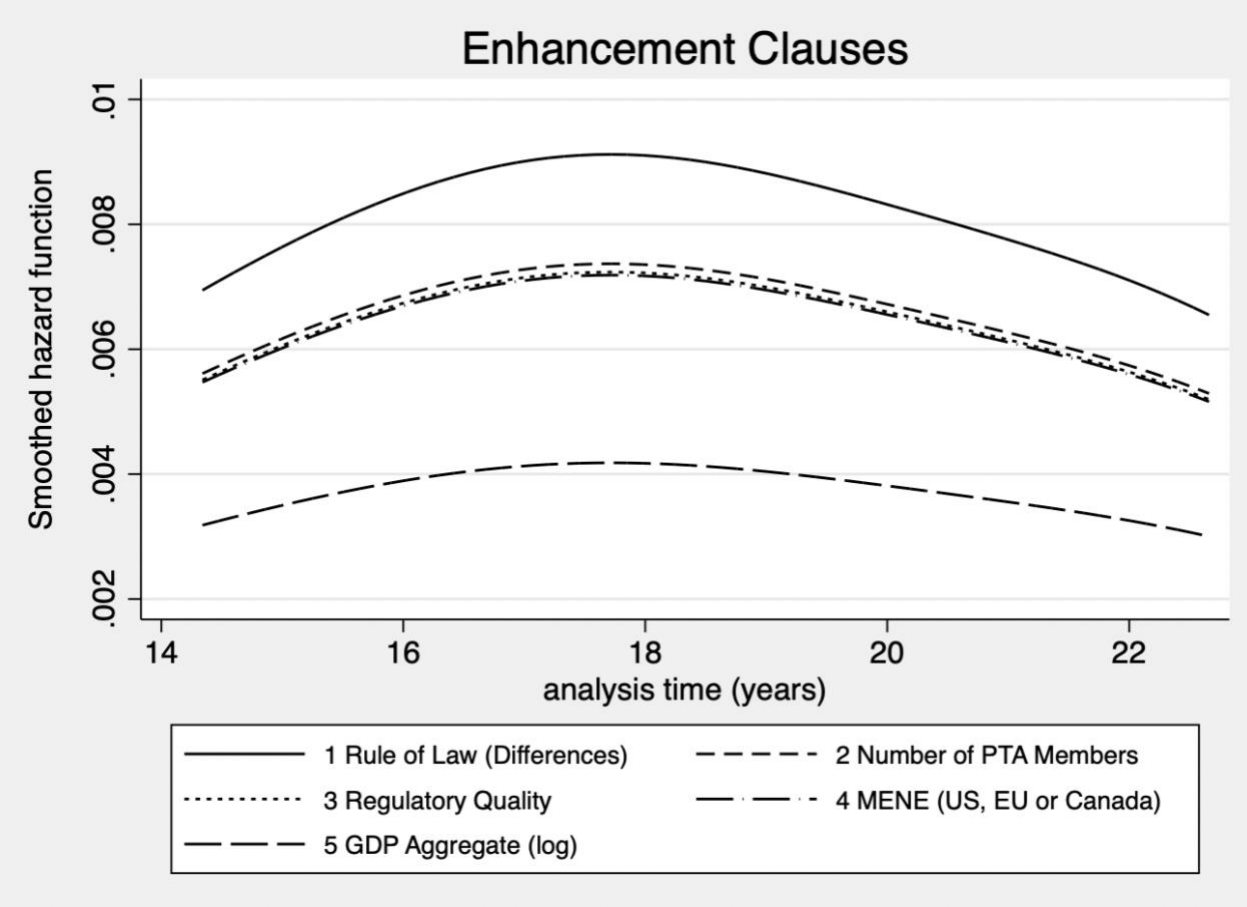
Escape clauses are more likely to be found in deeper PTAs with fewer members, higher regulatory capacity, and a greater concentration of market share (GDP Concentration). All these variables have however been growing more important in determining the likelihood of the inclusion of Transparency linkage clauses (on the environment) in PTAs.

Figure 5. 4 Drivers of Synergistic clauses.



There is a clear diffusion of Synergistic clauses in PTAs. The diffusion has been primarily driven by Major environmental norm entrepreneurs (US, EU and Canada) who are also major trading partners, as well as PTAs with members from across regions (Cross-regional PTAs) and in PTAs with fewer members (usually bilateral PTAs). Moreover, the bigger the aggregate market share, the more likely the inclusion of Synergistic clauses.

Figure 5. 5 Drivers of Enhancement clauses.



Members of PTAs with higher regulatory capacity on average, which include a Major environmental norm entrepreneur (US, EU or Canada) and representing a bigger aggregate market, are more likely to include Enhancement clauses. However, greater differences in the commitment to the rule of law (Rule of Law) and PTAs with more members are less likely to include Enhancement clauses.

The foregoing results indicate that while the main explanatory variables have been driving the inclusion of Transparency and Enhancement linkage clauses, there is a clear diffusion of Synergistic clauses. In addition, there is a slight diffusion of Enhancement clauses, meaning that they are becoming more common in PTAs regardless of the drivers of linkage. There is, therefore, significant and rapid 'greening of PTAs' through Synergistic clauses, but a slower 'greening' through Enhancement clauses. This finding has to be interpreted while keeping in mind that clauses

that promote environmental protection comprise only one-third of all environmental linkage clauses in PTAs that were coded for the present study.

It would be more instructive to dig deeper into the Enhancement clauses, since they are the most important indicator of the 'greening of PTAs. That is, which mechanisms have states adopted to leverage PTAs to enforce environmental policy commitments? As Table 5.5 below shows, institutional costs (Regulatory Capacity) have been the most proximate driver of variation in Enhancement clauses. In other words, the institutional capacity of PTA members is more important than their levels of international environmental commitments (Cumulative MEAs (Average)) or differences in the levels of domestic environmental standards (EPI Difference). Not surprisingly, the Major environmental norm entrepreneurs (US, EU and Canada) are significantly more likely to include the various types of Enhancement clauses in PTAs. It also seems PTAs with a greater concentration of market share (GDP Concentration) have been more likely to leverage it to include third-party enforcement in their Enhancement clauses.

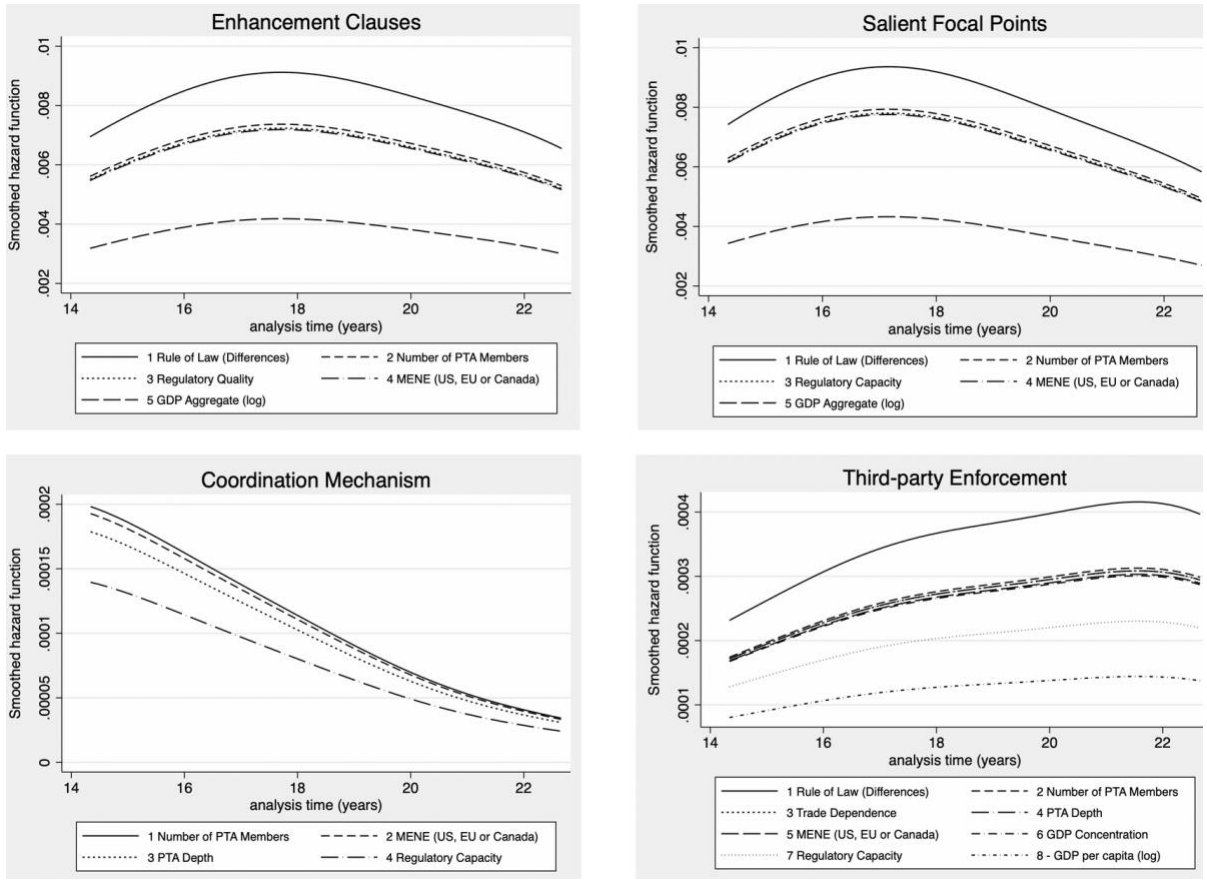
PTAs whose members have greater commitment to the rule of law are more likely to include the various types of Enhancement clauses in their PTAs, especially third-party enforcement.

Table 5. 5 Overall summary of performance of variables (Enhancement sub-clauses)

	Salient Focal Points	Coordination Mechanism	Third-party Enforcement
Policy Externalities			
GDP Concentration			✓ (+)
GDP Aggregate	✓ (+)		
EPI Difference			
Cumulative MEAs (Average)			
Adjustment Costs			
Regulatory Capacity (Institutional costs)	✓ (+)	✓ (+)	✓ (+)
Trade Dependence (Economic costs)			
Veto Players (Political costs)			
Alternative Explanations			
Major environmental norm entrepreneur (MENE) (US, EU, Canada)	✓ (+)	✓ (+)	✓ (+)
Regime Type			
Cross-Regional Diff.			
PTA Depth		✓ (+)	✓ (+)
OECD			
China			
Rule of Law	✓ (-)		✓ (-)
GDP per capita			✓ (+)
Size of membership	✓ (-)	✓ (-)	✓ (-)

Note: '+' shows a positive effect/increased likelihood (e.g., PTAs whose members have higher levels of development, on average, are more likely to include third-party enforcement mechanisms), while '-' denotes a negative effect/lower likelihood (e.g., PTAs with members whose economies are more dependent on trade are less likely to include Third-party enforcement clauses). '✓' denotes a statistically significant effect.

Figure 5. 6 Drivers of various compliance mechanisms of Enhancement clauses.



There is a clear diffusion of Coordination Mechanisms, thus indicating their growing adoption. There is a slight diffusion of the adoption of domestic and international environmental standards as salient focal points of coordination. Third-party enforcement is however only common in PTAs with wealthier members, which more likely include the Major environmental norm entrepreneurs (US, EU and Canada) who have a higher regulatory capacity on average.

To get a clearer view of the diffusion effect of the various compliance mechanisms in Enhancement clauses, Figure 5.6 above shows the effects of the main explanatory variables. The main finding is that while parties are increasingly including enforcement of MEAs and domestic environmental standards in their Enhancement clauses, there is a clear diffusion of Coordination Mechanisms (usually through diplomatic coordination via government agencies). Only PTAs with Major environmental norm entrepreneurs (US, EU and Canada), where a few members have greater market concentration hence relative bargaining power (GDP Concentration), where the members are less trade dependent, are wealthier, and with a higher regulatory capacity on average, are more likely to include third-party enforcement mechanism as part of their Enhancement clauses. It is, therefore, evident that most parties prefer using PTAs as coordination-enhancing devices (Salient focal points + coordination mechanisms) to using them as credible-commitment devices (through third-party enforcement). Crucially, this is a growing trend, as is illustrated in the graphs above.

5.4 Discussion

This section discusses the performance of each of the hypothesis underpinning the theory of issue linkage. Overall, the statistical analysis supports the four hypotheses as laid out in the theory of issue-linkage presented in Chapter 3. Three main points emerge from the analysis. First, the aggregate size of export markets and the concentration of market power have been significant drivers for the inclusion of clauses that mitigate green protectionism. Second, and surprisingly, differences in domestic environmental standards and the ratification of MEAs are not key factors driving the inclusion of clauses that promote environmental protection. Third, institutional costs (regulatory capacity) are the key adjustment costs driving the variation in the design of environmental linkage clauses. Each of the four hypotheses is discussed in turn below. The performance of alternative arguments will also be considered.

Two hypotheses posited that the design of clauses that mitigate green protectionism is driven by negative policy externalities and adjustment costs. In the first hypothesis, Transparency clauses are more likely to be included in PTAs that represent bigger market size, and whose members have higher institutional capacity. Moreover, PTAs with parties that have ratified a higher number of MEAs are more likely to include Transparency clauses. This finding suggests that as states continue to ratify MEAs and implement them at the domestic level, they are increasingly communicating the domestic environmental measures to their PTA trading partners, thus increasing transparency of the measures. Indeed, statistics from the WTO Environment Database, to which some members have reported their domestic environmental measures through PTAs, show a rising trend in such notifications.[183] Overall, the hypothesis finds support that negative policy externalities (green protectionism) and high adjustment costs (institutional) drive the inclusion of Transparency clauses.

The second hypothesis posits that negative policy externalities (green protectionism) and low adjustment costs are the main drivers for the inclusion of Escape clauses in PTAs. The findings show that greater market concentration in PTAs is the key negative policy externality driving the inclusion of Escape clauses in PTAs. This finding is consistent with the literature that has found that greater market concentration increases the concerns over, and likelihood of, the use of non-tariff barriers in trade agreements (Mansfield & Busch, 1995). What is surprising in terms of adjustment costs, however, is the finding that only institutional costs are a significant driver for the inclusion of Escape clauses. Earlier research has argued that Escape clauses are designed to

[183] https://edb.wto.org/

limit the influence of domestic political lobby groups (Pelc, 2009; Rosendorff & Milner, 2001). While this may be true for general escape clauses, it is not the case for environmental escape clauses. PTAs whose members had greater institutional capacity were however more likely to include the environmental Escape clauses, as they have the capacity to "seek paperwork" (Pelc, 2016a, p. 40) to justify the application of their domestic measures via the environmental escape clause.

Turning to the third hypothesis, that positive policy externalities and low adjustment costs are the main drivers for the inclusion of Synergistic clauses in PTAs, the findings lend support to the hypothesis. None of the adjustment costs is significant. The main policy externality, however, is the bigger aggregate market size of PTAs members. That is, Synergistic clauses are more likely to be included in PTAs that represent bigger aggregate markets. Synergistic clauses are however driven by the Major environmental norm entrepreneurs (US, Canada and the EU), perhaps as sticks to promote the diffusion of environmental goods and services and other market-based mechanisms. It could also be that these Major norm entrepreneurs account for a significant market share of the mechanisms in Synergistic clauses, thus promoting their export (B. Avery & Boadu, 2004; Mathew & Córdoba, 2009). That differences in domestic environmental standards or the propensity to ratify MEAs do not have a significant effect on the inclusion of Synergistic clauses suggest widespread absence of enthusiasm for the promotion of such clauses across PTA members, regardless of their environmental credibility. This is especially the case for developing countries (Balineau & De Melo, 2013; de Melo & Solleder, 2020).

Finally, the fourth hypothesis, which posits that positive externalities and high adjustment costs are the main drivers for the inclusion of Enhancement clauses in PTAs, finds strong support especially in adjustment costs. Institutional costs are the most important driver of variation in linkage. PTAs whose members have higher institutional capacity, on average, are more likely to include such Enhancement clauses in their PTAs. It is surprising to note that other adjustment costs, especially domestic environmental groups do not find support in the analysis, perhaps indicating their limited scope to PTAs whose members experience such dynamics, such as the US, Canada and the EU. Also noteworthy is that differences in domestic environmental standards and commitment to international environmental policy through ratification of MEAs is not a significant factor. An interpretation of this finding could be that concerns over environmental protection (positive policy externalities) are more widespread and are not a preserve of members with more stringent domestic environmental standards, or those that have ratified more MEAs. Also important to note is that Major environmental norm entrepreneurs have been a key driver for the inclusion of Enhancement clauses in PTAs. Thus, it is apparent the Major environmental norm entrepreneurs and PTAs with wealthier members are more likely to include Enhancement clauses, thus indicating the reluctance of less wealthy states to adopt such linkage. This is not surprising since issues of capacity have been central to international environmental regimes.

That economic costs from trade dependence and political costs from veto players do not attain significance suggests that these factors, while prominent in the PTAs of the major trading powers such as the US, Canada and the EU, are not prevalent (Postnikov & Bastiaens, 2020). It is also apparent that states often copy/paste the Escape clauses but not the others. Also, the significance of cross-regional diffusion of Transparency and Synergistic clauses suggests the prevalence of

concerns over the introduction of domestic environmental measures under the guise of green protectionism, as well as the widespread policy commitments to the liberalisation of environmental goods and services. Overall, the theory of issue-linkage provides a more general explanation of the design of the environmental linkage clauses, while the alternative explanations are important complements.

In summary, the findings in this chapter support and demonstrate the utility of the theory of issue-linkage in providing a general explanation on the variation in the design of linkage clauses. Alternative explanations can however complement the explanation offered by the theory of issue-linkage. Of the alternative explanations, the most compelling one is that Major environmental norm entrepreneurs have been a key driver for the inclusion of environmental protection clauses in PTAs (Jinnah & Morin, 2020).

5.5 Conclusion

This chapter sought to address the gap in the literature whereby there is an absence of a theoretical exploratory framework that is both general, internally consistent and parsimonious and has the capability to be able to explain both the presence and variation of environmental linkage clauses in ways that can be generalised for all PTAs, and not those just involving major western economies like the US, Canada and the EU. Overall, the findings provide support and demonstrate the utility of the theory of issue-linkage as developed in Chapter 3. The key findings are that the aggregate market size of PTA members, market concentration and institutional capacity are the main drivers for the inclusion of clauses that aim to mitigate green protectionism; on the other hand, institutional capacity is the main driver of the inclusion of environmental protection clauses in PTAs.

To probe these findings - the significance of institutional costs and the use of PTAs as coordination-enhancing devices - the next two chapters examine the case study of the East African Community (EAC) PTA. The EAC PTA is a particularly interesting case study, as it does not include a major trading bloc; moreover, its members are developing countries keen to improve their economies through trade policy while also using their PTA to cooperate on environmental protection. Only by relaxing the relative bargaining power dynamic, which has been the focus of 'greening of PTAs' case studies, can we gain a better understanding of the role of PTAs as coordination-enhancing devices in ensuring compliance with environmental policy commitments.

Chapter 6: The East African Community: Treaty Design

To probe the findings of the previous chapters, this chapter and the next will examine the East African Community (EAC) PTA as a qualitative case study. Adopting a qualitative approach (through historical and archival research, document analysis and semi-structured interviews), the case study tests the theory of issue-linkage and the findings of the large-n analysis within a rich context, a strategy that is crucial to overcoming the limitations of using a parsimonious rational choice theory. This is consistent with the overall strategy of this study, which is to aim for theoretical elegance and parsimony in its explanations, but also seek to ensure that the theory is both informed by and tested against the historical record.

The present chapter examines the design of environmental protection clauses in the EAC treaty text (treaty design), while the next chapter analyses the regional environmental policies adopted to implement the EAC treaty (design of implementation mechanisms). In doing so, both chapters test the fourth hypothesis of the theory of issue-linkage on the design of clauses promoting environmental protection, which posits that: *when generating positive policy externalities that incur high adjustment costs, states will adopt Enhancement linkage clauses.* Focusing on one hypothesis enabled a detailed analysis of the various compliance mechanisms adopted when using PTAs to promote environmental protection, an issue that is contentious as was revealed in the GATT EMIT debates analysed in Chapter 2. It is, therefore, beyond the present chapter to examine the three other hypotheses. Concerns over green protectionism in the EAC will, however, be briefly discussed in the penultimate section of the next chapter.

Both chapters demonstrate the regional sources of initiatives to promote environmental protection through the EAC PTA, which contrasts with the dominant narrative of a one-way diffusion of these norms from the global North to the global South. The present chapter, however, shows that the EAC partner states initially adopted a credible-commitments approach by including a dispute resolution mechanism to implement the environmental policy commitments in the EAC treaty text, contra the findings of the previous chapters. However, the next chapter will show that the EAC partner states abandoned the credible-commitments approach in favour of coordination-enhancing mechanisms based on diplomacy, and absent sanctions or third-party compellence mechanisms, when designing regional environmental policies to implement the environmental provisions of the EAC PTA treaty text. High institutional costs were a key factor, as the EAC partner states relied on donors for support. The present chapter will show the origins of the challenge of high institutional costs, while the next chapter will demonstrate the significance of these costs in shaping the design of implementation mechanisms.

The rest of the chapter is organised as follows. The first part justifies the selection of the EAC as a' 'in-between' case, and recaps the theoretical expectations based on the theory of issue-linkage developed in the preceding chapters. To set the context for the case study analysis, the second part traces the historical antecedents of environmental issues in the EAC region. The third and fourth parts analyse the design of Enhancement (compliance) clauses in the EAC Treaty text and its accompanying Memorandum of Understanding for Cooperation on Environment Management, while the fifth section concludes the chapter.

6.1 Why the East African Community (EAC) PTA?

The EAC is a regional community, formed through a PTA, that is both economically and politically integrated on a par with the EU. It currently comprises six members (Kenya, Uganda, Tanzania, Rwanda, Burundi and South Sudan). Kenya, Uganda and Tanzania are the founding members. Thus, the EAC is more than a basic PTA, as it is premised as a deep regional economic community (Mwithiga, 2015).

When the East African Community (EAC) PTA treaty was signed on 30 November 1999, and entered into force on 7 July 2000, it was the fourth time lucky.[184] Even though countries in the East African region had cooperated on regional issues before, all the previous attempts to formalise the cooperation ended up in precipitous failure.[185] Despite the political momentum for regional cooperation in Africa at the time, the first EAC became defunct a decade later, in 1977. This was mainly due to irreconcilable political differences between the member countries (Nye, 1963, 1965). The first EAC, a customs union, was formed at the height of the political decolonisation movement in Africa, organised around the ideology of Pan Africanism (Nye, 1963, p. 477). This ideology held that African countries could only progress and succeed if they formed a regional, and ultimately a continental, political federation (Mangeni & Juma, 2019, p. 30).

[184] The founding EAC member states were Kenya, Uganda and Tanzania, but the current EAC has six members (Kenya, Uganda, Tanzania, Rwanda, Burundi and South Sudan). Rwanda and Burundi joined the EAC in July 2007, while South Sudan joined in April 2016

[185] These are the formation of the East African High Commission (EAHC) (1948-1961), the East African Common Services Organisation (EACSO) (1961-967) and the first East African Community (EAC) in 1967

The EAC is a useful 'in-between' case to test the theory of issue-linkage and probe the findings of the previous chapters (Gerring, 2008; Seawright & Gerring, 2008, p. 298).[186] It is an 'in-between' case because 1) the EAC is deeply integrated like the EU, and to a lesser extent NAFTA, so we would expect a more judicialised approach of ensuring compliance with environmental protection commitments in the PTA. Moreover, the large-n analysis in the previous chapter shows that deeper PTAs are more likely to include such environmental clauses; and 2) EAC partner states did in fact set up a dispute resolution system to implement the environmental policy commitments in the PTA. The institutional similarity with the EU, including the development of regional environmental laws, suggests conformity with the EU-style approach to credible commitments. Yet it did not confirm, as the implementation measures abandoned the approach in favour of diplomatic coordination absent sanctions or third-party enforcement. Also, the EAC is the hardest South-South case for the theory of issue-linkage because it is most likely to go against the grain of the theory for the two reasons. If the theory can hold in this case, it should also be able to hold for other South-South PTAs. Further justification of the EAC case study is presented below.

First, we do not know as much about how developing countries have used PTAs to ensure compliance with their environmental policy commitments. As the previous empirical chapters have shown, states have largely used their PTAs as coordination-enhancing, and not credible-commitments, devices to promote compliance with their environmental policy commitments. As discussed in previous chapters, credible-commitment compliance mechanisms usually attach costs such as sanctions to noncompliance, while coordination-enhancing mechanisms rely on diplomatic coordination absent sanctions. The case study thus allows for testing the finding in previous

[186] An 'in-between' case as used in this study is a combination of both 'deviant' and 'most similar' cases.

chapters that South-South PTAs are more likely to adopt coordination-enhancing compliance mechanisms when using their PTAs to promote environmental protection.

Where smaller states have been considered, this has often been in the context of a PTA including major economies or a focus on major emerging economies (Elliott, 2003; Jinnah & Morgera, 2013a; Mehra, 2010; Shen, 2008). This is especially critical to understanding how developing countries have managed their economic and environmental interests. Where the literature has broadened the scope of analysis, it has focused on hypothesis testing of large datasets (e.g. Blümer et al., 2020; Morin et al., 2018, 2019). Case studies of PTAs comprising developing country partners are especially rare. Of theoretical, political and economic interest, therefore, is a detailed account of how developing countries use their PTAs as coordination-enhancing devices to promote environmental protection.

Second, the EAC is undertaking rapid economic integration through trade, while deepening regional cooperation on environmental issues. In a broader sense, Africa, as a continent that has placed trade policy at the centre of their economic transformation, is largely missing in literature. That African states concluded the biggest (geographically) and most complex regional integration project through the ratification of the Africa Continental Free Trade Agreement (AfCFTA) (Mangeni & Juma, 2019) warrants an examination of how environmental, and climate change issues, have been addressed. The EAC case study is a key building block towards such efforts.

Tensions between economic transformation through trade and addressing environmental challenges such as climate change are acute in developing country PTAs such as the EAC. The

EAC is especially important as it is the most integrated regional economic community (REC) in Africa (AU et al., 2019, p. 25). In addition, the EAC (together with the Common Market for Eastern and Southern Africa (COMESA) and Southern African Development Community (SADC)) established the Tripartite Free Trade Area, which served as the precursor to AfCFTA (Andriamananjara, 2015). We would therefore expect these countries to prioritise economic over environmental concerns.

Third, and crucially, the analysis of the EAC case study challenges prevailing claims in literature that often assume a one-way diffusion of environmental protection standards in PTAs, from the global North to South. As shall be demonstrated, EAC partner states were party to a continent-wide PTA (the AEC) that included environmental protection clauses as early as in 1980, which was much earlier than the conclusion of NAFTA. The conventional view in the literature is that NAFTA set the precedent of including environmental protection in PTAs in a substantive sense. A key theoretical implication of this claim is the need to probe and identify the varied sources of environmental protection norms, and the need to conduct such analysis in a dynamic manner. It is therefore anticipated that the detailed analysis of the EAC case study will highlight the need for more context-specific examination of PTAs, especially those underrepresented in the literature.

Finally, since there is an array of environmental issues, the case study chapters (especially Chapter 7) will focus on climate change. Climate change is widely regarded as the biggest environmental challenge facing the world. Reports by the Intergovernmental Panel on Climate Change (IPCC) have identified Africa as one of the regions that are the most vulnerable to climate change. The horn of East Africa has, for instance, experienced major famines, which have been exacerbated by

climate change. Also given that the EAC comprises least and developing countries that have placed trade policy front and centre in their economic transformation efforts, the case study offers an important 'laboratory' to examine how EAC partner states (and maybe others with a similar profile) navigate the trade and climate nexus. At a broader level, the case study has the potential to yield insights relevant to the emerging debate on how trade policy instruments can be used to address climate change.

But before proceeding with the analysis, it is important to highlight caveats. The EAC case study is not meant to be representative of all developing country PTAs. Rather, it is meant, first and foremost, to expand the realm of theoretical and political analysis of the subject matter of the present study in ways that expose the limits of generalisation of environmental linkage clauses in PTAs based on research that does not cover all regions of the world. In doing so, the core expectation is to contribute to the growing body of the relevant empirical and theoretical literature.

The empirical analysis relied on archival research accrued from field research at the EAC Headquarters in Arusha, Tanzania in 2018. Position papers from the GATT repository were also consulted. To complement the archival and desk research, interviews with relevant EAC officials were conducted. It is important, however, to note that the relevant EAC departments, such as the Climate Change Unit, had skeletal staff who had not served for very long; thus limited institutional memory. It was not possible to trace staff who had participated in the negotiations of the EAC treaty. These challenges notwithstanding, the archival research included key documents that captured the deliberations that yielded important insights. Conversations with the EAC Chief Librarian indicated that the archival material, especially on environmental protection, was rarely

consulted. Thus, it is hoped that bringing such material to light through this case study is also a useful contribution.

6.2 Historical Antecedents of Environmental Issues in the EAC Region

Since the revival of the fourth iteration of the EAC in 1999, hereafter the EAC, countries in the East African region have achieved significant milestones on regional cooperation.[187] Chief among these achievements is cooperation on pressing environmental issues, especially climate change. Even though the EAC Treaty of 1999 does not mention climate change, the issue emerged and resulted in a suite of regional regulatory instruments. Prior to the adoption of the EAC treaty in 1999, the eventual partner states had engaged in several multilateral and regional debates and initiatives on how to reconcile environmental and trade issue areas. The next two subsections relay the key debates at the multilateral GATT and regional initiatives to address environmental issues (including through their inclusion in agreements on other issue areas). As will be demonstrated, these debates would significantly shape the eventual design of environmental provisions in the EAC treaty text.

EAC Member States in Multilateral Trade Debates

As discussed in Chapter 2, the GATT EMIT group convened thirteen debates on the relationship between trade policy and environmental issues. EAC partner states actively participated in the debate, as part of the Africa negotiating bloc. Tanzania, on behalf of African countries, presented a position paper on the matter at hand, highlighting four key points (GATT Council, 1991).

[187] See Annex V for an organogram of the institutional arrangements of the EAC

First, Tanzania argued that poverty, due to low levels of economic development, was the main driver of environmental degradation. They gave the example of poor communities who relied on harvesting firewood from forests to meet their energy needs (GATT Council, 1991, p. 2). Hence, in order to address environmental degradation, it was imperative to address poverty, especially through trade. The distinguished diplomat from Tanzania then juxtaposed this logic against the opposite challenge in developed countries: rapid industrialization and consumerism had led to significant environmental degradation. Hence for African countries, trade was a function of development and '[s]o, we reiterate development is a categorical imperative' (GATT Council, 1991, p. 3).

Second, the diplomat from Tanzania noted the complexity of the relationship between trade and environment. To elaborate on this complexity, the diplomat articulated an argument premised on the 'factor of ninety-argued'. They argued that if highly industrialised countries found the relationship between trade and environment to be complex, then the issue was more complex, by a factor of ninety-eight, for less developed countries at the time. The number ninety-eight reflected the percentage of intellectual property rights held by industrialised countries. The logic of the argument aside, the main point was that the debate could not be resolved through a short debate.

Third, the submission by Tanzania underscored the importance of context when considering the relationship between trade and the environment. For African countries, the key issue of concern was the dumping of toxic wastes in their territories by industrialised countries. The problem was compounded by the complaint that the hazardous and toxic waste materials were domestically

prohibited in industrialised countries. Moreover, for African countries, their environmental problems were 'primordial', exacerbated by underdevelopment (GATT Council, 1991, p. 2). It is, therefore, not surprising that the management of hazardous wastes and ozone depletion, mentioned in the position paper, eventually ended up in the EAC treaty text.[188] In later years, the EAC partner states engaged in the development, and adopted, of the Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa in 1991.

Finally, the diplomat argued that given the disparities between the responsibility and capacity between industrialised and less developed countries, there was a need to transfer resources and technology from the former to the latter. In a bid to illustrate their point vividly, the diplomat recalled a speech by the former US Secretary of State, Robert McNamara, in 1985 to the FAO, which emphasised that Africa's patrimony was important to the international community at large. Thus, it was crucial to safeguard Africa's environmental and natural endowments through cost-sharing, with industrialised countries footing a significant fraction of the cost (GATT Council, 1991, p. 3).

In sum, African countries, including EAC partner states advocated for a trade-first approach through the separation of trade and environmental issue areas in trade agreements. Their rationale was the focus on trade as an instrument of economic growth and development, and the high costs they would incur from taking up environmental commitments. But if they were to support the

[188] Chapter 19 Article 113 (Prevention of Illegal Trade in and Movement of Toxic Chemicals, Substances and Hazardous Waste) and Chapter 19 Article 112(2)(f) 'promote the use of non-ozone depleting susbstances [sic] and environment-friendly technologies;'

integration of the two issus, then they would need support from industrialised countries through the transfer of resources to developing countries. In other words, environmental policies should not undermine economic/trade objectives, and that implementation costs should be offset by external sources, specifically industrialised countries. This theme would significantly influence the design of the EAC treaty text and its implementation mechanisms.

Regional sources of environmental protection norms

Meanwhile, well before the GATT EMIT debates, African countries were debating and developing regional environmental policies at the continental level. Regional agreements also frequently included environmental provisions. The debates and policy development commenced during the colonial era at the turn of the 20th century, and during and after decolonisation. Efforts to develop a regional environmental agreement commenced with the Convention on the Preservation of Wild Animals, Birds, and Fish in Africa signed in London on 19 May 1900 (the "London Convention of 1900"), concluded by colonial powers (Curry-Lindahl, 1969, p. 116). The Convention was, however, never adopted. It is therefore evident that environmental policy issues were on the radar of African policy makers for a long time. But was there an 'African logic' to these continental agreements? And more important for our immediate purposes, were environmental issues incorporated into regional agreements on other issues?

Answering these questions would provide a much-needed regional context for the origins of environmental protection norms in the African continent, an issue often absent or overlooked in the literature. Contemporary accounts often point to the multilateral forum as if it were the only source of environmental norms, of which African countries are 'norm-takers'. Claims that

countries 'copy/paste' template agreements often miss the context within which such agreements are developed. That African countries debated and developed regional agreements to reflect their unique circumstances and context shows that they did not simply 'copy/paste' templates from other regions. As will be discussed shortly, African countries have often eschewed sanctioned enforcement of (environmental) agreements.

Indeed, African countries have a long history of debating, developing and adopting continental environmental agreements. Moreover, they have a long history of including environmental provisions in regional agreements. An analysis of all the sixty-nine (69) regional agreements concluded since 1963 under the auspices of the Organisation of African Union (OAU) and its successor the African Union (AU) reveals that about one-third (29%) of the regional agreements include environmental provisions. Moreover, about one-fifth (22%) of the agreements sought to leverage the agreements to promote environmental policy objectives through improving environmental standards.[189]

Before the adoption of the EAC treaty in 1999, 30% of all the African regional agreements included environmental provisions broadly defined, while 25% included commitments to pursue environmental policy objectives.[190] This indicates the prevalence of leveraging regional agreements on other issues to pursue environmental policy objectives. These efforts, however, largely left implementation to the partner states. At least one EAC partner state was party to the agreements, thus indicating their exposure and engagement in regional environmental policy

[189] Analysis by Author, with data coded from the African Union's treaty repository: https://au.int/en/treaties
[190] Analysis by Author, with data coded from the African Union's treaty repository: https://au.int/en/treaties

making and inclusion of environmental clauses in other agreements. As will be demonstrated in the next section, some of the environmental issues dealt with at the regional level, and the approach to designing regional (environmental) agreements, largely influenced the design of the EAC treaty text.

A key feature of the African environmental agreements has been either the lack of implementation mechanisms, or the adoption of 'soft' forms of compliance mechanisms. Enforcement of the agreements through third-party mechanisms such as arbitration or adjudication has always been largely absent, and where included it is viewed only as a last resort. The implementation mechanisms of African regional environmental agreements have been described as leaving a lot to be desired, due to weaknesses in the administrative, legal, institutional and financial foundations for its implementation and the pragmatic means to honour the international law principle of "*pacta sunt servanda*"' (IUCN, 2004, p. 17). Briefly stated, the African logic for environmental cooperation was a more "system-oriented" legal approach...taking into consideration a broadview of environmental management…' and 'on prevention and management, rather than suppression and penalty' (IUCN, 2004, p. 2).

Three key regional agreements cemented the continental approach to regional environmental cooperation: i) the African Convention on the Conservation of Nature and Natural Resources (Algiers Convention); ii) African Economic Community (Abuja Treaty); and iii) the Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa. Even though other regional agreements included environmental clauses, these three agreements articulated the logic of environmental cooperation

in Africa. The underlying logic was the need to adopt an approach that would harness the synergy between economic development and environmental cooperation. Coordination, and not third-party, mechanisms were the preferred mode of ensuring compliance.

To safeguard the continent's veritable natural resources and biological diversity endowment, the Algiers Convention of 1968 was concluded after several decades of negotiations and debates. It was the first indigenous Africa-wide agreement on conservation of natural resources (Takang, 2014, p. 167). As its adoption came shortly after the formation of the OAU in 1963 to champion decolonisation of the African continent, the Algiers Convention radically reformulated the approach to environmental conservation from the previous one adopted by colonial powers:

> '...contrary to its predecessor and in the spirit of the Arusha Manifesto, the principal objective of the Algiers Convention was, in some respects, radically different. The *integration of conservation into development needs, especially in the fundamental principle of the Convention, stands out*. Indeed, the departure from command-and-control to a management style of conservation is visible in several articles of the Convention.' (Takang, 2014, p. 174, emphasis own).

Moreover, the Algiers Convention embodied a 'laissez faire' approach to environmental policy, whereby implementation was largely left to partner states. There were no implementation or compliance mechanisms in the agreement. This was a significant departure from previous agreements drafted by colonial powers. The Algiers Convention 'changed from a powerful control tool in the hands of the colonial powers into an instrument for transformation in the hands of the African people' (Takang, 2014, p. 186). Decades later, and largely due to developments in

multilateral environmental diplomacy, the Algiers Convention was significantly revised and renamed the Maputo Convention in 2003.

But African states would embark on revamping the Algiers Convention in later decades, partly to adapt to the changes in international environmental policy and diplomacy. The major change to the Algiers Convention was the inclusion of implementation mechanisms. These included a 'Conference of the Parties (the "COP"), a Secretariat, and Subsidiary Bodies mechanisms ...a financial mechanism, reporting and information techniques' (IUCN, 2004, p. 17). The purpose of the revision was 'not... to integrate the provisions of all existing global Conventions – to which most African countries are committed – but to remain the principal vehicle through which issues of particular concern to the continent may be considered, and concerted action taken. *These include African responses to global issues and commitments*' (IUCN, 2004, p. 6, emphasis own).

The Abuja Treaty, adopted in 1991, laid the blueprint for regional economic cooperation in Africa. While the primary focus of the Abuja Treaty was economic integration, it included clauses on environmental policy. Most significant was the call for the adoption of a Protocol on Natural Resources (Article 57) and a Protocol on Environment (Article 60). In later years, the EAC partner states would develop a Protocol on the Environment and Natural Resources as a binding instrument for sanctioned compliance with regional environmental policy commitments. In some sense, the Abuja Treaty served as a template for how regional economic agreements in Africa should address environmental issues.

To underscore the push towards ensuring regional environmental policies were designed with the African context in mind, the Bamako Convention was adopted by African countries on 30 January 1991 as an alternative to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (the Basel Convention). Specifically, the Bamako Convention articulated a more restrictive framework with the twin objectives of regulation of waste movements across African nations, and the prohibition of waste movements into Africa (Donald, 1992, p. 421). Not surprisingly, no African country had signed onto the Basel Convention by then. Recall the debates at the GATT EMIT where developing, including African, countries, called attention to the illegal shipment of hazardous wastes into their countries. Management of transboundary issues would be the most prominent issue in the EAC treaty text.

The unique history of regional environmental treaty making in Africa, and the particular attention to the integration of environmental and socio-economic dimensions of sustainable development, provides a crucial historical backdrop to understanding how the EAC partner states approached the environmental chapters in the EAC treaty text. A key feature of the environmental provisions and related regulatory instruments would be the absence of sanctioned compliance, and the pursuit of the mutual benefits of trade and environment.

6.3 The EAC PTA Treaty Text

Prior to the adoption of the EAC treaty of 1999, EAC partner states had been cooperating on environmental issues through *ad hoc* projects funded by foreign donors. The key task for negotiators was, therefore, the consolidation of the *ad hoc* projects into coherent policies. There was commitment from the highest political levels to support the consolidation efforts. At the Heads of State Summit held in April 1997, presidents from the three founding partner states (Kenya,

Uganda, and Tanzania) reaffirmed their commitment by including promotion of sustainable utilisation of shared natural resources in the summit's joint communiqué (EAC, 1997). This was not surprising since the three countries share a major ecosystem - Lake Victoria Basin. They adopted an incremental approach by transforming the Lake Victoria Basin (LVB) initiative into an institution. Another Heads of State Summit held in January 1999 formalised the directive to upgrade the LVB (EAC, 1999a). This included a review of environmental projects in LVB and directing the Commission to work out appropriate institutional arrangements for cooperation.

Coordination of Ad Hoc Projects

While EAC partner states expressed their desire to leverage the EAC treaty to address environmental policy objectives, they preferred to do so through *ad hoc* projects in lieu of a binding regional legal instrument. But what was clear was that environmental cooperation was high on the political agenda of the heads of state. Before the EAC treaty was adopted, much of the groundwork had been laid through work by departments in the precursor organisation, the East African Cooperation Organisation (EACO). Still focusing on regional environmental issues, the EACO held a high-level meeting to discuss how to cooperate to address the persistent water hyacinth problem, an invasive species that had taken over Lake Victoria (Opande et al., 2004). The response strategy comprised several projects. While there was a strong desire of the EAC partner states to integrate environmental issues, the high institutional adjustment costs and lack of capacity meant that international donors funded most of the projects.

To address the water hyacinth problem, the EACO meeting considered the application of the Ramsar Convention, an MEA that the two of the three EAC countries had ratified individually.[191] This marked a major step towards linking to MEAs to address regional environmental challenges. Initiatives to address the water hyacinth problem were funded by the government of Norway through the International Union for the Conservation of Nature (IUCN) (EAC, 1999c). Beyond discussions on the water hyacinth problem, the EACO meeting also considered other regional environmental issues. Given that the EAC partner states had national environmental regulations, it was noted that these regulations had to be harmonised. Such harmonisation would form the basis of future regional regulations, although this was not discussed at the meeting. Moreover, the environmental impacts of the anticipated growth in economic activity due to regional economic integration were discussed. To address such impacts, it was agreed that environmental impact assessments (EIA) would be a suitable instrument to limit the environmental damage.

Also discussed during the EACO meeting was how existing regional environmental projects could be scaled up. Those projects all focused on the Lake Victoria basin, the regionally shared ecosystem. Plastic pollution was identified as a major issue, and efforts to eradicate the plastic pollution problem were funded by the Swedish government through the Swedish International Development Agency (SIDA) (EAC, 1999c). But perhaps the most significant step towards institutionalisation of the regional cooperation efforts was the agreement to develop terms of reference (TORs) for the development of a sub-committee to deal with environmental issues. Development of the TORs would be in line with implementing an earlier directive by EACO at its

[191] Only two of the three EAC founding partner states had ratified the Ramsar Convention: Kenya (05/10/90), Uganda (04/07/88). Tanzania ratified the Convention later, on 13/08/00

thirteenth Committee Meeting. Only Tanzania had developed and submitted its TORs (EAC, 1999c).

Environmental issues were always high on the political agenda during the inception period of the EAC, even though the partner states were focused on regional rather than international environmental issues. Heads of State from the three EAC countries were kept abreast of the developments, especially on the harmonisation of environmental regulations. A report by the Council of Ministers, prepared for the Heads of Summit held in November 1999, noted progress on the harmonisation efforts (EAC, 1999d). The report also included updates on the efforts to eradicate the water hyacinth problem in Lake Victoria, funded by international donors. The resulting joint communiqué from the Heads of State summit reaffirmed the presidents' commitment towards addressing environmental challenges in the Lake Victoria basin (EAC, 2001a). For subsequent Heads of State summits, the leaders were updated on the progress, focusing on harmonisation of environmental regulations, the water hyacinth problem, and broader efforts to address other environmental challenges in the Lake Victoria Basin (EAC, 2001b). But the high costs of implementation, which were beyond the resource capacity of the EAC partner states, meant that most of these efforts were funded by international development partners. The government of Finland, for instance, pledged to support the EAC in its implementation of the natural resources and environment program, following a meeting with the EAC Secretariat in May 2002 (EAC, 2002b).

It is clear, from the initial efforts to lay the groundwork for regional environmental cooperation in the EAC, that the EAC countries were keen to integrate the trade and environmental issues. These

governments, however, faced high adjustment costs, given their limited resource capacity. The EAC governments sought an approach that allowed them to offset the high implementation costs through donor funding. Furthermore, the EAC partner states avoided leveraging the PTA's compliance mechanisms to implement their environmental policy commitments.

Having laid the groundwork for regional environmental cooperation, the EAC partner states switched focus to specific environmental sectors. They still preferred approaches that were mutually beneficial to trade and the environment. In the five years or so after the EAC treaty entered into force, the EAC partner states adopted a suite of regional climate change policies.[192] But one concern loomed large: the regulatory instruments did not include sanctioned compliance mechanisms that would 'tie the hands' of EAC partner state policy makers to implement them. Efforts by the East African Legislative Assembly (EALA) to secure ratification of the Protocol on Natural Resources and the Environment and to develop a regional Climate Change Act were unsuccessful. Instead, emphasis was on securing additional resources from external sources and coordination of climate change policies in the region. The next chapter will explore why this was the case.

Environment chapter of the EAC treaty text

At about the same time the EAC treaty was being negotiated, major donor countries were putting pressure on the East African countries to enhance their efforts to address environmental issues. During a series of meetings with international development partners in Brussels, Tokyo, Washington D. C. and London, a year prior to the signing of the EAC treaty, in 1998, the

[192] At this point in time the EAC still had three partner states

government of Japan and the World Bank raised concerns over the environmental impacts of the regional integration effort. For these international development partners, EAC partner countries could use the regional institution to cooperate on environmental issues. But while recognising the pressure from these development partners, who were also major sources of financing for environmental projects in the region, the primary initiative to use the EAC to cooperate on regional environmental issues came from the partner states.

When the EAC treaty text was concluded and adopted in 1999, it was the first time that any East African regional treaty text had included environmental issues in its mandate, as a study by a prominent Non-Governmental Organisation (NGO) revealed (Kituo Cha Katiba, 1999). Cooperation on regional environmental issues was eventually included in the final EAC Treaty text, as Chapter 19 - *Cooperation in Environment and Natural Resource Management*.[193] Table 6.1 below outlines the key Articles of the Environment Chapter.

[193] To view a copy if the EAC Treaty, please visit http://www.eala.org/uploads/The_Treaty_for_the_Establishment_of_the_East_Africa_Community_2006_1999.pdf

Table 6. 1 Articles in the Environment Chapter of the EAC Treaty Text of 1999

Article	Title	Focus areas
Article 111	Environmental Issues and Natural Resources	Sustainable utilisation of natural resources and the coordination of environmental policies
Article 112	Management of the Environment	Development of common environmental management policy
Article 113	Prevention of Illegal Trade in and Movement of Toxic Chemicals, Substances and Hazardous Wastes	Take common position against trade in the substances, coordinate policies, and ratify or accede to international environmental conventions that are designed to improve environmental policies and management.[a]
Article 114	Management of Natural Resources	Foster co-operation in the joint and efficient management and the sustainable utilisation of natural resources within the Community

Note: There is no specific implementation/compliance mechanism for the Chapter. This approach is similar to that of the Algiers Convention, where implementation is largely left to Partner States.
[a]: Note the expansive mandate of the Article to adopt international environmental conventions, broadly defined. As will be demonstrated shortly, the EAC partner states used the Article as a hook to develop regional climate change policies.

Remarkably, the EAC treaty did not include climate change as an issue. This is despite three of the founding EAC partner countries having ratified the United Framework Convention on Climate Change (UNFCCC) before the signing of the EAC treaty. The only climate-related clause in the EAC treaty called for collection and dissemination of meteorological information on climate analysis and season forecasts.[194] Table 6.2 below presents an overview of the key climate-change MEAs adopted by the EAC partner states.

[194] **Article 100 (1)(h) of Chapter 19, Meteorological Services:** Each Partner State shall collect and disseminate to the other Partner States meteorological information in order to facilitate the efficient

Table 6. 2 Signing and ratification dates for key multilateral climate change agreements.

	UNFCCC		Kyoto Protocol		Paris Agreement	
Country	**Signed**	**Ratified**	**Signed**	**Ratified**	**Signed**	**Ratified**
Burundi	11-Jun-1992	06-Jan-1997*	-	18-Oct-2001[a]	22-Apr-2016	17-Jan-2018
Kenya	12-Jun-1992	30-Aug-1994*	-	25-Feb-2005[a]	22-Apr-2016	28-Dec-2016
Rwanda	10-Jun-1992	18-Aug-1998*	-	22-Jul-2004	22-Apr-2016	06-Oct-2016
Tanzania	12-Jun-1992	17-Apr-1996*	-	26-Aug-2002	22-Apr-2016	18-May-2018
Uganda	13-Jun-1992	08-Sep-1993*	-	25-Mar-2002	22-Apr-2016	21-Sep-2016
South Sudan	-	17-Feb-2014[a]	-	-	22-Apr-2016	-

Source: United Nations Treaty Collection[195]. Note: a = Accession; * MEA ratified before signing of the EAC PTA Treaty (30-Nov-1999). Only Kenya, Uganda and Tanzania were the original signatories to the EAC Treaty (1999)

Although the final text of the EAC did not include any specific reference to climate change, it had a legal hook that would later be used to link to the multilateral environmental agreements (MEAs). The initial EAC draft text of the treaty did not have a clause on the ratification of MEAs. A suggestion for amendment of the treaty to include a clause on ratification of MEAs emerged from Kenya's National Parliament, following a workshop on the treaty in 1998 (EAC, 1999b). Surprisingly, the clause was added under Article 113 on *Prevention of Illegal Trade in and Movement of Toxic Chemicals, Substances and Hazardous Wastes*, perhaps indicating the limited

operation of air navigation, coastal shipping, inland waterways transport and the issuing of cyclone warnings and other adverse weather phenomena and co-operate in the following areas: (h) Climate analysis and seasonal forecast.

[195] https://treaties.un.org/Pages/Home.aspx?clang=_en

scope of linking to MEAs. About a year later, the same Assembly suggested other amendments to include participation of the civil society, both in Chapters 19 (Environment) and Chapter 27 (cooperation with development partners) and noting the importance of technology in addressing sustainable development through an amendment of the preamble. Noteworthy, perhaps, is that the environment chapter of the EAC treaty text largely resembles that of the Abuja Treaty - Africa's continental economic blueprint - which focused on regulating transboundary movement of toxic wastes and coordination of environmental policies.[196]

While the EAC Treaty included specific environmental issues such as transboundary movement of hazardous waste, ozone depletion, and atmospheric and water pollution, among others, its omission of climate change is striking. However, climate change would be eventually included in the EAC regional instruments; this is analysed in the next chapter. Up to now, the EAC had eschewed third-party enforcement mechanisms for environmental policy commitments. Having set up the legal provisions for environmental cooperation in the EAC region, the next step for partner states was to implement these environmental provisions. The next chapter will chart the emergence and evolution of regional climate policies in the EAC, and why attempts to foster the adoption of legally binding enforcement instruments eventually failed.

6.4 MoU for Cooperation on Environment Management

Alongside the EAC Treaty text, partner states concluded and adopted a Memorandum of Understanding for Cooperation on Environmental Management, hereafter the MoU.[197] Aware that the EAC treaty text was just but a starting point of regional cooperation on environmental

[196] Articles 58 (Environment), Article 59 (Control of Hazardous Wastes) and Article 60 (Protocol on the Environment) of the Abuja Treaty
[197] https://iea.uoregon.edu/treaty-text/4447

protection, the MoU called for the development of a Protocol on Environmental Management. Recall that the Abuja Treaty of 1991, the blueprint for continental economic integration, had also called for the development of a Protocol for environmental management. It can therefore be inferred that the call for the development of the Protocol for Environmental Management, as outlined in the MoU, had originated from the Abuja Treaty. EAC partner states had already ratified the Abuja Treaty.

Article 3 of the MoU clearly outlined the objectives of the Protocol as:

> 1. The partner States recognize the urgent need for the development of a protocol on common areas for cooperation and harmonization in the area of environment and natural resources management under the auspices of the Treaty.
>
> 2. The partner States will jointly request the Executive Director, UNEP and other competent international agencies and governments to assist in initiating and facilitating consultations, towards the development and implementation of a protocol on environment management under the auspices of the Treaty.

From the two objectives above, the EAC partner states sought to leverage the EAC PTA to promote environmental policy, but they were also aware of the high costs of developing the Protocol. To lower the institutional costs of developing the Protocol, the EAC partner states sought the technical and financial assistance of UNEP.

However, in anticipation of the challenges of adopting a legally binding enforcement mechanism for environmental protection in the region, the EAC partner states noted in the preamble:

> AWARE that a protocol on environment management under the Treaty may take some time to be developed.[198]

The Protocol was envisioned as a 'mechanism for compliance with and enforcement of the environmental policies, laws and strategies in the region'.[199] For states that had opposed leveraging trade agreements to enforce environmental policies, the adoption and ratification of the Protocol would mark a decisive step. An Interim Institutional Arrangement was established to ensure implementation of the MoU, and it was responsible for "overseeing the implementation of the agreed measures and actions..." of the MoU and it would meet frequently.[200]

To strengthen the enforceability of the MoU, a dispute resolution clause was added, linking the implementation of the MoU to the enforcement mechanisms of the precursor institution to the EAC, the Tripartite Commission for Co-operation [sic]:

> 1. In the event of a dispute between two or more Partner States concerning the interpretation or application of the present Memorandum of Understanding, the parties concerned shall seek a settlement of the dispute through negotiation.
> 2. If the concerned Partner States cannot reach agreement by negotiation as requested by any of them, the matter shall be referred to the dispute settlement mechanisms provided for under the

[198] Memorandum of Understanding for Cooperation on Environment Management, Preamble
[199] Memorandum of Understanding for Cooperation on Environment Management, Article 7(h)
[200] Article 4 - Establishment Of Interim Institutional Arrangement

Agreement for the Establishment of a permanent Tripartite Commission for Co-operation[sic], 30th November, 1993.[201]

As the next chapter will reveal, the adoption and ratification of the Protocol on Environment came to define the challenges of leveraging the EAC PTA to address environmental issues, including climate change. Surprisingly, climate change was not mentioned in the MoU, but it would be the focus of regional environmental cooperation through regulatory instruments in the EAC.

6.5 Conclusion

Drawing on a qualitative case study of the East African Community (EAC) PTA, this chapter has examined the inclusion of environmental protection clauses in the treaty text. Findings from this analysis show the case study as 'deviant' from the findings from the analysis in the previous chapters, since the EAC partner states adopted a credible-commitments approach, through dispute resolution mechanisms, to enforce environmental policy commitments in the EAC treaty text. But as the next chapter will show, the EAC partner states abandoned this approach in favour of coordination-enhancing compliance mechanisms that relied on diplomacy, absent sanctions or third-party enforcement mechanisms.

High institutional costs were also a major challenge, but their effect in constraining the choices of implementation and compliance mechanisms became significant during the implementation phase of the EAC PTA treaty, as will be demonstrated in the next chapter. What is consistent with the

[201] The process of dispute resolution under the Tripartite Commission for Cooperation comprised two steps. First, negotiations between the disputing parties. But if the negotiations failed, the dispute would be resolved at the level of Heads of State. This was a stark departure from the prevailing African logic of environmental cooperation, which did not develop implementation mechanisms. Memorandum of Understanding for Cooperation on Environment Management, Article 17, Dispute Settlement

findings of the previous chapter was the illustration of regional sources of initiatives to promote environmental protection through regional agreements in Africa, and the EAC PTA in particular; this contrasts with claims of a one-way diffusion of the norms of environmental protection through PTAs, from the global North to the global South, the dominant narrative in the literature.

The next chapter examines how in developing and adopting environmental policies to implement the EAC treaty, the partner states abandoned the credible-commitments approach through dispute resolution, in favour of coordination-enhancing compliance mechanisms absent sanctions.

Chapter 7: The East African Community's Implementation Mechanisms

Once the EAC treaty and the MoU on the Environment had been adopted, focus shifted to implementing its commitments. Implementation included developing the requisite legal instruments and institutional arrangements. EAC partner states, under the aegis of the EAC Secretariat, undertook much of this work. This chapter examines the origins and factors that shaped these legal instruments and institutional arrangements. It specifically examines why the EAC partner states abandoned the credible-commitments approach through third-party enforcement, which was articulated in the MoU on the Environment. Instead, they adopted a coordination-enhancing approach, whereby the focus was on coordinating the implementation of their environmental policy commitments, absent third-party enforcement or other forms of sanctioned compliance.

It shall be argued and demonstrated that even though the EAC partner states were committed to implementing their environmental and climate change policies, the political and economic costs of using a credible-commitments approach to compliance were too high. The failure of the Protocol on the Environment and Natural Resources to be ratified by all EAC partner states was testament to this. In lieu of the credible-commitments approach, partner states preferred strengthening their institutional capacity to improve the coordination of their efforts. Such initiatives included increased budgetary allocation from EAC partner states, as well as financial and technical assistance from donor countries and international organisations.

This chapter shows that several regional environmental and climate change policy instruments, and which embodied the coordination-enhancing compliance mechanisms, were developed and rapidly adopted by all EAC partner states. Indeed, to underscore the salience of the coordination-enhancing approach, negotiations on a proposed PTA between the EAC and the EU collapsed, with one of the reasons advanced by the EAC being that the EU included sanctions in the enforcement of the implementation of MEAs.

The rest of the chapter is structured as follows. The first section traces the emergence of climate change issues in the EAC. Section two then turns to the political challenges that beset efforts to address regional climate change issues. The section serves as a backdrop to the analysis of specific regional environmental and climate change policies developed under the auspices of the EAC, which is undertaken in section three. Section four of the chapter considers the relevance of alternative theoretical vis-à-vis the main theoretical account developed in this study. Section five concludes the chapter.

7.1 Emergence of Climate Change Issues in the EAC

Within about five years after the EAC PTA treaty entered into force on 7 July 2000, its partner states adopted a three-pronged approach to scaling-up regional environmental cooperation. First, they embarked on developing sectoral working groups that would deal with the various aspects of environmental issues. Once the working groups were in place, some of the groups were tasked with developing several regional environmental regulatory instruments and developing regional positions for engagement in regional and international environmental diplomacy. Third, the EAC partner states explored how they could use some of the PTA's compliance mechanisms to enforce their environmental policy commitments.

About two years after the EAC PTA treaty was signed in 1999, the newly formed division, the Productive and Natural Resources Sector, based at the EAC Secretariat, sought to explore the use of trade policy instruments to foster the importation of renewable energy equipment.[202] Specifically, the Sector proposed to the EAC partner states to consider tax relief and duty reductions on solar energy (photovoltaic and solar thermal systems, wind electric generation and water lifting technologies, biomass energy efficiency and technologies, and small hydro turbines (EAC, 2002a). However, climate change (mitigation) was not mentioned as a rationale for these policy recommendations.

The Productive and Natural Resources Sector division also recommended the establishment of four working groups, to operationalise the newly formed Committee on Environment and Natural Resources. The four working groups would each cover: 1) terrestrial ecosystems; 2) aquatic ecosystems; 3) pollution issues; and 4) policy, legal and institutional issues. Soon, the fourth working group would be crucial to the development of regional environmental policy instruments. It would be specifically tasked with leading the development of an EAC Water Vision, an EAC Water Policy, and an EAC Water Development Strategy (EAC, 2002a). This focus on water issues indicated that the EAC partner states were still focusing their regional integration efforts on the shared Lake Victoria water basin.

[202] The EAC partner countries had very low rates of energy access in 2001: (Kenya 17%; Uganda 8.6%; and Tanzania 10%). Data source: World Bank Development Indicators (https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=KE-UG-TZ)

A year later, in 2003, a meeting of the Committee on Environment and Natural Resources considered several issues, key among them the EAC Secretariat's participation in the then recently concluded World Summit on Sustainable Development (WSSD), and the development of an EAC Protocol on Environment and Natural Resource Management. The WSSD was held in Johannesburg, South Africa, from 26 August to 4 September 2002, marking a major milestone in international environmental diplomacy for the EAC partner states, and the EAC Secretariat in particular. In a first for regional environmental cooperation, EAC partner states developed a joint position paper, and an accompanying official statement presentation at the WSSD (EAC, 2003). As expected, the EAC partner states' position was not much different from what they had presented at the Rio Conference in 1992; WSSD was held as a ten-year anniversary and follow-up to the Rio Conference. In brief, the EAC position paper reaffirmed the need to focus on synergistic linkage between development and environmental issues, and the attendant support (financial, capacity and technological) from developed countries. By implication, the EAC partner states did not commit to undertake stringent commitments at WSSD to address environmental issues. A full report on the EAC Secretariat's participation at the WSSD was submitted for consideration by the 5th Council of Ministers in November 2002 (EAC, 2002a).

7.2 Antecedents to Law: The Underlying Political Challenges

In pursuing regional cooperation on environmental protection, the EAC partner states faced two challenges. One was inadequate institutional (technical and financial) capacity. Another was the need to coordinate environmental policies in the region. An immediate solution for the first challenge was to mobilise resources from various sources, including from donor countries and international organisations. Prior to the adoption of the EAC PTA treaty, partner states had

cooperated on managing shared regional ecosystems, especially the Lake Victoria Basin. Hence, the focus was on strengthening regional cooperation by building on this experience.

But as the partner states continued and even enhanced their engagement with multilateral environmental diplomacy, the need for more resources became apparent. The initial approach to environmental cooperation in the region had been through *ad hoc* projects that were funded by donors. Over time, EAC partner states sought to consolidate, strengthen and scale up this cooperation. Technical capacity to develop legal instruments was also in short supply. Consequently, the EAC had to turn to intergovernmental organisations such as UNEP for support. The gap between ambition and committed resources thus necessitated the need to explore sustainable sources of support. Moreover, EAC partner states committed very little budgetary allocation to environmental initiatives, especially climate change.

A second political challenge was formalising the regional environmental and climate change commitments. To do this, the EAC developed several regional legal instruments. Since the EAC partner states had ratified several MEAs and were keen to cooperate on other regional environmental commitments, they sought to develop legal instruments that would help them coordinate their efforts. Initial attempts to develop regional environmental legal instruments had adopted the credible-commitments approach, whereby sanctioned compliance through third-party dispute settlement was the solution to regional environmental cooperation problems. While the EAC Protocol on Environment and Natural Resources was intended to lay the foundation for subsequent regional environmental legal instruments, its reliance on third-party enforcement proved problematic. The Protocol was signed in the year 2006 but is yet to be ratified by all EAC

partner states to date.[203] All subsequent regional legal instruments have been adopted by all EAC partner states. As subsequent sections will demonstrate, the Protocol was ill-suited to addressing the coordination problem. Its reliance on sanctioned compliance was precisely why it was not adopted, due to its political infeasibility.

Understanding the underlying political challenges that the EAC partner states sought to address using compliance mechanisms is crucial to grasping the logic behind the design of the mechanisms in the regional environmental and climate change policy instruments. That the EAC faced institutional capacity challenges meant that partner states would prioritise and develop mechanisms to tap into additional resources. The nature of the problem to be tackled also informed the type of legal instruments that would effectively address the problem. Or as E. H. Carr eloquently captured the logic underpinning the design of legal instruments, 'Respect for law and treaties will be maintained only in so far as the law recognizes effective political machinery through which it can itself be modified and superseded. *There must be a clear recognition of that play of political forces which is antecedent to all law'* (Carr & Cox, 2016, p. 176, emphasis own). Having identified the political nature of the problem - which is one of coordination and not one of ensuring credibility of commitments - let us first turn to the design of the regional environmental and climate change legal instruments, before turning to efforts to address the challenges faced in implementing them.

[203] This is as of 16 May 2021

7.3 Compliance through Coordination

Since it was clear that the EAC partner states had committed to cooperation on regional environmental protection, the next step was developing the requisite legal instruments. The EAC treaty text had laid the foundation by devoting an entire chapter to regional environmental cooperation. The Memorandum of Understanding for Cooperation on Environment Management (the MoU) cemented this commitment. To give effect to these commitments, the EAC partner states sought to develop implementation mechanisms through regional legal instruments. The EAC Protocol on the Environment and Natural Resources would serve as the basis for these implementing mechanisms.

Compliance through credible commitments: A false start

Development of a regional protocol was first mooted in the Treaty Establishing the African Economic Community (also known as the Abuja Treaty) of 1991. The Abuja Treaty is the blueprint for continental economic integration in Africa, and it called for the development of regional Protocols on Environmental Management.[204] The MoU on Environment Management clearly laid out the rationale for the development of the Protocol:

> Article 3 - Protocol on Environment Management
>
> 1. The partner States recognize the urgent need for the development of a protocol on common areas for cooperation and harmonization in the area of environment and natural resources management under the auspices of the Treaty.

[204] Articles 57 and 60 of the Abuja Treaty of 1991

> 2. The partner States will jointly request the Executive Director, UNEP and other competent international agencies and governments to assist in initiating and facilitating consultations, towards the development and implementation of a protocol on environment management under the auspices of the Treat'[205]

The working group on policy, legal and institutional issues was tasked with developing the EAC Protocol on Environment and Natural Resources. Development of the Protocol was in direct response to the obligation of the MoU on Environmental Management, concluded and adopted alongside the EAC Treaty Text.

To kick start the process of development of the Protocol, two immediate issues had to be resolved. First, budgetary resources had to be allocated to the process. Second, the requisite technical expertise had to be procured. On the second matter, the EAC Sectoral Council on Environment and Natural Resources recommended, for approval by the Council of Ministers, allocation of additional funds to support the development of the Protocol. It also recommended that the development of the protocol be conducted with technical assistance from the United Nations Environment Programme (UNEP) (EAC, 2002a).

At that time, UNEP was implementing the Environmental Laws and Institutions project, in collaboration with the United Nations Development Programme (UNDP) and with funding from the Dutch government. Since no budgetary resources had been allocated for the development of the Protocol by the EAC partner states, it was suggested that the UNEP project would be ideal,

[205] https://iea.uoregon.edu/treaty-text/1998-moucooperationenvironmentmanagemententxt

especially on strengthening technical capacity. It was envisioned that the Protocol would serve as a basis for subsequent regional environmental regulations (EAC, 2002a).

Once the recommendations for the development of the Protocol were finalised, they were presented before the EAC Council of Ministers, who subsequently adopted them. Specifically, the Council of Ministers approved the recommendation to work with UNEP in developing the Protocol, in addition to liaising with the secretariats of the relevant international conventions and organisations (EAC, 2004a). The move to establish linkages with international organisations was part of broader efforts by the EAC Secretariat to engage in international environmental diplomacy, and access resources for the development of its increasingly ambitious environmental programme. The EAC had recently been accredited by the World Trade Organization (WTO) and the United Nations (UN), and it was working towards securing accreditation with the African Union (EAC, 2004a).

Efforts to develop the Protocol continued apace, but that turned out to be the easy part. The Protocol was finalised and signed in 2006, but ratification was not forthcoming. The Protocol was comprehensive, and it had captured the delicate balance between development and the environment, as deliberations of a meeting of the Sectoral Committee on Environment and Natural Resources on the draft Protocol in November 2004 revealed. At that meeting, two suggestions were made as amendments to the Protocol. First, to recognise the balance between development and environmental sustainability. And second, to include addressing climate change issues as a focus of the Protocol (EAC, 2004b).

It was clear that the Protocol envisioned ensuring compliance with environmental policy commitments in the East African Community as a credible-commitments challenge, hence, it adopted third-party enforcement. Sanctioned compliance in the Protocol would be realised through a third-party adjudication, with the final resolution being through judicialisation:

> ARTICLE 40
>
> DISPUTE SETTLEMENT
>
> 1. Unless otherwise provided in this Protocol, in the event of a dispute between two or more Partner States concerning the interpretation or application of this Protocol, the Partner States concerned shall seek a settlement of the dispute through negotiations or other alternate [sic] dispute resolution mechanisms.
>
> 2. If the Partner States concerned cannot reach agreement as provided for in paragraph 1, either Partner State or the Secretary General may refer such dispute to [the] East African Court of Justice [sic] in accordance with Articles 28 and 29 of the Treaty.
>
> 3. The decision of the East African Court of Justice on any dispute referred to it shall be final (EAC, 2006a).

Ratification of the Protocol was however taking longer than expected (EAC, 2005, 2006b). Much of the progress up to now was due to the initiative of the EAC Secretariat, and to some extent, the Sectoral Council on Environment and Natural Resources and the Council of Ministers. But the delay in ratification of the Protocol by all three EAC partner states was proving to be intractable. Since the Council of Ministers was unable to ensure ratification from the three EAC partner states, it forwarded the matter to the region's highest political making body - the Heads of State summit.

At the fifth extra-ordinary summit meeting held in November 2006, the summit's Joint Communiqué urged Partner States to ratify the Protocol ‘as soon as possible’ (EAC, 2006b).

Given the delay in ratification of the Protocol, the East African Legislative Assembly (EALA) decided to put pressure on the EAC partner states to ratify the Protocol. EALA passed a resolution urging the Council of Ministers to table quarterly reports to the Assembly on progress made towards ratification of the Protocol and adherence to Chapter 19 (Environment) of the Treaty. In addition, EALA also argued for the development of a joint policy to protect the environment and halt the destruction of forests (EALA, 2008). The stage was now set for battles between EALA and the Council of Ministers over subsequent development of regional environmental (and especially climate) policies. EALA was keen to exert its mandate as an oversight veto player to the executive arm of the EAC.

Ratification of the Protocol was still not forthcoming. A motion tabled at EALA in September 2008 sought to put pressure on EAC partner states to ratify the Protocol, noting that even though it was signed in 2006, it was yet to be ratified by all the EAC partner states. Kenya reported that a draft Cabinet memorandum had been prepared and would be tabled at the EAC Committee on Environment and Natural Resources, before forwarding it to the Cabinet for debate and ratification of the Protocol. In Uganda, a draft Cabinet memorandum was about to be finalised pending stakeholder consultations. For Tanzania, a Cabinet paper had been finalised and would be tabled to the relevant organs for discussion and later to the Parliament (EAC, 2009). EALA reiterated its role in policy making, perhaps underscoring its intent and legitimacy to pursue regional climate

change regulations. But these efforts did not bear fruits, as Tanzania persistently held out on ratifying the Protocol, to date (EALA, 2012c).

Tanzania's reluctance to ratify the Protocol was primarily due to the sanctioned compliance mechanisms (EALA, 2012c). For Tanzania, it was important to have leeway in their bid to balance between economic and environmental priorities. The Protocol's compliance mechanism mandated third-party enforcement:

> ARTICLE 39 COMPLIANCE WITH THIS PROTOCOL
>
> 1. Each Partner State shall take appropriate measures within its competence, including the adoption of laws and regulations, administrative actions and enforcement measures, to ensure compliance with this Protocol.
> 2. Each Partner State shall notify all other Partner States of the measures it takes pursuant to paragraph 1 above.
> 3. Each Partner State shall draw the attention of all other Partner States to any activity which in its opinion affects the implementation of the objectives, principles and provisions of this Protocol.
> 4. *In order to promote sound management of the environment and natural resources in the Community and to ensure compliance with this Protocol, the Partner States shall arrange, individually or collectively for inspections by observers* (emphasis own).

Using law to compel parties to comply is one means of ensuring successful implementation of a treaty, but it is apparent that a sanctioned compliance approach was deemed unsuitable by the EAC

partner states. EALA tried to assert their veto-powers as the oversight body of the EAC. But the EAC partner states, wherein executive political power rests, were not fully onboard with the credible-commitments approach. If this was the case, we should see all the EAC partner states ratifying the Protocol. As will soon become apparent, a coordination approach to regional legal instruments proved to be the most feasible.

Law as a coordination-enhancing device

Despite the failure to secure ratification of the Protocol by all the EAC partner states, efforts towards developing subsequent regional environmental legal instruments went apace. What made these instruments feasible to the EAC partner states? The answer lies in understanding the role of law as a coordination-enhancing device. The main challenge for the EAC partner states was coordinating their numerous environmental initiatives in ways that did not incur high adjustment costs, and the wish to avoid strict enforcement especially through sanctions and third-party dispute resolution.

Coordination took several dimensions. Since all EAC partner states already had national legal instruments on environmental protection, there was a need to coordinate their efforts in implementing them. Moreover, the need for cooperation was especially acute in the management of regional transboundary ecosystems and other natural resources such as the Lake Victoria Basin (EAC, 2002a).

At the multilateral level, EAC partner states also sought to coordinate their efforts in both the negotiation and implementation of MEAs. A longstanding approach for African countries'

engagement in international environmental negotiations has been to develop a common negotiation position. EAC partner states sought to coordinate their negotiation positions in multilateral environmental diplomacy using similar approaches (EAC, 2009).

Another coordination problem that the EAC partner states faced was institutional. While the regional legal instruments would provide a regulatory framework for coordination, there was a need for institutional arrangements that would facilitate the actual coordination. By having an office at the EAC Secretariat dedicated to environmental and climate change issues, it would be easier for partner states to have a contact point. Institutional coordination could thus comprise the EAC Secretariat liaising with national focal points in the EAC partner states.

Regional legal instruments were envisioned as the solution to these coordination problems. But how would they operate? The answer, once again, lies in coordination-enhancing mechanisms (McAdams, 2015). Briefly stated, the coordination-enhancing mechanisms hold that law performs *coordination* and *information* functions, which generate compliance. Such mechanisms are often juxtaposed with deterrence (use of sanctions) as mechanisms for generating compliance (McAdams, 2005, p. 1045).[206] Deterrence through sanctions proved an infeasible approach, as the stalled ratification of the Protocol revealed. Tanzania's argument in declining to ratify the Protocol, on the basis of the need to reserve space for economic development, indicates that the economic costs from trade-restrictive environmental measures were too high for EAC partner states (EAC,

[206] The basic argument of the Expressive theory of law is that law can generate compliance in the absence of sanctions and legitimacy. It does not preclude the need for sanctions or legitimacy being complementary to coordination. Rather, it emphasizes the coordination powers of law through expressions such as identifying focal points as loci of coordination, and establishing mechanisms to generate information on compliance. For a book-length treatment of the Expressive theory of law, see McAdams (2015)

2015a, pp. 3–4), hence the preference for environmental measures that were not enforced through sanctions. This is in contrast to PTAs such as NAFTA which, through their dispute settlement mechanisms, allow for the use of trade-restrictive measures to sanction noncompliance with environmental commitments in the PTA (Sanchez, 2002, p. 1372).

Applied to the EAC coordination problem, a coordination approach seemed to be the appropriate compliance mechanism. Law performs the coordination function by constructing focal points and establishing the requisite institutional arrangements. Simply put, a focal point creates a locus for coordination. In the case of the EAC, law served the coordination function by creating two focal types of focal points. The first was the creation of legal standards as focal points. The legal standards identified harmonisation as the preferred method of coordination (Drezner, 2001, p. 75), and the regional environmental legal policy instruments served as coordination-enhancing devices. The Protocol clearly captured this logic:

> CHAPTER THREE
>
> AREAS OF CO-OPERATION ON ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT ARTICLE 9 MANAGEMENT OF TRANSBOUNDARY RESOURCES
>
> The Partner States shall:
>
> a) develop mechanisms to ensure sustainable utilization of transboundary ecosystems; and
> b) *jointly develop and adopt harmonized common policies and strategies for the sustainable management of transboundary natural resources* (emphasis own).

Institutional arrangements are the second type of coordination mechanisms. There would be a need for staff at the EAC Secretariat who would be responsible for implementing the regional legal instruments. Since there was no dedicated department for the environment and also climate change at the EAC, partner states sought to create the institutional arrangements. Eventually, the EAC Climate Change Coordination Unit was established to coordinate climate change (EAC, 2011d), while the Sectoral Council on Environment and Natural Resources was established to coordinate the broader environmental initiatives in the region (EAC, 2010a). Officials from these offices would then coordinate with national focal points in the EAC partner states.

Law, as embodied in the regional legal instruments, also serves an information function in addressing the coordination problems at the EAC in two ways. It clarifies what the focal points for coordination are, by identifying harmonisation as the ideal point of coordination. Law also informs by identifying mechanisms for generating information pertinent to compliance. In all regional environmental and climate change legal instruments adopted by the EAC, monitoring and evaluation were adopted as such mechanisms. Coordination would thus avoid the economic costs associated with deterrence such as using trade-restrictive measures as sanctions, which could be enforced by third-party adjudicators.

Taken together, the foregoing theoretical discussions underpin the logic behind the design of the regional legal instruments for environmental protection, adopted by the EAC. Law generates compliance by acting as a coordination-enhancing device, contrary to the role of law in compelling parties to comply with their treaty obligations (Poulsen, 2020, p. 3). Despite the initial choice of third-party enforcement in the design of the MoU, the parties ultimately moved towards a

coordination approach because the latter incurred lower costs of noncompliance, especially by avoiding the use of sanctions to enforce environmental treaty obligations.

Remarkably, the coordination approach mirrors the findings from the large-n analysis of PTAs conducted in Chapters 4 and 5, where most PTAs have preferred a coordination to sanctioned compliance approach in designing environmental clauses that promote environmental protection (Enhancement clauses). Moreover, institutional capacity was a key driver for the inclusion of such clauses. Now that we have outlined the underlying problem of cooperation, and the role of law as a coordination-enhancing device, the next section presents a detailed analysis of the actual regional regulatory instruments.

Design of regional environmental and climate change legal instruments

Several regional legal instruments on environmental protection were adopted. Only four of these instruments were analysed, as the Protocol and the MoU on the Environment have already been analysed in the preceding sections. Specifically, the EAC Climate Change Policy; the EAC Climate Change Master Plan and Strategy; the EAC Joint Instruments for MEAs; and the EAC Concept Paper on the Justification of an EAC Climate Change Bill are examined.[207]

a) EAC Climate Change Policy

The EAC Climate Change Policy, hereafter Policy, was intended as the overarching coordination framework for climate change issues in the region. At the 11th Extraordinary Heads of State Summit in Arusha, Tanzania, in November 2009, a directive was issued to establish regional policy

[207] Each of these documents are annexed to this study

and strategies for addressing the adverse impacts of climate change (EAC, 2011a, p. 1). The overall aim of the Policy is 'to contribute to sustainable development in the EAC region through harmonized and coordinated regional strategies, programmes and actions to respond to climate change' (EAC, 2011a, p. 7, Chapter 2, Section 2.1). It is clear from this formulation that coordination was the main challenge, and harmonisation of standards was the preferred focal point.

In addition to identifying the legal standard for coordination - harmonisation - the Policy called for the establishment of a coordinating institutional mechanism. It identified the EAC Secretariat as the focal point for institutional coordination, wherein the Climate Change Coordination Unit would be housed. The coordinating office would work closely with national focal points in EAC partner states (EAC, 2011a, p. 34). Once the coordinating role had been clearly defined, the Policy then outlined the structure of the coordinating body (EAC, 2011a, p. 34).

Crucially, the Policy also provided information on enforcement and compliance. The enforcement mechanism would consist of monitoring and evaluation (EAC, 2011a, p. 36). In performing its 'information' role, the Policy also identified the need to mobilise resources to enable implementation of the climate change commitments. Several potential sources of support were identified, including from development partners, multilateral agencies, bilateral partners, intergovernmental organisations and the private sector. The Policy also mandated the development of financial mechanisms to serve as vehicles for the mobilised finance. Specifically, this would take the form of the East African Climate Change Fund. Other sources of support such as technology development and transfer, and capacity building, were also identified.

What is clear is there are no sanctions attached to noncompliance. This approach marks a stark departure from the sanctioned compliance approach of the Protocol, whose ratification stalled. Neither did the Policy seek to supplant other climate change legal instruments, be they multilateral or national. This is an indication that the EAC partner states sought to establish the EAC as the primary forum for addressing climate change. The EAC Climate Change Policy was thus designed as a coordination-enhancing device.

b) EAC Climate Change Master Plan

The EAC Strategy and Master Plan, hereafter referred to as the MP, was intended to implement the commitments of the EAC Climate Change Policy. The proposal for the MP emerged at the EAC Sectoral Council on Transport, Communication and Meteorology in 2007. Two years later, the proposal was endorsed at the 11th Ordinary Summit of the EAC Heads of State in November 2009 (EAC, 2011b, p. 17). In implementing the decisions, a workshop was convened, following a Ministerial directive, whose main objective was the development of an EAC Climate Change Master Plan (EAC, 2009). The Master Plan would serve as the legal basis for subsequent regulatory instruments, and it was expected to be in place by October 2009.

A second workshop on climate change was convened by the EAC Secretariat in February 2009. The main agenda of the workshop was to develop the scope of work, methodology and framework for the EAC Climate Change Master Plan, and to adopt the terms of reference (TORs) for the proposed Working Group on Climate Change. The Working Group would work within the

Committee on Environment and Natural Resources (EAC, 2009). The MP was finalised in September 2011.

Indeed, the justification of the MP was based on the need to coordinate the proliferation of the national climate change initiatives in the region: 'The Climate Change Master Plan...provides a coordinated response to key climate change issues in the East Africa region' (EAC, 2011b, p. 20). Highlighting its relationship between the EAC Climate Change Policy, and the EAC Strategy, the MP stated that it would 'provide the overall picture and vision linking all three documents' (EAC, 2011b, p. 20). In other words, the MP would coordinate all other regional climate change legal instruments (EAC, 2011b, p. 20).

The MP also proposed the establishment of a Climate Change Coordinating Unit (CCCU), which would be based at the Environment and Natural Resource Management department (EAC, 2011b, p. 131). The CCCU's main role would be that of coordination (EAC, 2011b, p. 132).

A monitoring and evaluation framework was developed to ensure compliance. The EAC Secretariat was tasked with the responsibility for 'tracking, coordinating, overseeing the implementation' of this Master Plan in collaboration with the five Partner States, and other agencies in the private sector, civil society or as may be assigned' (EAC, 2011b, p. 135). The CCCU would be responsible for monitoring implementation of the MP, while the EAC Secretariat would undertake an independent short-term review after two years (EAC, 2011b, p. 135). Once again it is very clear that the Master Plan's key function was one of coordination, as there were no

sanctions attached to noncompliance. Also, the Master Plan included mechanisms to generate information on parties' compliance.

c) EAC Instrument for Joint Participation in MEAs

EAC Partner States also faced the challenge of coordinating their participation in the negotiations on, and implementation of, MEAs. To facilitate this, the EAC Instrument for Joint Participation in MEAs, hereafter referred to as the IJPM, was developed.

The process for developing the IJPM was initiated by the EAC Secretariat. Building on the momentum of a series of EAC workshops, the Committee on Environment and Natural Resources held a meeting in February 2009 where it considered and deliberated on the development of a policy on joint participation of EAC partner states in international treaties and conventions (EAC, 2009). The overarching objective of the policy on joint participation was to harmonise views and positions of EAC partner states in international environmental negotiations, including on climate change (EAC, 2009).

Upon its deliberations on the modalities of participation in such fora, the Committee came up with two recommendations: i) that the EAC participates as a full member in international fora; and ii) that the EAC secretariat convenes a meeting to harmonise potions taken on issues prior to each COP negotiation (EAC, 2009). The Committee also suggested the selection of ten international treaties and conventions for which the EAC would develop modalities of participation by partner states.[208] The Committee further proposed the development of a resolution to be tabled at EALA,

[208] The list of the treaties includes: Convention on Biodiversity and the Cartagena Protocol; Ramsar Convention on Wetlands; United Nations Framework Convention on Climate Change and the Kyoto

urging the partner states to develop a joint policy to protect the environment. Climate change would feature in subsequent EAC fora throughout the year. Given the significance of the then upcoming UN climate change negotiations in Copenhagen at the end of the year (2009), the Committee recommended that the EAC partner states should develop a common position for the negotiations, building on national-level consultations in the partner states; and that the partner states should give priority to enhancing the capacity of their negotiations to be more effective at the Copenhagen negotiations.

The IJPM was premised on the rationale that 'the Partner States have a comparative advantage in joint participation in and negotiation of MEAs than when they act unilaterally' (EAC, 2020, p. 5). In further justification of its coordination role, the IJPM noted that 'Of equally important concern is that lack of effective coordination of action can lead to simply shifting the environmental problem from one area to another nationally and across borders...' and the 'need for EAC Partner States to work together on negotiation of and participation in MEAs. For this, they need to collaborate and coordinate their individual activities in a way that has proved difficult in the past. Though some joint coordination and participation already exists, there is scope for stronger and sustainable links and coordination between respective governmental and regional institutions

Protocol; Convention on International Trade and Endangered Species (CITES); Stockholm Convention on Persistent Organic Pollutants (POPs); Basel and Bamako Conventions on Hazardous Wastes and their Disposal; Montreal Protocol and the Vienna Convention on Substances Depleting the Ozone Layer; Rotterdam Convention on Prior Informed Consent; Strategic Approach to International Chemicals Management; and the UN Framework Convention to Combat Desertification (UNFCCD). In addition, the Committee recommended taking into account the treaties on the EA region: i) Convention for the protection, management, and development of the marine and coastal environment of the EA region; ad ii) Protocol concerning protected areas and wild fauna and flora in the East African region; and iii) Protocol concerning cooperation in combating marine pollution in cases of emergency in the EA region (pp. 4-5).

within the Community. *Such cooperation must be based on areas of common interests*' (EAC, 2020, pp. 8–9, emphasis own).

In addition, the IJPM limited its scope to only issues of common interest, a classic feature of coordination. It neither sought to ensure the credibility of commitments made by partner states, nor did it seek to establish itself as the legitimate forum for regional climate change cooperation in the region. Rather, it scoped its role to one of coordination, noting that the 'guidelines deal with issues of identification and determination of issues of common interest to Partner States, convening, developing consensus on issues, engagement in the negotiation process, rules of procedure, and structure for joint negotiation, financing mechanisms, and implementation of joint commitments' (EAC, 2020, p. 9).[209]

Importantly, the objective of the IJPM made it very clear that its role was one of coordination: 'The overall objective of the Guidelines is to guide EAC Partner States in the effective and coordinated negotiations and implementation of Multilateral Environmental Agreements and to harness and maximize the benefits and opportunities under the various international conventions and treaties on environment and natural resources that the EAC Partner States are Party to and where the EAC Secretariat is accredited with observer status' (EAC, 2020, p. 11).

[209] The problem of coordinating policies faced by the EAC partner states is akin to what has been termed as the dilemma of common aversions: 'Dilemmas of common aversions refer to situations in which actors must coordinate their policies by agreeing on some set of rules or conventions, to avoid mutually undesirable outcomes' (Krasner 1991, 338). For the original discussion on dilemmas of cooperation, see Stein (1983)

The IJPM also included implementation mechanisms to ensure compliance. The first part of the implementation mechanism was on coordination, while the second part was on information-generating mechanisms to foster compliance. The coordination mechanism clearly identified the focal points that would be the locus of coordination, which include the existing institutional arrangements of the EAC partner states (EAC, 2020, p. 15). Monitoring and evaluation was the second pillar of the implementation mechanism. It focused on generating information to foster compliance (EAC, 2020, p. 15). Overall, the IJPM is a textbook example of a coordination-enhancing mechanism, especially in the context of varying national contexts (McAdams, 2000a, p. 1657).[210]

d) Concept Paper on the Justification of the EAC Climate Change Bill

Even though there was an array of regional legal instruments on climate change in the EAC, there were efforts to develop a regional climate change law. The push for the development of a Climate Change Law, hereafter referred to as the Bill, came from the EALA - the legislative arm of the EAC. EALA's main concern was that the EAC partner states had adopted several legal instruments but they were not implemented. This is a classic case of a credible commitments problem.

In a series of events that were at times dramatic, EALA sought the development and adoption of the Bill. EALA, through the Agriculture, Tourism and Natural Resources (ATN) committee, tabled a report that analysed the food security and climate change nexus in the EAC region (EALA, 2010a, 2010b). The report concluded with a recommendation for the development of a regional

[210] As McAdams aptly puts it, 'Solving cooperation problems requires a change in payoffs. Solving coordination problems, however, just requires the right kind of *expectations*...Once the expectations are aligned, there is no difficulty"solving" the game and achieving what is the best outcome for both players' (emphasis in original).

framework on food security and climate change. It however noted the lack of prompt and full implementation of many policy declarations due to lack of political will and, crucially, *lack of legally binding instruments* (EALA, 2010b, emphasis own). EALA argued that this would address the development of a regional climate change bill, which when approved, would become law (EALA, 2013a). To ensure compliance, the law would oblige the EAC partner states to mobilise resources and implement the climate change commitments and policies. For EALA, a credible-commitments approach based on sanctioned compliance would be the most effective in strengthening regional cooperation on climate change in the EAC.

In its first meeting of the year in 2014, the Sectoral Council took several steps towards the development of the regional climate change bill. First, it approved the EALA Resolution on Climate Change that sought to exert pressure on the executive arm of the EAC to fully implement its commitments on climate change. Second, the Sectoral Council approved the TORs supporting the EAC's Accreditation Process as a Regional Implementing Entity under the UNFCCC Financial Mechanism. Third, and crucially, the Sectoral Council considered proposals to initiate a draft EAC Climate Change Bill, since such a proposal could only be initiated by Ministers before being forwarded to EALA for debate and consideration for adoption (EAC, 2014).

On cue, EALA convened two workshops on climate change to engage parliamentarians, and other stakeholders in the EAC partner states. Both workshops were convened by the ATN committee, which had been instrumental thus far in advocating for climate change issues in EALA. The first workshop was held in December 2013, and the second workshop in June 2014. The main objective of the first workshop was for parliamentarians, especially those at EALA, to pressure the Council

of Ministers to translate their political will into action by implementing the EAC Climate Change Policy through the introduction of a regional Climate Change Bill. EALA noted that the mandate for the introduction of the Bill lay with the Council of Ministers, pursuant to Article 14 of the EAC Treaty.

There had been initial confusion on which arm of the EAC could introduce the regional Climate Change Bill, and how such a Bill would relate to existing policy instruments. The EAC legal counsel weighed in on the matter and recommended that: 1) Pursuant to Article 14 of the EAC Treaty, only the Council could introduce the EAC Climate Change Bill; 2) and the regional Climate Change Bill could establish regional institutional mechanisms to coordinate climate change initiatives, establish and operationalise the EAC Climate Change Fund, and establish an EAC Carbon credit mechanism. Other recommendations that emerged from the workshop were for the need to address overreliance on donor funding; for the EAC to engage in the Durban process of the UNFCCC that aimed to develop a successor treaty to the Kyoto Protocol; and the need for the EAC Secretariat to participate in the upcoming UN Secretary General's CEOs Forum and engage the private sector in the EAC (EALA, 2014). An EAC official noted that "even though we [EAC] were keen to engage the private sector on climate change issues, they were not much interested" (Interview with EAC Official I, 9 November 2018). But an official from a major private sector network countered that they were "keen to engage with the EAC, focusing on policy certainty and pursuing mutually beneficial approaches for environmental and economic development" (Interview with a private sector network official on 15th October 2018).

Reiterating their commitment to execute their mandate as the legislative arm of the EAC, EALA took matters into their hands and passed the EAC Climate Change Bill at the end of the year 2014 (EALA, 2015a). Following the expeditious passing of the EAC Climate Change Bill by EALA, the Sectoral Council on Environment and Natural Resources began developing a Concept for the Justification of the Proposed Climate Change Law. The Concept would articulate the rationale for EAC Climate Change Bill, before the latter could be finalised (EAC, 2015a). Once the Sectoral Council had deliberated the Concept for Justification, it forwarded it to the Council of Ministers, which discussed it in early 2015 (EAC, 2015b).

The EAC Climate Change Bill is yet to be finalized and sent to EAC Partner States for ratification (EAC, 2017). An EAC official noted that "EALA's mandate is limited to legislating and not ratification...there are ongoing efforts to allow for ratification of EAC Bills at the Heads of State Summits, as opposed to the national ratification procedures. The rationale is that the latter process often takes too long" (Interview with EAC Official IV on 16 October 2018). In a follow up correspondence, an EAC official noted that the process had started afresh and that new terms of reference (ToRs) for development of the EAC Climate Change Bill had been drafted (Correspondence with EAC Official I on May 1, 2020; the ToRs are included in the Annexure).

Eventually, a concept paper on the justification of the EAC Climate Change Bill was developed and finalised in January 2020. The Concept Paper outlined the rationale for a Climate Change Bill, as well as its objectives and scope. The directive to kickstart preparations for the development of the Bill emerged from the 3rd Meeting of the Sectoral Council on Environment and Natural Resources, held from 27th-31st January 2014 in Bujumbura, Burundi (EAC, 2018, p. 2). A

Ministerial directive issued at the 2nd Extraordinary Sectoral Council on Environment and Natural Resources held on 12th March 2015, called for the development of the Concept Paper (EAC, 2018, p. 2).

The goal of the Concept Paper was 'to provide technical justification for the need for a Regional Climate Change Bill based on the directives of the Sectoral Council that noted the need for the region to strategically position itself to access climate change funds; the need for the proposed institutional framework envisaged in the proposed EAC Climate Change Law to be included in the Concept Paper; and the need to develop concrete proposals on the institutional structure and financing mechanism that should be subjected to the a wide consultative process' (EAC, 2018, p. 3). The institutional framework was in response to 'the existing uncoordinated efforts in responding to climate change at the regional level and the need for establishment of a clearly defined regional coordination and management structure' (EAC, 2018, p. 6).

By focusing on coordination and mobilising resources for implementation of the regional climate change commitments, the Bill was not intended as a credible-commitments device. Nowhere did the Concept Paper note the need to ensure credibility of commitments, including using sanctioned compliance. It can therefore be assumed that the main objective of the Bill, as outlined in the Concept Paper, is to enhance coordination of the vast array of regional climate change legal instruments, and mobilisation of financial resources. Table 7.1 below summarises the various types of compliance mechanisms found in the policy instruments that have been analysed in the preceding sections.

Table 7. 1 Summary of compliance mechanisms of EAC regional legal instruments on climate change and the environment

	Coordination-Enhancing Mechanisms		Credible-Commitments Mechanisms
	Salient Focal points	***Information (implementation) Mechanisms***	***Third-party Enforcement***
MoU on Environmental Management	✓	✓	✓
Protocol on Environment and Natural Resources	✓	✓	✓
EAC Climate Change Policy	✓	✓	
EAC Climate Change Master Plan	✓	✓	
EAC Instrument for Joint Participation in MEAs	✓	✓	
Concept Paper on the Justification of the EAC Climate Change Bill	✓	✓	

Note: While the MoU on Environmental Management and the Protocol on Environment and Natural Resources adopted a credible-commitments approach to ensuring compliance with environmental policy commitments, the subsequent policy instruments abandoned the approach and instead adopted a coordination-enhancing compliance approach.

Establishment of institutional mechanisms for coordination

Besides regional legal instruments, the EAC partner states sought to solve their coordination problems through institutional arrangements. The two main institutional arrangements established to solve this problem were the Environment and Natural Resources Council (at the Ministerial level) and the Climate Change Programme Management Unit (at the Secretariat level). Each of the institutional arrangements is discussed in detail below.

a) Establishment of the Environment and Natural Resources Council

While EALA was preparing to develop the regional climate change regulatory instruments, the EAC executive arm, under the guidance of the EAC ministers, was developing several institutional arrangements and commencing development of the relevant policy documents.[211] Even though the institutional and policy arrangements focused on environmental issues, broadly defined, they would play a pivotal role in the development of regional climate change policies. First, Ministers of EAC partner states established the Environment and Natural Resources Council, whose mandate would include addressing climate change. Climate change had emerged at the Forum for EAC Ministers responsible for development in September 2008, where it was a standalone agenda item. Its emergence was also in response to the directive from the Heads of State summit in June 2008, which called on the Ministers to develop the requisite institutional and policy arrangements to address climate change (EAC, 2009). It is important to note that the recommendations by the Ministers were primarily focused on integration of environmental (including climate change)

[211] Note that policies could only originate from the ministerial council then forwarded to EALA.

issues into existing EAC programmes (EAC, 2009). The only notable exception was the recommendation urging the ratification of the Environment Protocol.

b) Establishment of the Climate Change Programme Management Unit

Efforts to mainstream climate change into EAC programmes continued, but against the long shadow of institutional challenges due to resource constraints. The Council of Ministers informed EALA in November 2011 that it had passed several resolutions aimed at strengthening and mainstreaming climate change into the EAC. First, the Chair of the Council noted that a proposal for the establishment of the Climate Change Programme Management Unit had been approved. It would be implemented under the COMESA-EAC-SADC project, which was funded by several international donors (EAC, 2011d). A Swedish Government-funded project on carbon footprint/greenhouse gas standards, focused on agricultural exports, had also been launched (EAC, 2012b).

Second, the Sectoral Council on Environment and Natural Resources, a ministerial-level body, would be meeting later in the year to commence preparations for the then upcoming UN conference on the twentieth anniversary of Rio 1992 conference on environment and development - Rio+20. Third, trade and environment and sustainable development issues were part of the negotiations between the EAC and the European Union (EU) Economic Partnership Agreement (EPA) (EAC, 2011d). Moreover, the newly established Joint Council on the EAC-US Trade and Investment Facilitation Agreement would also address environmental issues. Crucially, the TIFA did not include sanctioned compliance mechanisms on environmental obligations (EAC, 2011d), an issue that will be discussed in detail in a forthcoming section.

Concerns over reliance on international donors to fund the climate change programme were repeatedly voiced by EALA. For instance, in the EAC supplementary budget of the fiscal year 2011/2012, Canada's International Development Research Centre (IDRC) and the US Agency for International Development (USAID) funded the key climate change projects through the supplementary budget (EALA, 2012a). But perhaps most revealing was the observation by an EALA member that international donors funded 91.8% of the EAC Food Security and Climate Change Action plan, the flagship regional policy endorsed at the heads of state level (EALA, 2012c). So disconcerted was the member that they asserted: '[T]he future of our Community is in the hands of donors' (EALA, 2012c). Three new climate change projects had also been initiated with funding from IDRC, USAID and multi-donor initiatives (EALA, 2012c).

EALA also continued to put pressure on the EAC executive arm to step up its efforts, and fulfill pending commitments, to address climate change (EALA, 2013b). EALA urged Tanzania to ratify the Protocol on the Environment and Natural Resources, since Kenya and Uganda had already deposited their instruments of ratification (EALA, 2012c). The Chair of the Council of Ministers updated the Assembly that several policy documents were at several stages of development. First, the process of institutionalising EAC joint participation in international conventions and treaties had commenced. Second, the draft EAC Climate Change Master Plan and Strategy had been prepared to guide the implementation of the EAC Climate Change Policy. Third, draft operational modalities of the EAC Climate Change Fund established by the Council of Ministers in 2010 had been prepared. The documents (on the Fund, Master Plan and Strategy) would be presented at the second Meeting of the Sectoral Council on Environment and Natural Resources in August 2012

for adoption (EALA, 2012c). Fourth, the sectoral council was reorganised, where environment and agriculture sectors were combined, perhaps reflecting the regional focus on food security and climate change nexus (EAC, 2012a).

Strengthening institutional capacity

Even though there was political momentum towards developing the environmental and climate change policy documents, the institutional challenge of insufficient resources and skeletal staff persisted. When the EALA members pressed the responsible Minister on the issue, the Minister responded that the Heads of State would approve 'millions of dollars' to address climate change. If implemented, this would be a significant increase from the then annual budget contribution of $10,000 by EAC member states, to address climate change (EALA, 2010c). The President of Tanzania, who was that year's Chair of the Heads of State Summit, in a speech at EALA, noted the importance that the Heads of State attached to the food security and climate change nexus, an issue they would tackle at their summit (EALA, 2015a).

At the Extra-Ordinary Meeting of the Council of Ministers, which preceded the Heads of State Summit, the Ministers fulfilled their promise to EALA by approving several policy documents and proposals on climate change. The Council adopted the draft Food Security and Climate Change Action plan, the draft Climate Change Policy, and the TORs for the Development of the Modalities for Establishment and Operationalisation of the EAC Climate Change Fund (EAC, 2010a). To expedite the process, the Council directed the EAC Secretariat to ensure that the ToRs for the Climate Change Fund were finalised, and to convene the first meeting of experts by July 2010 (EAC, 2010a). Additionally, the Council noted that additional funds amounting to US$ 231,000

had been secured through a joint project with another regional economic community, the Common Market for East and Southern Africa (COMESA). The funds had been allocated to the EAC to convene national climate change policy roundtables in the region in the build-up to developing a regional position for the COP15 climate change negotiations in the year 2009. The funds were also to be used to recruit a Climate Change Coordinator to be based at the EAC Secretariat and would cover one year (2009) (EAC, 2010a). This funding came from the Government of Norway (EALA, 2015a).

In subsequent debates on the EAC budget in EALA, budgetary support for climate change initiatives came up repeatedly. Implementation of the Food Security and Climate Change Action Plan was identified as a budgetary priority for the upcoming year (EALA, 2010d). There was, however, emphasis by EALA members that much of the funding should come from the EAC partner states (EALA, 2010e). But EALA also stressed the need for the EAC to access additional resources through international climate finance mechanisms. Responding to questions from EALA members, the Chair of the Council of Ministers noted that the third EAC Development Strategy (206-2010) had identified participation of the EAC in international treaties and conventions as one of eight strategic objectives (EALA, 2010e). The Chair also noted that the EAC was at an advanced stage in developing its application for accreditation to the UNFCCC; it was now awaiting legal review at the EAC Secretariat (EALA, 2010f). Moreover, the Chair noted that the draft Climate Change Policy that the Council had approved, which prioritised adaptation to climate change, would be considered and hopefully approved and adopted by the Heads of State in their upcoming summit. Finally, the Chair assured EALA that efforts towards mobilising resources locally would be enhanced (EALA, 2010f).

Earlier that year, and following the Ministerial directive, the first meeting of experts on preparations of modalities for operationalisation of the climate change fund had taken place in July 2010. The experts deliberated on the key elements of the climate change fund, with an obvious emphasis on the mobilisation of resources (EAC, 2010b). Given the ambitious nature of the climate change programme, the EAC climate change fund would play a crucial role in raising mobilising resources from both domestic and international sources. The fund would also provide much needed stability, especially when compared to the then *ad hoc* fund-raising strategy.

In tandem, another Ministerial directive was implemented when the Council established the Sectoral Council on Environment and Natural Resources, pursuant to Article 14(3)(i) of the EAC Treaty (EAC, 2010a). This Ministerial-level department would provide a more focused approach to environmental (including climate change) issues. The Council of Ministers had also approved the joint EAC-SADC-COMESA Climate Change Adaptation and Mitigation Programme, a tripartite regional project funded by international donors (EAC, 2010a). Approval of this project indicates that even though the EAC was keen to internalise the costs of its climate change programme, it was still open to funding from international donors. Moreover, international donors contributed a significant portion of the EAC supplemental budget for that fiscal year (EALA, 2010h).

While the roadmap for developing regional policies and other regulatory instruments was by now clear, securing the necessary resources to secure their implementation proved quite challenging. As a report tabled by the ATN committee of EALA revealed, even funding workshops on climate

change was a major challenge. The ATN tabled two workshop reports in January 2011: one on legal frameworks in the EAC; and a regional symposium on climate change (EALA, 2011b). After a hiccup arose when the Chair of the Council of Ministers claimed he was not aware of the tabled motion, debate on the reports resumed (EALA, 2011a). It turned out to be quite a spirited debate.

The Regional Symposium on Strategic Planning to address Climate Change was convened by the Uganda Parliamentary Forum, with funding from the German organisation GIZ (EALA, 2011c). The workshop included stakeholders from various sectors, including representatives from SADC, a regional economic bloc that includes some EAC partner countries. The focus of the workshop was on the difficulties of accessing international climate finance and other resources. It was noted that there was a need to strategise on how to access finance from the Green Climate Fund (GCF), the key financial mechanism of the UNFCCC. The strategy would be based on the rationale to operationalise the polluter pays principle, where major polluters are expected to support less polluting countries. Moreover, it was noted that the East African Development Bank (EADB) was working with the African Development Bank (AfDB) to access climate finance (EALA, 2011c).

Two other ATN reports on food security and climate change, and renewable energy in East Africa, were debated at EALA. On the first report, it was noted that climate change had greatly altered the politics of food security. The workshop had sought to understand the extent to which the challenge manifested in the region, and how it could link with the Food Security and Climate Change Action Plan (EALA, 2011c). The second report on renewable energy noted that there was a bias towards fossil fuel exploration in the EAC region, and this would lead to higher greenhouse gas emissions. In response, the report called for financial facilitation of the EAC Secretariat to develop a

Renewable Energy Master Plan 'immediately and without further delay'. To reiterate this recommendation, the report earmarked US$1.2 million for the process, which would be borne by the EAC partner states, in addition to increasing overall budgetary support for climate change (EALA, 2015b).

Even though climate change was still identified as a budgetary priority of the EAC, international donors kept contributing the bulk of the finances, especially for the supplementary budget. For example, the Canadian International Development Research Centre (IDRC) contributed US$ 712,779. This included funding to implement the Food Security and Climate Change Action Plan (EALA, 2011g). The Assembly however continued pressing for budgetary forecasts to include climate change (EALA, 2011d) and increased budgetary support for climate change (EALA, 2011d). But in an apparent disjuncture, the Assembly passed a resolution aimed at reducing and finally eradicating reliance on international aid, yet international donors were the major contributors of support for EAC climate change initiatives (EALA, 2011e). An address by the President of Rwanda at EALA underscored this challenge: high ambition on development of regional climate change legal instruments, but significant resource constraints (EALA, 2011f).

Overall, inadequate institutional capacity proved to be a major challenge in the development and implementation of EAC regional environmental and climate change policies. Much of the progress was due to external support especially by donors. Table 7.2 below presents corroborating support for the limited institutional capacity of the EAC partner states. As the table shows, all EAC partner states have had low regulatory capacity, government ineffectiveness, and are significantly trade-

dependent. The high dependence on trade underscores the prioritisation of economic over environmental budgetary elements; hence high economic costs.

Overall, the findings from the EAC PTA case study are consistent with those of the large-n analysis, especially the econometric analysis of the drivers of variation in the design of linkage clauses (Chapter 5). Table 7.3 below presents a summary of the key metrics of some of the alternative theoretical explanations that were significant from the econometric analysis.

Table 7. 2 Measures of institutional capacity and effectiveness, economic costs (trade dependence) of EAC Partner States

	Regulatory Capacity (%)				Government Effectiveness (%)				Trade Dependence (%)			
	1996	2000	2009	2019	1996	2000	2009	2019	1996	2000	2009	2019
Kenya	39.13	39.49	48.80	41.45	34.97	32.82	31.58	38.46	57	53	51	33
Uganda	53.80	56.41	47.85	37.98	27.32	42.05	32.54	31.25	35	33	47	40
Tanzania	31.52	41.03	36.36	27.88	27.32	41.54	33.97	17.31	52	24	44	32
Rwanda	9.24	13.85	42.11	58.17	12.02	28.72	49.76	60.58	32	27	37	58
Burundi	4.89	11.79	10.53	14.90	3.28	4.62	13.40	10.10	22	23	36	42
South Sudan*	-	-	-	1.97	-	-	-	0.00	-	-	-	66[a]
Average	**27.72**	**32.51**	**37.13**	**36.08**	**20.99**	**29.95**	**32.25**	**31.54**	**40**	**32**	**43**	**41**

Data source: World Bank Governance Indicators. Range of score is between 0-100%. It is evident that EAC Partner States have always had limited regulatory capacity, but one that has been improving over time. Moreover, the EAc partner states have low government effectiveness, and high dependence on tarde. These data show the high institutional and economic costs that EAC partner states would incur should they adopt trade-restrictive environmental measures. Data for Tanzania for Trade Dependence for 2017 used as 2019 is not available. * South Sudan became a sovereign state on 9 July 2011. [a] 2015 figure for South Sudan.

7.4 Performance of Alternative Explanations

While the main proposition underpinning the case study has been borne out - on EAC partner states using their PTAs as coordination-enhancing devices and facing high institutional costs despite a commitment to implementing environmental policy commitments - how have the alternative theoretical explanations fared? How each of the alternative explanations, as outlined in Chapters 1 and 5, has performed in the case study analyses of the preceding and present chapters is examined below.

Table 7. 3 Measures of some of the metrics of alternative explanations.

	Voice & Accountability (%)				Rule of Law (%)				GDP per capita (Current US$)				GDP (Current US$ Billion)			
	1996	2000	2009	2019	1996	2000	2009	2019	1996	2000	2009	2019	1996	2000	2009	2019
Kenya	28.50	23.88	36.49	36.45	18.09	24.75	17.06	35.58	421	397	905	1,817	12.05	12.71	37.02	95.50
Uganda	21.00	19.40	30.81	30.05	32.66	26.73	41.71	43.75	287	262	797	794	6.04	6.19	25.02	35.17
Tanzania	30.00	33.33	42.18	32.02	45.73	42.08	38.86	29.33	220	411	695	1,122	6.50	13.38	29.08	63.18
Rwanda	5.50	6.97	11.85	18.72	5.53	11.39	37.91	56.25	230	261	580	820	1.38	2.07	5.67	10.35
Burundi	7.50	7.46	29.38	4.93	7.54	7.43	12.32	5.77	143	136	212	261	0.87	0.870	1.78	3.01
South Sudan	-	-	-	1.97	-	-	-	1.44	-	-	-	1,119.7[a]	-	-	-	11.99
Average	**18.50**	**18.21**	**30.14**	**24.43**	**21.91**	**22.48**	**29.58**	**34.14**	**260**	**293**	**638**	**963**	**5.368**	**7.044**	**19.714**	**41.442**

Data source: World Bank Governance & World Development Indicators. [a] 2015 figure for South Sudan.

Relative bargaining power

EAC partner states completely avoided the use of third-party enforcement of environmental policy commitments. They also resisted attempts by some of the Major environmental norm entrepreneurs that sought credible commitments through sanctioned compliance. Since the US and the EU often include environmental protection and subsequent strong enforcement mechanisms in their PTAs, their negotiations with the EAC naturally would involve this approach. What is surprising however is that while the EAC partner states sought to enhance regional environmental cooperation, they were averse to the strong enforcement mechanisms of environmental provisions in the external PTAs. More importantly, the East African Legislative Assembly (EALA), which had led efforts to develop a binding regional instrument on climate change, with strong enforcement mechanisms, emerged as the key opponent especially of the EU-EAC PTA.

After protracted tensions between the EU and the EAC, the negotiations on the proposed Economic Partnership Agreement (EPA) collapsed. One of the key reasons for the collapse was the alleged linkage of environmental obligations with the EPA's dispute settlement mechanism for enforcement. However, a Trade and Investment Framework Agreement (TIFA), concluded at around the same time between the EAC and the US, included environmental commitments but did not adopt the sanctioned compliance mechanisms typical of US trade agreements. But why was this the case?

The EU sought to reformulate their EPAs such as the from preferential (favouring their less developed counterparts) to fully reciprocal, to bring them in line with WTO expectations of non-

discrimination; the Cotonou framework replaced the Lomé convention to address these issues (Mangeni & Juma, 2019, p. 32). When the EU thus sought to negotiate an Economic Partnership Agreement (EPA) with the EAC as a bloc, issues of development and opening up the EAC to massive EU imports that would undermine the EAC partner states' industrial policy were persistent (EALA, 2010g). Enforcement of environmental policy commitments became a major issue when the EU included clauses linking the compliance with MEA commitments to the EPAs dispute settlement mechanism. Even though this was not a major issue for the executive arm of the EAC, which was in fact ready to conclude the EPA, the legislative arm did not agree to it (EAC, 2012b).

To signal its disapproval, EALA rejected a grant from the EU aimed at supporting negotiations on the EPA, and passed a resolution seeking to compel the Council of Ministers and eventually the Heads of State not to agree to the clause on sanctioned enforcement of MEAs (EALA, 2012b). In rejecting the grant, which was earmarked as support for EAC countries in the EPA negotiations, EALA stressed that EAC partner states should bear the full costs of their engagement, with funding from their national budgets (EAC, 2011c). To reinforce its position, EALA passed a resolution noting that EAC partner states should not accede to the enforcement of environmental obligations in the EPA. The EALA Resolution is worth quoting at length:

> FURTHER AWARE that there is a stalemate in the technical negotiations on some issues. These issues are areas of concern to this Assembly and they are the following among others-
>
> - The high level of liberalization EU [sic] is asking of the EAC.
> - The inability to introduce new export taxes.

- The Most Favoured Nation (MFN) clause which will have an impact on our ability to have South-South cooperation and other trade agreements.

- The Development Chapter where Europe refuses to take on binding and additional commitments.

- *The Chapter on labour and* ***environment*** *that could oblige EAC countries to sign and implement more than a dozen additional international treaties.* ***A dispute settlement article is also included in this chapter to enforce these commitments***

THIS ASSEMBLY THEREFORE do resolve as follows:-

1. The EAC Council of Ministers engages further with the EU to address the pertinent concerns raised in this and the previous resolution on EPAs and most importantly look towards providing the alternative solution that Africa has already put forward the EBA which should be extended to the LDC regions.

2. The Council is further urged to engage with the EU to pursue a political intervention at the highest level especially on lobbying for the withdrawal of amendment to the Market Access Regulation (EC) 1528/2007 which threatens to lock some countries out of European market, noting that the technical angle is grinding to a halt.

3. *Proceed to conclude the negotiations ONLY after the full and formal resolution of the contentious issues.*

4. The Clerk of EALA is directed to transmit this Resolution to the National Assemblies/Parliaments for their debates and further appropriate action.

5. *The Secretary General is directed to forward this Resolution to the EAC Council and the negotiators for implementation and to issue a status report to the Assembly every four months until the signing of the EPAs* (EALA, 2012b, emphasis own).

By reasserting its oversight mandate, EALA's efforts contributed to the eventual collapse of the EAC-EU EPA negotiations. Only Kenya and Rwanda eventually ratified the EPA, primarily because they relied on the EU market for their exports (Nalunga, 2018). Recall that EALA had consistently sought regulatory instruments on environmental, and specifically climate change, issues which were backed by sanctions, at the regional level. But it was clearly opposed to external enforcement. It can therefore be concluded that attempted sanctioned enforcement of environmental obligations was an important factor in the collapse of the EAC-EU EPA negotiations.

Negotiations with the US on the TIFA, however, did not feature such sanctioned compliance clauses. In the Preamble of TIFA, the approach to environmental and economic policies was synergistic: '*Desiring* to ensure that their trade and environmental policies are mutually supportive and further the objective of sustainable development'. By contrast, clauses on labour and workers' rights were premised on enforcement, but without penalties for noncompliance. In the substantive part of the TIFA, a United States-East African Community Council on Trade and Investment ("the Council") was established, to, among others:

> [...identify relevant issues, such as those related to the protection of intellectual property rights, worker rights, and *the environment*, that may be appropriate for negotiation in an appropriate forum] (emphasis own).

TIFA was approved at the Heads of State Summit in June 2008, where a directive was issued to the Council of Ministers to conclude discussions. The summit directed the Council of Ministers to conclude discussions on the Trade and Investment Framework Agreement (TIFA) with the US, to be signed at the AGOA Conference in mid-July 2008 (HoS JC, June 2008). The agreement was then signed by the US (US Trade Representative) and the Director General (Customs Union) of the EAC, at the AGOA conference on 16 July 2008. Perhaps TIFA's design as a framework agreement, and its lack of the sanctioned compliance typical of US PTAs, could explain the lack of controversy akin to the EU PTA. What is important here is the legitimacy of enforcement mechanisms: external enforcement mechanisms were anathema especially to EALA. And finally, the paradox of the EAC relying on the US and EU for resources to implement their regional climate policies, yet rejecting sanctioned compliance mechanisms in external PTAs, underscores the import of legitimacy of enforcement mechanisms.

The outright rejection of sanctioned compliance, whether from within the region, or as imposed by external trading partners such as the Major environmental norm entrepreneurs, underscores the argument that coordination, and not credible commitments, was the main challenge and preferred approach to enforcement of environmental and climate change policy commitments. As the opposition to the environmental provisions in the proposed EU PTA from EALA showed, sovereignty costs were a decisive factor, which is consistent with the non-interference principle usually espoused by the global South in general (Coe, 2015), and Africa in particular (Akinyemi, 1972).

Bargaining efficiency

It has been argued that states will include environmental and other issues in PTAs to increase bargaining efficiency (Milewicz et al., 2016). While the EAC partner states took this approach when designing the EAC PTA treaty text, which is a deep PTA with a score of 4 out 7 (Dür et al., 2014b), but they abandoned the approach concluding subsequent PTAs, as will be discussed below.

Imitation/templating

Some scholars have argued that states typically copy/paste text from previous PTAs when developing new ones (Leonardo Baccini et al., 2015; Peacock et al., 2019). The preceding chapter showed that the EAC partner states indeed copy/pasted text from the environmental protocol of the Abuja Treaty, and used it to design the EAC Protocol on Environment and Natural Resources. As Chapter 6 showed, the Abuja treaty required regional economic communities (RECs) in Africa to develop such protocols, so it could be that the EAC partner states simply implemented that requirement. It is not, however, apparent that the EAC partner states sought to copy US, EU or other PTAs of major economies when designing the environmental provisions of the EAC treaty, and the subsequent implementation mechanisms.

Moreover, the EAC, the Common market for East and Southern Africa (COMESA) and the Southern African Development Community (SADC) concluded the Tripartite Free Trade Area (TFTA) PTA on 10 June 2015.[212] The TFTA did not include environmental linkage clauses, even

[212] Treaty text of the TFTA is available here https://www.atf.org.na/cms_documents/feb-tftaagreements9june20151740hrscleaned.pdf; SADC was adopted on 17 August 1992 and its treaty text is available here https://www.sadc.int/files/8613/5292/8378/Declaration__Treaty_of_SADC.pdf; and

though SADC, COMESA and the EAC PTAs each have elaborate linkage clauses promoting environmental cooperation.[213] The subsequent African Continental Free Trade Agreement (AfFTA) which was adopted on 21 March 2018, and of which the TFTA served as a building block, only has environmental linkage clauses in the preamble of the PTA text. AfCFTA, thus, does not have substantive environmental linkage clauses. This finding suggests that templating/imitation is not a deterministic mechanism, but that states choose what to include in PTAs and the context within which the PTA is concluded matters. The finding also underscores the move away from sanctioned compliance with environmental policy commitments in African PTAs. The templating argument is therefore insufficient in explaining the pattern of abandoning sanctioned compliance with environmental policy commitments in the aforementioned PTAs.

Diffusion through socialisation

Similarly, some scholars have argued that environmental clauses in PTAs concluded by environmentally credible countries are more likely to diffuse (Morin et al., 2019). Since the EAC, SADC and COMESA had substantive environmental protection commitments backed by sanctions compliance in their PTA texts, it would be expected that subsequent PTAs such as the TFTA and AfCFTA would also include such clauses. That these more recent PTAs do not include such clauses indicates the limitation of the diffusion argument. African countries are prioritising trade liberalisation as the main engine for economic growth (Mangeni & Juma, 2019). When I interviewed an EAC official and asked why the TFTA and AfCFTA did not include substantive environmental clauses, they observed that 'it all depends on negotiators. The EAC department of

COMESA was adopted on 08 December 1994 and its text is available here https://www.comesa.int/wp-content/uploads/2019/02/comesa-treaty-revised-20092012_with-zaire_final.pdf

[213] Both SADC and COMESA PTAs have environmental cooperation commitments that are backed by the PTA dispute resolution mechanisms, which include sanctions for noncompliance

environment was not much engaged in the TFTA and ACFTA negotiations. Moreover, the priority was on trade integration' (Interview with EAC Official I, 9 November 2018). Also, when asked whether there was tensions between trade and environmental policy when the EAC partner states were negotiating the TFTA and the AfCFTA, they said:

> 'Of course! This is a big issue. The trade department wants to go fast, and they view environmental, and climate change issues, as delaying them. When they consider environmental/climate change issues, they want to see them as opportunities (money). The environment department has thus far been trying to convince them to think about climate-proofing economies, e.g., infrastructure, and highlighting the impacts of climate change, in order to draw their attention. The department of environment has, therefore, been arguing along the lines of mainstreaming climate change. Moreover, trade officials are not keen on attending meetings convened by the environment department, hence they don't work together that much. Trade officials also see EIAs, for instance, as a hurdle to attracting foreign investments (Interview with EAC Official I, 9 November 2018).'

Domestic environmental groups

Finally, scholars have argued that domestic environmental groups have been lobbying for the inclusion of environmental protection clauses in PTAs (Morin et al., 2018). Others have similarly argued that governments with more representative electoral systems are more likely to include environmental linkage clauses underpinned by sanctioned compliance in their PTAs (Postnikov & Bastiaens, 2020). As the EAC case study analysis shows, domestic environmental groups were not a significant driver for the inclusion of such clauses. The groups were, however, involved in a consultative manner, at the invitation of the EAC. Only the EALA, which is a veto player in the region, advocated for the adoption of regional environmental policies based on sanctioned

compliance. Thus, the dynamics of domestic environmental groups as is the case of NAFTA and the EU (Abelson, 1995; Avery, 1998; Postnikov, 2014) does not apply for the EAC case study.

The spectre of green protectionism

Even though the case study has focused on the design of linkage clauses promoting environmental protection in the EAC, it is important to briefly note that the partner states have also developed mechanisms to mitigate green protectionism.

At the regional level, the EAC has collaborated with two other regional economic communities, SADC and COMESA to develop a Non-Tariff Barriers (NTB) online platform. The platform, launched in 2017, is intended as a 'reporting, monitoring and eliminating mechanism which incorporates concrete timelines for the removal of NTBs'.[214] By sending an SMS through their phones, stakeholders in the regions covered by the RECs could report such barriers for monitoring and resolution.[215] The EAC is also working with several stakeholders, including NGOs, to develop Greenhouse Gas (GHG) inventories especially targeted to the private sector in the region, to reduce emissions from the transport industry (Interview with an NGO representative, 06 December 2018).

The NTB platform is premised on the notion of necessity, where the States have to justify their measures; and the resolution mechanism of the NTB platform, therefore, performs the second

[214] https://www.tradebarriers.org/about

[215] The NTB platform had received only two complaints from the private sector on the lack of harmonization of vehicle emission standards in the region, and the delay in issuing environmental certificates. The EAC however works closely with the East African Business Council (EABC), an institution established under the EAC. EABC often lobbies the various EAC bodies and the EAC partner states on various issues, but rarely on climate change, according to an EAC official. Interview with EAC Official IV on 16 October 2018

function, which follows the logic of 'seeking paperwork' to justify the use of such measures: 'countries seek paperwork. They seek constraints. They seek investigations. They do this for both domestic and international reasons and they do so in systematic ways' (Pelc, 2016a, p. 243). Since its inception in 2017, 726 reports have been submitted and resolved. Of these, several notifications are related to the environment, and specifically climate change. Three reports have been filed under the broad environment category,[216] while six are on plastic regulations[217] and six on carbon taxes.[218] Thus, even though the EAC partner states have engaged in extensive regional environmental cooperation through their PTA, they have concomitantly sought to mitigate green protectionism in the region; this finding is consistent with the broader theme of the present study.

7.5 Conclusion

This chapter has demonstrated that when developing legal instruments to implement the environmental clauses in the EAC PTA treaty text, partner states abandoned the sanctioned compliance approach adopted in the design of the treaty and its attendant MoU, in favour of coordination mechanisms that did not include sanctions and/or third-party enforcement mechanisms to ensure compliance. Instead, they developed regional policy instruments that sought to enhance coordination on the implementation of the policies. Sustained efforts by the East African Legislative Assembly (EALA) - a veto player - to develop and ensure the adoption of a regional climate change law with sanctioned enforcement mechanisms failed to materialise, due to political infeasibility especially of sanctions. Indeed, the Protocol on Environment and Natural

[216] https://www.tradebarriers.org/resolved_complaints/search:environmental
[217] https://www.tradebarriers.org/resolved_complaints/search:plastic
[218] https://www.tradebarriers.org/resolved_complaints/search:carbon. This notification was filed by South African trucking company under SADC, and not the EU

Resources, which was intended as the enforcement mechanism for the EAC environmental commitments, was not adopted by all partner states, on the grounds that it could restrict economic policy objectives especially in the natural resources sector. Trade policy, especially trade-restrictive measures, were therefore avoided in the compliance mechanisms of the regional environmental legal instruments.

Sanctioned compliance including through third-party enforcement mechanisms has largely been absent in the EAC partner states' approach to promoting environmental protection in the region. Regional coordination through the EAC, however, proved to be challenging, as the partner states struggled with strengthening the institutional capacity of the EAC secretariat as a coordination-enhancing mechanism. Despite their commitment to the implementation of environmental policy commitments, the EAC partner states had to turn to donor countries and international organisations for financial and technical support.

Efforts by major trading powers such as the EU to introduce a credible-commitments approach (through third-party enforcement) to a proposed PTA with the EAC partly led to the collapse of the negotiations. This development underscores the infeasibility of sanctioned compliance in the EAC. Overall, the preceding and present chapters emphasise the need for more detailed case studies to improve our understanding of why and how some states have eschewed the use of sanctions such as trade-restrictive measures and/or third-party adjudication, and instead used their PTAs as coordination-enhancing devices in enforcing their environmental policy commitment.

Environmental cooperation in the EAC has, however, been ongoing under the spectre of green protectionism, leading to the development of a platform for reporting and resolving non-tariff barriers, including environmental ones. This finding is consistent with that of previous chapters, thus indicating that environmental measures are viewed by states as both vice and virtue from the trade standpoint.

Chapter 8: Conclusion

At the heart of this study is the question: *why and how have states used PTAs to address environmental policy issues?* The study examined whether the proliferation of environmental linkage clauses in PTAs is actually leading to the greening of PTAs by promoting environmental protection. To address the research question, a theory of issue-linkage was developed and tested against a large-n dataset of environmental linkage clauses drawn from 300 PTAs through statistical analysis, and a qualitative case study of the East African Community (EAC) PTA.

Chapter 1 set the context by posing the research puzzle and setting the study within the context of the relevant literature. It also outlined the methodology underpinning the study, and presented an overview of the overall argument. Chapter 2 examined the multilateral trade system's historical debates. It identified the main contentious issues on trade and environment linkages, as well as states' positions on the issues. It focused on a series of thirteen debates convened by the Environmental Measures and International Trade (EMIT) working group of the General Agreement on Tariffs and Trade (GATT). The chapter lay the groundwork for the theory developed in the study, especially in ensuring that the theory's assumptions are grounded in real-world historical developments instead of *a priori* theoretical assumptions. Chapter 3 articulated a theory of issue-linkage, which underpins the empirical analysis of the study. The theory of issue-linkage aimed for elegance and parsimony. But explanatory theories of this kind are vulnerable to the charge that they are ahistorical and inattentive to context (Snidal, 2002, pp. 85–87). These limitations were addressed by 1) ensuring that the underlying assumptions were historically informed, and 2) testing the theory in a more detailed qualitative case study.

Chapters 4 and 5 shifted attention to mapping and explaining the proliferation of environmental linkages in about 300 PTAs concluded in the past three decades. Chapter 4 analysed whether most of the environmental linkage clauses - the dependent variable - sought to curtail green protectionism or promote environmental protection. Chapter 5 examined the main drivers of variation - the explanatory variables - in the design of environmental linkage clauses in PTAs. This included not only testing the theory of issue-linkage developed in the study, but also alternative explanations in the literature on trade and environment. To probe the large-n findings of the preceding two chapters, Chapters 6 and 7 focused on the East African Community (EAC) as a South-South PTA case study. By adopting the EAC PTA as an in-between case study, Chapter 6 traced the origins of environmental policy commitments in the EAC PTA, while Chapter 7 analysed the factors that influenced the design of the compliance mechanisms of the environmental policy instruments developed under the purview of the EAC PTA.

The remainder of this chapter is structured as follows. The first section presents the main findings and conclusions of the study; the second section presents the study's contributions to several strands of literature, while the final section outlines policy recommendations on the prospects of linkage politics in navigating gridlock in global governance.

8.1 Main Findings and Conclusions

Overall, there are two key findings from this study. First, the large-n analysis found that the overarching objective of including environmental linkage clauses in PTAs has been to curb green protectionism. Unlike environmentalists, states have thus viewed environmental measures as a vice, and not a virtue and they have used PTAs to curb or constrain their effects on trade. What

appears on the surface to be the 'greening of PTAs' through the proliferation of environmental linkage clauses is, in fact, a 'green illusion'. That is, the proliferation of environmental linkage clauses does not necessarily equate to promoting environmental protection, as they could also seek to curtail green protectionism. Distinguishing the two types of linkage clauses is thus critical to the evaluation of the 'greening of PTAs' assumption.

The second key finding is that where states have used their PTAs to enforce environmental policy commitments, most PTAs have done so through coordination-enhancing mechanisms and avoided using third-party enforcement mechanisms. In fact, some states have included clauses that explicitly forbid access to the formidable third-party enforcement mechanisms of their PTAs. Except for Major environmental norm entrepreneurs (the US, EU and Canada), and a few more wealthy countries such Iceland, Liechtenstein, Norway, and Switzerland which comprise the European Free Trade Association (EFTA), most states have largely avoided using their PTAs as credible-commitment devices to enforce environmental policy commitments. In cases where states adopt third-party enforcement mechanisms, they have designed them as consultative mechanisms, which are distinct from the typical third-party dispute resolution mechanisms based on sanctioned compliance with trade policy commitments. The finding points to the need to look beyond the EU and US approaches to ensuring compliance with environmental commitments through PTAs, as they are the exception and not the rule.

Together, both findings challenge the conventional narrative's optimism in the 'greening of PTAs' assumption, whereby the proliferation of environmental linkage clauses might imply the promotion of environmental protection through PTAs. Chapter 2 on the GATT EMIT debates

showed clearly that states have been reluctant, for a long time, to use adverse trade measures, such as trade restrictions, outside of the framework of MEAs to enforce environmental policy commitments. This reluctance is demonstrated in the econometric analysis and the qualitative case study on the EAC.

Table 8.1 below presents an overview of the key points of the study across the chapters.

Table 8. 1 Summary

Chapter	Key points
Chapter 2 (Historical antecedents)	- Concerns over green protectionism dominated debates in GATT - Preference for the use of trade measures within MEA context to enforce environmental policy commitments - Emphatic rejection of unilateral, extra-jurisdictional use of trade measures to enforce environmental policy commitments
Chapter 3 (Theory)	- Developed a theory of issue-linkage - Adding adjustment costs to policy externalities significantly improved the explanatory power of the theory of issue-linkage
Chapter 4 (Proliferation of linkage clauses)	- Environmental linkage clauses that seek to curb green protectionism overwhelmingly dominate - Hence, curbing green protectionism is the primary reason for the proliferation of environmental linkage clauses in PTAs - PTAs have largely avoided the use of third-party mechanisms to ensure compliance with environmental policy commitments, instead preferring coordination-enhancing mechanisms
Chapter 5 (Variation in linkage)	- Overall, adjustment costs (institutional costs) have been the most proximate driver of variation in linkage outcomes - Major environmental norm entrepreneurs have been conducting forum-shopping through third-party enforcement of environmental policy commitments by leveraging their significant relative bargaining power - There has been a diffusion of coordination-enhancing mechanisms, absent sanctions, in enforcing environmental policy commitments
Chapter 6 (EAC treaty design)	- EAC partner states were committed to promoting regional environmental cooperation, hence included an Environment chapter in the PTA treaty text - High adjustment costs (institutional capacity) persistently plagued the implementation of environmental policy commitments

	- EAC partner states initially adopted a credible-commitments approach (based on third-party enforcement) in ensuring compliance with their environmental policy commitments
Chapter 7 (EAC implementation mechanisms)	- EAC partner states abandoned third-party enforcement in favour of coordination-enhancing compliance mechanisms in implementing their environmental policy commitments - EAC partner states developed mechanisms to mobilise additional resources to address the high adjustment costs (institutional capacity) of implementing their environmental policy commitments
Overall finding: Adjustment costs (institutional costs) have been the *proximate* driver of variation in the design of environmental linkage clauses.	

Overall conclusions

Two main conclusions follow from the findings. First, environmental measures have been primarily viewed by states as a vice, thus the need to curb green protectionism. The perceived 'greening of PTAs', through the proliferation of environmental linkage clauses in PTAs, is largely a 'green illusion', thus not a race to the top. These clauses on green protectionism, and their effects, do not contribute to greening by promoting environmental protection. It can be concluded that the proliferation of environmental linkage clauses in PTAs is primarily driven by the logic of curbing a *vice* (green protectionism) and not necessarily promoting a *virtue* (green protectionism).

Second, states have largely avoided supplanting the 'soft' enforcement approach of MEAs with third-party enforcement usually found in PTAs. This is because the institutional and economic costs of adopting third-party enforcement of environmental policy commitments have been too high. Thus, states have adopted coordination over a credible-commitments approach to ensuring compliance with environmental policy commitments. Although states are increasingly using their PTAs to enforce environmental policy commitments, they do so in ways that enable them to retain significant political and regulatory autonomy. In particular, they avoid using third-party

enforcement for environmental commitments in PTAs. One can conclude that states' preference for coordination over credible-commitments indicates their unwillingness to abandon the 'softer' enforcement approach common in MEAs. It can be further concluded that states recognise and value the differences in environmental standards; instead of offsetting them through harmonisation backed by third-party enforcement, they prefer coordination through mutual recognition of the differences. The US preference for sanctioned compliance can be linked to the political influence and pressure from domestic environmental groups, and these dynamics should not be assumed to be necessarily prevalent in other countries.

Limitations of the study

As with any study covering a wide range of material, there are several limitations to the present study. The first is the size of the database. The study examined 300 PTAs, but there are many more PTAs in existence. Databases such as TREND[219] and DESTA[220] have coded about 600 PTAs. However, due to computational time and resource constraints arising from the PhD timeframe and resource facilities, only so many PTAs could be coded and analysed. Choosing a smaller number of PTAs to analyse was also necessitated by the need to carefully read through the entire treaty texts of the PTAs, coding the environmental clauses in accordance with the theory of issue-linkage. Nevertheless, the study's large-n empirical analysis can be easily extended to cover all the PTAs, especially when time and computational capacity are abundant. Nonetheless, the sampling approach of focusing on PTAs notified to the WTO represents a comprehensive cross-section of PTAs in terms of geographic scope and diversity of parties.

[219] https://klimalog.die-gdi.de/trend/about-trend.html
[220] https://www.designoftradeagreements.org/

Second, qualitative case studies provide excellent means of testing the robustness of general explanatory theories by providing a more in-depth analysis of causal pathways, through process-tracing. Yet this very utility limits the scope of the number of case studies one can consider for a project such as the present study. The EAC PTA was analytically useful as an 'in-between' case (Seawright & Gerring, 2008), insofar as it has features that are both different and similar to the most studied cases, such as US and EU PTAs. It was a crucial case as it is similar to the EU in design but is also illustrative of the use of coordination mechanisms as elaborated in the theory of issue-linkage and large-n analysis. While there are contextual aspects that may be unique to the EAC case, the overall theoretical insights from the case can be generalised to other South-South PTAs that do not include major economies. But, of course, this requires further testing.

8.2 Contributions to the literature

Implications for environmental governance through PTAs

Findings from this study suggest several implications for subsequent scholarship on environmental governance through PTAs. The present study has gone beyond the existing literature on trade and environment, in the context of PTAs, by developing a causal general theory to explain the variation in the design of environmental linkage clauss in PTAs. There is thus much promise in refining theory to help us better understand the causal mechanisms that lead to variation in the design of environmental linkage clauses in PTAs.

It is also worth examining more PTAs beyond the global North 'beltway', especially the Major environmental norm entrepreneurs (such as the US, Canada and the EU). This is not to say such studies are not necessary; far from it, given the importance of these major economies. Rather, it is

to point to the value in examining PTAs in different contexts that have been neglected by the research community. Only then can we start generating a fuller and richer picture of the universe of PTAs. Such case studies can provide a more in-depth understanding to compensate for the limitations of formal methods such as statistical analysis, however sophisticated. As Chapter 2 on the GATT EMIT debates showed, states have always adopted policy positions that are more nuanced than appreciated in the literature. Simplistic claims such as the global North is more committed to environmental protection than the global South can be misleading. What is more important is to pin down the points of political disagreement, such as compliance mechanisms.

At the theoretical level, the study's findings underscore the importance of adjustment costs, and not just policy externalities, in the analysis of issue-linkage. Using PTAs to enforce environmental policy commitments is not necessarily a contentious issue. What is controversial, however, is using approaches that exert high adjustment costs on members, especially the use of trade sanctions or other approaches that erode political and regulatory autonomy. Shifting scholarly attention to the impact and dynamics of adjustment costs can yield sharper theoretical insights into how they influence linkage outcomes in various contexts. Such an analysis also avoids over-generalised propositions, such as conflating the resistance to certain compliance mechanisms - such as trade sanctions - with a lack of commitment to environmental protection.

As this study has shown, for instance, literature has commonly conflated compliance with sanctioned enforcement of commitments. Large-n studies have been especially inattentive to this detail. There is, therefore, a need to unpack enforcement mechanisms and the broader 'compliance

blackbox' (Checkel, 2001, p. 556).[221] Clearer conceptual distinctions between compliance, implementation and enforcement would help us bypass the 'credible-commitments through sanctioned compliance straitjacket', and shed crucial insights into the diversity of compliance mechanisms, particularly coordination-enhancing ones that do not include sanctions. Some of the literature on PTAs already does this (e.g. Bastiaens & Postnikov, 2017; Postnikov & Bastiaens, 2014). Thus, sanctions should be viewed as a means to an end - compliance with the PTA - and not an end in itself. For instance, fostering compliance through coordination holds much promise in the study of how PTAs can promote environmental protection. Or as Poulsen put it:

> Are more precise obligations more conducive for coordination, and what is the role of dispute settlement mechanisms? In the trade regime, for instance, institutionalized mechanisms for informal dispute settlement (e.g., the World Trade Organization's committee structure) have received little attention in empirical scholarship even though trade agreements often exclude important disciplines from third-party dispute settlement or fail to specify enforcement mechanisms in case of noncompliance, thereby reducing credibility...*As more tariff lines approach zero, the battleground of trade policy becomes less about locking in market access and more about competing regulatory standards*. This makes the politics of coordination more relevant than ever (Poulsen, 2020, p. 8, emphasis own)

Broader implications to the literature

[221] In a seminal study, Checkel (2001) explored rationalist (deterrence) and constructivist (norms/legitimacy) sources of compliance, an advancement from an outsize focus on the former in political science. Yet, as McAdams (2015) has persuasively argued and demonstrated, law can also act as coordination-enhancing device by using its expressive powers (identifying focal points of coordination, and generating pertinent information on compliance). Coordination, the third rail of compliance, has been largely neglected from the political science (especially international relations) literature on compliance (also see McAdams, 2000b, 2005)

Overall, this study contributes to several strands of the literature on trade and environment. By focusing on PTAs, the study contributes to the burgeoning literature on trade and environmental governance. Debates on trade and environment have traditionally focused on the World Trade Organization (WTO), especially its jurisprudence arising from disputes. Scholars from trade policy have, of course, emphasised the temptations and dangers of using trade policy for protectionist purposes - so-called green protectionism (e.g. Bhagwati, 1988, 2003; Greaker, 2006b). On the one hand, environmental governance scholars have highlighted the constraints placed by trade policy, especially in the design of MEAs (e.g. Eckersley, 2004a). This study has sought to take the accounts of both sides seriously and tested them against the empirical record. The GATT EMIT debates as outlined in Chapter 2, for instance, brought out the much-overlooked historical record on the diplomatic debates on the trade and environment nexus to provide the groundwork for developing the theoretical foundation of the study. In doing so, it is hoped that this study has underscored the need for nuanced discussions on the topic, as opposed to sweeping generalisations that often eschew important context.

The theory of issue-linkage enabled a rigorous analysis of the design of linkage clauses and their variation, a task that is often overlooked in the literature. It is hoped that improving our understanding of the design of environmental linkage clauses provides an important advancement in using PTAs to promote environmental protection. Specifically, it has been demonstrated that the clauses seek to either curtail green protectionism or promote environmental protection, and not just the latter. In placing theory-building at the heart of the study, it is hoped that the findings underscore the payoffs for understanding the causal logic behind the design of environmental

linkage clauses.[222] But as it has been earlier noted, parsimonious explanatory theories like the one developed in the present study lack nuance, so it would be more appropriate for such theories to be complemented with historical analysis and in-depth case studies that not only test the theory, but also provide the necessary context and nuance for a more rounded understanding.

This study also contributes to the rich theoretical literature on regime interaction (e.g. Alter & Meunier, 2009; Blome et al., 2016b; Stokke, 2001) and issue-linkage (e.g. Leebron, 2002; Maggi, 2016; Stein, 1980). Earlier literature on issue-linkage focused on transaction costs, while literature on regime interplay focuses on policy externalities. However, analysis of the attendant costs of responding to policy externalities - adjustment costs - has been largely absent in this literature. By integrating adjustment costs into the regime interaction literature, this study advances the explanatory power of the theories. Moreover, since adjustment costs have been the main factor driving variation in linkage outcomes, continued marginalisation of the costs severely curtails regime interaction's theoretical capacity. As this study has demonstrated, adjustment costs - especially institutional - play a crucial role in determining linkage outcomes. The theoretical advancement also contributes to linkage politics, broadly defined. By combining policy externalities with adjustment costs, this study has enriched both literatures.

Another significant contribution of this study is to the literature on globalisation and policy convergence. Relevant to this study is a famous question posed by the eminent political economist Dani Rodrik: *what do trade agreements really do?* (Rodrik, 2018). As this study has demonstrated,

[222] While testing hypotheses is a useful endeavour, especially for large-n studies, it should not be at the expense of theory-building; explanation should be prized over prediction especially through hypothesis-testing (Mearsheimer & Walt, 2013)

PTAs have primarily sought to curtail green protectionism more than promote environmental protection. Thus, PTAs are still primarily about promoting and liberalising trade and not restricting it. For scholars of environmental governance, trade agreements can be harnessed to enforce environmental policy commitments, especially through the use of trade measures in the design of MEAs (Eckersley, 2004a; Mehling et al., 2018; Zelli et al., 2013). Trade policy scholars have also underscored the persistence of green protectionism (e.g. Greaker, 2006b; Schuenemann & Kerr, 2019). The significant variation in the design of environmental linkage clauses in PTAs underscores the unsettled nature of this debate. States have, therefore, used their PTAs to deal with green protectionism much more than promoting environmental policy objectives, a trend that merits more in-depth analysis.

The study also contributes to the debate on the 'Globalization Paradox' (Rodrik, 2011). As Rodrik explains in this seminal book, *The Globalization Paradox*, states have attempted to curtail hyperglobalisation by re-asserting their national regulatory authority, especially in the setting of their national standards. In essence, states also face what Rodrik has called the 'globalisation trilemma': 'we cannot have hyperglobalization, democracy and self-determination all at once. We can have at most two out of three' (Rodrik, 2011, p. 200). When it comes to compliance, this study has revealed that states have chosen mechanisms that maintain their political autonomy and domestic regulatory authority. They have preferred to coordinate their environmental commitments primarily through domestic standards - non-derogation and improvement of the domestic environmental standards. On global and transboundary environmental challenges, preference has been for coordination through international environmental standards, namely MEAs and regional environmental agreements (as in the EAC PTA case study). True to their stated

objection in the GATT EMIT debates, states have largely avoided sanctioned compliance, especially through trade restrictions, as well as harmonisation of domestic environmental standards. Harmonisation of environmental policies in the EAC was made possible by the similar socio-economic and environmental contexts across partner states. These findings reinforce Rodrik's globalisation trilemma.

Findings from the study also contribute to the literature on globalisation and policy convergence (e.g. Holzinger & Knill, 2005; Mosley, 2000; Rudra, 2007). An implicit assumption implied by the growing trend of including environmental linkage clauses in PTAs might be that there is a convergence of domestic environmental standards. Yet, as this study has shown, the picture is much more nuanced. Daniel Drezner has aptly noted the difficulty of states agreeing on a common point of policy convergence:

> the study of globalization needs to be rescued from the pop commentators…. one reason the globalization phenomenon is important is the perception by many scholars and policymakers that it transforms international politics...Globalization is not deterministic; *there is no single predicted location for policy convergence*. The ability of states to cooperate and their ability to agree on norms of governance determines the extent of policy convergence (Drezner, 2001, p. 78, emphasis own).

As is apparent in the present study, disagreements over a single point of policy convergence for environmental standards have persisted for a long time. The main findings of the study corroborate Drezner's claim. As states continue to emphasise their political and regulatory autonomy, especially the need for each state to set their own environmental standards, hopes for (global)

harmonisation of standards remain a mirage. As the GATT EMIT debate revealed, developing countries have rejected and avoided efforts to harmonise domestic environmental standards due to the high 'social cost' they would incur (GATT, 1992j, p. 40). Equalising domestic environmental standards is too contentious and the default position is national autonomy in the absence of consensus among parties to a particular MEA, as Principles 11 and 12 of the Rio Declaration have outlined (UN, 1992, p. 3).

If the EAC PTA case study's findings are anything to go by, harmonisation will only be feasible when states have similar economic and cultural contexts. The assumption that increasing trade will drive environmental regulatory convergence upwards, will have to contend with these limitations. Moreover, this study has shown that not even Major environmental norm entrepreneurs, leveraging their enormous relative bargaining power drawn from their market size, have successfully pushed other states towards a single point of policy convergence. In fact, other states have largely avoided the third-party enforcement approach of Major environmental norm entrepreneurs. Claims of diffusion of environmental standards from the Major environmental norm entrepreneurs to other states will also have to pay more attention to the globalisation paradox. Where there has been greening of PTAs, through the proliferation of clauses promoting environmental protection, it has been through the mutual recognition of varying domestic standards and not through harmonisation. Drezner has articulated this challenge thus:

> Another potential problem is that much empirical work on globalization and policy formulation focuses more on the direction of policy trajectories and less on whether policies across countries are actually converging. Attempts to show convergence are often poorly conceptualized or merely assumed (Drezner, 2001, p. 66).

This study also offers insights on the age-old analysis of the role of law in international politics. Debates on how law generates compliance, and concomitant effects of political dynamics, have persisted (e.g. Downs et al., 1996; Goldstein et al., 2001; Guzman, 2002; Pelc, 2016b; Reus-Smit et al., 2004). Perhaps nowhere is this challenge more acute than in linkage politics. The literature on the inclusion of environmental linkage clauses in PTAs has largely overlooked the design of compliance mechanisms. And for the international political economy (IPE), more generally, compliance problems are primarily based on the need to ensure credible commitments, usually through sanctioned compliance mechanisms such as third-party dispute resolution. Therefore, it is often assumed that when states include environmental standards, especially via MEAs, in PTAs, they seek to leverage the latter's sanctioned compliance mechanisms as if this is the only way to ensure compliance. The outsize focus on the PTAs of Major environmental norm entrepreneurs has exacerbated this view. As a result, parties are more likely to use their enormous markets as relative bargaining leverage to promote their preferred environmental standards (e.g. Jinnah & Morin, 2020).

But as this study has shown, other states have largely avoided the credible-commitments compliance approach. Instead, these states have taken active steps to exclude environmental standards from trade policy enforcement disciplines in PTAs. Emerging economies, especially China, have been at the forefront of pushing for this approach of decoupled enforcement. Such PTAs often include clauses that explicitly decouple the compliance mechanisms of the environmental commitments from those of trade commitments. Compliance mechanisms for the former are often less punitive than those of the latter. This finding contributes to the emerging

literature on constraining the deterrent force of law through 'dejudicialization' (Abebe & Ginsburg, 2019). Law can punish, but it can also coordinate absent sanctions. The explicit exclusion of environmental standards, especially from third-party dispute resolution, is in tandem with a broader emergent trend where states preserve their political autonomy, particularly when they perceive its significant erosion:

> [W]e now are observing small and perhaps increasing steps toward what might be called the dejudicialization of international politics, conceived of as the complete removal from judicial cognizance of a policy issue that had previously been subject to judicialization. We are seeing some areas of law in which the scope and depth of judicial governance are less than they used to be, which might lead, in the extreme, to a full reversal of judicialization (Abebe & Ginsburg, 2019, p. 521).

The present study has demonstrated the salience of coordination-enhancing mechanisms in fostering enforcement of policy commitments to address the foregoing challenge of enforcement. The study has demonstrated that most PTAs have adopted coordination as the preferred compliance mechanism. The study also contributes to shifting the attention from the dominance of rationalist theories of compliance that emphasise ensuring credible commitments, especially through sanctions, which dominate IPE scholarship, to alternative compliance mechanisms including coordination-enhancing ones.

Lastly, the study also contributes to the problem that has preoccupied students of international politics: the problem structure of political issues. Arthur Stein's seminal conceptualisation of cooperation problems as dilemmas of common interest and dilemmas of common aversions is

instructive (Stein, 1982). Dilemmas of common aversion necessitate coordination to avoid undesirable outcomes, while dilemmas of common interest seek to ensure the credibility of commitments by deterring cheating. This study has revealed that promoting compliance with environmental policy commitments through PTAs has primarily sought to solve coordination problems posed by the dilemma of common aversions - avoidance of a race to the bottom and coordinating efforts in implementing MEAs and strengthening domestic standards. PTAs have therefore been used as a coordination-enhancing device. This finding is underscored by the limited use of sanctioned compliance, especially through third-party enforcement. By contrast, extant literature on the use of PTAs to promote environmental protection has assumed that the problem structure is one of dilemmas of common interests; this approach fits well, though, with forum-shopping by the Major environmental norm entrepreneurs (US, Canada and the EU).

8.3 Policy Implications of Linkage Politics and Gridlock in Global Governance

Finally, and looking to the future, a few reflections and conjectures on the relevance of this study's findings and conclusions for global governance are in order. Specifically, the reflections focus on the role of linkage politics in helping to overcome gridlock in global governance. Global governance has become more gridlocked (Hale et al., 2013). As the global climate crisis worsens, debates have resurfaced on how trade policy tools such as border carbon adjustment (BCA) mechanisms can contribute to tackling 'environmental dumping' - as in gaining a price advantage by failing to internalise environmental costs or failing to ensure adequate environmental regulation - such as through mitigating carbon leakage (Mehling et al., 2019). In a broader context, Major environmental norm entrepreneurs (the EU in this case) have sought to leverage trade agreements to foster global climate governance. While the potency of such policy instruments is not in question, there are valid concerns about their limits and normative and ethical implications

(Brandi, 2013). Concerns raised in the GATT EMITs, especially about exporting domestic environmental standards through unilateral, extra-jurisdictional application of trade measures, as highlighted in the Historical Antecedents chapter, stand to constrain application of adverse measures.

Moreover, concerns over the 'social costs' exacted on less developed countries, which also have other competing human development challenges, pose another significant hurdle (Bhagwati, 2001, pp. 22–23). International environmental cooperation and governance is guided by the principles of equity and common but differentiated responsibilities and respective capabilities (Rajamani, 2006). This is reflected in the Rio Declaration and the design of many MEAs such as the ozone and climate regimes. Whether states will abandon this approach of acknowledging and allowing differentiation and adopt an approach of equalising domestic environmental standards to address the so-called 'eco-dumping' remains an open question. For instance, scholars have already raised concerns over BCAs, especially with regards to their implications on equity and fairness in climate governance (e.g. Brandi, 2013; Eckersley, 2010). Thus, BCAs will not be a panacea for the problem of gridlock among parties to the Paris Agreement on Climate Change unless these issues are addressed.

Several policy recommendations follow from the present study. First, policy makers will need to reconsider the role of coordination especially through diplomacy in fostering compliance with policy commitments. Credible-commitment mechanisms based on attaching costs to noncompliance have been an attractive option, but as this study has demonstrated, such mechanisms are ill-suited to issue-linkages that incur significant adjustment costs to parties to the

agreements. Sanctioned compliance is thus not a silver bullet. Also, there is a need to pay attention to the adjustment costs incurred from linkage, especially regulatory capacity. Limited institutional capacity of states, especially developing ones, should not be confused with being a laggard or even inaction. Strengthening the institutional capacity of such states would enhance their capacity for compliance.

At the broader level, it is conjectured that the salience of linkage politics will grow so long as gridlock in global governance persists. It is likely that forum-shopping will be prevalent, particularly by major economic powers. Whether it is through linking international investment agreements to renewable energy (e.g. Selivanova, 2018; Tienhaara & Downie, 2018), trade restrictions to public health pandemics (Pelc, 2020), or even sovereign wealth funds to national security (Cohen, 2009), linkage politics will either exacerbate or help overcome policy gridlock. Of course, the jury is still out on this, but future scholarship can shed more light on the prospects of linkage politics in overcoming gridlock in global governance.

Bibliography

Abbot, F. M. (1993). The NAFTA environmental dispute settlement system as prototype for regional integration arrangements. *Yearbook of International Environmental Law*, *4*, 3–29.

Abbott, K. W., & Snidal, D. (1998). Why States Act through Formal International Organizations. *The Journal of Conflict Resolution*, *42*(1), 3–32. JSTOR.

Abbott, K. W., & Snidal, D. (2000). Hard and Soft Law in International Governance. *International Organization*, *54*(3), 421–456. https://doi.org/10.1162/002081800551280

Abdel-Latif, A. (2015). Intellectual property rights and the transfer of climate change technologies: Issues, challenges, and way forward. *Climate Policy*, *15*(1), 103–126. https://doi.org/10.1080/14693062.2014.951919

Abebe, D., & Ginsburg, T. (2019). The Dejudicialization of International Politics? *International Studies Quarterly*, *63*(3), 521–530. https://doi.org/10.1093/isq/sqz032

Abelson, D. E. (1995). Environmental lobbying and political posturing: The role of environmental groups in Ontario's debate over NAFTA. *Canadian Public Administration*, *38*(3), 352–381. https://doi.org/10.1111/j.1754-7121.1995.tb01054.x

Acharya, A. (2007). The Emerging Regional Architecture of World Politics. *World Politics*, *59*(4), 629–652.

Acharya, A. (2011). Norm Subsidiarity and Regional Orders: Sovereignty, Regionalism, and Rule-Making in the Third World1. *International Studies Quarterly*, *55*(1), 95–123. https://doi.org/10.1111/j.1468-2478.2010.00637.x

Acharya, A. (2014). Global International Relations (IR) and Regional Worlds. *International Studies Quarterly*, *58*(4), 647–659. https://doi.org/10.1111/isqu.12171

Aisbett, E., & Silberberger, M. (2020). Tariff liberalization and product standards: Regulatory chill and race to the bottom? *Regulation & Governance*, *Online first*. https://doi.org/10.1111/rego.12306

Akinyemi, A. B. (1972). The Organization of African Unity and the Concept of Non-Interference in International Affairs of Memmber-States. *British Year Book of International Law*, *46*, 393.

Alam, S. (2005). Trade-Environment Nexus in Gatt Jurisprudence: Pressing Issues for Developing Countries. *Bond Law Review*, *17*(2). http://epublications.bond.edu.au/blr/vol17/iss2/1

Allee, T., & Elsig, M. (2017). Veto players and the design of preferential trade agreements. *Review of International Political Economy*, *24*(3), 538–567. https://doi.org/10.1080/09692290.2017.1316298

Allee, T., & Elsig, M. (2019). Are the Contents of International Treaties Copied and Pasted? Evidence from Preferential Trade Agreements. *International Studies Quarterly*, *63*(3), 603–613. https://doi.org/10.1093/isq/sqz029

Alter, K. J., & Meunier, S. (2009). The Politics of International Regime Complexity. *Perspectives on Politics*, *7*(1), 13–24. https://doi.org/10.1017/S1537592709090033

Althammer, W., & Droege, S. (2003). International Trade and the Environment: The Real Conflicts. In L. Marsiliani, M. Rauscher, & C. Withagen (Eds.), *Environmental Policy in an International Perspective* (pp. 151–172). Springer Netherlands. https://doi.org/10.1007/978-94-017-0333-8_7

Andonova, L. B., Hale, T., & Roger, C. B. (2017). National Policy and Transnational Governance of Climate Change: Substitutes or Complements? *International Studies Quarterly*, *61*(2), 253–268. https://doi.org/10.1093/isq/sqx014

Andriamananjara, S. (2015, June 17). Understanding the importance of the Tripartite Free Trade Area. *Brookings*. https://www.brookings.edu/blog/africa-in-focus/2015/06/17/understanding-the-importance-of-the-tripartite-free-trade-area/

AU, AfDB, & UNECA. (2019). *Africa Regional Integration Index Report 2019*. African Union, African Development Bank, UN Economic Commission for Africa. https://www.integrate-africa.org/fileadmin/uploads/afdb/Documents/ARII-Report2019-FIN-R40-11jun20.pdf

Avery, B., & Boadu, F. O. (2004). Global Demand for U.S. Environmental Goods and Services. *Journal*

of Agricultural and Applied Economics, *36*(1), 49–64. https://doi.org/10.22004/ag.econ.42895
Avery, W. P. (1998). Domestic Interests in NAFTA Bargaining. *Political Science Quarterly*, *113*(2), 281–305. JSTOR. https://doi.org/10.2307/2657857
Axelrod, R., & Keohane, R. O. (1985). Achieving Cooperation under Anarchy: Strategies and Institutions. *World Politics*, *38*(1), 226–254. JSTOR. https://doi.org/10.2307/2010357
Baccini, Leonardo, & Urpelainen, J. (2012). Strategic Side Payments: Preferential Trading Agreements, Economic Reform, and Foreign Aid. *The Journal of Politics*, *74*(4), 932–949. https://doi.org/10.1017/S0022381612000485
Baccini, Leonardo, Dür, A., & Haftel, Y. Z. (2015). Imitation and Innovation in International Governance: The Diffusion of Trade Agreement Design. In A. Dür & M. Elsig (Eds.), *Trade Cooperation: The Purpose, Design and Effects of Preferential Trade Agreements*. Cambridge University Press.
Bagwell, K., & Staiger, R. W. (2001). Domestic Policies, National Sovereignty, and International Economic Institutions. *The Quarterly Journal of Economics*, *116*(2), 519–562. JSTOR.
Balineau, G., & De Melo, J. (2013). Removing barriers to trade on environmental goods: An appraisal. *World Trade Review*, *12*, 693.
Barton, J. H., Goldstein, J. L., Josling, T. E., & Steinberg, R. H. (2008a). *The Evolution of the Trade Regime: Politics, Law, and Economics of the GATT and the WTO* (Illustrated edition). Princeton University Press.
Barton, J. H., Goldstein, J. L., Josling, T. E., & Steinberg, R. H. (2008b). *The Evolution of the Trade Regime: Politics, Law, and Economics of the GATT and the WTO*. Princeton University Press.
Basedow, J. (2017). Escape clauses. In *Encyclopedia of Private International Law* (pp. 668–674). Edward Elgar Publishing Limited. https://www.elgaronline.com/view/nlm-book/9781782547228/b-9781782547235-E_12.xml
Bastiaens, I., & Postnikov, E. (2017). Greening up: The effects of environmental standards in EU and US trade agreements. *Environmental Politics*, *26*(5), 847–869. https://doi.org/10.1080/09644016.2017.1338213
Benedick, R. E. (1998). *Ozone Diplomacy: New Directions in Safeguarding the Planet, Enlarged Edition* (2nd edition). Harvard University Press.
Berger, A., Blümer, D., Brandi, C., & Chi, M. (2020). Towards Greening Trade? Environmental Provisions in Emerging Markets' Preferential Trade Agreements. In A. Negi, J. A. Pérez-Pineda, & J. Blankenbach (Eds.), *Sustainability Standards and Global Governance: Experiences of Emerging Economies* (pp. 61–81). Springer. https://doi.org/10.1007/978-981-15-3473-7_4
Berger, A., Brandi, C., & Bruhn, D. (2017). *Towards "greening" trade? Tracking environmental provisions in the preferential trade agreements of emerging markets*.
Beshkar, M., & Bond, E. W. (2016). Chapter 2—The Escape Clause in Trade Agreements. In Kyle Bagwell and Robert W. Staiger (Ed.), *Handbook of Commercial Policy: Vol. Volume 1, Part B* (pp. 69–106). North-Holland. https://doi.org/10.1016/bs.hescop.2016.04.007
Bhagwati, J. (1988). *Protectionism* (UniM Giblin Eunson 382.73 BHAG). Cambridge, Mass. : MIT Press, c1988.; cat00006a. https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00006a&AN=melb.b1571917&site=eds-live&scope=site
Bhagwati, J. (2001). After Seattle: Free Trade and the WTO. *International Affairs (Royal Institute of International Affairs 1944-)*, *77*(1), 15–29.
Bhagwati, J. (2003). Linkage of Trade and "Non-trade" Issues: Competition Policy and Labor Standards. In R. Pethig & M. Rauscher (Eds.), *Challenges to the World Economy* (pp. 233–243). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-19018-6_18
Bhagwati, J. (2008). *Termites in the Trading System: How Preferential Agreements Undermine Free Trade*. Oxford University Press.
Bhagwati, J., & Srinivasan, T. N. (1995). *Trade and the Environment: Does Environmental Diversity Detract from the Case for Free Trade?*

https://academiccommons.columbia.edu/catalog/ac:100101
Biermann, F., Pattberg, P., van Asselt, H., & Zelli, F. (2009). The Fragmentation of Global Governance Architectures: A Framework for Analysis. *Global Environmental Politics*, *9*(4), 14–40. https://doi.org/10.1162/glep.2009.9.4.14
Bland, J., & Nikiforakis, N. (2015). Coordination with third-party externalities. *European Economic Review*, *80*, 1–15. https://doi.org/10.1016/j.euroecorev.2015.07.019
Blome, K., Fischer-Lescano, A., Franzki, H., Markard, N., & Oeter, S. (Eds.). (2016a). *Contested Regime Collisions: Norm Fragmentation in World Society*. Cambridge University Press; Cambridge Core. https://www.cambridge.org/core/books/contested-regime-collisions/BF1B4A812026925B08D69E2659342E0A
Blome, K., Fischer-Lescano, A., Franzki, H., Markard, N., & Oeter, S. (Eds.). (2016b). *Contested Regime Collisions: Norm Fragmentation in World Society*. Cambridge University Press; Cambridge Core. https://doi.org/10.1017/CBO9781316411230
Blümer, D., Morin, J. F., Brandi, C., & Berger, A. (2020). Environmental provisions in trade agreements: Defending regulatory space or pursuing offensive interests? *Environmental Politics*, *29*(5), 866–889. https://doi.org/10.1080/09644016.2019.1703383
Böhmelt, T., & Spilker, G. (2016). The interaction of international institutions from a social network perspective. *International Environmental Agreements : Politics, Law and Economics; Dordrecht*, *16*(1), 67–89. http://dx.doi.org.ezp.lib.unimelb.edu.au/10.1007/s10784-014-9248-3
Bonnitcha, J. (2014). *Substantive Protection under Investment Treaties: A Legal and Economic Analysis*. Cambridge University Press.
Bonsi, R., Hammett, A. L., & Smith, B. (2008). Eco-Labels and International Trade: Problems and Solutions. *Journal of World Trade*, *42*, 407.
Bown, C. P., & Crowley, M. A. (2006). Policy externalities: How US antidumping affects Japanese exports to the EU. *European Journal of Political Economy*, *22*(3), 696–714. https://doi.org/10.1016/j.ejpoleco.2005.12.004
Brack, D. (1998). The Use of Trade Measures in the Montreal Protocol. In P. G. Le Prestre, J. D. Reid, & E. T. Morehouse (Eds.), *Protecting the Ozone Layer: Lessons, Models, and Prospects* (pp. 99–106). Springer US. https://doi.org/10.1007/978-1-4615-5585-8_14
Brandi, C. (2013). Trade and Climate Change: Environmental, Economic and Ethical Perspectives on Border Carbon Adjustments. *Ethics, Policy & Environment*, *16*(1), 79–93. https://doi.org/10.1080/21550085.2013.768395
Busch, M., & Pelc, K. J. (2015). Dispute Settlement in the WTO. In L. L. Martin (Ed.), *The Oxford Handbook of the Political Economy of International Trade*. Oxford University Press.
Calcott, P., & Walls, M. (2005). Waste, recycling, and "Design for Environment": Roles for markets and policy instruments. *Resource and Energy Economics*, *27*(4), 287–305. https://doi.org/10.1016/j.reseneeco.2005.02.001
Campbell, H. R., & Coombes, B. L. (1999). Green Protectionism and Organic Food Exporting from New Zealand: Crisis Experiments in the Breakdown of Fordist Trade and Agricultural Policies. *Rural Sociology*, *64*(2), 302–319. https://doi.org/10.1111/j.1549-0831.1999.tb00020.x
Carr, E. H., & Cox, M. (2016). *The Twenty Years' Crisis, 1919-1939: Reissued with a new preface from Michael Cox*. (UniM INTERNET resource). London : Palgrave Macmillan UK, 2016.; cat00006a. https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00006a&AN=melb.b6357217&site=eds-live&scope=site
Cashore, B., & Stone, M. W. (2014). Does California need Delaware? Explaining Indonesian, Chinese, and United States support for legality compliance of internationally traded products. *Regulation & Governance*, *8*(1), 49–73. https://doi.org/10.1111/rego.12053
Charnovitz, S. (2007). The WTO's Environmental Progress. *Journal of International Economic Law*, *10*(3), 685–706. https://doi.org/10.1093/jiel/jgm027
Checkel, J. T. (2001). Why Comply? Social Learning and European Identity Change. *International Organization*, *55*(3), 553–588. https://doi.org/10.1162/00208180152507551

Chi, M. (2014). 'Exhaustible Natural Resource' in WTO Law: GATT Article XX (g) Disputes and Their Implications. *Journal of World Trade*, *48*(5), 939–966.

Chimni, B. S. (2000). WTO and Environment: Shrimp-Turtle and EC-Hormones Cases. *Economic and Political Weekly*, *35*(20), 1752–1761.

Ciaro, E., Lucas, N., Sugathan, M., Marconini, M., & Fuentes, E. L. (2007a). *Trade in Environmental Goods and Services and Sustainable Development: Domestic Considerations and Strategies for WTO Negotiations* (ICTSD Environmental Goods and Services Series) [Policy Discussion Paper]. International Centre for Trade and Sustainable Development (ICTSD). http://www.ictsd.org/downloads/2008/07/compendium_dec_2007.pdf

Ciaro, E., Lucas, N., Sugathan, M., Marconini, M., & Fuentes, E. L. (2007b). *Trade in Environmental Goods and Services and Sustainable Development: Domestic Considerations and Strategies for WTO Negotiations* (ICTSD Environmental Goods and Services Series) [Policy Discussion Paper]. International Centre for Trade and Sustainable Development (ICTSD). http://www.ictsd.org/downloads/2008/07/compendium_dec_2007.pdf

Cihelkova, E. (2012). Regional Environmental Governance: The NAFTA Case. *Agricultural Economics*, *58*(10), 454–466.

Coase, R. H. (1937). The Nature of the Firm. *Economica*, *4*(16), 386–405. https://doi.org/10.1111/j.1468-0335.1937.tb00002.x

Coase, R. H. (1960). The Problem of Social Cost. *The Journal of Law & Economics*, *56*(4), 837–877. https://doi.org/10.1086/674872

Coe, B. (2015). Sovereignty Regimes and the Norm of Noninterference in the Global South: Regional and Temporal Variation. *Global Governance: A Review of Multilateralism and International Organizations*, *21*(2), 275–298. https://doi.org/10.1163/19426720-02102006

Cohen, B. J. (2009). Sovereign wealth funds and national security: The Great Tradeoff. *International Affairs*, *85*(4), 713–731. https://doi.org/10.1111/j.1468-2346.2009.00824.x

Collins-Williams, T., & Wolfe, R. (2010). Transparency as a trade policy tool: The WTO's cloudy windows. *World Trade Review*, *9*(4), 551–581. https://doi.org/10.1017/S1474745610000303

Condon, M. (2015). The integration of environmental law into international investment treaties and trade agreements: Negotiation process and the legalization of commitments. *Virginia Environmental Law Journal*, *33*(1), 102–152.

Côté, C. (2014). *A chilling effect? The impact of international investment agreements on national regulatory autonomy in the areas of health, safety and the environment* [Phd, The London School of Economics and Political Science (LSE)]. http://etheses.lse.ac.uk/897/

Croucher, G., & Woelert, P. (2018). Institutional Isomorphism. In *The Blackwell Encyclopedia of Sociology* (pp. 1–4). American Cancer Society. https://doi.org/10.1002/9781405165518.wbeos1127

Curry-Lindahl, K. (1969). The New African Conservation Convention. *Oryx*, *10*(2), 116–126. https://doi.org/10.1017/S0030605300007973

Damro, C. (2012). Market power Europe. *Journal of European Public Policy*, *19*(5), 682–699. https://doi.org/10.1080/13501763.2011.646779

Davis, C. L. (2004). International Institutions and Issue Linkage: Building Support for Agricultural Trade Liberalization. *American Political Science Review*, *98*(1), 153–169. https://doi.org/10.1017/S0003055404001066

de Melo, J., & Solleder, J.-M. (2020). Barriers to trade in environmental goods: How important they are and what should developing countries expect from their removal. *World Development*, *130*, 104910. https://doi.org/10.1016/j.worlddev.2020.104910

Demsetz, H. (1996). The core disagreement between Pigou, the profession, and Coase in the analyses of the externality question. *European Journal of Political Economy*, *12*(4), 565–579. https://doi.org/10.1016/S0176-2680(96)00025-0

Dias, A., & Nosowicz, A. (2020). EU Border Carbon Adjustment and the WTO: Hand in Hand Towards Tackling Climate Change. *Global Trade and Customs Journal*, *15*(1).

https://kluwerlawonline.com/journalarticle/Global+Trade+and+Customs+Journal/15.1/GTCJ2020004
DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, *48*(2), 147–160. JSTOR. https://doi.org/10.2307/2095101
Donald, J. W. (1992). The Bamako Convention as a Solution to the Problem of Hazardous Waste Exports to Less Developed Countries. *Columbia Journal of Environmental Law*, *17*, 419.
Dong, B., Gong, J., & Zhao, X. (2012). FDI and environmental regulation: Pollution haven or a race to the top? *Journal of Regulatory Economics*, *41*(2), 216–237. https://doi.org/10.1007/s11149-011-9162-3
Downs, G. W., Rocke, D. M., & Barsoom, P. N. (1996). Is the good news about compliance good news about cooperation? *International Organization*, *50*(3), 379–406. https://doi.org/10.1017/S0020818300033427
Drezner, D. W. (2001). Globalization and Policy Convergence. *International Studies Review*, *3*(1), 53–78.
Drezner, D. W. (2007a). *All politics is global: Explaining international regulatory regimes.* (UniM Bail 341.2 DREZ). Princeton, N.J. : Princeton University Press, c2007.; cat00006a. https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00006a&AN=melb.b3105703&site=eds-live&scope=site
Drezner, D. W. (2007b). *All politics is global: Explaining international regulatory regimes.* (UniM Bail 341.2 DREZ). Princeton, N.J. : Princeton University Press, c2007.; cat00006a. https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00006a&AN=melb.b3105703&site=eds-live&scope=site
Drezner, D. W. (2009a). The Power and Peril of International Regime Complexity. *Perspectives on Politics*, *7*(1), 65–70. JSTOR.
Drezner, D. W. (2009b). The Power and Peril of International Regime Complexity. *Perspectives on Politics*, *7*(1), 65–70.
Du, M. (2020). Voluntary Ecolabels in International Trade Law: A Case Study of the EU Ecolabel. *Journal of Environmental Law, Online first*. https://doi.org/10.1093/jel/eqaa022
Duina, F., & Breznau, N. (2002). Constructing Common Cultures: The Ontological and Normative Dimensions of Law in the European Union and Mercosur. *European Law Journal*, *8*(4), 574–595. https://doi.org/10.1111/1468-0386.00166
Dunoff, J. L. (2016). How to avoid regime collisions. In K. Blome, A. Fischer-Lescano, H. Franzki, N. Markard, & S. Oeter (Eds.), *Contested regime collisions: Norm fragmentation in world society.* (UniM Law KC 2000 CONT). Cambridge, United Kingdom : Cambridge University Press, 2016.; cat00006a. https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00006a&AN=melb.b6163395&site=eds-live&scope=site
Dür, A., Baccini, L., & Elsig, M. (2014a). The design of international trade agreements: Introducing a new dataset. *The Review of International Organizations*, *9*(3), 353–375. https://doi.org/10.1007/s11558-013-9179-8
Dür, A., Baccini, L., & Elsig, M. (2014b). The design of international trade agreements: Introducing a new dataset. *The Review of International Organizations*, *9*(3), 353–375. https://doi.org/10.1007/s11558-013-9179-8
EAC. (1997). *2nd Summit of Heads of State for East African Cooperation* (Joint Communiqué EAC/SHS2/1/97). East African Community Secretariat; Summit Reports Folder.
EAC. (1999a). *Joint Communiqué of the East African Heads of State Summit* [Joint Communiqué]. East African Community Secretariat; Summit Reports Folder.
EAC. (1999b). *Re: Amendment Proposal on the Draft Treaty for Establishment of East African Community. Ministry of East African and Regional Co-operation* (Proposal Ref: EAC 70/012/2 Vol. V). East African Community Secretariat; Treaty Making Process Folder.
EAC. (1999c). *Report of the 3rd East African Cooperation Meeting of the Environment Committee*

(Report of the Meeting Ref: EAC/TF/28/99). Secretariat of the Commission for East African Cooperation; Compendium of Reports - Environment Folder.
EAC. (1999d). *Report of the 4th Summit Meeting of Heads of State* (Report of the Meeting SHS/4/99). Secretariat of the Commission for East African Cooperation; Summit Reports Folder.
EAC. (2001a). *Report of the 1st East African Summit of Heads of State* (Report of the Meeting EAC/SHS/1/2001). East African Community Secretariat; Summit Reports Folder.
EAC. (2001b). *Report of the 3rd Summit Meeting of Heads of State* (Report of the Meeting EAC/SHS/03/2001). East African Community Secretariat; Summit Reports Folder.
EAC. (2002a). *Brief on Productive and Natural Resource Sectors. Sitting of the Standing Committee on Tourism, Wildlife and Natural Resources of the East African Legislative Assembly* [Report of the Meeting]. East African Community Secretariat; Compendium of Reports - Environment Folder.
EAC. (2002b). *Report of the First Annual Meeting Between Finland and the EAC Secretariat on Finnish Support to the EAC* [Report of the Meeting]. East African Community Secretariat; Foreign Policy Folder.
EAC. (2003). *7th Meeting of the Committee on Environment and Natural Resources* [Report of the Meeting]. East African Community Secretariat; Compendium of Reports - Environment Folder.
EAC. (2004a). *Report of the 8th Informal Meeting of the Committee on Environment and Natural resources* (Report of the Meeting Ref: EAC/SC/03/2004). East African Community Secretariat; Compendium of Reports - Environment Folder.
EAC. (2004b). *Report of the 9th Meeting of the Committee on Environment and Natural Resources* (Report of the Meeting Ref: EAC/TF/.../2004). East African Community Secretariat; Compendium of Reports - Environment Folder.
EAC. (2005). *Third Extraordinary Summit of the Heads of State of the East African Community* [Joint Communiqué]. East African Community Secretariat; Summit Reports Folder.
EAC. (2006a). *Protocol on Environment and Natural Resource Management*. East African Community Secretariat.
EAC. (2006b). *Report of the 8th Summit of the East African Community Heads of State* (Report of the Meeting EAC/SHS/08/2006). East African Community Secretariat; Summit Reports Folder.
EAC. (2009). *Meeting of the Committee for Environment and Natural Resources.* (Report of the Meeting Ref: EAC/SR/16/2009). East African Community Secretariat; Compendium of Reports - Environment Folder.
EAC. (2010a). *21st Extra-Ordinary Meeting of the Council of Ministers. Report of the Meeting* (Report of the Meeting EAC/EX/CM/21/2010). East African Community Secretariat; Council Reports Folder.
EAC. (2010b). *First Meeting of Experts on Preparations of Modalities of Operationalisation of the Climate Change Fund* (Report of the Meeting Ref: EAC/TF/53/2010). East African Community Secretariat; Compendium of Reports - Environment Folder.
EAC. (2011a). *East African Climate Change Policy*. East African Community Secretariat. http://repository.eac.int/bitstream/handle/11671/538/EAC%20Climate%20Change%20Policy_April%202011.pdf?sequence=1&isAllowed=y
EAC. (2011b). *East African Community Climate Change Master Plan 2011-2031*. East African Community Secretariat. https://www.meteorwanda.gov.rw/fileadmin/Template/Policies/EAC_Climate_Change_Master_Plan.pdf
EAC. (2011c). *23rd Extra-Ordinary Meeting of the Council of Ministers. Report of the Council* (Report of the Meeting EAC/EX/CM/23/2011). East African Community Secretariat; Council Reports Folder.
EAC. (2011d). *24th Meeting of the Council of Ministers. Report of the Council* (Report of the Meeting EAC/CM 24/2011). East African Community Secretariat; Council Reports Folder.
EAC. (2012a). *25th Meeting of the Council of Ministers. Report of the Council* (Report of the Meeting EAC/CM 25/CC/2012 Vol I). East African Community Secretariat; Council Reports Folder.

EAC. (2012b). *26th Meeting of the Council of Ministers. Report of the Council* (Report of the Meeting Ref: EAC/CM 26/2012 Vol II (Annex XIV-XXXVI)). East African Community Secretariat; Council Reports Folder.
EAC. (2014). *3rd Meeting of the Sectoral Council on Environment and Natural Resources* [Report of the Meeting]. East African Community Secretariat; Sectoral Council Reports.
EAC. (2015a). *2nd Extra-Ordinary Sectoral Council on Environment and Natural Resources. Session of the Ministers/Cabinet Secretaries* [Report of the Meeting]. East African Community Secretariat; Compendium of Reports - Environment Folder.
EAC. (2015b). *List of Annexes. 31st Ordinary Meeting of the Council of Ministers. Annex XI, The Draft Concept Paper on the Justification of the EAC Climate Change Bill* [Report of the Meeting]. East African Community Secretariat; Council Reports Folder.
EAC. (2017). *Meeting of the Technical Working Group (TWG) on Policy, Legal and Institutional Framework of the Environment and Natural Resource Management* [Report of the Meeting]. East African Community Secretariat; Sectoral Council Reports.
EAC. (2018). *Concept on the Justification for an EAC Climate Change Bill*. East African Community Secretariat.
EAC. (2020). *Draft Guidelines. Joint Participation in the Negotiations and Implementation of Multilateral Environmental Agreements*. East African Community Secretariat.
EALA. (2008). *A Resolution of the Assembly Urging the Partner States to Develop a Joint Policy to Protect the Environment* [Resolution]. East African Legislative Assembly; EALA Resolutions.
EALA. (2010a). *The Official Report of the Proceedings of the East African Legislative Assembly 76th Sitting—Second Assembly: Third Meeting—Third Session* [Hansard]. East African Legislative Assembly.
EALA. (2010b). *The Official Report of the Proceedings of the East African Legislative Assembly 77th Sitting—Second Assembly: Third Meeting—Third Session* [Hansard]. East African Legislative Assembly.
EALA. (2010c). *79th Sitting – Second Assembly: Fourth Meeting – Third Session* [Hansard]. East African Legislative Assembly.
EALA. (2010d). *The Official Report of the Proceedings of the East African Legislative Assembly 86th Sitting—Second Assembly: Fourth Meeting – Third Session* [Hansard]. East African Legislative Assembly.
EALA. (2010e). *The Official Report of the Proceedings of the East African Legislative Assembly 87th Sitting – Second Assembly: Fourth Meeting – Third Session* [Hansard]. East African Legislative Assembly.
EALA. (2010f). *The Official Report of the Proceedings of the East African Legislative Assembly 93rd Sitting – Second Assembly: First Meeting – Fourth Session* [Hansard]. East African Legislative Assembly.
EALA. (2010g). *Resolution of the East African Legislative Assembly Adopting a Positional Paper of the Committee on Communications, Trade and Investments on Economic Partnership Agreements and Urging the EAC Partner States To Pursue a Favourable Position on the EAC-EU EPAs* [Resolution]. East African Legislative Assembly; EALA Resolutions.
EALA. (2010h). *100th Sitting – Second Assembly: Second Meeting– Fourth Session* [Hansard]. East African Legislative Assembly.
EALA. (2011a). *The Official Report of the Proceedings of the East African Legislative Assembly 101st Sitting—Second Assembly: Third Meeting – Fourth Session* [Hansard]. East African Legislative Assembly.
EALA. (2011b). *The Official Report of the Proceedings of the East African Legislative Assembly 102nd Sitting—Second Assembly: Third Meeting – Fourth Session* [Hansard]. East African Legislative Assembly.
EALA. (2011c). *The Official Report of the Proceedings of the East African Legislative Assembly 104th Third Meeting – Fourth Session – Second Assembly* [Hansard]. East African Legislative

Assembly.
EALA. (2011d). *Official Report of the Proceedings of the East African Legislative Assembly Fifth Meeting– Fourth Session – Second Assembly* [Hansard]. East African Legislative Assembly.
EALA. (2011e). *Resolution of the Assembly Urging EAC Partner States to Adopt a Paradigm Shift rom Aid Effectiveness of Development Effectiveness* [Resolution]. East African Legislative Assembly; EALA Resolutions.
EALA. (2011f). *The Official Report of the Proceedings of the East African Legislative Assembly 118th Sitting—Second Assembly: Fifth Assembly* [Hansard]. East African Legislative Assembly.
EALA. (2011g). *The Official Report of the Proceedings of the East African Legislative Assembly 119th Sitting—Second Assembly: First Meeting – Fifth Session* [Hansard]. East African Legislative Assembly.
EALA. (2012a). *The Official Report of the Proceedings of the East African Legislative Assembly 132nd Sitting—Second Assembly: Third Meeting – Fifth Session* (Hansard). East African Legislative Assembly.
EALA. (2012b). *Resolution of the East African Legislative Assembly on EPAs* [Resolution]. East African Legislative Assembly; EALA Resolutions.
EALA. (2012c). *Official Report of the Proceedings of the East African Legislative Assembly Fifth Meeting– Fifth Session – Second Assembly* [Hansard]. East African Legislative Assembly.
EALA. (2013a). *The Official Report of the Proceedings of the East African Legislative Assembly 13th Sitting—Fourth Meeting—First Session—Third Assembly* [Hansard]. East African Legislative Assembly.
EALA. (2013b). *The Official Report of the Proceedings of the East African Legislative Assembly 21st Sitting – Third Assembly: Fifth Meeting—First Session* [Hansard]. East African Legislative Assembly.
EALA. (2014). *The Official Report of the Proceedings of the East African Legislative Assembly 56th Sitting—Third Assembly: Sixth Meeting—Second Session* [Hansard]. East African Legislative Assembly.
EALA. (2015a). *The Official Report of the Proceedings of the East African Legislative Assembly 84th Sitting – Third Assembly: Fourth Meeting – Third Session* [Hansard]. East African Legislative Assembly.
EALA. (2015b). *The Official Report of the Proceedings of the East African Legislative Assembly 107th Sitting—Third Assembly: First Meeting – Fourth Session* [Hansard]. East African Legislative Assembly.
Earnest, D. C. (2008). Coordination in Large Numbers: An Agent-Based Model of International Negotiations. *International Studies Quarterly*, *52*(2), 363–382. https://doi.org/10.1111/j.1468-2478.2008.00505.x
Eckersley, R. (2004a). The Big Chill: The WTO and Multilateral Environmental Agreements. *Global Environmental Politics*, *4*(2), 24–50. https://doi.org/10.1162/152638004323074183
Eckersley, R. (2004b). The Big Chill: The WTO and Multilateral Environmental Agreements. *Global Environmental Politics*, *4*(2), 24–50. https://doi.org/10.1162/152638004323074183
Eckersley, R. (2009). *Climate and Trade Policies in Post-2012 World*. United Nations Environment Programme. http://unep.ch/etb/publications/UNEP%20ADAM%20Climate%20and%20Trade%20Policies/UNEP%20ADAM%20Climate%20and%20Trade%20Policies.pdf
Eckersley, R. (2010). The Politics of Carbon Leakage and the Fairness of Border Measures. *Ethics & International Affairs*, *24*(4), 367–393. https://doi.org/10.1111/j.1747-7093.2010.00277.x
Ehrlich, S. D. (2007). Access to Protection: Domestic Institutions and Trade Policy in Democracies. *International Organization*, *61*(3), 571–605. JSTOR.
Eliste, P., & Fredriksson, P. G. (2004). Does Trade Liberalization Cause a Race-to-the-Bottom in Environmental Policies? A Spatial Econometric Analysis. In L. Anselin, R. J. G. M. Florax, & S. J. Rey (Eds.), *Advances in Spatial Econometrics: Methodology, Tools and Applications* (pp. 383–

396). Springer. https://doi.org/10.1007/978-3-662-05617-2_18
Elliott, L. (2003). ASEAN and environmental cooperation: Norms, interests and identity. *The Pacific Review*, *16*(1), 29–52. https://doi.org/10.1080/0951274032000043235
Eskeland, G. A., & Harrison, A. E. (2002). *Moving to Greener Pastures? Multinationals and the Pollution Haven Hypothesis* (Working Paper No. 8888). National Bureau of Economic Research. https://doi.org/10.3386/w8888
Evers, M. M. (2017). On Transgression. *International Studies Quarterly*, *61*(4), 786–794. https://doi.org/10.1093/isq/sqx065
Faude, B., & Groβe-Kreul, F. (2020). Let's Justify! How Regime Complexes Enhance the Normative Legitimacy of Global Governance. *International Studies Quarterly*, *64*(2), 431–439. https://doi.org/10.1093/isq/sqaa024
Fearon, J. D. (1997). Signaling Foreign Policy Interests: Tying Hands versus Sinking Costs. *The Journal of Conflict Resolution*, *41*(1), 68–90. JSTOR.
Fontagné, L., Kirchbach, F. V., & Mimouni, M. (2005). An Assessment of Environmentally- related Non-tariff Measures. *The World Economy*, *28*(10), 1417–1439. https://doi.org/10.1111/j.1467-9701.2005.00742.x
Franck, S. (2007). Empirically Evaluating Claims about Investment Treaty Arbitration. *North Carolina Law Review*, *86*(1), 1.
Gadret, E. T., & Rodriguez, M. V. R. (2007). The Transparency Principle and an Early Warning. *Revista Eletrônica de Sistemas de Informação*, *6*(2). https://doi.org/10.21529/RESI.2007.0602007
Gallagher, K. P., & Shrestha, E. (2011). *Investment Treaty Arbitration and Developing Countries: A Re-Appraisal* (No. 179093; Working Papers). Tufts University, Global Development and Environment Institute. https://ideas.repec.org/p/ags/tugdwp/179093.html
Gallastegui, I. G. (2002). The use of eco-labels: A review of the literature. *European Environment*, *12*(6), 316–331. https://doi.org/10.1002/eet.304
GATT. (1950). *Discriminatory Application of Import Restrictions Under Article XIV. A Report on the Use of Transitional Period Exceptions to the Rule of Non-Discrimination in the Discrimination of Qunatitative Import Restrictions Applied as at 01 March 1950 By Contracting Parties to the General Agreement to Safeguard Their Balance of Payments* (Report Prepared by the Contracting Parties, at Their Fourth Session at Geneva, February-March 1950, in Accordance with the Requirements of Paragraph 1 (g) of Article XIV of the General Agreement on Tariffs and Trade) [Draft]. General Agreement on Tariffs and Trade; SECRET/CP/3. https://docs.wto.org/gattdocs/q/GG/SECRET/CP3.pdf
GATT. (1954). *Amendments to United States Draft Proposals for Article XIV (W.9/73). Presented by the Canadian Delegation. Article XIV. Exceptions to the Rule of Non-discrimination* (Review Working Party I on Quantitative Restrictions. Sub-Group I-B: Balance-of-Payments Restrictions) [Restricted]. General Agreement on Tariffs and Trade; W.9/90. https://docs.wto.org/gattdocs/q/GG/W/9-90.PDF
GATT. (1964a). *Tabling of Exceptions List*. General Agreement on Tariffs and Trade; Let/6. https://docs.wto.org/gattdocs/q/GG/LET/6.PDF
GATT. (1964b). *Content of Exceptions List. Note by the Executive Secretary* (Sub-Committee on the Tariff Negotiating Plan) [Restricted]. General Agreement on Tariffs and Trade; TN.64/NP/16. https://docs.wto.org/gattdocs/q/GG/TN64/NP16.PDF
GATT. (1964c). *The Kennedy Round: Tabling of the Exceptions Lists* [Press Release]. General Agreement on Tariffs and Trade; GATT/906. https://docs.wto.org/gattdocs/q/GG/GATT/906.PDF
GATT. (1964d). *Kennedy Round: Process of Justification of the Exceptions Lists to Begin on 9 December* [Press Release]. General Agreement on Tariffs and Trade; GATT/907. https://docs.wto.org/gattdocs/q/GG/GATT/907.PDF
GATT. (1964e). *Justification of Exceptions Lists. Report by the Executive Secretary* (Report No. 115; Trade Negotiations Committee). General Agreement on Tariffs and Trade; TN.64(SECRET)/1. https://docs.wto.org/gattdocs/q/GG/TN64SECRET/1.pdf

GATT. (1964f). *Justification of Exceptions Lists. Note by the Executive Secretary* (No. 52; Trade Negotiations Committee). General Agreement on Tariffs and Trade; TN.64(SECRET)/2. https://docs.wto.org/gattdocs/q/GG/TN64SECRET/2.pdf
GATT. (1964g). *Justification of Exceptions Lists. Statement of the Representative of the United States, 10 December 1964* (Statement No. 66; Trade Negotiations Committee). General Agreement on Tariffs and Trade; TN.64(SECRET)/3. https://docs.wto.org/gattdocs/q/GG/TN64SECRET/3.pdf
GATT. (1965). *Meeting for the Examination of Partial Exceptions List* (Sub-Committee on the Participation of the Less-Developed Countries) [Confidential. Special Distribution]. General Agreement on Tariffs and Trade; TN.64/W/5. https://docs.wto.org/gattdocs/q/GG/TN64/W5.PDF
GATT. (1971). *Group on Environmental Measures and International Trade* [Restricted. Limited Distribution]. General Agreement on Tariffs and Trade; L/3622. https://docs.wto.org/gattdocs/q/GG/L3799/3622.PDF
GATT. (1972a). *Group on Environmental Measures and International Trade* [Restricted. Limited Distribution]. General Agreement on Tariffs and Trade; L/3622/Rev.1. https://docs.wto.org/gattdocs/q/GG/L3799/3622R1.PDF
GATT. (1972b). *Protection of the Environment: Considerations Relating to International Trade. Statement by Mr. Olivier Long, Director-General of GATT, at teh Conference on the Human Environment, Stockholm. 8 June 1972* [Press Release]. General Agreement on Tariffs and Trade; GATT/1109. https://docs.wto.org/gattdocs/q/GG/GATT/1109.PDF
GATT. (1984). *Notification* (Committee on Technical Barriers to Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TBT/Notif.84.98. https://docs.wto.org/gattdocs/q/TR/TBTNOT84/84-98.pdf
GATT. (1988). *Adverse Trade Effects of Environmental Measures. Communication from the United Nations Environment Programme* [Restricted. Limited Distribution]. General Agreement on Tariffs and Trade; L/6437. https://docs.wto.org/gattdocs/q/GG/L6599/6437.PDF
GATT. (1989a). *Notification* (Committee on Technical Barriers to Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TBT/Notif.89.0. https://docs.wto.org/gattdocs/q/TR/TBTNOT89/89-9.pdf
GATT. (1989b). *Communication from Peru. Exceptions and Safeguards* (Multilateral Trade Negotiations. Group of Negotiations on Services) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade. https://docs.wto.org/gattdocs/q/UR/GNS/W74.PDF
GATT. (1990a). *Communication from Austria, Finland, Iceland, Norway, Sweden and Switzerland* (Multilateral Trade Negotiations. The Uruguay Round. Trade Negotiations Committee) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; MTN.TNC/W/47. https://docs.wto.org/gattdocs/q/UR/TNC/W47.PDF
GATT. (1990b). *Notification* (Committee on Technical Barriers to Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TBT/Notif.90.105. https://docs.wto.org/gattdocs/q/TR/TBTNOT90/90-105.pdf
GATT. (1990c). *The Relevance of the International Plant Protection Convention to the Working Group on Sanitary and Phytosanitary Regulations and Barriers. Paper Submitted by FAO. 2 April 1990* (Multilateral Trade Negotiations. The Uruguay Round. Group of Negotiations on Goods (GATT): Negotiating Group on Agriculture: Working Group on Sanitary and Phytosanitary Regulations and Barriers) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade. https://docs.wto.org/gattdocs/q/UR/GNGNG05/WGSPW15.PDF
GATT. (1990d). *Notification* (Committee on Technical Barriers to Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TBT/Notif.90.305. https://docs.wto.org/gattdocs/q/TR/TBTNOT90/90-305.pdf
GATT. (1991a). *Trade and Environmental Policies. Communication from Austria* (Council) [Restricted. Limited Distribution]. General Agreement on Tariffs and Trade; L/6809. https://docs.wto.org/gattdocs/q/GG/L6999/6809.PDF
GATT. (1991b). *Outline of Points for Structured Debate on Environmental Measures and Trade. Note by*

the Chairman of the Contracting Parties [Restricted]. General Agreement on Tariffs and Trade; Spec(91)21. https://docs.wto.org/gattdocs/q/GG/SPEC/91-21.pdf
GATT. (1991c). *Subject: Group on Environmental Measures and International Trade*. General Agreement on Tariffs and Trade; GATT/AIR/3264. https://docs.wto.org/gattdocs/q/GG/GATTAIR/3264.pdf
GATT. (1991d). *Group on Environmental Measures and International Trade*. General Agreement on Tariffs and Trade; TRE/2. https://docs.wto.org/gattdocs/q/GG/TRE/2.pdf
GATT. (1991e). *Report of the Meeting of the Group on Environmental Measures and International Trade. 27 November 1991* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/1. https://docs.wto.org/gattdocs/q/GG/TRE/1.pdf
GATT. (1992a). *List of Representatives/Liste des Representants/Lista de Representantes* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/INF/2. https://docs.wto.org/gattdocs/q/GG/TRE/INF2.pdf
GATT. (1992b). *Arthur Dunkel Calls on Governments to Develop Constructive Links Between Trade and Environmental Policy Making* [Press Release]. General Agreement on Tariffs and Trade; GATT/1527. https://docs.wto.org/gattdocs/q/GG/GATT/1527.PDF
GATT. (1992c). *Expanding Trade Can Help Solve Environmental Problems, Says Report. GATT rules are not an obstacle to environmental protection, but trade weapon could be counterproductive* [Press Release]. General Agreement on Tariffs and Trade; GATT/1529. https://docs.wto.org/gattdocs/q/GG/GATT/1529.PDF
GATT. (1992d). *Report of the Meeting Held on 21 January 1992. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/3. https://docs.wto.org/gattdocs/q/GG/TRE/3.pdf
GATT. (1992e). *Environmental Technical regulations and Standards Notified Under the Agreement on Technical Barriers to Trade: 1980-91. Note by the Secretariat* (Committee on Technical Barriers to Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TBT/W/156. https://docs.wto.org/gattdocs/q/TR/TBT/W156.pdf
GATT. (1992f). *Report of the Meeting Held on 10-11 March 1992. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/4. https://docs.wto.org/gattdocs/q/GG/TRE/4.pdf
GATT. (1992g). *Trade Provisions Contained in Multilateral Environmental Agreements* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/1. https://docs.wto.org/gattdocs/q/GG/TRE/W1.pdf
GATT. (1992h). *Report of the Meeting Held on 4-5 May 1992. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/5. https://docs.wto.org/gattdocs/q/GG/TRE/5.pdf
GATT. (1992i). *Group on Environmental Measures and International Trade. Chairman's Concluding Remarks at the Meeting on 9/10 July 1992* (Group on Environmental Measures and International Trade). General Agreement on Tariffs and Trade; Let/1782. https://docs.wto.org/gattdocs/q/GG/LET/1782.PDF
GATT. (1992j). *Report of the Meeting Held on 9-10 July 1992. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/6. https://docs.wto.org/gattdocs/q/GG/TRE/6.pdf
GATT. (1992k). *Agenda Item 2: Multilateral Transparency of National Environmental Measures* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/2. https://docs.wto.org/gattdocs/q/GG/TRE/W2.pdf
GATT. (1992l). *Agenda Item 3: Packaging and Labelling Requirements. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/3. https://docs.wto.org/gattdocs/q/GG/TRE/W3.pdf
GATT. (1992m). *Report of the Meeting Held on 1-2 October 1992. Note by the Secretariat* (Group on

Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/7. https://docs.wto.org/gattdocs/q/GG/TRE/7.pdf
GATT. (1992n). *Agenda Item 2: Multilateral Transparency of National Environmental Regulations Likely to Have Trade Effects* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/4. https://docs.wto.org/gattdocs/q/GG/TRE/W4.pdf
GATT. (1992o). *The GATT and the Trade Provisions of Multilateral Environmental Agreements. Submission from the European Community* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/5. https://docs.wto.org/gattdocs/q/GG/TRE/W5.pdf
GATT. (1993a). *Report of the Meeting Held on 19 November 1992. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/8. https://docs.wto.org/gattdocs/q/GG/TRE/8.pdf
GATT. (1993b). *Group on Environmental Measures and International Trade* (Technical Barriers to Trade and Trade and Environment Division) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; Let/1799. https://docs.wto.org/gattdocs/q/GG/LET/1799.PDF
GATT. (1993c). *Report of the Meeting Held on 4-5 February 1993. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/9. https://docs.wto.org/gattdocs/q/GG/TRE/9.pdf
GATT. (1993d). *Group on Environmental Measures and International Trade* (Group on Environmental Measures and International Trade). General Agreement on Tariffs and Trade; Let/1808. https://docs.wto.org/gattdocs/q/GG/LET/1808.PDF
GATT. (1993e). *Agenda Item 1: Trade Provisions Contained in Existing Multilateral Environmental Agreements vis-a-vis GATT Principles and Provisions* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/8. https://docs.wto.org/gattdocs/q/GG/TRE/W8.pdf
GATT. (1993f). *Agenda Item 3: Trade Effects of New Packaging and Labelling Requirements Aimed at Protecting the Environment. Packaging Requirements. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/9. https://docs.wto.org/gattdocs/q/GG/TRE/W9.pdf
GATT. (1993g). *Report of the Meeting Held on 18-19 March 1993. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/10. https://docs.wto.org/gattdocs/q/GG/TRE/10.pdf
GATT. (1993h). *Report of the Meeting Held on 6-7 May 1993. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/11. https://docs.wto.org/gattdocs/q/GG/TRE/11.pdf
GATT. (1993i). *Ecological Labelling and Utilization of Used Packaging in Poland. Submission by Poland (Summary of the Text prepared by the Polish Packaging Research and Development Centre)* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/11. https://docs.wto.org/gattdocs/q/GG/TRE/W11.pdf
GATT. (1993j). *Agenda Item 3: Packaging and Labelling Requirements. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/12. https://docs.wto.org/gattdocs/q/GG/TRE/W12.pdf
GATT. (1993k). *Arthur Dunkel's Valedictory Reminder that Variety is the Spice of Trade. 'Trade growth brings social, political, environmental changes'* [Press Release]. General Agreement on Tariffs and Trade; GATT/1587. https://docs.wto.org/gattdocs/q/GG/GATT/1587.PDF
GATT. (1993l). *The Trade Effects of Environmental Measures. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/13. https://docs.wto.org/gattdocs/q/GG/TRE/W13.pdf
GATT. (1993m). *UNCED Follow-up: Results of the First Session of the Commission on Sustainable*

Development and Other Related Activities. Note by the Secretariat (Restricted. Limited Distribution COM.TD/W/503; Group on Environmental Measures and International Trade, Committee on Trade and Environment). General Agreement on Tariffs and Trade; TRE/W/14. https://docs.wto.org/gattdocs/q/GG/COMTD/W503.PDF

GATT. (1993n). *The Packaging Ordinance and International Trade. (Handling of Foreign Companies' Exports to the Federal Republic of Germany in Accordance with the Packaging Ordinance). Submission by Germany* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/15. https://docs.wto.org/gattdocs/q/GG/TRE/W15.pdf

GATT. (1993o). *Report of the Meeting Held on 5-7 July 1993. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/12. https://docs.wto.org/gattdocs/q/GG/TRE/12.pdf

GATT. (1993p). *Agenda Item 1: Trade Provisions Contained in Existing Multilateral Environmental Agreements vis-a-vis GATT Principles and Provisions. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/16. https://docs.wto.org/gattdocs/q/GG/TRE/W16.pdf

GATT. (1993q). *Agenda Item 1: Trade Provisions Contained in Existing Multilateral Environmental Agreements vis-avis GATT Principles and Provisions. Article XX(j). Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/17. https://docs.wto.org/gattdocs/q/GG/TRE/W17.pdf

GATT. (1993r). *Group on Environmental Measures and International Trade* (Technical Barriers to Trade and Trade and Environment Division). General Agreement on Tariffs and Trade; Let/1852. https://docs.wto.org/gattdocs/q/GG/LET/1852.PDF

GATT. (1993s). *Agenda Item 1: Trade Provision Contained in Existing Multilateral Environmental Agreements vis-a-vis GATT Principles and Provisions* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/18. https://docs.wto.org/gattdocs/q/GG/TRE/W18.pdf

GATT. (1993t). *GATT and International Environmental Agreements (IEAs)* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/19. https://docs.wto.org/gattdocs/q/GG/TRE/W19.pdf

GATT. (1993u). *Agenda Item 1: Trade Provisions Contained in Existing Multilateral Environmental Agreements vis-a-vis GATT Principles and Provisions* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/17/Rev.1. https://docs.wto.org/gattdocs/q/GG/TRE/W17R1.pdf

GATT. (1993v). *Agenda Item 2: Multilateral Transparency of National Environmental Regulations Likely to Have Trade Effects* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/10/Rev.1. https://docs.wto.org/gattdocs/q/GG/TRE/W10R1.pdf

GATT. (1993w). *Report of the Meeting Held on 5-6 October 1993. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/13. https://docs.wto.org/gattdocs/q/GG/TRE/13.pdf

GATT. (1994a). *Unnecessary Obstacles to International Trade. Note by the Secretariat* (Group on Environmental Measures and International Trade) [Restricted. Special Distribution]. General Agreement on Tariffs and Trade; TRE/W/21. https://docs.wto.org/gattdocs/q/GG/TRE/W21.pdf

GATT. (1994b). *Group on Environmental Measures and International Trade. Derestriction of documents* (Group on Environmental Measures and International Trade) [Limited Distribution]. General Agreement on Tariffs and Trade; L/7401. https://docs.wto.org/gattdocs/q/GG/L7599/7401.PDF

GATT. (1994c). *Note from the Chairman* (Group on Environmental Measures and International Trade). General Agreement on Tariffs and Trade; 94-0206. https://docs.wto.org/gattdocs/q/GG/LET/1870.PDF

GATT. (1994d). *Report by Ambassador H. Ukawa (Japan), Chairman of the Group on Environmental Measures and International Trade, to the 49th Session of the Contracting Parties* (Group on Environmental Measures and International Trade) [Limited Distribution]. General Agreement on Tariffs and Trade; L/7402. https://docs.wto.org/gattdocs/q/GG/L7599/7402.PDF

GATT Council. (1991). *TRADE AND ENVIRONMENT. Statement by the Delegation of Tanzania on behalf of the African Contracting Parties* (Spec (91) 31). General Agreement on Tariffs and Trade; GATT Digital Library 1947 - 1994. https://stacks.stanford.edu/file/pk404pp7086/92270080.pdf

Gerring, J. (2008). Case Selection for Case-Study Analysis: Qualitative and Quantitative Techniques. In *The Oxford Handbook of Political Methodology*. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199286546.001.0001

Ghodsi, M., & Michalek, J. (2016). Technical Barriers to Trade Notifications and Dispute Settlement within the WTO. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, *11*(2), 219–249.

Goldstein, J., Kahler, M., Keohane, R., & Slaughter, A.-M. (Eds.). (2001). *Legalization and World Politics*. MIT Press. https://mitpress.mit.edu/books/legalization-and-world-politics

Grankvist, G., Dahlstrand, U., & Biel, A. (2004). The Impact of Environmental Labelling on Consumer Preference: Negative vs. Positive Labels. *Journal of Consumer Policy*, *27*(2), 213–230. https://doi.org/10.1023/B:COPO.0000028167.54739.94

Greaker, M. (2006a). Eco-labels, Trade and Protectionism. *Environmental and Resource Economics*, *33*(1), 1–37. https://doi.org/10.1007/s10640-005-0070-9

Greaker, M. (2006b). Eco-labels, Trade and Protectionism. *Environmental and Resource Economics*, *33*(1), 1–37. https://doi.org/10.1007/s10640-005-0070-9

Guzman, A. T. (2002). A Compliance-Based Theory of International Law. *California Law Review*, *90*(6), 1823–1887. JSTOR. https://doi.org/10.2307/3481436

Guzman, A. T. (2005). The Design of International Agreements. *European Journal of International Law*, *16*(4), 579–612. https://doi.org/10.1093/ejil/chi134

Haas, E. B. (1980). Why Collaborate?: Issue-Linkage and International Regimes. *World Politics*, *32*(3), 357–405. https://doi.org/10.2307/2010109

Hafner-Burton, E. M. (2005a). Trading Human Rights: How Preferential Trade Agreements Influence Government Repression. *International Organization*, *59*(3), 593–629. Cambridge Core. https://doi.org/10.1017/S0020818305050216

Hafner-Burton, E. M. (2005b). Trading Human Rights: How Preferential Trade Agreements Influence Government Repression. *International Organization*, *59*(3), 593–629. https://doi.org/10.1017/S0020818305050216

Haggard, S., & Simmons, B. A. (1987). Theories of international regimes. *International Organization*, *41*(3), 491–517. https://doi.org/10.1017/S0020818300027569

Hale, T. (2015). The rule of law in the global economy: Explaining intergovernmental backing for private commercial tribunals. *European Journal of International Relations*, *21*(3), 483–512. https://doi.org/10.1177/1354066114546955

Hale, T., Held, D., & Young, K. (2013). *Gridlock: Why Global Cooperation is Failing when We Need It Most*. Polity Press.

Hirschman, A. O. (1980). *National Power and the Structure of Foreign Trade*. University of California Press.

Hoekman, B. M., & Mavroidis, P. C. (2015). WTO 'à la carte' or 'menu du jour'? Assessing the Case for More Plurilateral Agreements. *European Journal of International Law*, *26*(2), 319–343. https://doi.org/10.1093/ejil/chv025

Holcombe, R. G., & Sobel, R. S. (2001). Public Policy Toward Pecuniary Externalities. *Public Finance Review*, *29*(4), 304–325. https://doi.org/10.1177/109114210102900402

Holzinger, K., & Knill, C. (2005). Causes and conditions of cross-national policy convergence. *Journal of European Public Policy*, *12*(5), 775–796. https://doi.org/10.1080/13501760500161357

Horn, H., Mavroidis, P. C., & Wijkstrom, E. N. (2013). In the Shadow of the DSU: Addressing Specific Trade Concerns in the WTO SPS and TBT Committees. *Journal of World Trade*, *47*, 729.

Hu, X., Pollitt, H., Pirie, J., Mercure, J.-F., Liu, J., Meng, J., & Tao, S. (2020). The impacts of the trade liberalization of environmental goods on power system and CO2 emissions. *Energy Policy*, *140*, 111173. https://doi.org/10.1016/j.enpol.2019.111173

Huggins, A. (2017). *Multilateral Environmental Agreements and Compliance: The Benefits of Administrative Procedures*. Routledge.

Hurst, D. (2021, February 10). Europe trade talks: Australia urged to be 'more ambitious' on climate. *The Guardian*. http://www.theguardian.com/australia-news/2021/feb/11/europe-trade-talks-australia-urged-to-be-more-ambitious-on-climate

Hwang, J.-A., Park, Y., & Kim, Y. (2016). Why do consumers respond to eco-labels? The case of Korea. *SpringerPlus*, *5*(1), 1915. https://doi.org/10.1186/s40064-016-3550-1

Ikiara, M. M., & Mutua, J. (2006). *Identifying Complementary Measures to Ensure the Maximum Realisation of Benefits from the Liberalisation of Trade in Environmental Goods and Services Case Study: Kenya* (Working Paper No. 2004–02; Joint Working Party on Trade and Environment). Organisation for Economic Co-operation and Development (OECD). https://www.oecd.org/countries/kenya/37324543.pdf

Ing, L. Y., Cadot, O., & Walz, J. (2018). Transparency in non-tariff measures: An international comparison. *The World Economy*, *41*(3), 884–912. https://doi.org/10.1111/twec.12552

Irwin, D. A. (1995). The GATT in Historical Perspective. *The American Economic Review*, *85*(2), 323–328.

Irwin, D. A. (2015). *Free Trade under Fire* (4 edition). Princeton University Press.

Ismer, R., Neuhoff, K., & Pirlot, A. (2020). *Border Carbon Adjustments and Alternative Measures for the EU ETS: An Evaluation* (SSRN Scholarly Paper ID 3561525). Social Science Research Network. https://doi.org/10.2139/ssrn.3561525

IUCN. (2004). *An Introduction to theAfrican Convention on the Conservation of Nature and Natural Resources* (No. 56; An Introduction to TheAfrican Conventionon the Conservation of Natureand Natural ResourcesIUCN Environmental Policy and Law Paper). International Union for the Conservation of Nature (IUCN). https://portals.iucn.org/library/sites/library/files/documents/EPLP-056.pdf

Jaspers, N., & Falkner, R. (2013). International Trade, the Environment, and Climate Change. In *The Handbook of Global Climate and Environment Policy* (p. 530). John Wiley and Sons Ltd.

Jinnah, S. (2011). Strategic Linkages: The Evolving Role of Trade Agreements in Global Environmental Governance. *The Journal of Environment & Development*, *20*(2), 191–215. https://doi.org/10.1177/1070496511405152

Jinnah, S., & Kennedy, J. (2011). A New Era of Trade-Environment Politics: Learning from US Leadership and its Consequences Abroad. *Journal of Diplomacy & International Relations*, *12*(1), 95.

Jinnah, S., & Morgera, E. (2013a). Environmental Provisions in American and EU Free Trade Agreements: A Preliminary Comparison and Research Agenda. *Review of European, Comparative & International Environmental Law*, *22*(3), 324–339. https://doi.org/10.1111/reel.12042

Jinnah, S., & Morgera, E. (2013b). Environmental Provisions in American and EU Free Trade Agreements: A Preliminary Comparison and Research Agenda. *Review of European, Comparative & International Environmental Law*, *22*(3), 324–339. https://doi.org/10.1111/reel.12042

Jinnah, S., & Morin, J. F. (2020). *Greening through Trade: How American Trade Policy Is Linked to Environmental Protection Abroad*. MIT Press.

Johnson, T., & Urpelainen, J. (2012). A Strategic Theory of Regime Integration and Separation. *International Organization*, *66*(4), 645–677.

Kennedy, K. (2005). Special and Differential Treatment of Developing Countries. In P. Macrory, A.

Appleton, & M. Plummer (Eds.), *The World Trade Organization: Legal, Economic and Political Analysis* (pp. 1523–1570). Springer. https://doi.org/10.1007/0-387-22688-5_34
Keohane, R., & Goldstein, J. (1993). *Ideas and foreign policy: Beliefs, institutions, and political change.* (UniM Bail 327 IDEA). Ithaca : Cornell University Press, 1993.; cat00006a. https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00006a&AN=melb.b3230924&site=eds-live&scope=site
Keohane, R., & Milner, H. V. (Eds.). (1996). *Internationalization and Domestic Politics*. Cambridge University Press.
Keohane, R. O. (1984). *After Hegemony*. Princeton University Press. http://www.jstor.org/stable/j.ctt7sq9s
Keohane, R. O., & Victor, D. G. (2011). The Regime Complex for Climate Change. *Perspectives on Politics*, *9*(1), 7–23. https://doi.org/10.1017/S1537592710004068
Kerner, A. (2009). Why Should I Believe You? The Costs and Consequences of Bilateral Investment Treaties. *International Studies Quarterly*, *53*(1), 73–102. https://doi.org/10.1111/j.1468-2478.2008.01524.x
Khagram, S., Riker, J. V., & Sikkink, K. (2002). From Santiago to Seattle: Transnational Advocacy Groups Restructuring World Politics. In S. Khagram, J. V. Riker, & K. Sikkink (Eds.), *Restructuring World Politics: Transnational Social Movements, Networks, and Norms* (pp. 3–23). University of Minnesota Press. http://www.jstor.org/stable/10.5749/j.ctttsc5q
Khatun, F. (2012). Trade in Environmental Goods by Least Developed Countries: Issues for Negotiations. *South Asia Economic Journal*, *13*(2), 157–182. https://doi.org/10.1177/1391561412457232
Kirton, J. J., & Trebilcock, M. J. (2017). *Hard Choices, Soft Law: Voluntary Standards in Global Trade, Environment and Social Governance*. Routledge.
Kishore, P. (2014). Special and Differential Treatment in the Multilateral Trading System. *Chinese Journal of International Law*, *13*(2), 363–394. https://doi.org/10.1093/chinesejil/jmu004
Kituo Cha Katiba. (1999). *Conference on the Tanzania White Paper and the Draft Treaty for the Establishment of the East African Cooperation* [Report]. Kituo Cha Katiba; Treaty Making Process Folder.
Koremenos, B. (2016). *The Continent of International Law: Explaining Agreement Design*. Cambridge University Press.
Koremenos, B., & Betz, T. (2012). The Design of Dispute Settlement Procedures in International Agreements. In *Interdisciplinary Perspectives on International Law and International Relations: The State of the Art* (pp. 371–393). https://doi.org/10.1017/CBO9781139107310.019
Koremenos, B., Lipson, C., & Snidal, D. (2001). The Rational Design of International Institutions. *International Organization*, *55*(4), 761–799.
Krasner, S. D. (1976). State Power and the Structure of International Trade. *World Politics*, *28*(3), 317–347. https://doi.org/10.2307/2009974
Krasner, S. D. (1999). *Sovereignty: Organized Hypocrisy*. Princeton University Press.
Kreuder-Sonnen, C., & Zürn, M. (2020). After fragmentation: Norm collisions, interface conflicts, and conflict management. *Global Constitutionalism*, *9*(2), 241–267. https://doi.org/10.1017/S2045381719000315
Lai, Y.-B. (2007). The Political Economy Linkage between Trade Liberalization and Domestic Environmental Regulations. *Public Choice*, *133*(1/2), 57–72.
Laplante, B., & Garbutt, J. (1992). Environmental Protectionism. *Land Economics*, *68*(1), 116–119. https://doi.org/10.2307/3146748
Leal-Arcas, R. (2011). The Fragmentation of International Trade Law: Is Now the Time for Variable Geometry? *The Journal of World Investment & Trade*, *12*(2), vii–195. https://doi.org/10.1163/221190011X00166
Lechner, L. (2016a). The domestic battle over the design of non-trade issues in preferential trade agreements. *Review of International Political Economy*, *23*(5), 840–871. https://doi.org/10.1080/09692290.2016.1231130

Lechner, L. (2016b). The domestic battle over the design of non-trade issues in preferential trade agreements. *Review of International Political Economy*, *23*(5), 840–871. https://doi.org/10.1080/09692290.2016.1231130
Leebron, D. W. (2002). Linkages. *American Journal of International Law*, *96*(1), 5–27. Cambridge Core. https://doi.org/10.2307/2686123
Levinson, A. (2017). Environmental protectionism: The case of CAFE. *Economics Letters*, *160*, 20–23. https://doi.org/10.1016/j.econlet.2017.08.019
Licht, A. A. (2011). Change Comes with Time: Substantive Interpretation of Nonproportional Hazards in Event History Analysis. *Political Analysis*, *19*(2), 227–243. https://doi.org/10.1093/pan/mpq039
Lipson, C. (1991). Why are Some International Agreements Informal? *International Organization*, *45*(4), 495–538.
Lottici, M. V., Galperín, C., & Hoppstock, J. (2014). 'Green Trade Protectionism': An Analysis of Three New Issues that Affect Developing Countries. *Chinese Journal of Urban and Environmental Studies*, *02*(02), 1450016. https://doi.org/10.1142/S234574811450016X
Loureiro, M. L., & Lotade, J. (2005). Do fair trade and eco-labels in coffee wake up the consumer conscience? *Ecological Economics*, *53*(1), 129–138. https://doi.org/10.1016/j.ecolecon.2004.11.002
Maggi, G. (2016). Issue linkage. In K. Bagwell & R. W. Staiger (Eds.), *The Handbook of Commercial Policy* (Vol. 1A, p. 558). North Holland.
Makomere, R., & GUO, R. (2016). Navigating complexity in social-ecological systems: A synthesis framework of the adaptive governance regime. *Journal of Business Management & Social Sciences Research*, *5*(6). http://borjournals.com/a/index.php/jbmssr/article/view/2290
Mangeni, F., & Juma, C. (2019). *Emergent Africa. Evolution of Regional Economic Integration*. Headline Books.
Mansfield, E. D., & Busch, M. L. (1995). The political economy of nontariff barriers: A cross-national analysis. *International Organization*, *49*(4), 723–749. https://doi.org/10.1017/S0020818300028496
Mansfield, E. D., & Milner, H. V. (2012). *Votes, Vetoes, and the Political Economy of International Trade Agreements*. Princeton University Press.
Mansfield, E. D., Milner, H. V., & Pevehouse, J. C. (2007). Vetoing Co-operation: The Impact of Veto Players on Preferential Trading Arrangements. *British Journal of Political Science*, *37*(3), 403–432. https://doi.org/10.1017/S0007123407000221
Martens, D., & Oehri, M. (2018). Mapping Variation of Civil Society Involvement in EU Trade Agreements: A CSI Index. *European Foreign Affairs Review*, *23*(1). https://kluwerlawonline.com/journalarticle/European+Foreign+Affairs+Review/23.1/EERR2018003
Martin, L. L. (1995). Heterogeneity, linkage and common problems. In R. O. Keohane & E. Ostrom (Eds.), *Local Commons and Global Interdependence. Heterogeneity and Cooperation in Two Domains* (pp. 71–92). SAGE Publications.
Marx, A. (2018). Integrating Voluntary Sustainability Standards in Trade Policy: The Case of the European Union's GSP Scheme. *Sustainability*, *10*(12), 4364. https://doi.org/10.3390/su10124364
Mathew, A. J., & Córdoba, S. F. de. (2009). The Green Dilemma about Liberalization of Trade in Environmental Goods. *Journal of World Trade*, *43*(2). https://kluwerlawonline.com/journalarticle/Journal+of+World+Trade/43.2/TRAD2009016
Mbeva, K., & Makomere, R. (2015). *Orchestrating Environmental Sustainability in Regional Trade Agreements* (No. 007/2015; Responsible Natural Resource Economy Series). African Centre for Technology Studies (ACTS).
McAdams, R. (2000a). A Focal Point Theory of Expressive Law. *Virginia Law Review*, *86*(8), 1649–1729. JSTOR. https://doi.org/10.2307/1073827
McAdams, R. (2000b). Focal Point Theory of Expressive Law. *Virginia Law Review*, *86*, 1649.

McAdams, R. (2005). The Expressive Power of Adjudication. *University of Illinois Law Review*, *2005*, 1043.
McAdams, R. (2015). *The Expressive Powers of Law: Theories and Limits*. Harvard University Press.
McCloskey, D. (1998). Other Things Equal: The So-Called Coase Theorem. *Eastern Economic Journal*, *24*(3), 367–371.
McGee, J., & Wenta, J. (2014). Technology Transfer Institutions in Global Climate Governance: The Tension between Equity Principles and Market Allocation. *Review of European, Comparative & International Environmental Law*, *23*(3), 367–381. https://doi.org/10.1111/reel.12075
Mearsheimer, J. J., & Walt, S. M. (2013). Leaving theory behind: Why simplistic hypothesis testing is bad for International Relations. *European Journal of International Relations*, *19*(3), 427–457. https://doi.org/10.1177/1354066113494320
Medema, S. G. (1995). Ronald Coase on Economics and Economic Method. *History of Economics Review*, *24*(1), 1–22. https://doi.org/10.1080/10370196.1995.11733195
Mehling, M. A., Asselt, H. van, Das, K., & Droege, S. (2018). Beat protectionism and emissions at a stroke. *Nature*, *559*(7714), 321–324. https://doi.org/10.1038/d41586-018-05708-7
Mehling, M. A., Asselt, H. van, Das, K., Droege, S., & Verkuijl, C. (2019). Designing Border Carbon Adjustments for Enhanced Climate Action. *American Journal of International Law*, *113*(3), 433–481. https://doi.org/10.1017/ajil.2019.22
Mehra, K. (2010). Interaction between trade and environment policies with special-interest politics. *Indian Growth and Development Review*, *3*(2), 138–165. https://doi.org/10.1108/17538251011084464
Michaelowa, K. (2017). Resourcing International Organisations: So What? *Global Policy*, *8*(S5), 113–123. https://doi.org/10.1111/1758-5899.12471
Mikulaschek, C. (2018). Issue linkage across international organizations: Does European countries' temporary membership in the UN Security Council increase their receipts from the EU budget? *The Review of International Organizations*, *13*(4), 491–518. https://doi.org/10.1007/s11558-017-9289-9
Milewicz, K., Hollway, J., Peacock, C., & Snidal, D. (2016). Beyond Trade. *Journal of Conflict Resolution*, 0022002716662687. https://doi.org/10.1177/0022002716662687
Milner, H. V., & Rosendorff, B. P. (1996). Trade Negotiations, Information and Domestic Politics: The Role of Domestic Groups. *Economics & Politics*, *8*(2), 145–189. https://doi.org/10.1111/j.1468-0343.1996.tb00126.x
Minnich, D. J. (2005). Veto players, electoral incentives and international commitments: The impact of domestic institutions on intergovernmental organization membership. *European Journal of Political Research*, *44*(2), 295–325. https://doi.org/10.1111/j.1475-6765.2005.00229.x
Monteiro, J.-A. (2016). *Typology of environment-related provisions in regional trade agreements* (WTO Working Paper ERSD-2016-13). World Trade Organization. https://www.wto.org/english/res_e/reser_e/ersd201613_e.pdf
Moran, N. (2017). The First Twenty Cases Under GATT Article XX: Tuna or Shrimp Dear? In G. Adinolfi, F. Baetens, J. Caiado, A. Lupone, & A. G. Micara (Eds.), *International Economic Law: Contemporary Issues* (pp. 3–21). Springer International Publishing. https://doi.org/10.1007/978-3-319-44645-5_1
Moravcsik, A. (1997). Taking Preferences Seriously: A Liberal Theory of International Politics. *International Organization*, *51*(4), 513–553. https://doi.org/10.1162/002081897550447
Morin, J. F., Blümer, D., Brandi, C., & Berger, A. (2019). Kick-starting diffusion: Explaining the varying frequency of preferential trade agreements' environmental provisions by their initial conditions. *The World Economy*, *42*(9), 2602–2628. https://doi.org/10.1111/twec.12822
Morin, J. F., Dür, A., & Lechner, L. (2018). Mapping the Trade and Environment Nexus: Insights from a New Data Set. *Global Environmental Politics*, *18*(1), 122–139. https://doi.org/10.1162/GLEP_a_00447
Morin, J. F., & Jinnah, S. (2018). The untapped potential of preferential trade agreements for climate

governance. *Environmental Politics*, *27*(3), 541–565. https://doi.org/10.1080/09644016.2017.1421399
Morin, J. F., Pauwelyn, J., & Hollway, J. (2017). The Trade Regime as a Complex Adaptive System: Exploration and Exploitation of Environmental Norms in Trade Agreements. *Journal of International Economic Law*, *20*(2), 365–390. https://doi.org/10.1093/jiel/jgx013
Mosley, P. (2000). Globalisation, Economic Policy and Convergence. *The World Economy*, *23*(5), 613–634. https://doi.org/10.1111/1467-9701.00293
Mwithiga, P. M. (2015). The Challenges of Regional Integration in the East Africa Community. In A. B. Elhiraika, A. C. K. Mukungu, & W. Nyoike (Eds.), *Regional Integration and Policy Challenges in Africa* (pp. 89–108). Palgrave Macmillan UK. https://doi.org/10.1057/9781137462084_5
Nalunga, J. (2018). *Why the Economic Partnership Agreements failed in the East African Community?* Vienna Institute for International Dialogue and Cooperation. http://www.vidc.org/en/spotlight-online-magazine/spotlight-452018/why-the-economic-partnership-agreements-failed-in-the-east-african-community/
Narlikar, A. (2004). *International Trade and Developing Countries: Bargaining Coalitions in GATT and WTO*. Routledge. https://doi.org/10.4324/9780203633946
Nimubona, A.-D. (2012). Pollution Policy and Trade Liberalization of Environmental Goods. *Environmental and Resource Economics*, *53*(3), 323–346. https://doi.org/10.1007/s10640-012-9564-4
Nye, J. S. (1963). East African Economic Integration. *The Journal of Modern African Studies*, *1*(4), 475–502. JSTOR.
Nye, J. S. (1965). *Pan-Africanism and East African Integration*. Harvard University Press.
Oberthür, S., & Stokke, O. S. (Eds.). (2011). Institutional Interaction in Global Environmental Change. In *Managing institutional complexity. [Electronic resource]: Regime interplay and global environmental change.* (UniM INTERNET resource; p. 4). Cambridge, Mass. : MIT Press, c2011.; cat00006a. https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00006a&AN=melb.b5784766&site=eds-live&scope=site
OECD. (2007). *Environment and Regional Trade Agreements*. Organisation for Economic Co-operation and Development.
Opande, G. O., Onyango, J. C., & Wagai, S. O. (2004). Lake victoria: The water hyacinth (Eichhornia crassipes [Mart.] Solms), its socio-economic effects, control measures and resurgence in the Winam gulf. *Limnologica*, *34*(1), 105–109. https://doi.org/10.1016/S0075-9511(04)80028-8
Orbie, J., Martens, D., Oehri, M., & Putte, L. V. den. (2016). Promoting sustainable development or legitimising free trade? Civil society mechanisms in EU trade agreements. *Third World Thematics: A TWQ Journal*, *1*(4), 526–546. https://doi.org/10.1080/23802014.2016.1294032
Orgad, L. (2010). The preamble in constitutional interpretation. *International Journal of Constitutional Law*, *8*(4), 714–738. https://doi.org/10.1093/icon/mor010
Organ, L., & Williams, J. (1994). NAFTA and the Environment: The 'Greening' of Mexico. *Duke Environmental Law & Policy Forum*, *4*, 62–84.
Ornelas, E. (2016). Chapter 7—Special and Differential Treatment for Developing Countries. In Kyle Bagwell and Robert W. Staiger (Ed.), *Handbook of Commercial Policy: Vol. Volume 1, Part B* (pp. 369–432). North-Holland. http://www.sciencedirect.com/science/article/pii/S2214312216300114
Ostrom, E. (2012). Nested externalities and polycentric institutions: Must we wait for global solutions to climate change before taking actions at other scales? *Economic Theory*, *49*(2), 353–369. https://doi.org/10.1007/s00199-010-0558-6
Oye, K. A. (1985). Explaining Cooperation under Anarchy: Hypotheses and Strategies. *World Politics*, *38*(1), 1–24. JSTOR. https://doi.org/10.2307/2010349
Pauwelyn, J., & Hamilton, R. J. (2018). Exit from International Tribunals. *Journal of International Dispute Settlement*, *9*(4), 679–690. https://doi.org/10.1093/jnlids/idy031

Peacock, C., Milewicz, K., & Snidal, D. (2019). Boilerplate in International Trade Agreements. *International Studies Quarterly*, *63*(4), 923–937. https://doi.org/10.1093/isq/sqz069
Pelc, K. (2009). Seeking Escape: The Use of Escape Clauses in International Trade Agreements. *International Studies Quarterly*, *53*(2), 349–368. https://doi.org/10.1111/j.1468-2478.2009.00537.x
Pelc, K. (2010). Eluding efficiency: Why do we not see more efficient breach at the WTO? *World Trade Review*, *9*(4), 629–642. https://doi.org/10.1017/S1474745610000352
Pelc, K. (2016a). *Making and Bending International Rules: The Design of Exceptions and Escape Clauses in Trade Law*. Cambridge University Press.
Pelc, K. (2016b). What would E.H. Carr say? How international institutions address peaceful political change. In T. V. Paul (Ed.), *Accommodating Rising Powers: Past, Present, and Future*. Cambridge University Press. https://doi.org/10.1017/CBO9781316460191.004
Pelc, K. (2020). Can COVID-Era Export Restrictions Be Deterred? *Canadian Journal of Political Science/Revue Canadienne de Science Politique*, *53*(2), 349–356. https://doi.org/10.1017/S0008423920000578
Pickering, J., Betzold, C., & Skovgaard, J. (2017). Special issue: Managing fragmentation and complexity in the emerging system of international climate finance. *International Environmental Agreements: Politics, Law and Economics*, *17*(1), 1–16. https://doi.org/10.1007/s10784-016-9349-2
Pigman, G. A. (1998). The sovereignty discourse and the US debate on joining the world trade organization. *Global Society*, *12*(1), 75–102. https://doi.org/10.1080/13600829808443150
Pigou, A. (1920). *The Economics of Welfare*. Palgrave Macmillan UK. https://doi.org/10.1057/978-1-137-37562-9
Poast, P. (2013). Issue linkage and international cooperation: An empirical investigation. *Conflict Management and Peace Science*, *30*(3), 286–303. https://doi.org/10.1177/0738894213484030
Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies*, *47*(11), 1451–1458. https://doi.org/10.1016/j.ijnurstu.2010.06.004
Porter, G. (1999). Trade Competition and Pollution Standards: "Race to the Bottom" or "Stuck at the Bottom". *The Journal of Environment & Development*, *8*(2), 133–151. https://doi.org/10.1177/107049659900800203
Postnikov, E. (2014). The design of social standards in EU and US preferential trade agreements. In D. Deese (Ed.), *Handbook of International Political Economy of Trade* (p. 648). Edward Elgar.
Postnikov, E. (2019). Unravelling the Puzzle of Social Standards' Design in EU and US Trade Agreements. *New Political Economy*, *24*(2), 181–196. https://doi.org/10.1080/13563467.2018.1428943
Postnikov, E. (2020). *Social Standards in EU and US Trade Agreements*. Routledge.
Postnikov, E., & Bastiaens, I. (2020). Social protectionist bias: The domestic politics of North–South trade agreements. *The British Journal of Politics and International Relations*, *22*(2), 347–366. https://doi.org/10.1177/1369148120910991
Poulsen, L. N. S. (2015). *Bounded rationality and economic diplomacy: The politics of investment treaties in developing countries.* (UniM Law KC 227.2 POUL). Cambridge, United Kingdom Cambridge University Press, 2015.; cat00006a. https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00006a&AN=melb.b6442476&site=eds-live&scope=site
Poulsen, L. N. S. (2020). Beyond Credible Commitments: (Investment) Treaties as Focal Points. *International Studies Quarterly*, *64*(1), 26–34. https://doi.org/10.1093/isq/sqz079
Prakash, A., & Potoski, M. (2006). Racing to the Bottom? Trade, Environmental Governance, and ISO 14001. *American Journal of Political Science*, *50*(2), 350–364. https://doi.org/10.1111/j.1540-5907.2006.00188.x
Prakash, A., & Potoski, M. (2012). Voluntary environmental programs: A comparative perspective.

Journal of Policy Analysis and Management, *31*(1), 123–138. https://doi.org/10.1002/pam.20617
Pretty, J., Brett, C., Gee, D., Hine, R., Mason, C., Morison, J., Rayment, M., Bijl, G. V. D., & Dobbs, T. (2001). Policy Challenges and Priorities for Internalizing the Externalities of Modern Agriculture. *Journal of Environmental Planning and Management*, *44*(2), 263–283. https://doi.org/10.1080/09640560123782
Princen, S., & Kerremans, B. (2008). Opportunity Structures in the EU Multi-Level System. *West European Politics*, *31*(6), 1129–1146. https://doi.org/10.1080/01402380802370484
Prowse, S. (2010). *Aid for Trade: Supporting Trade Preference Reform* (SSRN Scholarly Paper ID 1694144). Social Science Research Network. https://papers.ssrn.com/abstract=1694144
Putnam, R. D. (1988). Diplomacy and Domestic Politics: The Logic of Two-Level Games. *International Organization*, *42*(3), 427–460.
Rajamani, L. (2006). *Differential Treatment in International Environmental Law*. Oxford University Press.
Rajamani, L. (2011). The reach and limits of the principle of common but differentiated responsibilities and respective capabilities in the climate change regime. In *Handbook of Climate Change and India*. Routledge. https://doi.org/10.4324/9780203153284.ch8
Rajamani, L. (2018). The principle of common but differentiated responsibilities and respective capabilities in the international climate change regime. In R. Lyster & R. Verchick (Eds.), *Research Handbook on Climate Disaster Law* (pp. 46–60). Edward Elgar. https://www.elgaronline.com/view/edcoll/9781786430021/9781786430021.00009.xml
Reeve, R. (2006). Wildlife trade, sanctions and compliance: Lessons from the CITES regime. *International Affairs*, *82*(5), 881–897. https://doi.org/10.1111/j.1468-2346.2006.00576.x
Reus-Smit, P. C., Reus-Smit, C., Biersteker, T., & Smith, S. (2004). *The Politics of International Law*. Cambridge University Press.
Richardson, M., & Stähler, F. (2019). International agreements, economic sovereignty and exit. *European Economic Review*, *120*, 103326. https://doi.org/10.1016/j.euroecorev.2019.103326
Rodrik, D. (2011). *The Globalization Paradox: Democracy and the Future of the World Economy*. W. W. Norton.
Rodrik, D. (2018). What Do Trade Agreements Really Do? *Journal of Economic Perspectives*, *32*(2), 73–90. https://doi.org/10.1257/jep.32.2.73
Rosendal, K. (2001). Impacts of Overlapping International Regimes: The Case of Biodiversity. *Global Governance*, *7*(1), 95–117.
Rosendorff, B. P., & Milner, H. V. (2001). The Optimal Design of International Trade Institutions: Uncertainty and Escape. *International Organization*, *55*(4), 829–857. JSTOR.
Rosert, D. (2014). *The Stakes Are High: A review of the financial costs of investment treaty arbitration*. International Institute for Sustainable Development.
Rudra, N. (2007). Welfare States in Developing Countries: Unique or Universal? *The Journal of Politics*, *69*(2), 378–396. https://doi.org/10.1111/j.1468-2508.2007.00538.x
Salzman, J. (1997). Informing the Green Consumer: The Debate Over the Use and Abuse of Environmental Labels. *Journal of Industrial Ecology*, *1*(2), 11–21. https://doi.org/10.1162/jiec.1997.1.2.11
Sanchez, R. (2002). Governance, Trade, and the Environment in the Context of NAFTA. *American Behavioral Scientist*, *45*(9), 1369–1393. https://doi.org/10.1177/0002764202045009005
Schelling, T. (1981). *The Strategy of Conflict* (1 edition). Harvard University Press.
Scholtz, W. (2009). Equity as the basis for a future international climate change agreement: Between pragmatic panacea and idealistic impediment. The optimisation of the CBDR principle via realism. *The Comparative and International Law Journal of Southern Africa*, *42*(2), 166–182. JSTOR.
Schuenemann, F., & Kerr, W. A. (2019). European Union non-tariff barriers to imports of African biofuels. *Agrekon*, *58*(4), 407–425. https://doi.org/10.1080/03031853.2019.1577144
Seawright, J., & Gerring, J. (2008). Case Selection Techniques in Case Study Research: A Menu of

Qualitative and Quantitative Options. *Political Research Quarterly*, *61*(2), 294–308. https://doi.org/10.1177/1065912907313077
Selivanova, Y. S. (2018). Changes in Renewables Support Policy and Investment Protection under the Energy Charter Treaty: Analysis of Jurisprudence and Outlook for the Current Arbitration Cases. *ICSID Review - Foreign Investment Law Journal*, *33*(2), 433–455. https://doi.org/10.1093/icsidreview/siy010
Shaffer, G. (2005). *The Under-Examined Trade-Environment Linkage: Domestic Politics and WTO Disputes*. https://academiccommons.columbia.edu/catalog/ac%3A124879
Shahin, M. (1999). Trade and Environment: How Real Is the Debate. In G. P. Sampson & W. B. Chambers (Eds.), *Trade, environment, and the millennium* (pp. 48–80). United Nations University Press.
Sharma, N. K., & Kushwaha, G. S. (2019). Eco-labels: A tool for green marketing or just a blind mirror for consumers. *Electronic Green Journal*, *1*(42). https://doi.org/10.5070/G314233710
Sheldon, I. (2006). Trade and Environmental Policy: A Race to the Bottom? *Journal of Agricultural Economics*, *57*(3), 365–392. https://doi.org/10.1111/j.1477-9552.2006.00056.x
Shen, J. (2008). Trade liberalization and environmental degradation in China. *Applied Economics*, *40*(8), 997–1004. https://doi.org/10.1080/00036840600771148
Shendruk, A. (2021, January 1). *What is the African Continental Free Trade Area (AfCFTA)?* Quartz. https://qz.com/1951523/what-is-the-african-continental-free-trade-area-afcfta/
Skilton, T. E. (1993). GATT and the Environment in Conflict: The Tuna-Dolphin Dispute and the Quest for an International Conservation Strategy. *Cornell International Law Journal*, *26*, 455.
Small, M. L. (2011). How to Conduct a Mixed Methods Study: Recent Trends in a Rapidly Growing Literature. *Annual Review of Sociology*, *37*(1), 57–86. https://doi.org/10.1146/annurev.soc.012809.102657
Smith, J. (2001). Globalizing Resistance: The Battle of Seattle and the Future of Social Movements. *Mobilization: An International Quarterly*, *6*(1), 1–19. https://doi.org/10.17813/maiq.6.1.y63133434t8vq608
Smith, J. M. (2000). The Politics of Dispute Settlement Design: Explaining Legalism in Regional Trade Pacts. *International Organization*, *54*(1), 137–180.
Smolyansky, M. (2019). Policy externalities and banking integration. *Journal of Financial Economics*, *132*(3), 118–139. https://doi.org/10.1016/j.jfineco.2018.11.001
Snidal, D. (2002). Rational Choice and International Relations. In W. Carlsnaes, T. Risse, & B. Simmons (Eds.), *Handbook of International Relations* (pp. 73–94). SAGE Publications Ltd. https://doi.org/10.4135/9781848608290
Spilker, G., Bernauer, T., & Umaña, V. (2018). What Kinds of Trade Liberalization Agreements Do People in Developing Countries Want? *International Interactions*, *44*(3), 510–536. https://doi.org/10.1080/03050629.2018.1436316
Spiller, P. T., & Tommasi, M. (2008). The Institutions of Regulation: An Application to Public Utilities. In C. Ménard & M. M. Shirley (Eds.), *Handbook of New Institutional Economics* (pp. 515–543). Springer. https://doi.org/10.1007/978-3-540-69305-5_21
Srinivasan, T. N. (2005). Nondiscrimination in GATT/WTO: Was There Anything to Begin with and Is There Anything Left. *World Trade Review*, *4*, 69.
Staples, A. J., Reeling, C. J., Widmar, N. J. O., & Lusk, J. L. (2020). Consumer willingness to pay for sustainability attributes in beer: A choice experiment using eco-labels. *Agribusiness*, *36*(4), 591–612. https://doi.org/10.1002/agr.21655
Stein, A. A. (1980). The Politics of Linkage. *World Politics*, *33*(1), 62–81. https://doi.org/10.2307/2010255
Stein, A. A. (1982). Coordination and collaboration: Regimes in an anarchic world. *International Organization*, *36*(2), 299–324. https://doi.org/10.1017/S0020818300018968
Stokke, O. S. (2001). *The Interplay of International Regimes: Putting Effectiveness Theory to Work* (No. 14/2001; FNI Report). Fridtjof Nansen Institute. https://www.files.ethz.ch/isn/100208/01-14-

oss.pdf
Strom, T. H. (1997). Pouring Fuel on the Fire? The WTO's Reformulated Gasoline Case. *Canadian Yearbook of International Law / Annuaire Canadien de Droit International*, *34*, 249–271. https://doi.org/10.1017/S0069005800006391
Takang, J. M. (2014). From Algiers to Maputo: The Role of the African Convention on the Conservation of Nature and Natural Resources in the Harmonization of Conservation Policy in Africa. *Journal of International Wildlife Law & Policy*, *17*(4), 165–186. https://doi.org/10.1080/13880292.2014.957034
Thompson, D. (1999). Beyond Benefit-Cost Analysis: Institutional Transaction Costs and Regulation of Water Quality. *Natural Resources Journal*, *39*(3), 517–541.
Tienhaara, K. (2009). *The expropriation of environmental governance: Protecting foreign investors at the expense of public policy*. (UniM Law KC 243 TIEN). Cambridge ; New York : Cambridge University, 2009.; cat00006a. https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=cat00006a&AN=melb.b3359601&site=eds-live&scope=site
Tienhaara, K. (2018). Regulatory Chill in a Warming World: The Threat to Climate Policy Posed by Investor-State Dispute Settlement. *Transnational Environmental Law*, *7*(2), 229–250. https://doi.org/10.1017/S2047102517000309
Tienhaara, K., & Downie, C. (2018). Risky Business? The Energy Charter Treaty, Renewable Energy, and Investor-State Disputes. *Global Governance: A Review of Multilateralism and International Organizations*, *24*(3), 451–471. https://doi.org/10.1163/19426720-02403009
Trujillo, E. (2012). The Tuna-Dolphin Encore—WTO Rules on Environmental Labeling. *American Society of International Law*, *16*(7). https://www.asil.org/sites/default/files/insight120307.pdf
Trujillo, E. (2013). A Dialogical Approach to Trade and Environment. *Journal of International Economic Law*, *16*(3), 535–585. https://doi.org/10.1093/jiel/jgt019
UN. (1947a). *Draft Charter. Article 37. General Exceptions to Chapter V. Amendment proposed by the Delegation of France, Belgium, the Netherlands and Luxembourg* (Second Session of the Preparatory Committee of the United Nations Conference on Trade and Employment) [Restricted]. United Nations Economic and Social Council; E/PC/T/W.46. https://docs.wto.org/gattdocs/q/UN/EPCT/W46.PDF
UN. (1947b). *Draft Charter. Italy: Proposed Amendments. Article 23: Exceptions to the Rule of Non-Discrimination* (Third Committee: General Commercial Policy) [Unrestricted]. United Nations Conference on Trade and Employment; E/CONF.2/0.3/1/Add.15. https://docs.wto.org/gattdocs/q/UN/ECONF2/C3-1A15.PDF
UN. (1948a). *Iraq: Amendment to Article 94 (General Exceptions)* (Sixth Committee: Organization). United Nations Conference on Trade and Employment; E/CONF.2/C.6/12/Add.9. https://stacks.stanford.edu/file/zv664kk0646/90170049.pdf
UN. (1948b). *Norway: Proposal. Article 23: Exceptions to the Rule of Non-Discrimination* (Third Committee: Commercial Policy) [Restricted]. United Nations Conference on Trade and Employment; E/CONF.2/0.3/F/W.4. https://docs.wto.org/gattdocs/q/UN/ECONF2/C3-FW4.PDF
UN. (1992). *Rio Declaration on Environment and Development*. United Nations General Assembly. https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_CONF.151_26_Vol.I_Declaration.pdf
Usynin, M., & Gáspár-Szilágyi, S. (2018). The Growing Tendency of Including Investment Chapters in PTAs. In F. Amtenbrink, D. Prévost, & R. A. Wessel (Eds.), *Netherlands Yearbook of International Law 2017: Shifting Forms and Levels of Cooperation in International Economic Law: Structural Developments in Trade, Investment and Financial Regulation* (pp. 267–304). T.M.C. Asser Press. https://doi.org/10.1007/978-94-6265-243-9_9
van der Ven, H., Rothacker, C., & Cashore, B. (2018). Do eco-labels prevent deforestation? Lessons from non-state market driven governance in the soy, palm oil, and cocoa sectors. *Global Environmental Change*, *52*, 141–151. https://doi.org/10.1016/j.gloenvcha.2018.07.002

VanGrasstek, C. (2013). *The History and Future of the World Trade Organization*. World Trade Organization.
Verbruggen, H., Kuik, O., & Bennis, M. (1995). *Environmental Regulations as Trade Barriers for Developing Countries: Eco-Labelling and the Dutch Cut Flower Industry* (SSRN Scholarly Paper ID 4437). Social Science Research Network. https://papers.ssrn.com/abstract=4437
Victor, D. G. (2006). Toward Effective International Cooperation on Climate Change: Numbers, Interests and Institutions. *Global Environmental Politics*, *6*(3), 90–103. https://doi.org/10.1162/glep.2006.6.3.90
Vijil, M. (2014). Aid for Trade Effectiveness: Complementarities with Economic Integration. *The World Economy*, *37*(4), 555–566. https://doi.org/10.1111/twec.12140
Voituriez, T., & Wang, X. (2011). Getting the carbon price right through climate border measures: A Chinese perspective. *Climate Policy*, *11*(5), 1257–1261. https://doi.org/10.1080/14693062.2011.601615
Wæver, O. (2009). Waltz's Theory of Theory. *International Relations*, *23*(2), 201–222. https://doi.org/10.1177/0047117809104635
Walter, J. M., & Chang, Y.-M. (2020). Environmental policies and political feasibility: Eco-labels versus emission taxes. *Economic Analysis and Policy*, *66*, 194–206. https://doi.org/10.1016/j.eap.2020.04.004
Waltz, K. N. (1979). *Theory of international politics.* New York : McGraw-Hill, c1979.
Waltz, K. N. (1986). Reflections on Theory of International Politics: A Response to My Critics. In R. O. Keohane (Ed.), *Neorealism and Its Critics* (1st edition). *Columbia University Press.
Wan, R., Nakada, M., & Takarada, Y. (2018). Trade liberalization in environmental goods. *Resource and Energy Economics*, *51*, 44–66. https://doi.org/10.1016/j.reseneeco.2017.11.001
Williams, M. J. (2021). Beyond state capacity: Bureaucratic performance, policy implementation and reform. *Journal of Institutional Economics*, *Online first*, 1–19. https://doi.org/10.1017/S1744137420000478
Wilson, J. S., Mann, C. L., & Otsuki, T. (2005). Assessing the Benefits of Trade Facilitation: A Global Perspective. *The World Economy*, *28*(6), 841–871. https://doi.org/10.1111/j.1467-9701.2005.00709.x
Winham, G. R. (1990). GATT and the International Trade Régime. *International Journal*, *45*(4), 796–822. https://doi.org/10.1177/002070209004500403
Woolcock, S. (2014). Differentiation within reciprocity: The European Union approach to preferential trade agreements. *Contemporary Politics*, *20*(1), 36–48. https://doi.org/10.1080/13569775.2014.881603
WTO. (2018). *WTO TBT Enquiry Point Guide* (Making Transparency Work). World Trade Organization. https://www.wto.org/english/tratop_e/tbt_e/tbt_enquiry_point_guide_e.pdf
WTO, & UNEP. (2018). *Making trade work for the environment, prosperity and resilience*. World Trade Organization, United Nations Environment Programme. https://www.wto.org/english/res_e/publications_e/unereport2018_e.pdf
Wu, M. (2014). Why Developing Countries Won't Negotiate? The Case of the WTO Environmental Goods Agreement. *Trade, Law and Development*, *6*(1), 93–176.
Yechout, P. J. (1996). In the Wake of Tuna II: New Possibilities for GATT-Compliant Environmental Standards. *Minnesota Journal of Global Trade*, *5*, 247.
Yoo, S. H., & Kim, J. (2011). Trade Liberalization in Environmental Goods: Major Issues and Impacts. *Korea and the World Economy*, *12*(3), 579–610.
Young, A., & Peterson, J. (2006). The EU and the new trade politics. *Journal of European Public Policy*, *13*(6), 795–814. https://doi.org/10.1080/13501760600837104
Young, M. (Ed.). (2012). *Regime Interaction in International Law: Facing Fragmentation*. Cambridge University Press; Cambridge Core. https://doi.org/10.1017/CBO9780511862403
Young, O., Chambers, B., KIm, J. A., & ten Have, C. (Eds.). (2008). *Institutional Interplay: Biosafety and Trade*. United Nations University Press.

http://collections.unu.edu/eserv/UNU:2488/pdf9789280811483.pdf
Zelli, F., Gupta, A., & van Asselt, H. (2013). Institutional Interactions at the Crossroads of Trade and Environment: The Dominance of Liberal Environmentalism? *Global Governance: A Review of Multilateralism and International Organizations*, *19*(1), 105–118. https://doi.org/10.5555/1075-2846-19.1.105

Annex I: List of Preferential Trade Agreements Consulted

Table AI.1 List of PTAs that were consulted. Main source: WTO RTAs Database[223]

No.	PTA Name	Year of Signature	No.	PTA Name	Year of Signature	No.	PTA Name	Year of Signature
1	Mexico-Paraguay	1983	101	Japan_Singapore	2002	201	Turkey_Jordan	2009
2	Ecuador-Mexico	1983	102	Brazil_Mexico	2002	202	Turkey_Chile	2009
3	Panama-Dominican_Republic	1985	103	India_Thailand	2003	203	EFTA_Albania	2009
4	Argentina-Mexico	1986	104	Mexico_Uruguay	2003	204	EFTA_Serbia	2009
5	Andean Community	1987	105	India_Afghanistan	2003	205	ASEAN_India	2009
6	EU-San_Marino[224]	1991	106	Panama_Chinese_Taipei	2003	206	Turkey_Serbia	2009
7	EU-Andorra	1991	107	Ukraine_Moldova	2003	207	India_Nepal	2009
8	EFTA-Turkey	1991	108	Common_Economic_Zone (CEZ)	2003	208	Korea_India	2009
9	Thailand-Laos	1991	109	EFTA_Chile	2003	209	ASEAN_Australia_New_Zealand	2009
10	Southern Common Market (MERCOSUR)	1991	110	EC (25) Enlargement	2003	210	Peru_China	2009
11	RussianFederation-Uzbekistan	1992	111	Korea_Chile	2003	211	EU_Cameroon	2009

[223] https://rtais.wto.org/UI/PublicMaintainRTAHome.aspx

[224] All previous versions of the European Union are simply referred to as EU for easy of reference

12	Russian_Federaion-Turkmenistan	1992	112	EU_Chile	2003	212	Japan_Switzerland	2009
13	Russia-Azerbaijan	1992	113	China - Macao, China	2003	213	Southern Common Market (MERCOSUR) - Egypt	2010
14	Ukraine-Belarus	1992	114	China- Hong Kong, China	2003	214	Costa_Rica_Singapore	2010
15	Faroe_Islands-Norway	1992	115	US_Singapore	2003	215	Canada_Panama	2010
16	North American Free Trade Agreement (NAFTA)	1992	116	US_Chile	2003	216	Chile_Malaysia	2010
17	EFTA-Israel	1992	117	SIngapore_Australia	2003	217	EFTA_Ukraine	2010
18	Association of Southeast Asian Nations (ASEAN)	1992	118	Agadir Agreement	2004	218	China_Costa_Rica	2010
19	Economic Cooperation Organization (ECO)	1992	119	Southern Common Market (MERCOSUR)_India	2004	219	EU_Korea	2010
20	Economic Community of West African States (ECOWAS)	1993	120	South Asian Free Trade Agreement (SAFTA)	2004	220	EFTA_Peru	2010
21	Armenia-Moldova	1993	121	Turkey_Syria	2004	221	Hong_Kong_New_Zealand	2010
22	Melanesian Spearhead Group (MSG)	1993	122	EFTA_Lebanon	2004	222	EU_Serbia	2010
23	South Asian Preferential Trade Arrangement (SAPTA)	1993	123	Jordan_Singapore	2004	223	MERCOSUR-Egypt	2010

24	Common Market for Eastern and Southern Africa (COMESA)	1993	124	Dominican Republic - Central America - United States Free Trade Agreement (CAFTA-DR)	2004	224	Mexico_Bolivia	2010
25	Colombia-Mexico	1994	125	Turkey_Morocco	2004	225	Chile_Viet_Nam	2011
26	Ukraine-Kazakhstan	1994	126	US_Morocco	2004	226	Mexico_Central_America	2011
27	Ukraine-Turkmenistan	1994	127	ASEAN_China	2004	227	El_Savador_Cuba	2011
28	Ukraine-Uzbekistan	1994	128	Turkey_Palestine	2004	228	CIS	2011
29	Armenia-Ukraine	1994	129	Turkey_Tunisia	2004	229	Costa_Rica_Peru	2011
30	Georgia-Russia	1994	130	EFTA_Tunisia	2004	230	Turkey_Mauritius	2011
31	Kyrgyzstan_Armenia	1994	131	Japan_Mexico	2004	231	Ukraine_Montenegro	2011
32	West African Economic and Monetary Union (WAEMU)	1994	132	Thailand_Australia	2004	232	EFTA_Montenegro	2011
33	Economic and Monetary Community of Central Africa (CEMAC)	1994	133	US_Australia	2004	233	EFTA_Hong_Kong	2011
34	Commonwealth of Independent States	1994	134	Guatemala_Chinese_Taipei	2005	234	Panama_Peru	2011
35	Faroe-Islands_Switzerland	1994	135	Iceland_Faroe_Islands	2005	235	Japan_Peru	2011
36	EC (15) Enlargement	1994	136	Egypt_Turkey	2005	236	Peru_Mexico	2011
37	Russia_Belarus_Kazakstan	1995	137	Chile_China	2005	237	India_Japan	2011

38	Ukraine_Azerbaijan	1995	138	Trans-Pacific Strategic Economic Partnership	2005	238	India_Malaysia	2011
39	Armenia_Turkmenistan	1995	139	India_Singapore	2005	239	Peru_Korea	2011
40	Georgia_Armenia	1995	140	EC (27) Enlargement	2005	240	Central American Common Market (CACM) - Accession of Panama	2012
41	Georgia_Ukraine	1995	141	US_Bahrain	2005	241	Hong_Kong_Chile	2012
42	EU_Israel	1995	142	EFTA_Korea	2005	242	Malaysia_Australia	2012
43	Kyrgyz Republic - Kazakhstan	1995	143	Japan_Malaysia	2005	243	Korea_Turkey	2012
44	Kyrgyz Republic - Moldova, Republic of	1995	144	Korea_Singapore	2005	244	EU_Central_America	2012
45	Kyrgyz Republic - Ukraine	1995	145	Thailand_New_Zealand	2005	245	Indonesia_Pakistan	2012
46	EU_Tunisia	1995	146	US_Colombia	2006	246	Chile_Thailand	2013
47	EU_Turkey	1995	147	Peru_Chile	2006	247	Costa Rica_Colombia	2013
48	Southern African Development Community (SADC)	1996	148	ASEAN_Korea	2006	248	Korea_Colombia	2013
49	Georgia_Azerbaijan	1996	149	Chile_Colombia	2006	249	Canada_Honduras	2013
50	Georgia_Turkmenistan	1996	150	Nicaragua_Chinese_Taipei	2006	250	EFTA_Bosnia and Herzegovina	2013
51	EU_Morocco	1996	151	US_Peru	2006	251	EFTA_Central_Ameri	2013

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52	Kyrgyz Republic - Uzbekistan	1996	152	US_Oman	2006	252	Iceland_China	2013
53	Turkey_Israel	1996	153	Chile_India	2006	253	Switzerland_China	2013
54	Canada_Chile	1996	154	Japan_Phillipines	2006	254	Singapore_China	2013
55	EU_Faroe_Islands	1996	155	EFTA_SACU	2006	255	New Zealand_Chinese_Taipei	2013
56	Canada_Israel	1996	156	India_Bhutan	2006	256	EU_Colombia_Peru	2013
57	Pan-Arab Free Trade Area (PAFTA)	1997	157	Turkey_Albania	2006	257	Turkey_Malaysia	2014
58	EU_Jordan	1997	158	Panama_Chile	2006	258	Turkey_Moldova	2014
59	Georgia_Kazakhstan	1997	159	Pakistan_China	2006	259	Pacific Alliance	2014
60	EU_Mexico	1997	160	Central European Free Trade Agreement (CEFTA) 2006	2006	260	Mexico_Panama	2014
61	EFTA_Morocco	1997	161	Panama_Singapore	2006	261	Canada_Korea	2014
62	EU_Palestinian_Authority	1997	162	EU_Albania	2006	262	Japan_Australia	2014
63	Dominican_Republic_Central_America	1998	163	Mauritius_Pakistan	2007	263	Korea_Australia	2014
64	India_Sri_Lanka	1998	164	US_Panama	2007	264	Eurasian Economic Union (EAEU)	2014
65	Chile_Mexico	1998	165	Colombia-Northern Triangle (El Salvador, Guatemala, Honduras)	2007	265	EU_Georgia	2014

66	EFTA_Palestinian_Authority	1998	166	Korea_US	2007	266	EU_Ukraine	2014
67	Chile - Nicaragua (Chile - Central America)	1999	167	El_Savador_Honduras_Taipei	2007	267	EU_Moldova	2014
68	Chile_Guatemala	1999	168	Panama - Honduras (Panama - Central America)	2007	268	Eurasian Economic Union (EAEU) - Viet Nam	2015
69	Chile_Honduras (Chile - Central America)	1999	169	Panama - Costa Rica (Panama - Central America)	2007	269	Japan_Mongolia	2015
70	Armenia_Kazakhstan	1999	170	Turkey_Georgia	2007	270	Korea_Viet Nam	2015
71	Chile - El Salvador (Chile - Central America)	1999	171	Brunei_Japan	2007	271	China_Korea	2015
72	Chile - Costa Rica (Chile - Central America)	1999	172	Japan_Indonesia	2007	272	Australia_China	2015
73	Turkey_Macedonia	1999	173	Pakistan_Malaysia	2007	273	Korea_New_Zealand	2015
74	EU_South_Africa	1999	174	EU_Montenegro	2007	274	Turkey_Singapore	2015
75	East_African_Community	1999	175	Japan_Thailand	2007	275	Peru_Honduras	2015
76	Russia_Serbia	2000	176	Chile_Japan	2007	276	EU_Canada	2016
77	US_Jordan	2000	177	EFTA_Egypt	2007	277	Canada_Ukraine	2016
78	New_Zealand_Singapore	2000	178	MERCOSUR_Israel	2007	278	EFTA_Georgia	2016

79	EFTA_Mexico	2000	179	MERCOSUR-SACU	2008	279	Argentina_Brazil	2016
80	Israel_Mexico	2000	180	Gulf_Cooperation_Council(GCC)_Singapore	2008	280	MERCOSUR_Mexico	2016
81	EFTA_Macedonia	2000	181	Panama_Guatemala	2008	281	MERCOSUR_Chile	2016
82	Mexico_Cuba	2000	182	Canada_Colombia	2008	282	EU_SADC	2016
83	Pacific Island Countries Trade Agreement (PICTA)	2001	183	EFTA_Colombia	2008	283	EU_Ghana	2016
84	Ukraine - The former Yugoslav Republic of Macedonia	2001	184	Turkey_Montenegro	2008	284	EFTA_Phillipines	2016
85	Ukraine_Tajikistan	2001	185	ASEAN_Japan	2008	285	China_Georgia	2017
86	Gulf_Cooperation_Council(GCC)	2001	186	Japan_Vietnam	2008	286	El Savador_Ecuador	2017
87	EU_Egypt	2001	187	EFTA_Canada	2008	287	Hong Kong, China - Macao, China	2017
88	Asia Pacific Trade Agreement (APTA) - Accession of China	2001	188	Canada_Peru	2008	288	El Salvador-Ecuador	2017
89	Canada_Costa_Rica	2001	189	Peru_Singapore	2008	289	China_Georgia	2017
90	EFTA_Jordan	2001	190	China_New_Zealand	2008	290	EU_Armenia	2017
91	EU_Macedonia	2001	191	Australia_Chile	2008	291	Chile_Indonesia	2017
92	Morocco_UAE	2001	192	China_Singapore	2008	292	CPTPP	2018
93	GUAM	2002	193	EU-Côte d'Ivoire	2008	293	EU_Japan	2018

94	Pakistan_Sri_Lanka	2002	194	EU_CARIFORUM States EPA	2008	294	Hong_Kong_Georgia	2018
95	Southern African Customs Union (SACU)	2002	195	EU - Bosnia and Herzegovina	2008	295	EAEU_Iran	2018
96	EU_Algeria	2002	196	Canada_Jordan	2009	296	EU_Singapore	2018
97	Panama - El Salvador (Panama - Central America)	2002	197	Panama_Nicaragua(Panama-Central_America)	2009	297	Peru_Australia	2018
98	Turkey - Bosnia and Herzegovina	2002	198	EU_Eastern and Southern Africa States Interim EPA	2009	298	Hong_Kong_Australia	2019
99	EU_Lebanon	2002	199	New_Zealand_Malaysia	2009	299	EU_Vietnam	2019
100	EFTA_Singapore	2002	200	EU_PNG_Fiji	2009	300		

Note: Not all the PTAs (especially the ones concluded prior to 1991) were analysed. Specific chapters (Chapters 4 and 5) specify the years covered by the PTAs analysed in the specific chapters

Annex II: Econometric Robustness Tests[225]

Table AII.1 Original Models

	Transparency	**Escape**	**Synergistic**	**Enhancement**	**Salient Focal Points**	**Coordination Mechanisms**	**Third-party Enforcement**
Policy Externalities							
GDP Concentration	1.07825 (0.4122063)	**1.368666** (.1763868)**	1.233053 (.2894693)	0.9341844 (0.5424864)	1.041028 (.6130654)	1.442946 (1.255823)	1.607716 (.4828415)
GDP Aggregate	**1.105604** (0 .044967)**	1.102988 (.1487895)	**1.195259** (.0987352)**	**1.152368** 0(.0731087)**	**1.168302** (.0715122)**	1.057175 (.1065766)	.8704683 (.0883026)
EPI Difference	1.004425 (0 .0036753)	1.003544 (.003702)	1.002072 (.0064076)	1.006053 (0.0046684)	1.007284 (.0048052)	.9922806 (.0058555)	.9927053 (.0073534)
Cumulative MEAs (Average)	**1.009707** (.0037802)**	1.005124 (.0036066)	1.00386 (.0059346)	1.001465 (0.0050874)	1.004556 (.0054266)	1.011318 (.0172182)	1.007941 (.0202034)
Adjustment Costs							
Regulatory Capacity (Institutional costs)	**1.013064*** (0.0047547)**	**1.014251*** (.0049425)**	1.004244 (.0131061)	**1.094788*** (0.0336164)**	**1.089598*** (.0348752)**	**1.032362*** (.0124033)**	**1.032785** (.013137)**
Trade Dependence (Economic costs)	**1.002226* (0.0011835)**	**1.002292* (.0012779)**	1.001733 (.0018819)	1.000646 (0.0015943)	1.001226 (.0016653)	.99919 (.0023003)	**.9862194* (.0079437)**

[225] Robustness tests for the analysis in Chapter 7

Veto players (Political costs)	0.8039578 (0.2077994)	1.139508 (.3840931)	0.6106328 (.3398204)	1.262227 (0.5363389)	1.192563 (.5347204)	1.33909 (.8736523)	2.07908 (3.584442)
Alternative Explanations							
Major environmental norm entrepreneurs (US, EU & Canada)	0.8670218 (0.0896206)	1.043826 (.1020766)	**1.51753*** (.2075227)**	**1.329846** (0.1728575)**	**1.286327** (.1580714)**	**1.649264*** (.2727943)**	**2.091391*** (.4657616)**
Regime Type	0.9391 (0.0536325)	**0.9034665* (.0478756)**	0.9791193 (.0342912)	1.024289 (0.0979461)	.9654856 (.0851803)	.9699795 (.0446775)	.9282124 (.0454344)
Cross-regional dif	**1.406951*** (0.1542232)**	1.127228 (.1064107)	**2.03524** (.6131544)**	1.003203 (0.1529416)	.9397385 (.1528999)	1.464211 (.4679254)	1.985713 (.9568198)
Bargaining eff (PTA Depth)	1.021805 (.0186351)	**1.033757* (.0195882)**	1.078624 (.0507644)	1.039436 (0.0355594)	1.028157 (.0348997)	**1.131565** (.0624083)**	**2.711538** (1.119956)**
OECD	0.9304428 (.0968439)	.9580313 (.095756)	1.158191 (.2302041)	**0.7840967* (.1116308)**	.9441656 (.1606771)	.5929964 (.4037043)	.7633026 (.1354773)
China	**0.7236774* (.128993)**	**0 .7259406** (.1072437)**	0.7526277 (.2202726)	0.9101021 (0.6997023)	.3728707 (.2639468)	1.333974 (.4832877)	3.061432 (3.540062)
Rule of Law	1.002286 (0.0059235)	.9997503 (.0062568)	1.005838 (.012854)	**0.9784505*** (0.007028)**	**.9826646** (.0075017)**	**.9701204** (.0123441)**	**.9707568** (.012482)**
GDP per capita	**0.6607881*** (0.0886908)**	**0.6971013*** (.0962064)**	0 .7489651 (.2732412)	.983978 (0.2564616)	.8417532 (.1774729)	1.544856 (.6281783)	**2.067669* (.8835995)**
Members	**0.9896524* (0.0062044)**	**0.9814459*** (.0054958)**	0.973153*** (.0096133)	**0.979482*** (0.0071317)**	**.9816576** (.0076622)**	**.9820261* (.0095765)**	.9848135 (.0097062)

Table AII.2 Models with Interactions for Policy Externalities and Adjustment Costs

	Transparency	**Escape**	**Synergistic**	**Enhancement**	**Salient Focal Points**	**Coordination Mechanisms**	**Third-party Enforcement**
Policy Externalities							
GDP Concentration	0 .8438222 (.6448298)	1.306791 (.9707012)	0 .3986761 (.4664992)	0.1179779 (.1576676)	**0 .084847* (.1207527)**	3.135197 (7.109741)	**0 .0462139* (.1194926)**
GDP Aggregate	1.180313 (.1753114)	0 .5726108 (.2638299)	1.557839 (.4922439)	0.8732266 (.2258582)	0 .5696191 (.3872758)	**0.4138237** (.1510109)**	0.5547733 (.1956833)
EPI Difference	0 .9957122 (.0245926)	0.9801667 (.0232208)	0 .8821444 (.0879769)	0 .9711121 (.0350031)	0.981067 (.0333214)	**0.8884485*** (.0394778)**	0.974881 (.0434023)
Cumulative MEAs (Average)	1.009876 (.0368803)	1.041296 (.0382005)	0.9621249 (.0752992)	**1.106879*** (.0319679)**	**1.112126*** (.0338914)**	**1.068053** (.0334947)**	**1.144365*** (.0501359)**
Adjustment Costs							
Regulatory	**1.12854****	0.9635109	1.088324	1.01161	0.9786401	**0.8269173***	0.9496972

Capacity (Institutional costs)	**(.0657211)**	(.0635591)	(.0990138)	(.0688238)	(.0638751)	**(.0844773)**	(.1042402)
Trade Dependence (Economic costs)	**0.9516879** (.0186983)**	0.9762054 (.0203951)	1.034551 (.1298672)	0.9817746 (.0420767)	0.9866295 (.044634)	**0.8923028* (.0593242)**	0.9580906 (.03634)
Veto players (Political costs)	0.8262789 (.2448641)	1.064026 (.3693699)	0.7283687 (.3886616)	**2.768819** (1.114703)**	**2.454738** (1.011574)**	1.815067 (.8809398)	**3.672494** (2.303647)**
Alternative Explanations							
Major environmental norm entrepreneurs (US, EU & Canada)	0.8780881 (.0845839)	1.087792 (.1044415)	**1.857063*** (.3072657)**	**1.613385*** (.2186694)**	**1.525224*** (.2026048)**	**1.994563*** (.4006939)**	**3.22304*** (.9355559)**
Regime Type	0 .8676373 (.2144679)	0.8644142 (.2183397)	0.3972617 (.2865944)	**1.361202** (.2120254)**	**1.346993* (.2261885)**	1.660542 (1.261837)	1.493023 (.6313377)
Cross-regional dif	**1.385965*** (.1710524)**	1.017501 (.1000034)	**1.618669* (.4699451)**	0.7811602 (.1244221)	0.7546506 (.1223544)	1.883834 (2.263636)	1.457342 (.8308468)
Bargaining eff (PTA Depth)	**1.037328** (.0194109)**	**1.169205*** (.0664967)**	**1.42305*** (.1694772)**	**1.133317*** (.043083)**	**1.133672*** (.0449679)**	**1.220057*** (.0685943)**	**3.02209*** (1.000303)**
OECD	0.9576402 (.1088287)	0.9485382 (.1070972)	1.799862 (1.565788)	0.8837937 (.1559192)	1.038792 (.2134098)	0.4870752 (.454247)	0.802526 (.1657648)
China	0.5067741 (.2859226)	**0.7051088** (.1138683)**	0.9787834 (.8497365)	1.344111 (.3534634)	1.010345 (.2527161)	**7.017226** (6.57207)**	4.362714 (7.490611)
Rule of Law	1.005433	1.000426	0.9959026	0.9980884	1.005353	**1.04044***	**0.9724205**

(Avg)	(.0056662)	(.0056856)	(.0116937)	(.0102925)	(.0114488)	**(.0128047)**	**(.0129643)**
GDP per capita	**0.7262772**** **(.1168297)**	**0.677361**** **(.1166073)**	0.9146529 (.3725792)	0.8235461 (.2721551)	0.4681531 (.4381039)	1.538122 (.5626292)	1.660183 (.7198399)
Members	0.9934821 (.0073181)	**0.9725755***** **(.0072121)**	**0.9749024**** **(.0098282)**	**0.9809827**** **(.0073518)**	**0.9533786*** **(.0242765)**	**0.9740278*** **(.0114682)**	**0.9802281*** **(.0102357)**
GDP Aggregate *Regulatory Capacity	**0.9946653**** **(.0023924)**	1.001383 (.0025246)	0.9951038 (.0035968)	**1.001864***** **(.0027982)**	1.003132 (.0025405)	1.006827 (.0042514)	1.00586 (.0043958)
GDP Aggregate*Trade Dependence	**1.002282***** **(.000819)**	1.001248 (.0008369)	0.9990277 (.0054112)	1.001089 (.0017384)	1.000806 (.0018274)	**1.004927*** **(.002867)**	1.001707 (.0015986)
GDP Aggregate*Regime Type	1.007407 (.0095567)	1.007742 (.0100827)	**1.018357*** **(.0101326)**	0.9827199 (.0189668)	0.9789158 (.0203713)	1.009594 (.0131439)	0.9700853 (.046645)
GDP Conc*Regulatory Capacity	**1.035757***** **(.0110728)**	1.010893 (.0102315)	1.014837 (.0155318)	1.155423 (.04367)	**1.173395***** **(.0526716)**	1.060558 (.0389798)	1.10765 (.1014318)
GDP Conc*Trade Dependence	**0.9851933***** **(.0038332)**	0.9836287 (.0111188)	1.001841 (.0105257)	0.9902103 (.0092001)	0.9886242 (.0103124)	**0.9648365*** **(.0185736)**	1.003262 (.022242)
GDP Conc*Regime Type	**0.8706771***** **(.0451321)**	0.8783369 (.1400363)	0.8380025 (.2488994)	0.7620862 (.2981894)	0.793623 (.3458012)	**0.7047199**** **(.1247628)**	1.072115 (.8238151)
EPI Diff*Regulatory Capacity	1.000047 (.0003416)	1.000275 (.000331)	1.00032 (.0004992)	1.000242 (.0004871)	1.00013 (.0004846)	**1.001046*** **(.0006037)**	1.000448 (.0005606)
EPI Diff*Trade	1.00005	1.000018	1.000065	1.000113	**1.000146***	0.9999931	0.9999853

Dependence	(.0000721)	(.0000647)	(.0000824)	(.0000861)	**(.000086)**	(.0001388)	(.0001554)
EPI Diff*Regime Type	1.000121 (.002845)	1.001087 (.002606)	1.002711 (.0017508)	1.000023 (.0012296)	0.9994742 (.0011633)	1.001862 (.0016019)	0.9975113 (.0019221)
MEA_Cum_Avg *Regulatory Capacity	1.000111 (.0001583)	1.000014 (.0001648)	1.001583 (.0010642)	**0.9988961*** (.0003868)**	**0.9987678*** (.000388)**	0.9994582 (.0004114)	0.9986537 (.0005049)
MEA_Cum_Avg *Trade Dependence	0.9999646 (.000062)	0.9999382 (.0000584)	0.9999048 (.0003188)	0.9999033 (.0000884)	0.999951 (.000085)	0.9999895 (.0004225)	**0.9998312*** (.0001688)**
MEA_Cum_Avg *Regime_Type	1.000631 (.0021001)	0.997124 (.0020467)	**0.9972241* (.0014835)**	0.9992144 (.0010926)	0.9996471 (.0011763)	0.9973426 (.0016267)	0.9982275 (.0018539)

Table AII.3 Government Effectiveness/Regulatory Capacity Robustness

	Transparency	**Escape**	**Synergistic**	**Enhancement**	**Salient Focal Points**	**Coordination Mechanisms**	**Third-party Enforcement**
Policy Externalities							
GDP Concentration	1.143515 (.4388684)	**1.348123** (.1794888)**	1.206598 (.2926176)	1.040506 (.2217305)	**1.327908* (.8129559)**	1.86629 (1.671362)	**1.805329* (.5516612)**
GDP Aggregate	**1.070988* (.0429634)**	1.0307 (.1324599)	**1.203157** (.1038398)**	1.080021 (.0581462)	1.109656 (.060417)	1.026719 (.0963895)	**.839094* (.0835282)**
EPI Difference	1.004245 (.0040126)	1.004762 (.0038495)	.9985829 (.0070002)	1.00151 (.0054798)	1.003348 (.0055579)	**.9890434* (.0061674)**	.9980822 (.0076804)
Cumulative MEAs (Average)	**1.009845*** (.0037319)**	1.003833 (.0035925)	1.00433 (.0060243)	1.002466 (.0050989)	1.00507 (.0055761)	1.013529 (.0173612)	1.002844 (.0213551)

Adjustment Costs							
Government Effectiveness (Institutional costs)	.9985504 (.0024693)	**.9938092* (.0034207)**	1.003601 (.0039211)	1.000072 (.0032345)	.9995634 (.0033636)	1.002557 (.0044996)	.9949569 (.0052197)
Trade Dependence (Economic costs)	**1.002551** (.0011908)**	**1.002704** (.0013083)**	1.001547 (.0019066)	1.001095 (.0016961)	1.001803 (.0017796)	.9991769 (.0024391)	.9881635 (.0082864)
Veto players (Political costs)	.7090681 (.1770277)	1.161025 (.3693706)	.5274447 (.2882438)	.8915336 (.3323983)	.8368019 (.3195766)	.7937814 (.4710069)	1.189927 (2.223694)
Alternative Explanations							
Major environmental norm entrepreneurs (US, EU & Canada)	.9096663 (.0937787)	1.135013 (.1044378)	**1.470681*** (.2114849)**	**1.396094** (.184338)**	**1.333233** (.1754256)**	**1.692916*** (.2823695)**	**2.365948*** (.5666858)**
Regime Type	.977886 (.0518828)	.9861933 (.0165249)	.9812293 (.0347159)	1.125234 (.107163)	1.019658 (.0322227)	.9993016 (.0471969)	.9671131 (.0494517)
Cross-regional dif	**1.462263*** (.1618566)**	**1.175323* (.1129478)**	**2.055807** (.61849)**	1.091141 (.1628491)	1.025784 (.1597724)	1.608708 (.5032517)	**2.280744* (1.120453)**
Bargaining eff (PTA Depth)	**1.032116* (.0192196)**	**1.039798** (.018956)**	**1.080826* (.0501338)**	1.05858 (.0383132)	1.042747 (.0378349)	**1.141935** (.0654863)**	**2.797348*** (1.104294)**
OECD	.9941186 (.0993972)	.9956665 (.10433)	1.422241 (.8427045)	.8280426 (.1319988)	1.039377 (.1736843)	.5746257 (.4822738)	.8488115 (.1672885)
China	.8211729	.8190968	.7670105	1.754417	.6548884	1.426758	1.580669

	(.1425813)	(.1258745)	(.2370897)	(1.342631)	(.4864703)	(.5140751)	(.6224197)
Rule of Law	1.005579 (.0037291)	1.008285 (.0090076)	1.012657 (.0097128)	.9952639 (.005502)	.9985814 (.0055495)	.994945 (.0088522)	.9861843 (.0112548)
GDP per capita	**.7567734**** **(.0981225)**	.9181742 (.1066398)	.7317245 (.2803455)	1.300462 (.268943)	1.093474 (.2035454)	1.635614 (.5711428)	**2.3609**** **(.9849388)**
Members	.9902353 (.0061698)	**.9816829***** **(.0051936)**	**.9726784***** **(.0094233)**	**.9793673***** **(.0065829)**	**.9811378***** **(.0071244)**	**.9790445**** **(.00904)**	**.9807172**** **(.0096582)**

Table AII.4 Robustness Check EPI/SSI

	Transparency	**Escape**	**Synergistic**	**Enhancement**	**Salient Focal Points**	**Coordination Mechanisms**	**Third-party Enforcement**
Policy Externalities							
GDP Concentration	1.002441 (.1492259)	**1.277426*** **(.1816003)**	1.300344 (.9656493)	.7840096 (.5030613)	**.836851***** **(.5239194)**	1.356931 (1.182374)	**4.503927*** **(4.320296)**
GDP Aggregate	**1.085451*** **(.0475659)**	1.043261 (.0524149)	1.126886 (.103975)	**1.151912**** **(.0724857)**	1.183087 (.0734615)	1.411229 (.4246428)	.8420423 (.0858433)
SSI Difference	1.024457 (.0305621)	1.026757 (.0270027)	1.136796 (.1548796)	1.065168 (.1324154)	.8793878 (.1337562)	.8383164 (.1940477)	.9415862 (.0419868)
Cumulative MEAs (Average)	1.006704 (.0044597)	1.003257 (.0038988)	.9977997 (.0064067)	1.004375 (.0057562)	**1.011545*** **(.0062818)**	1.021029 (.0214969)	.9955943 (.0281157)
Adjustment Costs							
Regulatory Capacity (Institutional costs)	1.009986 (.0064541)	1.032952 (.0223677)	1.031307 (.0461982)	**1.020829*** **(.01135)**	**1.016338**** **(.0081372)**	**1.065136*** **(.0385599)**	**1.024475*** **(.013946)**
Trade Dependence (Economic costs)	1.004721 (.0038365)	1.002718 (.0039377)	1.001616 (.0059023)	1.004009 (.0050797)	1.005775 (.0056009)	1.000148 (.0078649)	**.9925013***** **(.0025828)**
Veto players (Political costs)	.7714704 (.2171794)	.8315123 (.27896)	.2495395 (.4820113)	.7340285 (.9640073)	.6243466 (.8738886)	.2462743 (.5127966)	.6735342 (1.523981)
Alternative Explanations							
Major	.6837633	1.032437	**1.464323****	**1.311608***	1.171104	**3.34137****	**12.29473*****

environmental norm entrepreneurs (US, EU & Canada)	(.2330691)	(.106962)	**(.2237665)**	**(.1945862)**	(.1616793)	**(1.747799)**	**(7.999158)**
Regime Type	1.006993 (.0233438)	.9822211 (.0195588)	1.014293 (.0451636)	1.094482 (.1305169)	.9777438 (.1016431)	1.019216 (.0574682)	.9781074 (.0502114)
Cross-regional dif	**1.452238*** (.1742561)**	1.143223 (.1328643)	**2.060031** (.6910908)**	1.12875 (.5845654)	.9523007 (.1598698)	2.583506 (2.62468)	6.755449 (11.20972)
Bargaining eff (PTA Depth)	1.034236 (.0622047)	1.062635 (.067053)	1.051124 (.050824)	1.028897 (.0351828)	1.005078 (.0334335)	1.210073 (.2208565)	**2.581519*** (.9402356)**
OECD	.6158775 (.2026129)	.7282761 (.2281411)	1.874026 (1.488868)	.5076992 (.2156001)	.4181797 (.2424316)	.2806831 (.3241698)	.3746767 (.2410619)
China	.9559066 (.1844516)	.7851039 (.1254891)	1.512167 (1.490731)	1.567845 (1.488972)	.2894175 (.2754433)	1.289544 (1.506665)	4.023784 (5.016784)
Rule of Law	.9961347 (.0053694)	1.000549 (.0049705)	.9933772 (.0108467)	**.9864042* (.0075218)**	**1.025122*** (.0091958)**	1.029752 (.0213597)	**.9676173* (.0163305)**
GDP per capita	.999981 (.0000274)	.8289805 (.1423069)	1.000022 (.0000413)	.9999859 (.0000364)	.999956 (.0000294)	.999978 (.0000416)	**2.995874** (1.471122)**
Members	**.9889583* (.0065767)**	**.981002*** (.0065479)**	**.9807548* (.0114622)**	**.9798762** (.0078372)**	**.9840207** (.0075037)**	.9521123 (.0314855)	.9600339 (.0380523)

Table AII.5 Robustness Check MEA Cumulative/MEA Annual

	Transparency	**Escape**	**Synergistic**	**Enhancement**	**Salient Focal Points**	**Coordination Mechanisms**	**Third-party Enforcement**
Policy Externalities							
GDP Concentration	1.152153 (.446781)	**1.372605** (.1769894)**	1.230497 (.2823597)	.8988702 (.5232685)	1.01334 (.6018021)	1.386206 (1.177728)	1.599453 (.4735173)
GDP Aggregate	**1.107867** (.0449063)**	1.091314 (.1460453)	**1.201644** (.0987528)**	**1.151697** (.0730652)**	**1.171434** (.071507)**	1.064943 (.1076364)	.866015 (.0889558)
EPI Difference	1.004029 (.0036643)	1.003209 (.0037649)	1.002327 (.00634)	1.006321 (.0046691)	1.007636 (.0047774)	.9923773 (.0059149)	.9929192 (.0076489)
Annual MEAs (Average)	.9848075 (.020094)	.9682543 (.0198505)	.9724715 (.030354)	.9683744 (.0267745)	.9768349 (.0267154)	.9800609 (.0372299)	.9504561 (.0441158)
Adjustment Costs							
Regulatory Capacity (Institutional costs)	**1.012747** (.0050052)**	**1.013923*** (.0051927)**	1.004427 (.0129851)	**1.094106*** (.0335484)**	**1.090974*** (.0351228)**	**1.032426*** (.0126598)**	**1.032951** (.0133743)**
Trade Dependence (Economic costs)	1.00083 (.0010238)	1.00391 (.0030247)	1.001278 (.0018348)	1.000427 (.0014627)	1.000606 (.0015291)	.9987562 (.0022094)	**.9948227** (.0023277)**
Veto players (Political costs)	.7779313 (.193821)	1.153104 (.380024)	.6275726 (.3481645)	1.259136 (.5327952)	1.176309 (.5245785)	1.364844 (.9033773)	1.361549 (.8694106)
Alternative Explanations							
Major	.9119959	1.086556	**1.546728***	**1.346212**	**1.311816**	**1.665992***	**2.17363***

environmental norm entrepreneurs (US, EU & Canada)	(.0918074)	(.0990466)	**(.2088873)**	**(.1729172)**	**(.1578053)**	**(.2782025)**	**(.5134216)**
Regime Type	.9911553 (.0508609)	.9279147 (.0430673)	.9863451 (.0305925)	1.038683 (.0868858)	1.00054 (.0782391)	.979539 (.0429895)	.9314554 (.0474399)
Cross-regional dif	**1.476901*** (.158353)**	1.148827 (.1082776)	**2.121332*** (.6140142)**	1.000183 (.145492)	.9545662 (.1462454)	1.503884 (.4818201)	1.978654 (.9414313)
Bargaining eff (PTA Depth)	1.026694 (.0203542)	**1.035072* (.0203194)**	1.076641 (.0501934)	1.039435 (.0355328)	1.028469 (.0352655)	1.135207 (.0630382)	**2.814218** (1.246052)**
OECD	.9426539 (.1000716)	.9634246 (.0986723)	1.158746 (.2282466)	**.7794779* (.1106156)**	.9307941 (.1528971)	.5832943 (.3943514)	.7636393 (.1311801)
China	.830944 (.1412816)	.7942519 (.1113061)	.8006775 (.2066452)	1.059859 (.7545247)	.4832227 (.3234066)	1.435487 (.4736027)	1.620041 (.5285947)
Rule of Law	1.001466 (.0061238)	.9996532 (.0063445)	1.005675 (.0127864)	**.9783138*** (.0072319)**	**.9819386** (.0078135)**	**.9694567** (.0127561)**	**.9710515** (.0127261)**
GDP per capita	**.7507931** (.1002133)**	**.7470757** (.0987372)**	.7892799 (.2672132)	1.014422 (.2501658)	.9141241 (.1972021)	1.657361 (.6518079)	**2.142756** (.8290913)**
Members	**.9861317** (.0055403)**	**.980207*** (.0050609)**	**.972067*** (.0090884)**	**.9798305*** (.0066088)**	**.9807623*** (.0067538)**	**.9804685** (.0093245)**	**.9843762* (.0084671)**

Table AII.6 Robustness Check Regime Type/Voice & Accountability

	Transparency	**Escape**	**Synergistic**	**Enhancement**	**Salient Focal Points**	**Coordination Mechanisms**	**Third-party Enforcement**
Policy Externalities							
GDP Concentration	1.054242 (.1364655)	**1.344813** (.1689571)**	1.190189 (.2776959)	.9534883 (.1882363)	1.002423 (.5900705)	1.724515 (1.570311)	**1.632754* (.4733795)**
GDP Aggregate	**1.072093* (.0409318)**	1.116186 (.1511421)	**1.20426** (.0955196)**	**1.142947** (.073429)**	**1.166208** (.0711848)**	.9841844 (.1082301)	.8764797 (.0940814)
EPI Difference	1.004714 (.0039604)	**1.006235* (.0036321)**	1.003625 (.0064224)	1.006161 (.0047258)	1.007427 (.004855)	.9922257 (.0058134)	.9946511 (.0071261)
Cumulative MEAs (Average)	**1.00619* (.0037655)**	1.004237 (.0036085)	1.005558 (.0064072)	1.004674 (.0056877)	1.004915 (.0061459)	**1.012149** (.0061996)**	1.008082 (.0197431)
Adjustment Costs							
Regulatory Capacity (Institutional costs)	**1.008542* (.0051969)**	**1.017088*** (.0060699)**	1.028414 (.0476488)	**1.103536*** (.0327667)**	**1.089131*** (.0347673)**	**1.039377*** (.0132872)**	**1.028084** (.0129983)**
Trade Dependence (Economic costs)	1.001398 (.0012011)	1.004916 (.003545)	1.001871 (.0017995)	1.000596 (.0015965)	1.001281 (.0016588)	.9983852 (.0022993)	.9872998 (.0078105)
Veto players (Political costs)	**.6714153* (.1554124)**	.9204513 (.2782085)	.2582517 (.4054995)	1.505404 (.5713371)	1.164886 (.4598469)	10.43773 (17.32129)	1.094143 (1.747486)
Alternative Explanations							
Major	.8903858	1.065268	**1.527199***	**1.33356**	**1.297949**	**1.740537***	**2.10426***

environmental norm entrepreneurs (US, EU & Canada)	(.0882018)	(.0956553)	**(.209714)**	**(.1712876)**	**(.1573599)**	**(.304289)**	**(.4620384)**
Voice & Accountability	.9998974 (.0047431)	.9929476 (.0047205)	.9809413 (.0333838)	.9943474 (.0082122)	.9971643 (.0085346)	**.9157923** (.0353872)**	.9872148 (.0130555)
Cross-regional dif	**1.42063*** (.1588703)**	1.135776 (.1061821)	**1.999812** (.5765286)**	.9867034 (.1513585)	.9367911 (.1516117)	1.51959 (.5023826)	2.11765 (1.041386)
Bargaining eff (PTA Depth)	1.01752 (.0179496)	1.05709 (.0518827)	1.191197 (.1462265)	1.044776 (.0362291)	1.027026 (.0344551)	**1.142979** (.0603878)**	2.464954 (.9245462)
OECD	.9292233 (.0982504)	.9545845 (.0936117)	1.318903 (.708809)	.8030067 (.1141214)	.943883 (.159935)	.7295549 (.5075432)	**.7203289* (.1290261)**
China	.8326127 (.1230631)	**.7393168** (.1016257)**	.7228359 (.1980393)	.8713412 (.1807928)	.717885 (.1593244)	1.210483 (.3607332)	4.186153 (4.759816)
Rule of Law	.9973018 (.0057847)	.9984265 (.0059013)	1.005761 (.0140067)	**.9796989** (.0079302)**	**.983784* (.0083634)**	.9804643 (.0139677)	.9795469 (.0155772)
GDP per capita	.9999769 (.0000165)	**.7400098** (.1067569)**	.7264923 (.248505)	.9221263 (.2065631)	.8613142 (.1751936)	1.482723 (.5119603)	**2.242029** (.9067782)**
Members	**.9898301* (.0059912)**	**.9826359*** (.0054745)**	**.974595*** (.0092067)**	**.9818828** (.0076937)**	**.982082** (.0079331)**	.9904268 (.0101628)	**.9844981** (.0108848)**

Table AII.7 Interactions terms

	Transparency	**Escape**	**Synergistic**	**Enhancement**	**Salient Focal Points**	**Coordination Mechanisms**	**Third-party Enforcement**
Policy Externalities							
GDP Concentration	1.069586 (.4075022)	1.34749 (.1905675)	1.175014 (.2765455)	.8738647 (.4899143)	1.115665 (.639319)	1.304378 (1.123633)	5.214295 (5.223582)
GDP Aggregate	**1.103108**** **(.0476947)**	1.101317 (.1479307)	**1.19578**** **(.0923683)**	1.150854 (.0736008)	1.063762 (.0727038)	1.061138 (.1059318)	.9036987 (.1062514)
EPI Difference	1.004981 (.0037445)	1.003584 (.0037055)	1.002951 (.0060443)	1.006341 (.0047423)	**1.008898*** **(.0047136)**	.9909258 (.0059243)	.9950845 (.0067043)
Cumulative MEAs (Average)	**1.009856***** **(.0038141)**	1.005175 (.0036327)	1.003613 (.0057484)	1.004102 (.0054549)	1.002069 (.0053052)	1.014734 (.0173423)	1.006941 (.02001)
Adjustment Costs							
Regulatory Capacity (Institutional costs)	**1.045376**** **(.0193736)**	**1.014146***** **(.0048946)**	1.005241 (.0123052)	1.108439 (.0357343)	**1.057686*** **(.0346989)**	**1.033761***** **(.0121393)**	1.022821 (.0143887)
Trade Dependence (Economic costs)	**1.002116*** **(.0011662)**	**1.002299*** **(.0012817)**	1.001843 (.0019302)	1.000397 (.0016564)	1.002034 (.0016419)	.9990588 (.0023639)	.9874119 (.0090828)
Veto players (Political costs)	.8224548 (.2211602)	1.144039 (.3848825)	.607355 (.3086656)	1.293987 (.5441219)	1.04086 (.390619)	1.292951 (.8291549)	2.69694 (4.58359)
Alternative Explanations							
Major	.8695682	.9944332	.2223423	4.402726	**.0000668*****	1.404708	2.467025

environmental norm entrepreneurs (US, EU & Canada)	(.0888219)	(.2409212)	(.3288525)	(3.485829)	**(.0001988)**	(.3819804)	(.8691004)
Regime type	.9302717 (.0551079)	**.9035097* (.047871)**	.9794112 (.0342288)	.9935765 (.0926963)	1.023324 (.0318724)	.9669437 (.0446991)	.9286734 (.0382722)
Cross-regional dif	1.587587 (.6049167)	1.124253 (.1075132)	**1.72115**2 (.47435)**	.9784686 (.1513669)	1.005321 (.1635572)	1.438858 (.4688352)	2.26448 (1.253091)
Bargaining eff (PTA Depth)	1.022358 (.0185953)	**1.034366* (.0197129)**	1.082791 (.0526505)	1.024505 (.0335761)	1.010674 (.0345582)	**1.119948* (.0669431)**	1.37298 (.1699139)
OECD	.9293293 (.095614)	.9576065 (.0957698)	1.16114 (.2399703)	.7386723 (.1101076)	1.079666 (.2139746)	.5116035 (.3948453)	.7808585 (.1507773)
China	.7111345 (.1280329)	**.7290167** (.1069506)**	.7459145 (.1993691)	.7889766 (.569598)	.9933932 (.2963076)	1.339258 (.477291)	1.847255 (2.338184)
Rule of Law	1.002047 (.0060326)	.9994903 (.0063212)	1.006771 (.0113963)	.979928 (.0071077)	.9876232 (.0076442)	**.973055** (.0122837)**	.974183 (.0163603)
GDP per capita	**.6406575*** (.0893908)**	**.6977198*** (.0962557)**	.6722983 (.2562283)	.9201499 (.2370612)	.9946506 (.2288814)	1.487847 (.5922665)	1.845517 (.888217)
Members	.9902041 (.0062655)	.9812139 (.005591)	**.9736536*** (.0091685)**	.9794312 (.0067631)	**.9659919*** (.0086466)**	.984196 (.0103847)	.9779473 (.012511)
Interaction Terms							
Regional Capacity	.9980224 (.0061992)						

Hegemon GDP Concentration		1.065525 (.2969349)					
Hegemon Cross-Regional			312.5469 (1343.824)				
Hegemon Regulatory Capacity				.984994 (.0097723)			
Hegemon Log GDP					**1.410388*** (.1473034)**		
Hegemon Rule of Law						1.003693 (.0045973)	.996787 (.0045728)

Table AII.8 Summary of significance of variables across models (0-4)[226]

	Transparency					Escape					Synergistic					Enhancement				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
Policy Externalities																				
GDP Concentration						✓	✓	✓	✓	✓										
GDP Aggregate	✓	✓	✓	✓	✓							✓		✓	✓			✓	✓	✓
EPI Difference										✓										
Cumulative MEAs (Average)	✓	✓			✓															
Adjustment Costs																				
Regulatory Capacity (Institutional costs)	✓			✓	✓		✓		✓	✓						✓		✓	✓	✓
Trade Dependence (Economic costs)	✓	✓				✓	✓													
Veto players (Political costs)					✓															

[226] Models: 0 (Original); 1 (Replaced Regulatory Capacity with Government Effectiveness (average)); 2 (Replaced EPI with Sustainable Society Index (SSI)); 3 (Replaced Average number of Cumulative MEAs with average number of Annual MEAs); 4 (Replaced Regime Type with Voice and Accountability. The symbol '✓' means the variable is statistically significant.

Alternative Explanations																				
Major environmental norm entrepreneurs (US, EU & Canada)											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Regime Type																				
Cross-Regional Diff.	✓	✓	✓	✓	✓						✓	✓	✓	✓	✓					
PTA Depth	✓					✓	✓		✓			✓								
OECD																✓			✓	
China	✓					✓				✓										
Rule of Law Difference																		✓	✓	✓
GDP per capita	✓	✓		✓		✓			✓	✓										
Number of Members	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓

Table AII.9 Summary of significance of variables across models (0-4)[227]

	Salient Focal Points					Coordination Mechanisms					Third-party Enforcement				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
Policy Externalities															
GDP Concentration		✓	✓									✓	✓		✓
GDP Aggregate	✓			✓	✓							✓			
EPI Difference							✓								
Cumulative MEAs (Average)			✓							✓					
Adjustment Costs															
Regulatory Capacity (Institutional costs)	✓		✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓
Trade Dependence (Economic costs)											✓		✓	✓	
Veto players (Political costs)															
Alternative Explanations															

[227] Models: 0 (Original); 1 (Replaced Regulatory Capacity with Government Effectiveness (average)); 2 (Replaced EPI with Sustainable Society Index (SSI)); 3 (Replaced Average number of Cumulative MEAs with average number of Annual MEAs); 4 (Replaced Regime Type with Voice and Accountability. The symbol '✓' means the variable is statistically significant.

Major environmental norm entrepreneurs (US, EU & Canada)	✓	✓	x	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Regime Type															
Cross-Regional Diff.												✓			
PTA Depth						✓	✓			✓	✓	✓	✓	✓	
OECD															✓
China															
Rule of Law Difference	✓		✓	✓	✓	✓			✓		✓		✓	✓	
GDP per capita											✓	✓	✓	✓	✓
Number of Members	✓	✓	✓	✓	✓	✓	✓		✓			✓		✓	✓

Table AII.10 Overall summary of performance of explanatory variables[228]

	Transparency	Escape	Synergistic	Enhancement
Policy Externalities				
GDP Concentration		✓ (+)		
GDP Aggregate	✓ (+)		✓ (+)	✓ (+)
EPI Difference				
Cumulative MEAs (Average)	✓ (+)			
Adjustment Costs				
Regulatory Capacity (Institutional costs)	✓ (+)		✓ (+)	✓ (+)
Trade Dependence (Economic costs)				
Veto players (Political costs)				
Alternative Explanations				
Major environmental norm entrepreneurs (US, EU &			✓ (+)	✓ (+)

[228] Note: '+' shows a positive effect/increased likelihood (e.g PTAs with greater concentration of market power in one member country will be more likely to include Escape clauses), while '-' denotes a negative effect/lower likelihood (e.g PTAs where there is a greater difference in members' Rule of Law commitment are less likely to include Enhance clauses). '✓' denotes a statistically significant relationship

Canada)				
Regime Type				
Cross-Regional Diff.	✓ (+)		✓ (+)	
PTA Depth		✓ (+)		
OECD				
China				
Rule of Law				✓ (-)
GDP per capita				
Members	✓ (-)	✓ (-)	✓ (-)	✓ (-)

Table AII.11 Overall summary of performance of variables (Enhancement sub-clauses)[229]

	Salient Focal Points	Coordination Mechanism	Third-party Enforcement
Policy Externalities			
GDP Concentration			✓ (+)
GDP Aggregate	✓ (+)		
EPI Difference			
Cumulative MEAs (Average)			
Adjustment Costs			
Regulatory Capacity (Institutional costs)	✓ (+)	✓ (+)	✓ (+)
Trade Dependence (Economic costs)			
Veto players (Political costs)			
Alternative Explanations			
Major environmental norm entrepreneurs (US, EU & Canada)	✓ (+)	✓ (+)	✓ (+)
Regime Type			

[229] Note: '+' shows a positive effect/increased likelihood (e.g PTAs whose members have higher levels of development, on average, are more likely to include third-party enforcement mechanisms), while '-' denotes a negative effect/lower likelihood (e.g PTAs with members whose economies are more dependent on trade are less likely to include Third-party enforcement clauses). '✓' denotes a statistically significant effect.

Cross-Regional Diff.			
PTA Depth		✓ (+)	✓ (+)
OECD			
China			
Rule of Law	✓ (-)		✓ (-)
GDP per capita			✓ (+)
Members	✓ (-)	✓ (-)	✓ (-)

Table AII.12 Summary and Description of Key Variables

Variable	Calculation	Rationale	Source
Dependent/Outcome Variables			
Transparency	Coded if PTA text includes notification (TBT and SPS) requirements (Binary)	Captures the use of domestic environmental measures as Non-tariff Barriers (NTBs)	Coded by Author from PTA text
Escape	Coded if PTA text includes the environment in is Exceptions (Binary)	Captures the constrained application of domestic environmental measures	Coded by Author from PTA text
Synergistic	Coded if PTA text includes market mechanisms on environment, such as environmental goods and services (EGS), eco-labelling etc	Captures the win-win approach to trade and environment	Coded by Author from PTA text
Enhancement	Coded if PTA text includes domestic and/or policy commitments to promote environmental protection	Captures the use of PTAs to enforce environmental policy commitments	Coded by Author from PTA text
Independent/Explanatory Variables			
Policy Externalities			
GDP Concentration	Use of the HHI Index as advanced by Pevehouse et al. (2002, p. 11)[230]. Ranges between 0 and 1, with larger values indicating greater market concentration by a PTA member	Captures the use of relative market power	Data for GDP from the World Bank

[230] http://pages.ucsd.edu/~ehafner/pdfs/after_hegemony.pdf

GDP Aggregate	Calculates the total value of the GDP of all PTA members (US$). Logged value used.	Captures the dynamics of export market share (market access)	Data for GDP from the World Bank
EPI Difference	Calculates the biggest difference between PTA EPI scores	Captures the 'Race-to-the-Bottom' Dynamic	Data from Yale University[231]
MEA Cumulative Average	Total cumulative number of MEAs concluded by PTA members, divided by the total number of PTA members	Captures commitment to international environmental policy	Data from Yale University
Adjustment Costs			
Regulatory Capacity (Institutional costs)	Calculates the average measure of the regulatory capacity of PTA members. Ranges between 0 and 100, with higher values indicating higher capacity. AVerage values calculated	Captures the institutional costs/capacity of implementing linkage commitments	World Bank Development Indicators
Trade Dependence (Economic costs)	Calculates the ratio of trade to GDP; i.e., (Trade/GDP). Greater values indicate higher trade dependence	Captures the dynamics of trade dependence on linkage prospects	Data from the World Bank
Veto Players (Political costs)	Average value calculated, varies between 0 and 1, with higher values indicating greater constraints on policy makers	Captures the dynamics of domestic politics	Data from the Political Constraints (POLCON) Database[232]
Alternative Explanations			

[231] https://epi.yale.edu
[232] https://mgmt.wharton.upenn.edu/faculty/heniszpolcon/polcondataset/

Major environmental norm entrepreneurs (US, EU & Canada)	Binary value coded 1 for presence, 0 for absence	Captures the role of the major economies in linkage	Coded by Author from PTA text
Regime Type (Political Costs)	Average value calculated, ranging from 0 to 10.	Captures domestic environmental groups dynamics	Data from Polity IV Database[233]
Cross-Regional Diffusion	Binary value coded 1 for cross-regional PTAs, 0 for otherwise	Captures the effects of different regional contexts; especially useful in distinguishing the effects of regional integration PTAs from bilateral PTAs	Coded by Author from WTO RTA Database[234]
PTA Depth	Ranges between 1 and 7, with higher values showing more issues included in PTAs	Captures the 'bargaining efficiency' dynamic; that is, whether environmental issues are just another 'add-on' in PTAs	Data from DESTA database[235]
OECD	Binary variable, coded 1 for presence of an OECD member in a PTA, 0 for absence	Captures the presence of an OECD member in a PTA. The OECD has been active in the trade and environment debate for decades	Coded by Author with data on PTA members from the WTO RTA Database
China	Binary variable, coded 1 for presence of China in a PTA, 0 for otherwise	Captures the effect of China, a major emerging economy and rule-maker	Coded by Author from PTA text
Rule of Law	Greatest difference between Rule of Law scores for PTA members calculated. Bigger differences show greater difference in political cultures	Captures the dynamics of differences in political cultures as regards to commitments to the rule of law	Data from World Bank Development Indicators

[233] https://www.systemicpeace.org/polityproject.html
[234] https://www.wto.org/english/tratop_e/region_e/region_e.htm
[235] https://www.designoftradeagreements.org/downloads/

GDP per capita	Average value calculated, then logged	Captures the level of development of PTA members	Data from World Bank Development Indicators
Members	Calculated by counting total number of members from PTA text	Captures the dynamics of number of negotiation partners in a PTA	Coded by Author from PTA text
Robustness Measures			
Government Effectiveness	Average value calculated, ranges between 0 and 100, with higher values showing greater effectiveness	Substitute for Regulatory capacity. Measures the effectiveness of a government in implementing its policy commitments	World Bank Development Indicators
SSI Difference	Greatest difference in value of PTA member scores calculated	Substitute for EPI. Measures the broader context of the 'race-to-the-bottom' hypothesis	Data from the SSI Database[236]
MEA Annual Average	Total number of MEAs concluded in a given year by PTA members, divided by the total number of PTA members	Substitute for MEA Cumulative Average. Captures commitment to international environmental policy	Data from IEA Database[237]
Voice & Accountability	Average value calculated, ranges between 0 and 100, with higher values indicating greater room for involvement of domestic interest groups	Substitute for regime Type. Captures the dynamics of domestic interest groups, especially environmental groups, in lobbying government (trade) officials	World Bank Development Indicators

[236] http://www.ssfindex.com/ssi
[237] https://iea.uoregon.edu

Table AII.13 Summary statistics of key explanatory variables

	Observations	Mean	Standard Deviation	Min	Max
GDP Aggregate (log)	6,916	27.67001	1.998162	0	30.63174
EPI Difference	3,440	13.35893	9.834071	0	51.85
Regulatory quality	4,429	61.61879	19.46058	9.239131	99.51923
Rule of law	4,445	29.20338	20.34743	0	86.625
Trade dependence	6,059	80.99453	41.39919	15.07631	304.1512
Veto players	5,880	0.5050806	0 .2126642	0	0.8630478
Regime type	5,876	4.967215	4.272154	-10	10
GDP per capita (log)	6,025	9.595904	0 .7576141	7.297364	11.2025
Cross_regional PTA	6,916	0.6165414	0 .4862636	0	1
GDP Concentration	6,188	0.7253988	0 .2865193	0.01	1
Members	6,916	5.879555	7.562941	1	34
Major environmental norm entrepreneurs (US, EU & Canada)	6,916	0.2219491	0 .4155871	0	1
MEAs Cumulative	6,526	61.98994	25.48959	0	136
OECD	6,916	0.5902256	0 .4918275	0	1
PTA Depth	6,006	3.557609	2.253596	0	7
China	6,916	0.0601504	0 .2377824	0	1

Annex III: Case Study Interview Schedule

From September to November 2018, I conducted six interviews on the East African Community (EAC) PTA case study analysis. Two of the interviews (with private sector network officials and veteran civil society activists) were conducted in Nairobi, Kenya, while the rest of the interviews were conducted at the EAC Headquarters in Arusha, Tanzania. All the interviews were conducted in a semi-structured format, but revolved around the question of how the officials and the various actors had engaged on environmental and climate change policies of the EAC. The focus was also the nature of enforcement mechanisms sought by the various actors. As for the EAC officials, I interviewed a senior official responsible for the environment department, and three officials from the East African Legislative Assembly (EALA) which is the legislative body of the EAC. Interviews with EALA officials were crucial since the body has been very active in the development of regional environmental and climate change policies in the EAC. Moreover, archival research based on official EAC meetings revealed the significant role played by EALA as a veto player, hence the focus on interviewing its officials. Finally, all interviewees requested anonymity, a condition that was also included in the Ethics approval for the research.

Table AIII.1 Interview schedule

Interviewee	Location	Date
Official from the Kenya Private Sector Alliance	Nairobi, Kenya	15 October 2018
Veteran civil society climate change activist (with deep knowledge and engagement with the EAC)	Nairobi, Kenya	16 October 2018
Interview with EAC Secretariat Official I	Arusha, Tanzania	09 November 2018, follow up (virtual) interview on 20 April 2020
Interview with EALA Official II	Arusha, Tanzania	16 November 2018
Interview with EALA Official III	Arusha, Tanzania	20 November 2018
Interview with EALA Official IV	Arusha, Tanzania	23 November 2018

Annex IV: Draft EAC Regulatory Instruments (Confidential)[238]

Annex IV.1 EAC Guidelines for MEAs negotiations and implementation[239]
ANNEX III

EAST AFRICAN COMMUNITY

DRAFT

GUIDELINES

JOINT PARTICIPATION IN THE NEGOTIATIONS AND IMPLEMENTATION OF MULTILATERAL ENVIRONMENTAL AGREEMENTS

[238] Confidential, for thesis examination only. I received the draft documents from the EAC Secretariat on the understanding that I should only share them for thesis examination. Policy documents not included in the Annexure herein are publicly available, with the online links provided in the case study chapters (6 & 7).

[239] Text formatting for all the policy documents in this section has been preserved in the format as received.

EAC SECRETARIAT
ARUSHA, TANZANIA
JANUARY 2020

Definition of Terminologies

An MEA - a legally or non-legally binding instrument between two or more nation states that deal with some aspect of the environment.

Compliance – the state of conformity with obligations, imposed by a State, its competent authorities and agencies on the regulated community, whether directly or through conditions and requirements in permits, licenses and authorizations, in implementing MEAs.

Enforcement – the range of procedures and actions employed by a State, its competent authorities and agencies to ensure that organizations or persons, potentially failing to comply with environmental laws or regulations implementing MEAs, can be brought or returned into compliance and/or punished through civil, administrative or criminal actions.

Implementation - programmatic, project, policy and strategic related activities.

Observer status - is a privilege granted to some organizations to participate in the UN organized activities without participating in decision making.

Parties – UN Members States which have ratified or acceded to United Nations Multilateral Environmental Agreements (MEAs). e.g. UNFCCC, UNCBD, UNCCD etc.

Signatory countries – that is, countries that have signed the MEA but have not carried out all the steps necessary for ratification.
Signatory countries.

Acronyms and Abbreviations

UNFCCC	United Nations Framework Convention on Climate Change
CBD	Convention on Biological Diversity
SDGs	Sustainable Development Goals
MEAs	Multilateral Environmental Agreements
EAC	East African Community
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
	CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora
UNCED	United Nations Conference on Environment and Development
NGO	Nongovernmental organizations
COMESA	Common Market of Eastern and Southern Africa
SADC	Southern Africa Development Community

1.0. INTRODUCTION

1.1 Preamble

The East African Community (EAC) Partner States have commitment to making every effort to ensure effective implementation of Multilateral Environmental Agreements (MEAs) signed and ratified by Partner States, including the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD), the United Nations Convention to Combat Desertification (UNFCCD), Ramsar Convention on Wetlands, Convention and International Trade in Endangered Species of Wild Flora and Fauna (CITES), Convention for the Protection of the Ozone Layer, Convention on Persistent Orgnanic Pollutants (POPS) and International Tropical Timber Agreement (ITTA). The Partner States have commitment to strength regional cooperation to address the persistent challenges related to sustainable development and the achievement of the Sustainable Development Goals (SDGs) by 2030.

The Guidelines are premised on the realization that the Partner States have a comparative advantage in joint participation in and negotiation of MEAs than when they act unilaterally. Collaborating within an agreed actions for joint participation in the negotiation and implementation of MEAs can promote sustained and inclusive economic growth, social development, environmental protection and therefore benefits to all Partner States.

Securing people's opportunities to influence their lives and future, participate in decision making and voice their concerns are fundamental for sustainable development calls for broad alliances of people, governments, civil society and private sector, all working together to secure the future we want for present and future generations. Article 40(3) of the EAC Common Market Protocol stipulates the Partner States shall respect the principles of international environmental law and honour their commitments in respect of international agreements which relate to environmental management.

1.2 Background

Issues pertaining to EAC Partner States' engagement and harmonization of views and approaches of implementing various international conventions on environment and natural resources have been discussed at various policy and technical levels by the EAC Heads of State, Ministerial and technical experts as appropriate.

The East African Community Guidelines for Joint Participation in the Negotiations and Implementation of Multilateral Environmental Agreements (MEAs) is the reflection of the commitment by Partner States in strategic intervention on environment and natural resources matters that seeks to promote joint participation in international treaties and conventions by the EAC Partner States.

Pursuant to this Strategic Intervention, the meeting of Ministers Responsible for Environment and Natural Resources that took place on 12 November 2009 noted the low status of the implementation of the United Nations Convention on Biological Diversity (UNCBD), United Nations Convention to Combat Desertification (UNCCD), and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). It recommended the need for Partner States to create a common platform on issues, conventions and treaties.

The implementation of the Guidelines shall be guided by fundamental and operational principles laid out in Articles 6 and 7 of the EAC Treaty and common international environmental principles including sustainable development, environmental integrity, fundamental right of the people to live in a clean and healthy environment; co-operation in the management of environment and natural resources of trans-boundary; the principle of public participation in the development of policies, plans, processes and activities; polluter pays and user pays; the principle of prevention of significant harm; precautionary principle; state responsibility, and social and environmental justice and equity amongst others.

1.3 EAC Legal Instruments, Policies and Strategies

The Guidelines anchor seamlessly with the mandate of the EAC and its instruments. Articles 111, 112 and 114 of the **EAC Treaty** provide for cooperation in Environment and Natural Resources Management. The EAC Partner States recognize that a clean and healthy environment is a prerequisite for sustainable development, and development activities in various productive and social sectors including agriculture and livestock, energy, industry, infrastructure, may pose negative impacts leading to the degradation of the environment and depletion of its

rich natural resource capital. The Partner States have therefore agreed to take concerted measures to foster co-operation in the joint and efficient management and sustainable utilization of natural resources within the Community.

Further, Article 130 of Chapter 26 of the EAC Treaty on relations with other regional and international organizations and development partners states that:

(i) Partner States shall honour their commitments in respect of other multinational and international organisations of which they are members;
(ii) The Partner States reiterate their desire for a wider unity of Africa and regard the Community as a step towards the achievement of the objectives of the Treaty Establishing the African Economic Community;
(iii) With a view to contributing towards the achievement of the objectives of the Community, the Community shall foster co-operative arrangements with other regional and international organisations whose activities have a bearing on the objectives of the Community;
(iv) The Partner States shall accord special importance to co-operation with the Organisation of African Unity, United Nations Organisation and its agencies, and other international organisations, bilateral and multi-lateral development partners interested in the objectives of the Community.

Furthermore, the EAC Treaty enshrines the resolve of the EAC Partner States to strengthen their cooperation in economic, social cultural, political, technological amongst other areas for a fast, balanced and sustainable development of the region, through the establishment of an *East African Community*, *East African Customs Union* and a *Common Market* as transitional stages to the integral parts of a *Monetary Union* and ultimately a *Political Federation*.

The Treaty further recognize that development activities in various sectors, including agriculture, industry, and infrastructure, scientific and technological advancement may have negative impacts on the environment, leading to the degradation of the environment and depletion of natural resources. It also recognizes that a clean and healthy environment is a prerequisite for sustainable development.

Article 43 (3) of the Protocol clarifies that its provisions *"shall not affect the rights and obligations of any Partner State deriving from any existing international agreement, except where the exercise of those rights and obligations would cause a serious damage or threat to the environment and natural resources in the Community*".

The Protocol also addresses matters of cooperation between Partner States and third parties. Under Article 44 (1), "*Partner States shall, individually or collectively, adopt appropriate measures, compatible with international law, to dissuade non-Partner States from undertaking activities which undermine the effectiveness of [the] Protocol";* and Partner States undertake to *"encourage the coordination of activities carried out under [the] Protocol and, if they are parties to them, under other relevant international agreements, in order to derive maximum benefit from activities under each agreement while avoiding duplication of effort"*[240]

Under Article 40 of the **Common Market Protocol** on the Establishment of the East African Community Common Market (2009), the Partner States undertake to ensure the sound environmental and natural resources management principles for proper functioning of the EAC Common Market through prevention of activities that are detrimental to the environment including meeting obligations set under the international environmental law.

Finally, the **EAC Protocol on Foreign Policy Coordination** calls for collaboration in multilateral diplomacy calls on Partner States to collaborate in multilateral diplomacy with a view to harmonizing their positions at the regional and international fora including; meetings of international organizations such as the United Nations, the World Bank, International Monetary Fund and other agencies of the United Nations, the World Trade Organization, and other fora in which the Partner States have an interest in Article 6(2)(d).

1.4 Rationale

Multilateral Environmental Agreements (MEAs) deal with environmental problems and concerns facing the EAC Partner States. They seek to harmonize the efforts of governments to address local and global environmental challenges and provide important driving forces for international and national action on environmental matters. Given the diversity of the issues they deal with, no single MEA can cover environmental challenges holistically. The need to consider all the environmental media of air, land and water as well as a wide range of sectors, including industry, agriculture and transport makes it difficult for any one convention to deal with all issues when their mandates for action are usually limited.

[240] 44 (4)

Of equally important concern is that lack of effective coordination of action can lead to simply shifting the environmental problem from one area to another nationally and across borders. Furthermore, States are often highly asymmetric in their relevant interests. They therefore tend to regiment and approach negotiations from rather national standpoints, depending on how they value an environmental good as well as a cost-benefit analysis of taking a particular course of action. These forms of asymmetric interests are based on a simple model of a well-defined national or common interest yielding national cost and benefit functions for particular environmental issue.

Such considerations are at the core of the need for EAC Partner States to work together on negotiation of and participation in MEAs. For this, they need to collaborate and coordinate their individual activities in a way that has proved difficult in the past. Though some joint coordination and participation already exists, there is scope for stronger and sustainable links and coordination between respective governmental and regional institutions within the Community. Such cooperation must be based on areas of common interests.

1.5 Scope

These Guidelines provide basic reference point for guidance on joint participation in and negotiation of MEAs by the EAC Partner States. It elaborates the procedures and substance for leveraging and harmonizing the efforts of Partner States towards international and national action on environmental matters concerning negotiation and implementation of MEAs of common interest. To this extent, guidelines deal with issues of identification and determination of issues of common interest to Partner States, convening, developing consensus on issues, engagement in the negotiation process, rules of procedure, and structure for joint negotiation, financing mechanisms, and implementation of joint commitments.

2.0 SITUATIONAL ANALYSIS

2.1 Regional Situation

East African Community (EAC) Partner States and the region at large is richly endowed with various environmental/natural resources that are drivers for local livelihoods, national and regional economies and development. These include; arable land, water resources, fisheries, livestock, wildlife, forests, wetlands, coastal and marine and mountainous ecosystems, minerals and energy resources, and biodiversity. These resources transcend national boundaries and are part of some of the most crucial trans-boundary regional resources. The economic development of the Partner States and the region is adversely affected by dynamic social, economic, environmental and political factors. These include; population growth, economic activities, land use and consumption patterns and climate change.

2.2 International Situation

The main instrument available under international law for countries to collaborate on a broad range of global environmental challenges is international conventions and treaties on environment and natural resources also known as Multilateral Environmental Agreements (MEAs). MEAs are agreements between states which may take the form of "soft-law", setting out non legally binding principles which parties are obligated to consider when taking actions to address a particular environmental issue, or "hard-law" which specify legally-binding actions to be undertaken toward an environmental objective. Amongst the global environmental issues that MEA are designed to respond to include; loss of biological diversity, adverse impacts of climate change, depletion of the ozone layer, hazardous waste, organic pollutants, marine pollution, trade in endangered species, destruction of wetlands etc.

Although international treaties are legally binding on the Parties and the Parties are obligated to implement the convention and treaties, they do not replace national laws. On the contrary, Parties have to adopt their own domestic legislations to ensure the conventions and treaties are implemented at the national level.

According to the Register of International Treaties and Other Agreements in the field of the Environment, there are over 272 international conventions, treaties and their related instruments such as amendments in the field of environment (UNEP, 2005).

The United Nations Conference on Environment and Development (UNCED) held in Rio de Jeniero in 1992 popularly known as the "Earth Summit" launched the international debate on sustainable development that recognizes the inter-linkages between environment, economic and social development issues. The Earth Summit focused on providing pathways to halting destruction of irreplaceable of natural resources and reducing environmental pollution. Governments were challenged to rethink their approaches on sustainable development in a changing environment. The Summit further recommended the integration of the three aspects of environment, economic and social issues into sustainable development decision making by the international community. Over 20 years, later, the outcome of the Earth Summit has had a significant influence on subsequent UN conferences on environment and development. The Earth Summit produced five international policy documents, conventions and declarations on environment and sustainable development existing in form of "*hard and soft laws*". These include:

(i) the Rio Declaration on Environment and Development;
(ii) Agenda 21[241];
(iii) the Convention on Biological Diversity (CBD);
(iv) the United Nations Framework Convention on Climate Change (UNFCCC) and;
(v) the Statement of Forest Principles.

As a follow up to the Earth Summit, the EAC Partner States have signed and ratified two Rio Conventions including the Convention on Biological Diversity (CBD); and the United Nations Framework Convention on Climate Change (UNFCCC) amongst many other regional and international conventions and treaties on environment and natural resources management.

[241] Agenda 21 is a global plan of action that was adopted to ensure sustainable development through integration of environment and development issues and reflects a global consensus and political commitment at the highest level on development and environment cooperation.

3.0 GOAL AND OBJECTIVE

3.1 Goal

The overall goal of the Guidelines is to enhance the effective and coordinated participation in, negotiation and implementation of regional and multilateral environmental agreements. The Guidelines seek to enhance and strengthen the regional engagement process in various conventions and treaties on environment and natural resources management that EAC Partner States are party.

3.2 Objective

The overall objective of the Guidelines is to guide EAC Partner States in the effective and coordinated negotiations and implementation of Multilateral Environmental Agreements and to harness and maximize the benefits and opportunities under the various international conventions and treaties on environment and natural resources that the EAC Partner States are Party to and where the EAC Secretariat is accredited with observer status. The specific objectives of the guidelines shall include to:

(i) develop negotiating platforms to achieve common positions in the respective Conventions;
(ii) enhance technical capacities of the negotiating platforms;
(iii) mobilize resources to enhance EACs' participation in, and implementation of MEAs; and
(iv) enhance regional platform/forum for information sharing, monitoring and evaluation and reporting on the progress among the Partner States.

4.0 GUIDING PRINCIPLES

Participation in and negotiation of MEAs are complex cooperative processes which can take place at a range of different levels, from formal to informal, and from using

high-level overarching bodies to individual governments and stakeholders, such as nongovernmental organizations (NGOs). But each MEA has its own priorities and interests and it can be erroneous to assume that one approach can fit all situations. Great synergy is necessary among stakeholders in order to ensure that they can play the useful role in linking MEAs, since they attend meetings of several bodies under different agreements.

For the purpose of these guidelines, participation is actively taking part or exchange of information in the process whereas negotiation is a dialogue between parties intended to reach an understanding, resolve point of difference or gain advantage in an outcome.

4.1 Issue(s) Identification and Notification Process

The need for joint participation in and negotiation of any particular regional and international environmental instruments shall follow the following process:

(i) the issue shall be first identified through a needs analysis by the Partner State(s) and/or the EAC Secretariat, EAC Organs and institutions and communicated to all by the Secretariat;
(ii) Partner States shall notify all relevant national stakeholders through the Ministry responsible for East African Community Affairs with a copy to focal ministries/institutions;
(iii) the notification and response shall be provided within a sufficient time, that is at least three months before the MEA event, to allow for national consultations prior to EAC Secretariat convening a regional meeting to consider the matter.

4.2 Convening

Once formal notification is given of the need to take up an issue/problem jointly, the EAC Secretariat shall of its own accord or in consultation with the initiating Partner State convene a Technical Review Meeting to consider whether the issue is of sufficient weight and interest to require joint participation or negotiation. The

Technical Review Meeting shall be constituted by Partner States experts from the coordinating, focal point of the MEA and other relevant stakeholders based on the issue identified for joint participation or negotiation.

4.3 Consensus Building and Development of Common Positions

Upon agreement on the need for joint participation or negotiation on an issue, the Technical Meeting will be convened. The Technical Meeting shall have the power to symmetrically co-opt into it any experts or consultants as may be necessary to effectively deal with the subject matter.

The National Focal Point of each Partner State shall be responsible for communicating the national position of Partner State in relation to the matter under consideration. The final resolutions shall be embodied in a written document for endorsement by all Partner States according to EAC's established rules and procedures.

The final resolution of the Technical Meeting shall be communicated to the focal Ministries of the Partner States through the Ministry Responsible for EAC Affairs. Barring any dissenting views from any particular Partner State, the position would constitute the common position of the EAC Partner States on that particular matter.

4.4 Communication of Common Position

The next step is for the EAC Partner States and EAC Secretariat to engage in the relevant international negotiations based on agreed common position in their respective capacities as State Parties and Observer.

The official position of the EAC shall be communicated at the International Meetings/events. EAC Secretariat and Partner States shall do whatever they can to identify with it and promote it. The EAC Secretariat and Partner States will endeavour to use the most appropriate means and platform to communicate the position, including the Africa Bloc, individual Partner State, as well as statements and engagement during working/contact groups.

4.5 Rules of Procedure

The rules and procedures for engagement, joint negotiations and participation shall be feasible, practical and amicable and shall apply to all Partner States. The following principles shall be observed:

(i) Commitment to consensus and trust building;
(ii) Commitment to the common positions;
(iii) Maintaining integrity and transparency;
(iv) Frequency of engagements and meetings shall be on regular basis (timing to be need based and funds availability);
(v) Date and venue where the engagement sessions shall be communicated to Partner States;
(vi) Special sessions and meetings shall be through written notices;
(vii) The quorum shall be constituted by all partner states guided by EAC rules and procedures;
(viii) The common position shall be shared or accessed by Partner States by authorized person, in order to maintain confidentiality;
(ix) The rules may be amended by consensus; and
(x) These rules and procedures should not contravene the EAC Treaty provisions.

4.6 Roles and Responsibilities

The roles and responsibilities shall include:

(i) Technical Meetings responsible for determining and communicating negotiation positions;
(ii) EAC Secretariat shall provide the administrative and coordinating role for the Technical Meeting, with the Officer in Charge of Environment as the Focal Point;

(iii) The Technical Meeting shall be constituted by Partner States experts from the coordinating ministry, focal point ministry of the MEA and other relevant stakeholders dealing with the issue identified for joint participation or negotiation;
(iv) The Chair of the Technical Meeting shall be nominated in accordance with the EAC rules of conduct of common business;
(v) Each Technical Meeting shall have a Rapporteur appointed in accordance with the rules of procedure of conducting EAC business;
(vi) Each Technical Meeting will have the liberty to form Ad hoc and/or standing and/or expert groups of any kind for any and/or all purposes as it may determine;
(vii) Such Ad hoc and/or standing and/or expert groups would be given the same facilitation and service by the EAC Secretariat as it would give the Technical Meeting; and
(viii) Technical meetings and the Ad hoc and/or standing and/or expert groups shall be held and conducted in such a place and manner, as the case may be, as shall be determined by consensus.

5.0 IMPLEMENTATION MECHANISMS

Implementation is primarily a national issue, which is not necessarily covered by any international treaty. However, EAC recognizes that certain treaties are best implemented using a joint or collaborative approach. This is done mainly through national laws.

Key among the MEAs that would require joint participation and negotiation by EAC Partner States include, but are not limited to:-

(i) All MEAs that have been ratified by all EAC Partner States
(ii) MEAs which support sustainable trans boundary ecosystem conservation and management
(iii) MEAs that support the COMESA-EAC-SADC Tripartite Arrangement
(iv) MEAs that support socio-economic development
(v) All Regional Environmental Agreement (REAs) signed and ratified by all Partner States

5.1 Coordination Mechanisms

It is appreciated that the effectiveness of joint participation in and negotiation of MEAs by the Partner States is dependent on the goodwill and strength of each Member State's approach and institutions. Thus each Partner States would ensure strength central coordinating entities for MEAs. In this endeavour, the EAC guidelines shall leverage upon:-

(i) existing institutional framework of EAC Partner States, organs and procedures, and
(ii) Identifying the mechanisms/structures through which they would engage for joint implementation.

5.2 Monitoring and Evaluation

Monitoring of implementation is important. At Partner State level, the central coordinating entity will be responsible for establishing a database of all implementable MEAs and establish a mechanism of monitoring the MEAs. The EAC Secretariat will be responsible for coordinating and monitoring the implementation at regional level. Monitoring compliance on implementation of MEAs shall be through periodic evaluation at national and regional level through the Sectoral Council of Environment and Natural Resources Management.

5.3 Budget and Financing

A budget to support MEA activities (convening meetings to for consensus building and developing common positions, participation in MEAs negotiations etc.) shall be prepared by EAC Secretariat. Resource shall be mobilized through the development of a fund raising strategy which will target financial resources from Partner States, development partners, International Agencies and the Private Sector.

Implementation of MEAs, including monitoring will require additional financial resources by Partner States. At the national level; Partner State will set aside adequate funds for implementing MEAs including soliciting external sources. For

MEAs of trans-boundary nature and their elements, the EAC Secretariat will coordinate or facilitate the preparation of funding proposals.

Clear strategy for resource mobilization will be developed to facilitate mobilization of resources to implement the guidelines including leveraging for joint implementation of MEAs related activities. Mechanisms for apportioning financial resources and budgeting for planned or activities already under implementation.

Annex IV.2 Concept Paper on Justification for EAC CC Bill

EAST AFRICAN COMMUNITY

CONCEPT PAPER ON THE JUSTIFICATION FOR AN EAC CLIMATE CHANGE BILL

EAC SECRETARIAT

ARUSHA, TANZANIA
FEBRUARY, 2018

1.0 INTRODUCTION AND BACKGROUND

1.1 Background

Climate change is defined as the change in climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods (UNFCCC, 1994). The effects of climate change particularly climatic disasters of floods and droughts have serious and significant impacts on communities, ecosystems and economies with negative impact on sustainable development in developing countries and least developed countries that most vulnerable to climate change.

The most recent scientific findings published in the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) informed by new evidence of climate change based on several independent scientific observations of the climate system, historical climate archives, theoretical studies of climate processes and simulations using several global and regional climate models indicates that the atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level has risen, and the atmospheric concentrations of greenhouse gases (GHGs), mainly carbon dioxide (CO2), methane (CH4), and nitrous oxide (N20) have increased to levels unprecedented. Carbon dioxide concentrations have increased by 40% since pre-industrial period, primarily due to emissions from burning of fossil fuel and net land use change practices such as deforestation.

EAC Secretariat and Partner States have developed climate change instruments in the form of policies, strategies and Acts with the view of strengthening the implementation of the climate change projects and programs. Partner States are also Parties to the United Nations Framework Convention to Combat Climate Change (UNFCCC) and have been actively implementing decisions and directives emanating from global climate change policy discourse. EAC Secretariat is accredited as observer to UNFCCC and has been facilitating and supporting Partner States in the implementation of regional climate change programs. However, some key interventions such as Mainstreaming of the climate change into regional development Policies and Strategies necessitate the presence of the Climate Change Act for the legal impetus.

1.2 Decisions and Directives

The 3rd Meeting of the Sectoral Council on Environment and Natural Resources held from 27th-31st January 2014 in Bujumbura ***directed the EAC Secretariat to initiate the process of formulating a Regional Climate Change Bill.***

The 2nd Extra-Ordinary Meeting of the Sectoral Council observed that the establishment of institutions is a prerogative of the Summit, the need for the region to strategically position itself to access climate change funds; the need for the proposed institutional framework envisaged in the proposed Bill to be included in the Concept Paper; and the need to develop concrete proposals on the institutional structure and financing mechanism that should be subjected to the a wide consultative process.

The 2nd Extra Ordinary Sectoral Council on Environment and Natural Resources held on 12th March 2015 further directed:

(i) ***the Partner States to undertake national consultations on the draft concept paper for the justification of the EAC Climate Change Bill by 30th April 2015 and submit comments to the EAC Secretariat;***

(ii) ***the Secretariat to support the Republic of Burundi to undertake national consultations on the draft concept paper for the justification of the EAC Climate Change Bill by 30th April 2015; and***

(iii) ***the Secretariat to consolidate the comments with a team of Partner States Experts by 30th June 2015 and submit the revised concept paper to the 4th Sectoral Council on Environment.***

The 29th Meeting of the Council of Ministers held on 20th April 2015 in Arusha directed the EAC Secretariat to ***submit a Concept Paper on the justification for a Regional Climate Change Bill to the 30th Meeting of the Council (EAC/CM 29/Directive 18).***

The 4th Meeting of the Sectoral Council on Environment and Natural Resources (4th SCENR) Management held in Kigali on 7th-10th June, 2016 directed the Secretariat to finalize the development of the Concept Paper on the proposed EAC Climate Change Bill and submit to 5th SCENR for consideration. The 5th SCENR on 9th February 2018 adopted the Concept Paper on Justification for EAC Climate Change Bill.

1.3 Objective of the Paper

The purpose of this Concept Paper is therefore to provide technical justification for the need for a Regional Climate Change Bill based on the directives of the Sectoral Council that noted the need for the region to strategically position itself to access climate change funds; the need for the proposed institutional framework envisaged in the proposed Bill to be included in the Concept Paper; and the need to develop concrete proposals on the institutional structure and financing mechanism that should be subjected to the a wide consultative process.

2.0 RATIONALE AND JUSTIFICATION FOR THE EAC CLIMATE CHANGE BILL

2.1 The EAC Climate Change Policy Framework

The EAC Climate Change Policy was approved by the 9th Extra Ordinary Meeting of the EAC Heads of State Summit on 19th April 2011 in Dar es Salaam. The 27th Meeting of the Council of Ministers held on 31st August 2013 approved the following key climate change strategic documents in accordance with the Climate Change Policy:

(i) the EAC Climate Change Strategy and EAC Climate Change Master Plan *(EAC/CM 27/Decision 26)*; and
(ii) Operational Modalities for the EAC Climate Change Fund *(EAC/CM 27/Decision 28)*.

2.2 East Africa Legislative Assembly Report and Resolution on Climate Change

The East Africa Legislative Assembly (EALA) adopted a *Report and Resolution on Climate Change* during the 1st Session of the 4th Meeting of the East African Legislative Assembly (EALA) held from 21st January to 1st February 2013 in Bujumbura. The Assembly observed the following:

(i) Partner States have developed or are in the process of developing Climate Change Policies, Strategies and Action Plans as appropriate to respond to the adverse impacts of climate change through adaptation while taking advantage of sustainable development opportunities emanating from climate change mitigation efforts;
(ii) EAC has an elaborate Climate Change Policy Framework comprising of the EAC Climate Change Policy, Strategy, Action Plan and EAC Climate Change Fund;

(iii) there is a common challenge at both the national and regional level in supporting the implementation of policies through legal and institutional frameworks for various actors including resource mobilization;
(iv) there is enabling policy framework at EAC and Partner States level to support implementation of climate change initiatives that include the EAC Treaty, Protocol on Environment and Natural Resources Management, Climate Change Policy, Strategy, Master Plan, Operational Modalities for the EAC Climate Change Fund etc; as well as
(v) Party States Constitutional dispensations, National Development and Strategic Plans, National Visions, National Environment Policies;
(vi) need for EAC Secretariat to initiate a draft EAC Climate Change Bill to give legal effect to the EAC Climate Change Policy through: (a) establishing a Regional Institutional Structure to coordinate Climate Change initiatives; (b) fully operationalize the EAC Climate Change Fund and (c) provide legal framework for carbon trading in the region; and
(vii) Coordinate regional and collective input to the global climate agenda including climate change treaties

The Assembly further observed the need to fast track the operationalization of the EAC Climate Change Fund established by the Council of Ministers in 2010 through putting in place necessary legal instruments and recommended the following amongst others:

(i) EAC Secretariat and EALA to collaborate in developing necessary technical, operational and legal arrangements to fully operationalize the EAC Climate Change Fund; and
(ii) the EAC Council of Ministers to introduce a Bill on operationalization of the EAC Climate Change Fund to give it legal basis.

The Resolution on Climate Change recognizes that climate change is a real threat to sustainable development globally and particularly in the region with adverse impacts across all sectors of the economy including agriculture and food security, water resources, ecosystems, tourism, human health and settlement, industrial development and peace and security. It also recognizes the following amongst others:

(i) over 70% of natural disasters in the EAC region are climatic related and that the greatest impacts of climate change are evidenced in form of climatic disasters including floods and droughts; and
(ii) there are opportunities for sustainable development accruing from climate change adaptation and mitigation measures, in particular those geared towards green economy and low carbon development.

The Assembly therefore urged for the fast tracking of the operationalization of the EAC Climate Change Fund amongst others. The Resolution is in accordance with the provisions of the Treaty for Establishment of the East African Community, in particular Articles 100, 111,112 and 113 on Meteorological Services and Environment and Natural Resources Management, respectively. The Members of Parliament welcomed the progress made by EAC Secretariat in the development and implementation of the Regional Climate Change Policy, Climate Change Strategy and Master Plan that aims to ensure harmonized and coordinated approach to addressing climate change in the region. The Resolution also reaffirms the legislator's commitment to make every effort to contribute to climate change adaptation, including through disaster risk reduction and management measures.

3.0 OBJECTIVE OF THE PROPOSED EAC CLIMATE CHANGE BILL

The overall objective of the proposed EAC Climate Change Bill is to provide a legal and regulatory framework for the implementation and coordination of the EAC Climate Change Policy. The Bill is expected to provide legal guidance on strategic adaptation and mitigation interventions in the EAC region aimed at responding to the adverse impacts of climate change and contribution towards the reduction of global emissions of greenhouse gases in the atmosphere. The specific objectives are to:

(a) *establish a Regional Institutional Structure to coordinate Climate Change initiatives;*
(b) *fully operationalize the EAC Climate Change Fund and*
(c) *Guide carbon trading in the region.*

3.1 Proposed Institutional Framework

The EAC Climate Change Policy recognizes the existing uncoordinated efforts in responding to climate change at the regional level and the need for establishment of a clearly defined regional coordination and management structure. The Policy further states that the establishment of an appropriate regional implementation structure will be guided by the Protocol for Environment and Natural Resources Management and the proposal for the establishment of an EAC Climate Change Function. The Policy also recognizes the Sectoral Council of Ministers for Environment and Natural Resources shall remain the highest decision making body on all matters regarding to climate change as per the EAC Treaty.

The proposed regional institutional arrangement will be mandated to oversee the effective implementation of the EAC Climate Change Policy through the EAC Climate Change Strategy, Master Plan and the EAC Climate Change Fund. The institutional structure will also seek to establish clear linkages with existing institutions in the Partner States, EAC organs and institutions and other international entities with a view of enhancing synergies and minimizing duplication of efforts at the regional level.

The coordinating institution shall be charged with the responsibility of designing and reviewing climate change policies, strategies and plans; projects and programmes and mobilization of resources for their implementation; promoting the mainstreaming of climate change in education curriculum; building the capacity of research institutions and setting climate change research and development agenda amongst others.

The proposed climate change institutional framework will require a comprehensive capacity building strategy to enhance efficiency in delivering the institutional mandate. The proposed institutional framework shall include the EAC Secretariat working jointly with relevant EAC organs and institutions including the East African Legislative Assembly (EALA), Lake Victoria Basin Commission (LVBC), Lake Victoria Fisheries Organization (LVFO), Inter-University Council of East Africa (IUCEA), East Africa Development Bank (EADB), EAC Science and Technology Commission (ESTC) and any other institutions that may be established by the EAC Heads of State Summit. The following climate change programmes, projects and initiatives are being implemented by several EAC organs and institutions with coordination from mainly the EAC Secretariat and LVBC Secretariat. The Policy also recognizes the Sectoral Council of Ministers for Environment and Natural Resources as the highest

decision making body on all matters regarding to climate change as per the EAC Treaty.

In this regard, a Technical Proposal for the Establishment of the EAC Climate Change Coordination Function was adopted as part of the Proposals for Capacity Enhancement for the Department of Environment and Natural Resources adopted by the 27th Meeting of the Council of Ministers held on 31st August 2013 in Arusha, Tanzania. The Technical Proposal is herewith attached as ***Annex I***.

3.2 Proposed Financing of Regional Climate Change Initiatives

Financing climate change is a capital intensive undertaking that requires multiple and innovative financial mechanisms to ensure sustainability. Several climate change financing mechanisms for addressing mitigation and adaptation initiatives exist within the Partner States. These include both multilateral and bilateral sources such as; the Global Environment Facility (GEF) Trust Fund, Special Climate Change Fund, Least Developed Country Fund, Adaptation Fund, Green Climate Change Fund, Forest Carbon Partnership Facility, International Climate Initiative, Global Climate Change Alliance and Cool Earth Partnership amongst others. Market-based mechanisms such as the Clean Development Mechanism (CDM) and Reducing Emissions from Deforestation and Forest Degradation (REDD+) have been also been established.

The existing international climate change funding mechanisms have inherent multiple challenges. These impede the implementation of prioritized climate change activities within the Partner States and the Region. Common challenges include: lack of adequate funds due to delayed capitalization and disbursement of committed resources; rigorous and complex bureaucratic procedures and processes leading to high transaction costs; unpredictability and unsustainability of existing funds; limited technical capacities to develop concrete climate change mitigation projects approved as part of the Clean Development Mechanism (CDM); and limited knowledge and understanding of procedures for accessing existing regional and international climate change financing mechanisms.

Regional Climate Change activities and initiatives by the EAC are currently being supported through development partners under donor funded projects. There is currently no budget is allocated to climate change activities from Partner States contributions.

In light of the above, and as articulated in the EAC Climate Change Policy, inadequate financing remains one of the major challenges the region is facing towards responding to climate change – particularly with respect to adaptation, mitigation and capacity building, in the areas of research, technology development and transfer, education, public awareness, and training among others.

The EAC Climate Change Fund was established by the 20th EAC Council of Ministers, held on 26th March 2010 in Arusha, Tanzania (EAC/CM 20/Decision 30). The Council further directed the Secretariat to work with Partner States' experts to develop modalities for operationalizing the Fund and submit the document to the Council for consideration. The Operational Modalities for the EAC Climate Change Fund prepared through a consultative experts meetings were approved by the 27th Meeting of the Council of Ministers held on 31st August 2013 held in Arusha (EAC/CM 27/Decision 28).

The overall aim of the Fund is to address the inadequacy, unsustainable, unpredictable and inaccessible funding situation for climate change activities at the regional level and support regional climate change monitoring, research, adaptation and mitigation projects with regional implications as identified and prioritized in the EAC Climate Change Policy, Strategy and Master Plan. The EAC Climate Change Fund will therefore complement existing instruments, and enhance the ability of the region to respond to climate change challenges through ensuring that adequate, reliable, predictable and sustainable financial resources are secured.

It is therefore envisaged that once the Fund is fully operational, it will assist in enhancing the region's socio-economic resilience of communities and economies against the vagaries of climate change. The Fund is also envisaged to enhance the region's capacity to leverage financial and technical support from existing and emerging climate change finance mechanisms and funds by multilateral, bilateral, and other international, regional and domestic sources – including the private sector.

ROADMAP FOR DEVELOPMENT OF EAC CLIMATE CHANGE BILL

A roadmap for developing the EAC Climate Change Bill is as follows:

	Activity	**Methodology/Approach**	**Responsibility**	**Timeline**
1.	Preparation of a Technical Paper/Concept Paper for EAC Climate Change Bill	Desktop Review	EAC Secretariat	October 2017
2.	Consideration of the Concept Paper	Meeting	Sectoral Council	December 2017
3.	Adoption of the Concept Paper	Meeting	Council of Ministers	June 2018
4.	Drafting of the draft EAC Climate Change Bill	Consultancy	EAC Secretariat-Legal Department	August-December 2018
5.	Provision of Technical input into the draft Bill	Technical Workshop	Climate Change Technical Working Group EAC Secretariat	February 2019
6.	Consideration of the Bill by the EALA Committee on Agriculture,	Meeting	EALA Committee on Agriculture, Natural	March-April 2019

	Natural Resources and Tourism		Resources and Tourism	
7.	Provision of Policy guidance on the draft EAC CC Bill	Sectoral Council/Council	Sectoral Committee on Environment and Natural Resources	April-June 2019
8.	Provision of legal input to the EAC CC Bill	EALA Sessions	East African Legislative Assembly (EALA) EAC Secretariat	May-June 2019
9.	Undertaking national consultations on the draft Bill	Public Hearings	East African Legislative Assembly (EALA) EAC Secretariat	June-July 2019
10.	Provision of further policy guidance on the Bill	Soliciting more inputs and guidance	Council of Ministers	August-September 2019
12.	Submission of the Bill to the Partner States for signing		EAC Secretariat	October 2019

Annex IV.3 Terms of Reference (ToR) for Development of the EAC Climate Change Bill

EAST AFRICAN COMMUNITY

DEVELOPMENT OF EAC CLIMATE CHANGE BILL

TERMS OF REFERENCE OF A CONSULTANCY

EAC SECRETARIAT
ARUSHA, TANZANIA
DECEMBER 2018

1.0 **Background**

The East African Community (EAC) is an inter-governmental organization of six Partner States namely Burundi, Kenya, Rwanda, South Sudan, United Republic of Tanzania, and Republic of Uganda. The Treaty for the Establishment of the East African Community was signed on November 30th 1999 and came into force on July 7th 2000. The main objective of the Community is to develop policies and programmes aimed at widening and deepening co-operation among the Partner States in mainly political and economic, social and cultural fields, research and technology, defence, security, legal and judicial affairs, for the partners' mutual benefit.

The adverse impacts of climate change in the EAC region are a huge threat to the region's socio-economic development, negatively affecting livelihoods and economies. These are evidenced through extreme weather phenomena (droughts and floods) that are occurring with greater frequency and intensity and results in food insecurity, energy insecurity, land degradation, loss of biodiversity, reduced revenue from tourism, increase in pests and diseases, sea level rise, water scarcity, natural resource based conflict and severe damage to infrastructure among others.

To respond to the above, EAC developed the Climate Change Policy and climate change strategy in order to guide Partner States and other stakeholders in the preparation and implementation of collective measures to address Climate Change in the region while ensuring sustainable social and economic development. These climate change documents prescribes statements to guide Adaptation and mitigation actions on Climate Change taking cognizance of national, regional, sub-regional development policies, plans, strategies and programmes while at the same time complementing other Multilateral Environmental Agreements (MEAs) that EAC Partner States are Party to.

However, some key interventions such as mainstreaming of the climate change into regional development policies and strategies necessitate the need of climate change Act to the legal impetus. In this line, the 3rd meeting of the Sectoral Council on Environment and Natural Resources Management held from 27th-31st January 2014 in Bujumbura directed the EAC Secretariat to initiate the processes of formulating a Regional Climate Change Bill. On 9th February 2018, the 5th Sectoral Council on Environment and Natural Resources Management adopted the Concept Paper on Justification for EAC Climate Change Bill. The Bill will translate into an act that will provide a law to address climate change issues in the region. The Bill seeks to guide and direct the development, management, implementation and regulation mechanism to enhance climate change resilience and low carbon development in the region.

2.0 Objectives of the Consultancy

The main objective of this Consultancy is to draft EAC Climate Change Bill with the view of providing a framework for enhanced response to climate change, provide mechanism and measures to achieve low carbon climate change development and for connected purposes. Specifically, the Consultancy will:

i) Analyse the existing climate change policy and regulatory framework in the region and internationally;
ii) Ensure that development of the EAC climate change bill should be informed by the regional and international climate change agenda;
iii) Recommend the appropriate institutional structure to oversee the implementation of the Bill;
iv) Prescribe measures to effectively constitute and implement financing mechanism for climate change in the region;
v) Provide recommendations for strengthening regional and international collaboration in climate change; and
vi) Prescribe measures to facilitate the implementation of the EAC Climate Change Policy and Strategy including capacity building and resource mobilization.

3.0 Scope of the Work

In carrying out the assignment, the Consultants shall:

(i) Take the stock of existing Climate Change instruments (including but not limited to Acts, Policies and Strategies) at the sectoral, National, regional and Global levels;
(ii) Collect relevant data and information from studies, research and findings in the region necessary to inform the development of Climate Change Bill;
(iii) Conduct briefings and consultative meetings with stakeholders with the view of soliciting inputs and harnessing regional ownership of the Bill; and
(iv) Develop a draft EAC Climate Change Bill taking into account issues emanating from national, regional and global climate change policy discourse.

4.0 Methodology/Approach

The Consultant(s) will be required to execute this work following, but not limited to, the following techniques:

- Desk Review: Document analysis and literature review
- Information surveying and check listing
- Field visits and including focused workshops

- Consultative meetings and interviews with key stakeholders (e.g. line ministries, Regional institutions, development Partners, related NGOs, CSOs, Private sector and Academic & Research Institutions)

NOTE:

- Documents to be reviewed will include but not limited to: Partner States Acts, policies, strategies, and reports on climate change, State of the environment reports, VIA Sector Baseline Reports, VIA hot spot index mapping, Multi-lateral & bi-lateral organisation reports (e.g. UNFCCC, IPCC, USAID, FAO, World Bank, UNEP, and UNDP); Sustainable Development Goals (SDGs), EAC Vision 2050, EAC Climate Change Policy and Strategy, EAC Climate Change Master Plan (2011-2031)and EAC 5th Development Strategy.
- **Stakeholders Consultations with**: Key regional stakeholders; key Development Partners; Key NGOs; Research institutions;
- Qualitative data and information should be, where possible, supported with quantitative information.

5.0 **Deliverables**

- **Inception Report:** Within two weeks of contract signing the Consultant should produce an inception report outlining the key issues, approach to the assignment and detailed work plan.
- **Initial draft bill:** the consultant will produce a climate change draft bill that will be submitted for initial consultations and improvements at national level;
- **Workshops:** The Consultants will present their works and gather inputs from national and regional stakeholders consultation workshops to solicit inputs and views necessary for the improvement of the regional Climate Change Bill development.
- **First Draft Bill:** The Consultant (s) will deliver the first draft Bill for the EAC Climate Change Bill.
- **Progress Reports:** The Consultant(s) will produce a report that summarizes the results of the tasks undertaken above and present a draft document to EAC Secretariat.
- **Regional workshops:** to validate the 1st draft EAC Climate Change Bill.
- Supporting documentation including summary of the literature search, minutes of meetings, summary of the consultations undertaken etc.
- **Policy Note:** The Consultant(s) will develop a brief Bill report of not more than 10 pages summarizing the results of the report described above. A brief report will serve as the basis for discussion for identifying recommended transformational changes and the design of climate change priorities for EAC.

- **Communication:** The Consultant will develop a PowerPoint presentation summarizing the results of the options analysis and present them to EAC Secretariat/Climate Change Technical Working Group (CCTWG) and at the consultation and validation Workshops.
- **Final (draft) Bill:** the consultants will deliver a full draft EAC Climate Change Bill.

These deliverables should be submitted for validation at each stage of submission.

6.0 **Competencies**

This work should involve at least two consultants one for leading on legal development stream and the other leading on technical analysis and options development.

The Consultant(s) should have excellent knowledge of national, regional and global climate change regulatory framework and demonstrate experience on performing similar assignments.

7.0 **Required Skills and Experience**

- The Consultants or firm should at least hold;
- A Master's degree or above in Environmental Law, Law, Climate Change, Environmental Science, Natural Resources Management or related areas;
- At least 10 years' of experience in environmental law, climate change planning and policy development;
- An incumbent should have a strong knowledge of national, regional and international organizations. Knowledge and experience on civil society will be an added advantage;
- Demonstrated experience in environmental law design and formulation and reporting skills; and
- Knowledge of the EAC context is an added advantage

8.0 **Timeframe**

The consultancy shall be finalized within 45 man-days from the commencement time (award and signing of the contract of deployment of Technical Assistance).

9.0 **Reporting**

The Consultant(s) shall report to the fortnightly to the task force and monthly to the EAC Secretariat in Arusha, Tanzania through the Department of Environment and Natural Resources and shall closely liaise with the Principal Environment and Natural Resources Officer (PENRO).

10.0 Budget and Modalities of Payment Fees

The budget for this consultancy will be totally supported by the EAC Secretariat and modalities of procurement and payment shall follow EAC procedures.

The consultants' contracts will include facilitating of the task team that will work together with the consultants

11.0 Obligations and Expectations of the Parties

11.1 The Partner States

Partner States through the Climate Change Technical Working Group shall;

(a) Participate in the discussions relevant to support development of EAC Climate Change Bill;
(b) Providing access to documents relevant to this consultancy; and
(c) Participate in the appraisal in validation of the draft Bill.

11.2 The EAC Secretariat

The Secretariat shall:

(a) Make available to the consultants documents and information relevant to climate change, institutional capacity and program management necessary to support development of the Climate Change Bill;
(b) Organise relevant workshops and Actively participate in Climate Change Bill development;
(c) Link the consultant to all relevant stakeholders in order to discuss opportunities and challenges for the development of regional climate change bill; and
(d) Prepare and submit to the appropriate policy organs necessary policy documents and other instruments to support the adoption of the Climate Change Bill.

11.3 The Consultant

The consultant shall:

(a) Perform all expected activities and timely deliver all expected products outlined in these Terms of Reference (ToR);
(b) Report at determined intervals progress and results to the EAC Secretariat; and
(c) Identify implementation challenges at early and appropriate periods in order to make necessary adjustments.

12.0 Mode of application

All technical and financial proposals should be addressed to:

Secretary General

East African Community (EAC) Secretariat,

P.O. Box 1096

Arusha, Tanzania

Annex V: EAC Organogram