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SAFEGUARDING A LIBERAL SYSTEM OF STATES:
REINTERPRETING STATES' FREEDOMS IN INCREASING INTERDEPENDENCE

by

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A thesis submitted in partial fulfilment of the requirements
for the degree of Doctor of Philosophy in Law
The University of Auckland, 2011

ABSTRACT

A crucial issue for international law is how to deal with situations where one state's policies affect another state's domestic affairs. The traditional answer is that international law is a liberal system centred on relative sovereignty, in which states' freedom to exercise their sovereignty (positive freedom) is inherently limited by the need to protect other states' domestic affairs against interference (negative freedom).

Ideally, when facing global problems, states co-operate with each other to limit their positive freedom. However, states often fail to agree on bilateral or multilateral co-operative responses or only agree on a lowest common denominator that provides an inadequate response. This creates tension between states' positive and negative freedom and exposes states to the adverse effects of other states' policies.

Two transboundary problems that feature prominently on the international agenda—climate change mitigation and macro-financial instability—serve as case studies to examine whether international law protects states against such adverse effects. The case studies reveal how international law fails to protect states' negative freedom against the adverse effects of other states' actions or omissions. The starting position under the Lotus Principle is the freedom of states to act. As the case studies demonstrate, limits on this freedom in general and specialized international law are insufficient or inadequate to avoid adverse effects. Moreover, trade liberalization obligations restrict states' ability to respond unilaterally to transboundary problems when these responses potentially have a negative impact on trade.

Rather than advocating fundamental changes to the international order, the thesis proposes an evolutionary process of rebalancing existing rules and principles on the exercise of state sovereignty. This rebalancing can take place through dialectical processes of reinterpretation, in which states, non-state actors and international institutions interact to argue and refine the limits on the exercise of state sovereignty. The thesis identifies locality, reasonableness and good neighbourliness as interstitial norms that can guide the reinterpretation of the existing rules and principles on the exercise of state sovereignty. The goal of this reinterpretation is to strengthen international law's structure as a liberal system of states that ensures co-existence and co-operation in a pluralistic society.

PREFACE AND ACKNOWLEDGMENTS

The idea for this thesis grew out of a paper I wrote as part of my LL.M degree on the scope of the principle of non-intervention when one state influences the domestic affairs of another through non-forcible means. The question driving that paper as well as this thesis is how international law can respond to the increasing frequency of transboundary impacts of a state's decisions. A logical response to transboundary problems would be for states' to co-operate on transboundary regulatory mechanisms. However, despite states' efforts, such co-operative responses to transboundary problems are often missing or ineffective. Why is this when co-operative responses are undeniably in the collective interest of states? In my research, I discovered that the development of co-operative responses is often hampered by the very reasons that make them so important. The increasing transboundary impacts result from the broad freedom of states to exercise their sovereignty. In 1971, the US Treasury Secretary John Connally famously said to his European counterparts concerned about the impact of a declining US dollar on their economies: "It's our currency, but it's your problem".¹ In our increasingly interdependent world, it is not just a state's exchange rate policies that are other states' problems. The broader states' freedom to act, the more frequent the impact of their decisions on other states. Moreover, if states have a broad freedom to act, they need to be willing to make significant sacrifices when accepting limits on the exercise of their sovereignty. Thus, claims that increasing interdependence has reduced state sovereignty are at best incomplete. Increasing interdependence has indeed reduced state's ability to exercise their sovereignty over matters that are traditionally part of their domestic affairs. However, this reduced freedom often results from other states' exercise of their sovereignty. Adapting international law to the challenge of increasing interdependence is therefore not about choosing between more or fewer limits on the exercise of state sovereignty, but about different limits to ensure that a state's exercise of its sovereignty does not affect the exercise by other states of their sovereignty. This thesis proposes a pathway towards this goal that can also increase the likelihood of co-operative responses to transboundary problems.

To assist the reader, the table of contents is followed by lists of the treaties and cases referred to, and of the abbreviations used throughout this thesis. An overview of the literature is included in the bibliography at the end of this thesis.

¹ Eichengreen, *Globalizing Capital: A History of the International Monetary System*, 2nd ed. (2008), 134.

The international institutions and mechanisms referred to in this thesis all have extensive websites from where the decisions used in this thesis can be retrieved. All URLs are valid as of June 2011.

While there can only be one name on the front of this thesis, the end result could not have been achieved without the support of my supervisors, Dr. Caroline Foster and Professor Jane Kelsey, who always found the time to comment on my drafts without delay, even during their leaves of absence or when my project took them out of their own areas of specialization.

Generous scholarships of the University of Auckland and of the Education NZ Trust eased the financial burden of stepping back into student life and enabled me to present my research at conferences and workshops in Australia, Belgium, Germany, Hong Kong and New Zealand. The feedback received there was invaluable.

More important than the financial support, was the moral support of my family and friends that helped to preserve a smidgen of sanity throughout the process. At Uni, many thanks are due to Melanie Drake and Liesl Ploos van Amstel at the PGSA; to the fellow members of the “Tiresian Society”: my “cellmate” Yolinda Chan, Deidre Bourke, Stephanie Mead, Angela Willemse, Guy Charlton, Kris Gledhill, Ned Fletcher and particularly David Griffiths, who reminded me of the motto: “First thou must go the road to hell...”; and to the other inhabitants of the 7th floor: Jeanna Tannion, Andy Martin, Megan Henley, Francoise Godet, Vernon Tava, and, last but not least, the tireless Joanne Anderson whose energy and dedication too often go unnoticed. In life outside Uni, the gorgeous “goggle girls” made sure I forgot about the thesis, if necessary helped by a few glasses of wine. Beccs, Hollie, Jo, Nic, Niki and Shannon – thanks for putting up with me!

I am greatly indebted to my parents, for being my beacons on the path of life (even from the other side of the world) and for their unconditional love and support for more than three decades. Mama en papa, bedankt voor alles! I owe immense gratitude to my father-in-law for keeping me healthy and well fed with his famous fried rice lunches and to my mother-in-law for showing me that a foreign-born woman can have a place in New Zealand academia.

Last but not least, my LL.M set me on track for this thesis, but more importantly brought John into my life. He probably did not realize when he was encouraging one of his friends to finish her LL.M paper that he would end up spending his evenings and long weekends editing his wife’s thesis. I cannot count the ways in which he supported me along the way, but I am certain that I could not wish for a better fellow traveller.

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LIST OF TREATIES

Annex on Financial Services	Annex on Financial Services, General Agreement on Trade in Services, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B, 33 <i>I.L.M.</i> 1189 (1994)
DSU	Understanding on Rules and Procedures Governing the Settlement of Disputes, Marrakesh Agreement Establishing the World Trade Organization, Annex 2, 1869 <i>U.N.T.S.</i> 401, 33 <i>I.L.M.</i> 1226 (1994)
EU–Korea FTA	Free Trade Agreement between the European Union and its Member States, of the one part, and the Republic of Korea, of the other part, (2011) <i>Official Journal</i> L 127/6.
GATS	General Agreement on Trade in Services, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B, 1869 <i>U.N.T.S.</i> 183, 33 <i>I.L.M.</i> 1167 (1994)
GATT	General Agreement on Tariffs and Trade 1994, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 <i>U.N.T.S.</i> 187, 33 <i>I.L.M.</i> 1153 (1994)
ICJ Statute	Statute of the International Court of Justice, 26 June 1945, <i>U.S.T.S.</i> 993
IMF Articles of Agreement	Articles of Agreement of the International Monetary Fund, 22 July 1945, 2 <i>U.N.T.S.</i> 39
Kyoto Protocol	Kyoto Protocol to the United Nations Framework Convention on Climate Change, 16 March 1998, 37 <i>I.L.M.</i> 32 (1998)
League of Nations Covenant	Covenant of the League of Nations, 28 June 1919
Montevideo Convention	1933 Montevideo Convention on the Rights and Duties of States, <i>U.S.T.S.</i> 881
Montreal Protocol	Montreal Protocol on Substances That Deplete the Ozone Layer, 16 September 1987, 1522 <i>U.N.T.S.</i> 3

NAFTA	North-American Free Trade Agreement, 17 December 1992, 32 <i>I.L.M.</i> 289 (1993), 32 <i>I.L.M.</i> 605 (1993), 32 <i>I.L.M.</i> 1480 (1993), 32 <i>I.L.M.</i> 1502 (1993) and 32 <i>I.L.M.</i> 1520 (1993)
SCM Agreement	Agreement on Subsidies and Countervailing Measures, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 <i>U.N.T.S.</i> 14
TBT Agreement	Agreement on Technical Barriers to Trade, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, at < http://www.wto.org/english/docs_e/legal_e/17-tbt.pdf >
UN Charter	Charter of the United Nations, 26 June 1945, 1 <i>U.N.T.S.</i> XVI
UNCLOS	United Nations Convention on the Law of the Sea, 10 December 1982, 1833 <i>U.N.T.S.</i> 3.
UNFCCC	United Nations Framework Convention on Climate Change, 4 June 1992, 31 <i>I.L.M.</i> 848 (1992)
US–Argentina BIT	Treaty Between United States of America and the Argentine Republic Concerning the Reciprocal Encouragement and Protection of Investment, 14 November 1991, 31 <i>I.L.M.</i> 124 (1992)
US–Korea FTA	Free Trade Agreement between the United States of American and the Republic of Korea, 30 June 2007, at < http://www.ustr.gov/trade-agreements/free-trade-agreements/korus-fta/final-text >
Vienna Convention on the Law of Treaties	Vienna Convention on the Law of Treaties, 23 May 1969, 1155 <i>U.N.T.S.</i> 331
WTO Agreement	Marrakesh Agreement Establishing the World Trade Organization, 15 April 1994, 1867 <i>U.N.T.S.</i> 154, 33 <i>I.L.M.</i> 1144 (1994)

LIST OF CASES

<i>Permanent Court of International Justice (in chronological order)</i>	
Nationality Decrees Advisory Opinion	<i>Nationality Decrees Issued in Tunis and Morocco (French Zone) on November 8th, 1921 (Advisory Opinion)</i> (7 February 1923), PCIJ Series B 5
Wimbledon	<i>Case of the S.S. "Wimbledon"</i> (17 August 1923), PCIJ Series A 15
Lotus	<i>Case of the S.S. "Lotus"</i> (7 September 1927), PCIJ Series A 4
Serbian Loans	<i>Case Concerning the Payment of Various Serbian Loans Issued in France and Case Concerning the Payment in Gold of the Brazilian Federal Loans Issued in France</i> (1929) PCIJ Series A 20/21
<i>International Court of Justice (in chronological order)</i>	
Corfu Channel	<i>Corfu Channel Case (United Kingdom of Great Britain and Northern Ireland v. Albania)</i> (9 April 1949), ICJ Reports 4
Fisheries Case (United Kingdom v. Norway)	<i>Fisheries Case (United Kingdom v. Norway)</i> (18 December 1951), ICJ Reports 116
Nuclear Tests	<i>Nuclear Tests (Australia v. France)</i> (20 December 1974), ICJ Reports 253
Nicaragua	<i>Case Concerning Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America) (Merits)</i> (27 June 1986), ICJ Reports 14
Nuclear Weapons Advisory Opinion	<i>Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion)</i> (8 July 1996), ICJ Reports 226
Armed Activities on the Territory of the Congo	<i>Case Concerning Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)</i> (19 December 2005), ICJ Reports 168

Pulp Mills	<i>Pulp Mills on the River Uruguay (Argentina v. Uruguay)</i> (20 April 2010), at < http://www.icj-cij.org/docket/files/135/15877.pdf >
Kosovo Advisory Opinion	<i>Accordance with International Law of the Unilateral Declaration of Independence in Respect of Kosovo (Advisory Opinion)</i> (22 July 2010), at < http://www.icj-cij.org/docket/files/141/15987.pdf >
Arbitral Awards	
Island of Palmas	<i>Arbitral Award Rendered in Conformity with the Special Agreement Concluded on January 23, 1925 between the United States of America and the Netherlands Relating to the Arbitration of Differences Respecting Sovereignty over the Island of Palmas (or Miangas)</i> (4 April 1928), Reports of International Arbitral Awards vol. II, 829-871
Trail Smelter	<i>Trail Smelter Case</i> (16 April 1938 and 11 March 1941), Reports of International Arbitral Awards vol. III, 1905
Lac Lanoux	<i>Lac Lanoux Arbitration</i> (16 November 1957), 24 International Law Reports 101
LG&E (Liability)	<i>LG&E Energy Corp et al v the Argentine Republic (Decision on Liability)</i> (2006) ICSID ARB/02/1 46 I.L.M. 36 (2007),
International Tribunal on the Law of the Sea	
Responsibilities and Obligations of Sponsoring States Advisory Opinion	<i>Advisory Opinion on Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area</i> (1 February 2011), at < http://www.itlos.org/case_documents/2011/document_en_379.pdf >
GATT and WTO Decisions (in alphabetical order)	
Brazil–Retreaded Tyres (AB)	Appellate Body Report, <i>Brazil–Measures Affecting Imports of Retreaded Tyres</i> , WT/DS332/AB/R, adopted 17 December 2007

Canada–Autos	Panel Report, <i>Canada–Certain Measures Affecting the Automotive Industry</i> , WT/DS139/R, WT/DS142/R, adopted 19 June 2000, as modified by Appellate Body Report WT/DS139/AB/R, WT/DS142/AB/R
Canada–FIRA	GATT Panel Report, <i>Canada–Administration of the Foreign Investment Review Act</i> , L/5504, adopted 7 February 1984
Canada–Herring and Salmon	GATT Panel Report, <i>Canada–Measures Affecting Exports of Unprocessed Herring and Salmon</i> , L/6268, adopted 22 March 1988
China–Audiovisual (AB)	Appellate Body Report, <i>China–Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products</i> , WT/DS363/AB/R, adopted 19 January 2010
China–Audiovisual (Panel)	Panel Report, <i>China–Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products</i> , WT/DS363/R and Corr.1, adopted 19 January 2010, as modified by Appellate Body Report WT/DS363/AB/R
EC–Asbestos (AB)	Appellate Body Report, <i>European Communities–Measures Affecting Asbestos and Asbestos-Containing Products</i> , WT/DS135/AB/R, adopted 5 April 2001
EC–Asbestos (Panel)	Panel Report, <i>European Communities–Measures Affecting Asbestos and Asbestos-Containing Products</i> , WT/DS135/R and Add.1, adopted 5 April 2001, as modified by Appellate Body Report WT/DS135/AB/R
EC–Bananas III (AB)	Appellate Body Report, <i>European Communities–Regime for the Importation, Sale and Distribution of Bananas</i> , WT/DS27/AB/R, adopted 25 September 1997
EC–Bananas III (Ecuador)	Panel Report, <i>European Communities–Regime for the Importation, Sale and Distribution of Bananas, Complaint by Ecuador</i> , WT/DS27/R/ECU, adopted 25 September 1997, as modified by Appellate Body Report WT/DS27/AB/R

EC–Biotech	Panel Report, <i>European Communities–Measures Affecting the Approval and Marketing of Biotech Products</i> , WT/DS291/R, WT/DS292/R, WT/DS293/R, Add.1 to Add.9, and Corr.1, adopted 21 November 2006
EC–Sardines (AB)	Appellate Body Report, <i>European Communities–Trade Description of Sardines</i> , WT/DS231/AB/R, adopted 23 October 2002
EC–Sardines (Panel)	Panel Report, <i>European Communities–Trade Description of Sardines</i> , WT/DS231/R and Corr.1, adopted 23 October 2002, as modified by Appellate Body Report WT/DS231/AB/R
EEC–Oilseeds I	GATT Panel Report, <i>European Economic Community–Payments and Subsidies Paid to Processors and Producers of Oilseeds and Related Animal-Feed Proteins</i> , L/6627, adopted 25 January 1990
India–Autos (Panel)	Panel Report, <i>India–Measures Affecting the Automotive Sector</i> , WT/DS146/R, WT/DS175/R and Corr.1, adopted 5 April 2002
India–QR (AB)	Appellate Body Report, <i>India–Quantitative Restrictions on Imports of Agricultural, Textile and Industrial Products</i> , WT/DS90/AB/R, adopted 22 September 1999
India–QR (Panel)	Panel Report, <i>India–Quantitative Restrictions on Imports of Agricultural, Textile and Industrial Products</i> , WT/DS90/R, adopted 22 September 1999, upheld by Appellate Body Report WT/DS90/AB/R
Japan–Alcoholic Beverages II (AB)	Appellate Body Report, <i>Japan–Taxes on Alcoholic Beverages</i> , WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R, adopted 1 November 1996
Japan–Alcoholic Beverages II (Panel)	Panel Report, <i>Japan–Taxes on Alcoholic Beverages</i> , WT/DS8/R, WT/DS10/R, WT/DS11/R, adopted 1 November 1996, as modified by Appellate Body Report WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R
Japan–Film	Panel Report, <i>Japan–Measures Affecting Consumer Photographic Film and Paper</i> , WT/DS44/R, adopted 22 April 1998

Korea–Beef (AB)	Appellate Body Report, <i>Korea–Measures Affecting Imports of Fresh, Chilled and Frozen Beef</i> , WT/DS161/AB/R, WT/DS169/AB/R, adopted 10 January 2001
US–FSC (AB)	Appellate Body Report, <i>United States–Tax Treatment for “Foreign Sales Corporations”</i> , WT/DS108/AB/R, adopted 20 March 2000
US–FSC (Panel)	Panel Report, <i>United States–Tax Treatment for “Foreign Sales Corporations”</i> , WT/DS108/R, adopted 20 March 2000, as modified by Appellate Body Report WT/DS108/AB/R
US–FSC 21.5 (EC)	Panel Report, <i>United States–Tax Treatment for “Foreign Sales Corporations”–Recourse to Article 21.5 of the DSU by the European Communities</i> , WT/DS108/RW, adopted 29 January 2002, as modified by Appellate Body Report WT/DS108/AB/RW
US–Gambling (AB)	Appellate Body Report, <i>United States–Measures Affecting the Cross-Border Supply of Gambling and Betting Services</i> , WT/DS285/AB/R, adopted 20 April 2005
US–Gambling (Panel)	Panel Report, <i>United States–Measures Affecting the Cross-Border Supply of Gambling and Betting Services</i> , WT/DS285/R, adopted 20 April 2005, as modified by Appellate Body Report WT/DS285/AB/R
US–Malt Beverages	GATT Panel Report, <i>United States–Measures Affecting Alcoholic and Malt Beverages</i> , DS23/R, adopted 19 June 1992
US–Nicaraguan Trade	GATT Panel Report, <i>United States–Trade Measures Affecting Nicaragua</i> , L/6053, 13 October 1986, unadopted
US–Reformulated Gasoline (AB)	Appellate Body Report, <i>United States–Standards for Reformulated and Conventional Gasoline</i> , WT/DS2/AB/R, adopted 20 May 1996
US–Reformulated Gasoline (Panel)	Panel Report, <i>United States–Standards for Reformulated and Conventional Gasoline</i> , WT/DS2/R, adopted 20 May 1996, as modified by Appellate Body Report WT/DS2/AB/R

US-Shrimp (AB)	Appellate Body Report, <i>United States-Import Prohibition of Certain Shrimp and Shrimp Products</i> , WT/DS58/AB/R, adopted 6 November 1998
US-Shrimp (Panel)	Panel Report, <i>United States-Import Prohibition of Certain Shrimp and Shrimp Products</i> , WT/DS58/R and Corr.1, adopted 6 November 1998, as modified by Appellate Body Report WT/DS58/AB/R
US-Shrimp 21.5 (AB)	Appellate Body Report, <i>United States-Import Restrictions on Shrimp and Certain Shrimp Products, Recourse to Article 21.5 of the DSU by Malaysia</i> , WT/DS58/AB/RW, adopted 21 November 2001
US-Taxes on Automobiles	GATT Panel Report, <i>United States-Taxes on Automobiles</i> , DS31/R, 11 October 1994, unadopted
US-Tuna I	GATT Panel Report, <i>United States-Restrictions on Imports of Tuna</i> , DS21/R, DS21/R, 3 September 1991, unadopted

LIST OF ABBREVIATIONS

AB	Appellate Body
AWG-LCA	Ad Hoc Working Group on Long-term Cooperative Action
AWG-KP	Open-ended Ad Hoc Working Group of Parties to the Kyoto Protocol
BIT	Bilateral Investment Treaty
BTA	Border Tax Adjustments
CARIFORUM	Caribbean Forum
CDS	Credit Default Swap
CFC	Chlorofluorocarbons
CH ₄	Methane
CMP	Conference of the Parties to the Convention Serving as the Meeting of the Parties to the Kyoto Protocol
CO ₂	Carbon Dioxide
COP	Conference of the Parties to the UNFCCC
DSU	Dispute Settlement Understanding
EC	European Community
EEC	European Economic Community
EITs	Economies In Transition
EPA	Economic Partnership Agreement
EU	European Union
FCN Treaties	Treaties of Friendship, Commerce and Navigation

FSAP	Financial Sector Assessment Program
FTA	Free Trade Agreement
G-10	Group of Ten
G-20	Group of Twenty
G-8	Group of Eight
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GHG	Greenhouse Gas(es)
HCFC	Halogenated Chlorofluorocarbons
HFC	Hydrofluorocarbons
ICAO	International Civil Aviation Organization
ICJ	International Court of Justice
ICSID	International Centre for Settlement of Investment Disputes
ILC	International Law Commission
IMF	International Monetary Fund
IMO	International Maritime Organization
INC	Intergovernmental Negotiating Committee for a Framework Convention on Climate Change
IPCC	Intergovernmental Panel on Climate Change
LULUCF	Land Use, Land Use Change and Forestry
MFN	Most Favoured Nation
N ₂ O	Nitrous Oxide

NAFTA	North American Free Trade Agreement
ODS	Ozone-Depleting Substances
PCIJ	Permanent Court of International Justice
PFC	Perfluorocarbons
PPM	Processes or Production Methods
QTL-requirements	Qualification Requirements and Procedures, Technical Standards and Licensing Requirements
Qelro, qelrc or qelro	Quantified Emission Limitation and Reduction Commitments/Obligations
SBI	Subsidiary Body for Implementation
SCM	Subsidies and Countervailing Measures
SF ₆	Sulphur Hexafluoride
SWF	Sovereign Wealth Fund
TBT	Technical Barriers to Trade
UK	United Kingdom
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNCTAD	United Nations Conference on Trade and Development
UNFCCC	United Nations Framework Convention on Climate Change
US	United States
USSR	Union of Soviet Socialist Republics
WTO	World Trade Organization

INTRODUCTION

For as long as states have existed, there has been a need for rules and principles to govern inter-state relations. From the 17th century onwards, inter-state relations have been organized around the concept of state sovereignty. Sovereignty means that every state has the ultimate authority to determine its domestic affairs to the exclusion of other states.² This concept is integral to the traditional conception of international law's nature as a liberal system of states that recognizes the existence of a "private sphere" in which each state is free to decide for itself on the social, economic and political structure of its domestic society. Any limitations on this freedom require the state's consent.

The fact that states are territorially distinct does not guarantee that each is immune from the actions or omissions of other states. An international legal system heralding state sovereignty inevitably leads to "a collision of sovereignties".³ Such collisions manifest themselves when states' actions or omissions within their own territory adversely affect other states. For example, transboundary air currents, rivers or aquifers can transfer pollution or disease across state borders, with the ability to harm human, animal and/or plant health. In such situations, states downwind or downriver depend on the state of origin to remove the source of pollution or to contain the outbreak.

When states find themselves in a situation in which other states' actions or omissions affect them, they are interdependent. Interdependence stems from the emergence of issues that fall outside the scope of any one state's regulatory capacity, because they are global in nature or because their underlying causes fall within one state's jurisdiction but their consequences occur in another. Examples are myriad, and include the need to deal with migration issues, to maintain international peace and security, to respond to transboundary and global environmental problems, to ensure air transport and maritime shipping links between states or to prevent the spread of contagious diseases.

In recent decades, interdependence between sovereign states has been increasing,⁴ due to changes in the intensity and types of problems of interdependence. This development can be

² See Chapter 3, Section I.

³ Wildhaber, "Sovereignty and International Law", in Macdonald and Johnston (Eds.), *The Structure and Process of International Law: Essays in Legal Philosophy Doctrine and Theory* (1986), 444.

⁴ Schrijver, *Sovereignty over Natural Resources: Balancing Rights and Duties* (1997), 256; Gillespie, "International Environmental Law and Policy", in Bosselmann and Grinlinton (Eds.), *Environmental Law for a Sustainable Society* (2002), 75; Sobel, *Political Economy and Global Affairs* (2006), 70.

attributed to a number of factors. Interdependence has intensified because improvements in international transport and communications have increased the frequency of interactions between, on the one hand, states and private persons⁵ within their jurisdiction and, on the other hand, other states and private persons in the jurisdiction of other states. These innovations have also reorganized commerce through transnational investment, production and supply chains, and cross-border capital and information flows. A further, related source of increasing interdependence is the international character of policy decisions that were previously limited to states' territories. This international character arises because of trade liberalization. Trade reduces states' regulatory options when they want to protect their environment or economy from the adverse impact of goods, services and capital or the adverse impact of the production processes of those goods or the supply methods of those services. Legally, states can still regulate their domestically produced goods or their domestic services and service suppliers. However, concerns about the competitiveness of domestic producers or service providers when other states adopt regulation that is more lenient, or no regulation at all, may reduce their willingness to regulate. Hence, states now frequently depend on other states to achieve effective regulation of private economic actors involved in international trade.

This thesis uses climate change mitigation and macro-financial instability as examples of increasing interdependence. As Strange pointed out at the end of the 20th century:⁶

There are now two serious threats that jeopardize civilization and the life chances of our children and grandchildren –both “threats without enemies”. The worst threat –if we take a long-term view of life on this planet– is the environmental one. [...] But though the ecological threats to humanity are certainly the most serious, they are a comparatively long-term threat. Whereas if confidence in the financial system were to collapse, causing credit to shrink and world economic growth to slow to zero, that is a much more immediate threat.

In each case study, a failure to act could undermine stability worldwide. However, climate change and macro-financial instability exceed the regulatory capacity of individual states. This is clear in the case study on climate change mitigation. The Earth's atmosphere cannot be parcelled up along state boundaries, and the effects of climate change triggered by greenhouse gas emissions do not necessarily occur where these gases have been emitted. In contrast, problems of macro-financial instability do not inherently exceed an individual state's regulatory capacity, but often do because of the increasing integration of domestic financial systems. In both case studies, trade liberalization agreements limit states' ability to regulate unilaterally if this

⁵ The reference to private persons includes both natural persons and legal persons.

⁶ Strange, *Mad Money: When Markets Outgrow Governments* (1998), 2.

regulation has trade restrictive effects. These legal limits often restrict states' willingness to regulate their domestic private economic actors unilaterally due to concerns about maintaining the competitiveness of these actors over their foreign competitors in an increasingly integrated global economy. Thus, if their unilateral regulation cannot have trade restrictive effects, states depend on each other to develop a co-ordinated response.

A central question for this thesis is whether the rules and principles governing the exercise of state sovereignty enable states to respond, multilaterally or unilaterally, to the pressures caused by increasing interdependence. It will be argued that the current rules and principles on the exercise of state sovereignty create obstacles towards unilateral and multilateral responses.

I. THE THEORETICAL FRAMEWORK

The reality of increasing interdependence means that it is more important than ever to find a balance between a state's sovereignty and the need to constrain state sovereignty because of the possibility that a state's actions or omissions affect other states and their inhabitants. Traditionally, states have organized their relations around the concept of state sovereignty and have recognized that sovereignty is not an absolute but a relative concept, inherently limited by the equal sovereignty of other states.⁷ States can also attempt to balance competing exercises of state sovereignty through international agreements in which they agree on specific limits in the exercise of state sovereignty. Since World War II, the number of international agreements has grown considerably.⁸ However, international agreements do not cover every area of increasing interdependence. Some areas, such as trade liberalization, have been the subject of extensive agreements in which states accept obligations to remove tariffs and non-tariff barriers to trade. The limits on non-tariff barriers to trade are particularly significant because they restrict states' ability to regulate trade-related issues where states have yet to consent to effective limits on the exercise of state sovereignty, such as climate change mitigation and macro-financial stability.

The phenomenon of increasing interdependence thus exposes a fault-line beneath inter-state relations. Pressure on this fault-line is building. Pulling in one direction is the need for co-operative responses to international problems. Pulling in the other direction is an international legal system based on state sovereignty that requires consent to international obligations. To

⁷ Lauterpacht, "Sovereignty-Myth or Reality?", 73 *International Affairs* 137 (1997), 140-141, 149; Schermers, "Different Aspects of Sovereignty", in Kreijen (Ed.) *State, Sovereignty, and International Governance* (2002), 185.

⁸ A prominent example is the United Nations Convention on the Law of the Sea. Trade liberalization agreements, such as the WTO Agreement, are responses to the need to act jointly to reduce tariffs and quota.

relieve this pressure, this thesis argues that liberal principles should continue to govern interstate relations. A central concept in liberal theory is “freedom”. To understand what freedom should entail, a crucial distinction is the one made by Berlin⁹ between positive freedom to act and negative freedom from external interference.

As will be explained, Berlin considered negative freedom to be the most important conception of freedom. The case studies on climate change mitigation and macro-financial stability analyse the rules and principles governing the exercise of state sovereignty, and reveal that they prioritize protection of states’ positive freedom rather than their negative freedom. The emphasis on positive freedom is unproblematic as long as there are few transboundary impacts of states’ actions or omissions, or few problems requiring state co-operation. In those situations, protection of positive freedom will also protect negative freedom. However, in increasing interdependence, one state’s actions or omissions often affect another state’s negative freedom.

While the preference for positive freedom may provide a clear principle to guide a state’s exercise of its sovereignty, it ultimately undermines not only negative freedom but also positive freedom, as the impact of one state’s actions or omissions can narrow another state’s ability to exercise its sovereignty. This is because the required balance is not just between one state’s freedom to do X and another state’s freedom from the negative impact of X. The negative impact of X may inhibit the freedom to do Y. For example, state A’s decision not to regulate greenhouse gas emissions can reduce the regulatory options available to state B. In theory, state B retains the choice between regulating or not. However, regulation can negatively affect the competitiveness of its domestic industries. State B might therefore find regulation unattractive. Thus, while legally speaking states’ positive freedom is protected, this will in reality only be true for large and strong states that by virtue of their size and strength are immune to other states’ actions or omissions. As interdependence increases, the question becomes how many states truly fit that description.

The impact of the imbalance between states’ positive and negative freedom affects states’ ability to co-exist in a pluralistic society of states. “Co-existence” requires that states recognize that they exist together and that respect is due to each other’s existence. Ensuring co-existence is important because of the differences between states. The more frequent interactions between states in increasing interdependence and the fact that many of the new states created during the second half of the 20th century are considerably less powerful than the older states have only

⁹ Berlin, *Liberty: Incorporating ‘Four Essays on Liberty’* (2002).

made these differences more visible. Because of these differences, it remains important that each state has its own space in which it can take policy decisions adapted to its particular needs and those of its population.

In addition, the imbalance between states' positive and negative freedom creates disincentives towards co-operation, despite the necessity of co-operation for the provision of global public goods such as climate change mitigation and macro-financial stability. Although states may share the need for effective responses to international problems, their individual interests in the specific steps required for co-operation to arise and succeed are often very different, if not wholly incompatible. So, while states may agree on a destination, they often strongly disagree on the route to be taken towards that destination and on who should be carrying the load along that journey. For example, states now agree on the significance of the challenge posed by climate change and even on the need to keep temperature increases to 2°C above pre-industrial levels. Nevertheless, disagreements remain on which states should bear the costs of the required emission reductions and on how much each state should contribute. Endless discussions about the journey can make it very difficult to reach the destination. To the extent that effective responses to international problems require direct limits on states' positive freedom, they require the consent of all states that need to co-operate. The analyses in the case studies will illustrate that maintaining broad positive freedom in a liberalized global economy can hinder adequate co-operative responses to international problems, because the states whose actions or omissions have a negative impact abroad have to make significant sacrifices when agreeing to limits on the exercise of their sovereignty. Moreover, affecting states, even developing ones, will be in a stronger bargaining position than affected states when it comes to concluding agreements, because the latter cannot unilaterally avoid the negative impact and may thus be more inclined to make concessions.

Despite the need for limits on the exercise of state sovereignty in increasing interdependence, the priority given to states' positive freedom erodes state sovereignty's relative nature. This affects states' "decisional sovereignty", which encapsulates the idea that a state should be able to decide what acts take place within its territory.

Decisional sovereignty is related to, but not congruent with, the idea of self-determination. Self-determination requires the ability of states' inhabitants, acting collectively, to decide on their

political structure and their economic, social and cultural policies without outside interference.¹⁰ When international lawyers discuss self-determination, they often refer to the “principle of self-determination”. Over the years, this principle has promoted the creation of homogenous nation-states (national self-determination), provided the legal conceptual basis for decolonization after World War II (peoples’ self-determination) and, in its latest incarnation, promoted the human right of self-determination.¹¹ The goal behind each of these variations is to ensure that states duly represent their populations. In increasing interdependence, even states that closely represent their populations cannot create the necessary conditions for self-determination, because all states are affected by other states’ actions or omissions. Decisional sovereignty is broader than self-determination. The aim of decisional sovereignty is not only to align states and their populations, but also to ensure that decisions affecting a state’s population are taken by that state rather than by external actors unaccountable to its population.

Having argued that liberal principles should govern inter-state relations to ensure states’ co-existence and co-operation, the thesis argues that the current rules and principles on the exercise of state sovereignty are not robust enough to support a liberal system of states. The question then becomes how to bring about such a system. Given that international law’s prioritization of the protection of states’ positive freedom over the protection of their negative freedom is incompatible with the demands of a liberal system, how and to what extent can the exercise of state sovereignty be limited to avoid adverse effects on other states’ domestic affairs?

The reflexive response of many international lawyers to a perceived need for limits on the exercise of state sovereignty is to advocate the development of multilateral agreements. Alvarez describes the role of multilateralism for international lawyers as “our shared secular religion”.¹² However, this focus on multilateralism fails to account for the disincentives towards co-operation that exist because of the emphasis on states’ positive freedom over their negative freedom. In both case studies, the development and implementation of co-operative responses

¹⁰ UN General Assembly, *Declaration on the Granting of Independence to Colonial Countries and Peoples*, GA Res. 1514, UN GAOR, 15th sess, 947th plen mtg (1960); UN General Assembly, *Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations*, GA Res. 2625, UN GAOR, 25th sess, 1883rd plen mtg (1970); Thürer and Burri, “Self-Determination”, in Wolfrum (Ed.) *The Max Planck Encyclopedia of Public International Law*, at <www.mpepil.com>; Peters, “Humanity as the A and Ω of Sovereignty”, 20 *European Journal of International Law* 513 (2009), 541.

¹¹ Casanovas, *Unity and Pluralism in Public International Law* (2001), 131-135; Falk, “Self-Determination under International Law: The Coherence of Doctrine Versus the Incoherence of Experience”, in Danspeckgruber (Ed.) *The Self-Determination of Peoples: Community, Nation and State in an Interdependent World* (2002), 32; McWhinney, *Self-Determination of Peoples and Plural-Ethnic States in Contemporary International Law: Failed States, Nation-Building and the Alternative, Federal Option* (2007), 2.

¹² Alvarez, “Multilateralism and Its Discontents”, 11 *European Journal of International Law* 393 (2000), 394.

has featured prominently on the international agenda in recent years. Yet, existing international responses are ineffective or incomplete, leaving states vulnerable to the threats of catastrophic climate change and macro-financial instability.

This thesis argues that better protection of states' negative freedom in increasing interdependence could be achieved through a more evolutionary and incremental process of reinterpretation. The aim is to rebalance the existing rules and principles on the exercise of state sovereignty. This rebalancing would take place through various formal and informal dialectical processes in which a wide variety of actors through interaction and argument refine the limits on the exercise of state sovereignty in increasing interdependence. Formal processes are, for example, inter-state discussions at an international conference or dispute settlement by an international adjudicator. Examples of informal processes are informal diplomatic interactions between states or the influence non-state actors, such as non-governmental organisations, have when lobbying states, international organisations or public opinion.

Dialectical processes alone are insufficient to achieve a liberal system of states; substantive concepts are needed to give these processes normative direction. Accordingly, this thesis identifies a set of "interstitial norms" that can drive the reinterpretation of rules and principles governing the exercise of state sovereignty towards a liberal system of states. "Interstitial norms" have been described by Lowe as norms that operate "in the interstices between [...] primary rules" when these rules compete for application to a specific set of facts.¹³ Three interstitial norms are advanced here. The first is locality, which holds that states should be able to take action if an act takes place within their territory or if an act has effects within their territory. This norm would allow states to act when their negative freedom is adversely affected. However, actions in accordance with the norm of locality can still have an adverse impact on other states' negative freedom, because an act and its effects do not necessarily occur within the same territory. Therefore, the two additional norms of reasonableness and good neighbourliness further limit the exercise of states' positive freedom. States should avoid the situation whereby the exercise of their positive freedom adversely affects their "neighbours". This term is understood broadly and therefore not limited to states that physically border each other. If adverse effects on other states are inevitable, states should ensure that these effects remain within reasonable bounds.

¹³ Lowe, "The Politics of Law-Making: Are the Method and Character of Norm Creation Changing?", in Byers (Ed.) *The Role of Law in International Politics* (2000), 213-214.

Removing the current preference for positive over negative freedom will increase the likelihood of collisions of sovereignty. Although these collisions may go against the idea of fostering co-existence between states, they are not necessarily a bad evolution. Rather, the collisions can catalyse the development of more, and more successful, international agreements governing the exercise of state sovereignty by raising states' awareness of the interconnected nature of their interests. Rebalancing states' freedoms through reinterpretation based on interstitial norms thus has the advantage of "ripening" international responses to international problems.

II. THE CASE STUDIES

The thesis explores the challenges of ensuring a liberal system of states in the specific contexts of climate change mitigation and macro-financial instability. The analysis distinguishes between "direct limits" on the exercise of state sovereignty and "limits on the legality of defensive mechanisms".

Direct limits take the form of "Do not do X" or "Do X". They can be found in international agreements that deal directly with climate change mitigation, such as the Kyoto Protocol, or with macro-financial stability, such as the IMF Articles of Agreement. These limits are intended to forestall an exercise of state sovereignty causing adverse impacts in other states or undermining the achievement of a global public good. The thesis argues that there is a lack of direct limits in each of the case studies, which results in a broad protection of states' positive freedom.

Defensive mechanisms are an alternative way of balancing states' positive and negative freedom. The legality of defensive mechanisms in international law is determined by rules and principles that take the form of "a State may do X to avoid an adverse external impact". Defensive mechanisms allow states that are (potentially) affected by another state's actions or omissions to regulate in protection of their sovereignty. Defensive mechanisms can be reactive as well as preventive. States can thus rely upon defensive mechanisms even before they experience the adverse impact. Defensive mechanisms are particularly important to protect states' domestic affairs against another state's actions or omissions when no direct limits are available to restrict how the latter exercises its sovereignty. They can also complement existing direct limits on the exercise of state sovereignty when these are not sufficient to eliminate all adverse effects. Because defensive mechanisms focus on the protection of the affected state's domestic affairs, they are preferable over direct limits to deal with complex problems of increasing interdependence. Direct limits on one state are crude instruments to protect other states' domestic affairs; they restrict a state's behaviour even if it does not affect another state's

domestic affairs. In contrast, defensive mechanisms are only available when a state (potentially) experiences an adverse effect.

Given the argument that international law overprotects states' positive freedom, studying the legality of defensive mechanisms may seem contradictory. However, the issue is highly relevant because trade liberalization agreements horizontally allocate jurisdiction over trade-related areas,¹⁴ such as climate change mitigation and macro-financial instability. Often, these agreements restrict a state's exercise of its sovereignty in protection of its domestic affairs in increasing interdependence, and lead to insufficient protection of states' negative freedom. They thus constitute legal limits on the legality of defensive mechanisms.

The trade liberalization agreements studied to assess the limits on the legality of defensive mechanisms are, firstly, the multilateral agreements under the WTO umbrella, such as GATT and GATS. Due to the lack of progress in the WTO's Doha Round, the momentum of trade liberalization has now shifted to bilateral trade liberalization agreements.¹⁵ The case studies will therefore also look into two bilateral free trade agreements (FTAs): the US–Korea FTA and the EU–Korea FTA. These bilateral FTAs have been chosen for several reasons. First, the US and the EU are at the forefront of FTA negotiations, often pushing for more liberalization than has been agreed within the WTO. Second, both are recent agreements that in the case of the EU exhibit a new strategy, particularly in the area of services.¹⁶ Of the various US FTAs, the US–Korea FTA goes the furthest in relation to financial services trade liberalization.¹⁷ Finally, choosing agreements with the same state, i.e. Korea, reduces potential distortions in the comparison between the EU and the US approaches due to differences between their respective counterparties.

All the trade liberalization agreements studied contain disciplines for states regarding market access and regulation of foreign goods, services or service suppliers. The US–Korea FTA also contains disciplines on the regulation of financial investments. The agreements further provide

¹⁴ Trachtman, "Institutional Linkage: Transcending "Trade And ...", 96 *American Journal of International Law* 77 (2002), 80; Horn and Mavroidis, "The Permissible Reach of National Environmental Policies", 42 *Journal of World Trade* 1107 (2008), 1108.

¹⁵ McRae, "Book Review: The Evolution of the Trade Regime: Politics, Law, and Economics of the GATT and the WTO", 104 *American Journal of International Law* 334 (2010), 335.

¹⁶ European Commission DG Trade, "EU-Korea FTA: A Quick Reading Guide" (October 2010), at <http://trade.ec.europa.eu/doclib/docs/2009/october/tradoc_145203.pdf>, 1, 7.

¹⁷ Public Citizen, *Fixes to Problematic Foreign Investor, Financial Deregulation Provisions in Bush's Korea FTA Text Could Limit Prospective Damage, Start Obama's Promised Trade Reforms*, at <<http://www.citizen.org/documents/Talkingpointsinvestmentand%20financiaservices10.pdf>>, 4.

exceptions that allow trade-restrictive regulation in response to specific societal needs. The exceptions thus protect states' domestic affairs against negative impacts of another state's actions or omissions in relation to these specific societal needs. As a result, the balance between liberalization commitments and the exceptions to those commitments contained in trade liberalization agreements is crucial to determine whether international law can function as a liberal system in increasing interdependence. The thesis argues that the scope of the available exceptions is insufficiently broad to counterbalance states' liberalization commitments whenever trade exposes states' domestic affairs to the adverse impact of other states' actions or omissions.

Theoretically, new direct limits in response to problems of increasing interdependence could remedy the imbalance between states' positive and negative freedom. Depending on the situation, these limits would either force states to refrain from certain actions or to engage in specific actions such as the regulation of economic actors within their territory. However, the existing imbalance in favour of positive freedom combined with the requirement of sovereign consent to international obligations complicates the development of new direct limits.

Instead, the thesis proposes to reinterpret the limits on the legality of defensive mechanisms, guided by the interstitial norms of locality, reasonableness and good neighbourliness, as the preferred solution to correct the existing imbalance between states' positive and negative freedom. The main legal obstacle to the implementation of defensive mechanisms currently lies in the interpretation of inherently abstract concepts, such as "likeness" or "necessity", that determine the application of crucial provisions of trade liberalization agreements. To lower the existing obstacles to the legality of defensive mechanisms, the thesis suggests different interpretations of these concepts that are compatible with the text of the trade liberalization agreements as well as with the objective of ensuring that liberal principles govern inter-state relations.

Reinterpretation of the limits in trade liberalization agreements on the legality of defensive mechanisms is a dynamic process that can take place, for example, through consultations between parties to the agreements, through formal dispute settlement or through discussions within the various other committees created under the agreements. Ideally, a reinterpretation of the rules and principles governing the exercise of state sovereignty will lead the affecting state to change the policies that cause the adverse impact. Moreover, looser limits on the legality of defensive mechanisms will allow affected states to protect non-trade values through domestic regulation, even if their regulation is trade restrictive. Using defensive mechanisms, affected

states can protect their domestic affairs against the adverse impact of another state's actions or omissions. Thus, the affected states do not depend on the affecting state to change its policies.

III. ROADMAP TO THE THESIS

This thesis is divided in two Parts. Part I analyses the impact of increasing interdependence on the international system of sovereign states that has traditionally been seen as liberal.¹⁸ It demonstrates that general international law currently does not support a liberal system of states because of imbalances between states' positive freedom and other states' negative freedom. Part II then addresses how the legal system of sovereign states can be reconfigured as a liberal one, even in situations of increasing interdependence such as climate change mitigation and macro-financial stability.

Part I contains three Chapters that analyse the core building blocks of this thesis. Chapter 1 discusses the increasing interdependence between states. As the examples of climate change mitigation and macro-financial instability will illustrate, states are increasingly affected by other states' policy decisions and rely on each other for co-ordinated responses to a growing number of transboundary problems. However, as both case studies show, developing such responses is very difficult in practice.

Chapter 2 argues that liberal principles should guide inter-state relations in situations of increasing interdependence. Liberal principles dictate that protection of states' negative freedom takes priority over protection of their positive freedom. This argument is supported by an examination of the core tenets of a liberal system and of the reasons why a liberal system of states remains important in increasing interdependence.

Chapter 3 proposes a more sophisticated approach to the premise that the international legal system is based on the concept of state sovereignty. This Chapter emphasises that state sovereignty is a relative concept, inherently limited by the equal sovereignty of other states. However, the current rules and principles on the exercise of state sovereignty impose few limits on a state's exercise of its sovereignty, even if needed to protect the sovereignty of other states. The principles establishing states' freedom to act, such as the Lotus Principle according to which

¹⁸ Weil, "Towards Relative Normativity in International Law?", 77 *American Journal of International Law* 413 (1983), 419; Carty, *The Decay of International Law?: A Reappraisal of the Limits of Legal Imagination in International Affairs* (1986), 88; Henkin, *International Law: Politics and Values* (1995), 97, 100-101, 104; Simpson, "Two Liberalisms", 12 *European Journal of International Law* 537 (2001), 540-541; Koskenniemi, *From Apology to Utopia: The Structure of International Legal Argument* (2005), 93-94; Sandholtz and Stiles, *International Norms and Cycles of Change* (2009), 20-21.

states are presumed free to exercise their sovereignty within their territory, have a very wide reach. Further, the few limits that exist to avoid a situation in which a state's exercise of its sovereignty adversely affects other states are interpreted narrowly. These limits are only available for limited categories of adverse effects and require the affected state to establish a causal link between the effect and another state's actions or omissions. In situations of increasing interdependence, these conditions are often difficult to fulfil. The combined effect is that state sovereignty is not as relative as often thought. Linking back to Chapter 2, Chapter 3 further argues that the weakened relative nature of state sovereignty is incompatible with the requirements of a liberal system of states.

Having established in Part I that the reality of increasing interdependence undermines the argument that international law is a liberal system of sovereign states, the six chapters of Part II address the question how a liberal system of sovereign states can be ensured despite increasing interdependence.

Chapter 4 examines the dialectical processes of normative change, and identifies locality, reasonableness and good neighbourliness as the interstitial norms that can serve as substantive drivers of these processes.

Chapter 5 employs these interstitial norms to propose possible substantive outcomes of the various formal and informal processes through which rules and principles of general international law governing the exercise of state sovereignty can be reinterpreted. The goal is to ensure that these rules and principles contain the necessary limits to guarantee that sovereignty is a relative concept in increasing interdependence, so as to reduce the possibility of a state's actions or omissions adversely affecting other states.

The four remaining Chapters of Part II examine for each of the case studies the balance between states' positive and negative freedom that results from the application of direct limits and limits on the legality of defensive mechanisms. The thesis establishes that specialized international law contains few direct limits on the exercise of state sovereignty to ensure that a state takes steps to reduce greenhouse gas emissions (Chapter 6) or to ensure that the necessary measures are in place to protect macro-financial stability (Chapter 8). In addition, trade liberalization agreements impose limits on the legality of defensive mechanisms. The climate change mitigation case study in Chapter 7 analyses the provisions related to the trade in goods in the context of the WTO and in the FTAs. The provisions liberalizing trade in financial services in the GATS and in the services chapters in the FTAs are the topic of the macro-financial instability case study in Chapter 9. The obligations these agreements impose on states are traditionally

interpreted very broadly. Moreover, the available exceptions are subject to strict conditions and, as a result, insufficiently compensate for the restrictive impact of these obligations on states' ability to regulate in protection of their domestic affairs.

Before progressing further, it is useful to clarify what does not come within the scope of the core question about the balance between states' positive and negative freedom to ensure a liberal system of states in increasing interdependence.

First, the discussion of international law as a liberal system of states should not be confused with a discussion of international law as a system of liberal states. Some "liberal" theories of international relations extrapolate the focus on liberty of private actors that is typical for applications of liberalism within the domestic context of states to the international context. The position that international law should protect the individual freedoms of private actors over those of states is central to these theories.¹⁹ Moreover, these theories argue that any state that is not organized based on (Western) ideas of democracy, separation of powers, checks and balances and respect for private property²⁰ may be excluded from the international community. In this conception of a liberal theory, the adjective "liberal" thus refers to a domestic quality of the states rather than to a quality of the international system of states. Rather than promoting co-existence and co-operation, these theories want to universalise values that are not currently shared by all actors. Due to their anti-pluralist "intolerance of the illiberal",²¹ these theories are not as liberal as their name suggests.²²

Individual states' liberal credentials are not a central concern of this thesis. The focus is on the liberal nature of international law as a legal system governing states' interactions. A liberal system of international law does not require a system of liberal states. States' adherence to liberalism internally does not necessarily overlap with adherence to liberalism externally, and vice versa. Internally illiberal states can act in a liberal way externally. As Koskeniemi points out, "it is a paradox that many writers or statesmen who most deplore the Western intellectual heritage are most anxious to universalize it under a rigid international system of sovereign

¹⁹ Arguments along these lines can be found in Teson, "The Kantian Theory of International Law", 92 *Columbia Law Review* 53 (1992), 54 and Slaughter, "International Law in a World of Liberal States", 6 *European Journal of International Law* 503 (1995), 504-505.

²⁰ Richardson, "Contending Liberalisms: Past and Present", 3 *European Journal of International Relations* 5 (1997), 5.

²¹ Simpson, *Great Powers and Outlaw States: Unequal Sovereigns in the International Legal Order* (2004), 78.

²² Gray, *Two Faces of Liberalism* (2000), 2-3 describes this tension as the "two faces of liberalism".

equality.”²³ For example, China is one of the strongest proponents of the principle of non-intervention, the international equivalent of the classical liberal argument for autonomy in the private space. Yet internally China is far from a liberal state. At the same time, the empirical foundations for claims that internally liberal states are also externally liberal are debated,²⁴ as the external behaviour of some internally liberal states can hardly be said to be consistently liberal. Some internally liberal states, such as the US, have historically shown disregard for the sovereignty of other states and for international law in general.²⁵

Second, although the study of the legality of defensive mechanisms under trade liberalization agreements involves an analysis of the balance struck in these agreements between trading obligations and regulatory autonomy, the thesis focuses only on a subset of situations in which trading obligations can conflict with regulatory autonomy. The tension between trade and regulatory autonomy arises in a wide range of situations in which the exercise of regulatory autonomy has some impact on trade. For example, trade can be affected by quantitative and qualitative restrictions on the goods or services offered on the domestic market, by subsidies to domestic production or by government procurement policies favouring domestic production. The focus in this thesis is on trade as a contributor to increasing interdependence and on the restrictions trade liberalization agreements impose on states’ unilateral regulation to keep goods or services that contribute to a transboundary problem out of their domestic markets.

Finally, despite its focus on better protection of states’ negative freedom, the thesis does not advocate a blind return to a state-centred system of international relations. In a liberal system of states, states cannot have absolute rights to exercise their sovereignty or unlimited positive freedom, as they cannot disregard the equal rights of other states. An absolute approach to the exercise of sovereignty is unsustainable and incompatible with the idea of international law.

Instead, the ultimate aim of this thesis is more progressive. The goal is to incentivize cooperation between states when needed. It will be argued that rebalanced rules and principles governing the exercise of state sovereignty have the potential to force states to take into account the costs of their actions when these have, or threaten to have, a negative impact on other states. An important cost that arises out of reinterpreted limits on the legality of defensive mechanisms

²³ Koskenniemi, *supra* note 18, 156-157.

²⁴ Reus-Smit, “The Strange Death of Liberal International Theory”, 12 *European Journal of International Law* 573 (2001), 588-589.

²⁵ Simpson, *supra* note 18, 565.

is that states affected by another state's actions or omissions will be able to restrict trade in response. The exclusion of the affecting state's goods, services or service suppliers can be a significant factor for this state to improve its regulatory framework and to co-operate with other states when needed. To take the climate change case study as an example, under the prevailing international legal framework, state A may decide to keep coal-fired electricity generation because it is not at a high risk of experiencing climate change's negative effects and because it has access to an abundant supply of cheap coal. However, if state B decides to reduce trade in goods based on the greenhouse gas intensity of the energy sources used in the production process due to its vulnerability to climate change and/or to ensure that its domestic producers switch to renewable energy sources, state A would lose access to an export market. To maintain access to state B's market, state A may want to switch towards more renewable energy sources. Of course, co-operation has yet to emerge, but at least the underlying incentives are altered.

Thus, this thesis sees state sovereignty not as the end of the analysis, but as the starting point on which to build reinterpreted international rules and principles that can function in the new reality of increasing interdependence. As Greig points out, "interdependence can be as creative of conflict and disagreement as of collaboration and consensus".²⁶ The goal is to have an international legal system that gently pushes states towards collaboration and consensus rather than towards conflict and disagreement.

²⁶ Greig, "International Community', 'Interdependence' and All That Rhetorical Correctness?", in Kreijen (Ed.) *State, Sovereignty, and International Governance* (2002), 570.

PART I. INCREASING INTERDEPENDENCE IN A LIBERAL SYSTEM OF SOVEREIGN STATES

This Part analyses how increasing interdependence challenges the traditional characterisation of the international legal system as a liberal system of states. Chapter 1 discusses how issues that were previously thought of as within states' domestic affairs have become transboundary as a result of increasing interdependence. As the climate change mitigation and macro-financial instability case studies illustrate, a state's regulatory decisions increasingly affect other states, either because the latter experience harm as a result of the decisions or because the competitiveness of their producers and service suppliers in global markets suffers. Both case studies also illustrate the difficulties getting states to agree on the development of co-operative responses to global problems.

How can international law limit the exercise of state sovereignty in increasing interdependence to ensure that a state's actions or omissions do not negatively affect other states and to ensure that co-operative responses emerge when states face global problems? Chapter 2 develops the central theoretical argument that inter-state relations should be guided by liberal principles. Integral to the idea of a liberal system is the freedom of its constituents. In the case of international law, these constituents are sovereign states. However, the concept of freedom by itself is crude and needs to be nuanced. To this end, Chapter 2 relies on Berlin's distinction between positive freedom to act and negative freedom from external interference. It is argued that a liberal system requires prioritizing states' negative over their positive freedom. The Chapter further argues that liberal principles are important for inter-state relations to ensure states' co-existence as well as their co-operation.

Chapter 3 examines the assumed reality of an international legal system premised on state sovereignty. It argues that the concept of sovereignty focuses on protecting states' ability to decide over their domestic affairs. Protection of states' "decisional sovereignty" implies that the exercise of state sovereignty is limited by the equal sovereignty of other states. In other words, states' positive freedom needs to be limited to protect other states' negative freedom. Chapter 3 argues that the traditional corollaries of state sovereignty—sovereign equality, the principle of non-intervention and sovereign consent to international obligations—illustrate how international law is historically guided by liberal principles. However, the current rules and principles on the exercise of state sovereignty in general international law are not sophisticated enough to limit the exercise of state sovereignty in situations of increasing interdependence, undermining the ideal of an liberal system of states in international law.

CHAPTER 1. THE REALITY OF INCREASING INTERDEPENDENCE

The Oxford English Dictionary defines interdependence as “the fact or condition of depending each upon the other; mutual dependence.” When states are interdependent, they find themselves in a situation where other states’ actions or omissions can significantly affect them.²⁷ While dependence is mutual, it is not necessarily equal. Due to closer links with other states or differences in relative power, some states are more sensitive to the actions of other states than others.

The four Sections in this Chapter have two goals. First, Section I discusses how interdependence between states is an inherent feature of the international law landscape and why it has been increasing in recent decades. Second, Sections II and III introduce climate change mitigation and macro-financial instability as the two case studies central to the analysis in Part II, and discuss why each of them illustrates increasing interdependence. Section IV concludes.

I. INCREASING INTERDEPENDENCE

Given that states share a single planet, interdependence has existed on some level since the creation of states. Interdependence is thus not a new challenge for international law. It can even be said that states’ interdependence necessitated the development of international law to regulate to what extent states’ actions could affect others.

In recent decades, interdependence can be said to be increasing. One reason is a simple matter of numbers. Following decolonization and the collapse of the USSR, the number of states has more than tripled. As a result, issues that were previously intra-state suddenly became transboundary.²⁸ For example, air pollution that would have been a domestic issue in the former USSR became a transboundary issue between newly independent states.

However, there is more to increasing interdependence than simply the number of states. Major technological advances have made states grow closer. Technological improvements have spurred widespread industrialization and faster transport. Better transport enables producers to access markets further away, creating the necessary scale to sustain specialization. There are, however, environmental downsides. The engines that power this faster transport emit carbon dioxide, one of the greenhouse gases (GHGs) that trigger climate change if their atmospheric

²⁷ Keohane and Nye, *Power and Interdependence*, 3rd ed. (2001), 7.

²⁸ Barrett, *Environment and Statecraft: The Strategy of Environmental Treaty-Making* (2003), 136.

concentrations rise. Intensive agriculture and industrialization increase the pressures on the natural environment, with possible transboundary implications.

Another example of an important technological advance is the development of international communications. The telephone, radio, television and the Internet have not only increased people's awareness of events on the other side of the world, they have also revolutionized business. Computer networks have enhanced global financial markets by connecting trade in different financial centres around the world. Trade in financial products or foreign exchange no longer requires physical delivery of paper-based financial instruments or of banknotes, but is done by a keystroke. Moreover, improved understanding of economic mechanisms and the availability of powerful computers have enabled the development of new financial products that repackage risk. As investors worldwide purchase these products, financial instability can easily spread from one state to another.

Increased mobility because of technological improvements spurred further questions regarding a wide range of problems. For example, given the ease with which individuals can now travel, what information should be in the travel documents they present at the border? How should a state treat foreign nationals within its territory? What can states do to fight organized crime? Can they obtain evidence in other states for a domestic criminal procedure? Who should prosecute suspected terrorists or war criminals?

The technological improvements also created a need for states to co-ordinate their behaviour.²⁹ For example, in relation to transport, states depend on each other to develop road and railroad networks that connect across boundaries and to determine whether airplanes of one state can freely travel through the airspace of another, or ships of one through the territorial waters of another state.

Two problems of interdependence central to this thesis are climate change mitigation and macro-financial instability. In both case studies, interdependence arises because one state's policies affect other states. In addition, both case studies reflect problems of a global character. The global character of climate change is obvious. Climate change is a problem that is inherently global in nature. No state can change the fact that our planet only has one atmosphere. A further problem of a global character results from the need for co-operation on the regulation of private emitters within states. In theory, states can regulate emitters within their territories. In practice,

²⁹ Delbruck, "Structural Changes in the International System and Its Legal Order: International Law in the Era of Globalization", 11 *Schweizerischen Zeitschrift für internationales und europäisches Recht* 1 (2001), 6.

however, competitiveness concerns often limit their willingness to regulate unilaterally when trading partners do not follow suit within their own territories. These concerns arise due to the integration of the global economy, accelerated by states' decisions to liberalize trade on a multilateral and bilateral basis. A solution would be to co-operate on minimum emission standards to ensure a level playing field between internationally active producers, regardless of where they are based, but this requires the co-operation of all states.

The case study on macro-financial instability is only a global problem for this second reason. Contrary to climate change mitigation, macro-financial instability can be limited to one state and is not inherently global in nature. Yet, it has a global dimension because of the need to co-operate on the regulation of private players on globalized financial markets.

An important legal factor of why the case studies are global problems for this second reason lies in the trade liberalization commitments states negotiated to facilitate the cross-border movement of goods, investment and capital. These commitments were negotiated bilaterally through Treaties of Friendship, Commerce and Navigation (FCN Treaties) and through free trade agreements (FTAs) as well as multilaterally through the GATT and its successor, the WTO. These agreements commit parties progressively to remove restrictions on trade in goods and services and on capital and investment flows. Trade liberalization agreements provided a catalyst for increased trade. Like technological improvements, increased trade opened up new questions of interdependence. Liberalized trade, capital and investment flows can act like a conveyor belt that transfers problems such as environmental pollution or economic instability from one state to another. The closer economic connections between states that follow from liberalization expose trade-related areas that are traditionally considered as part of their domestic affairs, such as social, economic, health and environmental policies, to the impacts of other states' policy and regulatory decisions. For example, should electronic or automotive products meet minimum efficiency standards? Should imported products be produced through processes that use a minimum percentage of "green energy"? Should labourers be protected through maximum working hours, workplace health and safety standards, a specific minimum wage or a minimum age, even if those raise the production costs? Which qualifications should financial service providers have? How much information should financial products' prospectuses include? As will be argued in Part II, trade liberalization agreements affect states' ability to regulate in protection of their domestic affairs against the negative impact of climate change or of macro-financial instability transferred through trade.

The impact on states of another state's decision whether to regulate is not only the risk of exposure to the problem that the regulation in question ought to avoid. In a globalized economy

opened by trade liberalization, states compete with each other for investors and employment opportunities for their population. A state's decision to impose costly regulation on business can drive businesses out to other, more lenient, states from where they can continue to serve their customers living in their original home state. The risk of losing competitiveness because of regulation can reduce the political will to regulate. In the end, states may refrain from regulating within their market, even if regulation would bring important health or social benefits. If all states follow this reasoning, important regulation will be lacking. This potential loss of competitiveness is a further reason why states are interdependent when it comes to agreeing on a minimum level of regulation to address global problems.

At first sight, a simple solution to increasing interdependence would be deeper co-operation between states. Sometimes states can easily agree on behaviour that is beneficial to all, but effective co-operation between states is often much harder to achieve. Different obstacles to co-operation exist. First, states might agree on the need to deal with a particular problem, such as climate change, but would rather see others bear the costs of addressing the problem. Second, even when states agree on the need to co-operate, they can still disagree on how to do so. For example, states might agree that fuel efficiency standards would help to mitigate climate change, but disagree on how strict these standards should be. Or, if they already have domestic standards, a state might prefer that other states adopt its standards rather than the other way around. Finally, states might agree on the need for and type of action, but still be hesitant to act without specific assurances that the other states will fulfil their part of the deal. The introduction to the case studies in the following two Sections illustrates the difficulties in reaching international co-operative agreements to respond to climate change and macro-financial instability.

II. STUDY 1: CLIMATE CHANGE MITIGATION

As a prelude to discussing how climate change mitigation is an example of increasing interdependence, Section A discusses the science of climate change and the available responses to it. Section B examines why climate change mitigation is a problem of increasing interdependence.

A. *Climate Change Science and Responses*

Since the 19th century, scientists have been aware of the “greenhouse effect” that leads to climate change.³⁰ They discovered that various greenhouse gases (GHGs) in the atmosphere trap infrared radiation that is reflected back towards space by the Earth’s surface, which causes the atmosphere to be warmed.³¹ The greenhouse effect itself is fully natural and even benign. Without it, temperatures at the Earth’s surface would fluctuate substantially between day and night,³² making the Earth unsuitable for human life.³³

The problem is that human activities, such as transport, industry, agriculture and deforestation,³⁴ have increased atmospheric GHG concentrations. The main culprit of this increase is fossil fuel combustion that emits carbon dioxide (CO₂).³⁵ However, CO₂ is not the only GHG. Examples of other GHGs are methane (CH₄) and halocarbons, such as chlorofluorocarbons (CFCs), halogenated chlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs).³⁶ Increased atmospheric GHG concentrations trap radiation that would otherwise have been reflected into space, leading to an increase in the Earth’s surface temperature. Since 1900, the global average near-surface temperature has increased by 0.7°C.³⁷

³⁰ Important milestones in the discovery of the greenhouse effect were reached in the work of Joseph Fourier, John Tyndall and Svante Arrhenius in the second half of the 19th century, see Fleming, *Historical Perspectives on Climate Change* (1998), 55-82. The link between human activities and climate change was established in the 20th century, see *ibid.*, 113-128.

³¹ Ferguson, “The Kyoto Protocol: The Battle over Global Warming Heats Up”, 8 *Transnational Law and Policy* 293 (1998-99), 296; Cowie, *Climate Change: Biological and Human Aspects* (2007), 3-4.

³² Louka, *International Environmental Law: Fairness, Effectiveness, and World Order* (2006), 357; Cowie, *supra* note 31, 4.

³³ Bodansky, “The United Nations Framework Convention on Climate Change: A Commentary”, 18 *Yale Journal of International Law* 451 (1993), 456; Stern, *The Economics of Climate Change: The Stern Review* (2007), 7.

³⁴ See Figure 1 in Stern, *supra* note 33, iv; Intergovernmental Panel on Climate Change, “Summary for Policymakers”, in Solomon et al. (Eds.), *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (2007), 2-3.

³⁵ CO₂ accounted for 82.4% of total emissions in Annex I, or developed, Parties in 2008, see UNFCCC SBI, *National greenhouse gas inventory data for the period 1990-2008*, FCCC/SBI/2010/18, para. 22 [“National greenhouse gas inventory data 1990-2008”].

³⁶ Oberthür and Ott, *The Kyoto Protocol: International Climate Policy for the 21st Century* (1999), 6. The Kyoto Protocol deals with emissions of CO₂, CH₄, nitrous oxide (N₂O), HFCs, PFCs and sulphur hexafluoride (SF₆), see *Kyoto Protocol*, Annex A.

³⁷ Intergovernmental Panel on Climate Change, *supra* note 34, 5; Stern, *supra* note 33, 5.

Global warming triggers various other climatic effects that have an impact on the Earth's physical and biological systems.³⁸ For example, sea levels rise because of melting glaciers and because the oceans absorb more than 80% of the extra heat resulting in an expansion of sea water ("thermal expansion").³⁹ Other consequences include increased occurrences of storms, floods, droughts and heat waves.⁴⁰ In some areas of the world, these effects are a greater cause of concern than the warming itself, which may even be welcomed as it makes the local climate more temperate.⁴¹

Depending on which link they relate to in the chain between emissions to damage, states' individual or co-operative responses to the threat of climate change can be grouped in three broad strategies: climate change mitigation, adaptation and geo-engineering.

A first response is to mitigate climate change. This response focuses on reducing the atmospheric concentrations of GHGs. Because the breakdown of GHG emissions in the atmosphere takes decades, depending on the type of gas, this is inherently a long-term effort. Moreover, the success of climate change mitigation through emission reductions depends on the aggregate efforts of all states.⁴² As indicated in the Intergovernmental Panel on Climate Change (IPCC)'s Fourth Assessment Report,⁴³ no country emits more than 20% of global emissions and

³⁸ Rosenzweig et al., "Attributing Physical and Biological Impacts to Anthropogenic Climate Change", 453 *Nature* 353 (2008).

³⁹ Intergovernmental Panel on Climate Change, *supra* note 34, 5, 7.

⁴⁰ Grover, "Introduction", in Grover (Ed.) *Climate Change: Five Years after Kyoto* (2002), 6-7.

⁴¹ Stern, *supra* note 33, 56.

⁴² Cooper, "The Kyoto Protocol: A Flawed Concept", in Maxwell and Reuveny (Eds.), *Trade and Environment: Theory and Policy in the Context of EU Enlargement and Economic Transition* (2005), 19; Barrett, *Why Cooperate?: The Incentive to Supply Global Public Goods* (2007), 74.

⁴³ The Intergovernmental Panel on Climate Change was established by the World Meteorological Organization and the UN Environment Programme (UNEP), with the endorsement of the UN General Assembly, see *Protection of Global Climate for Present and Future Generations of Mankind*, GA Res. 43/53, UN Doc A/RES/43/53 (1988) [*Protection of Global Climate*"]. Its aim is to collect information on climate change science, as well as on the environmental and socio-economic impact thereof, and to formulate policy strategies to respond to climate change, see Intergovernmental Panel on Climate Change, *16 Years of Scientific Assessment in Support of the Climate Convention* (December 2004), at <<http://www.ipcc.ch/pdf/10th-anniversary/anniversary-brochure.pdf>>, 2-3. The results of this exercise are published in the IPCC's Assessment Reports, which are considered the most authoritative statement of our scientific knowledge about climate change, adaptation and mitigation, see Rodi et al., "Implementing the Kyoto Protocol in a Multidimensional Legal System: Lessons from a Comparative Assessment", 16 *Yearbook of International Environmental Law* 3 (2005), 6-7. The latest and fourth edition of this report was published in 2007. A fifth edition is expected in 2013-2014.

no economic sector more than 25%, requiring a cross-sectoral engagement of multiple states to reduce emissions.⁴⁴

Mitigation can take place through limits on GHG emissions before they occur. In addition, atmospheric GHG concentrations can be reduced by removing already emitted GHGs, through the sequestration of GHGs, particularly CO₂, in forests or soil⁴⁵ or through the growth of phytoplankton in the oceans.⁴⁶ Carbon capture and storage techniques are a second method of sequestration. These techniques capture CO₂ emitted during electricity generation and other industrial processes, such as steel or cement production, at the point of emission. The captured CO₂ is then stored in geological formations such as depleted onshore or offshore oil fields (“geological sequestration”),⁴⁷ in the deep ocean (“ocean sequestration”) or used as an input in other production processes.⁴⁸

In addition to the scientific uncertainty surrounding these processes,⁴⁹ permanency of storage is an important downside of sequestration techniques.⁵⁰ Moreover, these techniques will only be successful in reducing atmospheric GHG concentrations when emissions grow more slowly than the capacity to sequester. It is expected that GHG emissions in developed and developing states will continue to grow. For example, between 1990 and 2008, New Zealand’s aggregate GHG emissions increased by 62.4% and the US’s by 15.3%.⁵¹ China’s GHG emissions have more than doubled between 1990 and 2006.⁵² Other developing states are also seeing considerable

⁴⁴ Gupta et al., “Policies, Instruments and Co-Operative Arrangements”, in Metz et al. (Eds.), *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (2007), 768.

⁴⁵ Metz et al. (Eds.), *IPCC Special Report on Carbon Dioxide Capture and Storage* (2005), 58; Michaelowa et al., “Issues and Options for the Post-2012 Climate Architecture—an Overview”, 5 *International Environmental Agreements* 5 (2005), 14-15; Louka, *supra* note 32, 357.

⁴⁶ Michaelowa et al., *supra* note 45, 15; Barker et al., “Mitigation from a Cross-Sectoral Perspective”, in Metz et al. (Eds.), *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (2007), 625.

⁴⁷ Purdy and Macrory, *Geological Carbon Sequestration: Critical Legal Issues* (January 2004), at <<http://www.tyndall.ac.uk/sites/default/files/wp45.pdf>>, 2.

⁴⁸ Metz et al. (Eds.), *supra* note 45, 3.

⁴⁹ Purdy and Macrory, *supra* note 47, 2; Barker et al., *supra* note 46, 625.

⁵⁰ Metz et al. (Eds.), *supra* note 45, 66; Michaelowa et al., *supra* note 45, 15; Shackley and Cough, “Conclusions and Recommendations”, in Shackley and Cough (Eds.), *Carbon Capture and Its Storage: An Integrated Assessment* (2006), 285-290.

⁵¹ National Greenhouse Gas Inventory Data for the Period 1990-2008, *supra* note 35, table 6.

⁵² Ecofys, *G8 Climate Scorecards 2009* (July 2009), at <http://www.ecofys.com/com/publications/documents/report_g8_climate09.pdf>, 39.

increases in their GHG emissions. Between 1990 and 2006, Brazil's GHG emissions increased by 47.4%,⁵³ India's by 78.2%⁵⁴ and Mexico's by 41.3%.⁵⁵

A second and more immediate response to climate change is to adapt to the negative effects of climate change. In contrast with mitigation efforts, adaptation deals with the consequences rather than with the causes of climate change. It includes measures such as the construction of dikes to prevent floods or desalination plants to convert seawater into fresh water during droughts.⁵⁶ An important difference between adaptation and mitigation is that both the costs and benefits of adaptation are situated at the local or national level whereas mitigation costs are local, but its benefits are global. In recent years, adaptation is becoming increasingly important as a policy response to climate change,⁵⁷ as mitigation efforts are unlikely to avoid the impact of climate change in next few decades.⁵⁸ In the long run, however, adaptation alone will be insufficient to shield states from the negative effects of climate change. Therefore, adaptation and mitigation efforts need to be undertaken simultaneously.⁵⁹

A third response, which is still in its infancy and the feasibility of which has not been widely studied in practice, is geo-engineering. Similar to mitigation, but contrasting with adaptation, geo-engineering aims to prevent climate change. In contrast to mitigation, but similar to adaptation, geo-engineering does not seek to reduce GHG emissions or remove GHG from the atmosphere in a bid to lower atmospheric GHG concentrations. Rather, these techniques aim to regulate the amount of incoming solar radiation that warms the Earth. Suggested techniques encompass managing the amount of incoming solar radiation through the spraying of dust particles in the atmosphere⁶⁰ or even the placement of mirrors in space.⁶¹ So far, none of the

⁵³ *Ibid.*, 37.

⁵⁴ *Ibid.*, 41.

⁵⁵ *Ibid.*, 43.

⁵⁶ Schipper, "Conceptual History of Adaptation in the UNFCCC Process", 15 *Review of European Community and International Environmental Law* 82 (2006), 84.

⁵⁷ Yamin et al., "Perspectives on 'Dangerous Anthropogenic Interference'; or How to Operationalize Article 2 of the UN Framework Convention on Climate Change", in Schellnhuber et al. (Eds.), *Avoiding Dangerous Climate Change* (2006), 85-86.

⁵⁸ Klein et al., "Inter-Relationships between Adaptation and Mitigation", in Parry et al. (Eds.), *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (2007), 747.

⁵⁹ *Ibid.*, 748.

⁶⁰ Keith, "Geoengineering the Climate: History and Prospect", 25 *Annual Review of Energy and the Environment* 245 (2000), 78; Crutzen, "Albedo Enhancement by Stratospheric Sulfur Injections: A Contribution to Resolve a Policy

suggested techniques has actually been implemented. Moreover, current representations of geo-engineering are fairly simplistic as they involve one action only. Further, geo-engineering efforts are at this stage “largely speculative and unproven and with the risk of unknown side-effects”.⁶²

B. *Climate Change Mitigation as an Example of Increasing Interdependence*

The need for climate change mitigation is an example of increasing interdependence because effective climate change mitigation depends on the aggregate efforts of all states. Therefore, states are affected by another state’s emissions or by its decision whether to participate in international efforts to mitigate climate change.

In contrast to climate change mitigation, adaptation and geo-engineering can be undertaken unilaterally.⁶³ For example, a state’s dikes can protect its territory against rising seawater, regardless of whether another state does the same. Thus, states are not interdependent for the provision of either of these responses to climate change. Moreover, in contrast with climate change mitigation through emission reductions, the benefits of adaptation and of geo-engineering will accrue to the states that are bearing the costs thereof.⁶⁴ Admittedly, not all states will have the resources to shoulder these costs. Poor states may need to rely on wealthy states for financial assistance. However, this does not point to interdependence, but rather to dependence. Mutuality is lacking in the relationship between poor and wealthy states, as wealthy states will not themselves be at a higher risk of climate change when they do not fund poor states’ adaptation efforts. Adaptation and geo-engineering will therefore not be discussed further in this thesis.

(1) *The Difficulties of Achieving Co-Operation on Climate Change Mitigation*

Given that there is only one atmosphere, increased atmospheric GHG concentrations within one state’s territory lead to global problems. Responding to the threat of climate change through

Dilemma?”, 77 *Climatic Change* 211 (2006); Barrett, “The Incredible Economics of Geoengineering”, 39 *Environmental and Resource Economics* 45 (2008), 47.

⁶¹ Angel, “Feasibility of Cooling the Earth with a Cloud of Small Spacecraft near the Inner Lagrange Point (L1)”, 103 *Proceedings of the National Academy of Sciences* 17184 (2006).

⁶² Intergovernmental Panel on Climate Change, “Summary for Policymakers”, in Metz et al. (Eds.), *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (2007), 15.

⁶³ For adaptation, see Bodansky, “Climate Commitments: Assessing the Options”, in Pew Center on Global Climate Change (Ed.) *Beyond Kyoto: Advancing the International Effort against Climate Change* (2003), 56, footnote 52; Schipper, *supra* note 56, 92. For geo-engineering see Barrett, *supra* note 42, 38.

⁶⁴ Klein et al., *supra* note 58, 747.

mitigation is, however, very complex. First, the impact of climate change is not uniform around the world; higher latitudes and continental regions are expected to experience higher temperature increases.⁶⁵ The need for climate change mitigation is therefore more urgent for some regions than for others. Second, discrepancies exist between the vulnerability and the responsibility of states. States where the impact of climate change is more keenly felt do not correlate with the states most responsible for climate change. Developing states are the most affected by climate change, even though on a per capita basis they contribute the least to the overall increase in emissions, both historically and currently. Third, GHG emission reductions are costly, and alternative sources of energy are not readily available at comparable cost. Fourth, climate change is an inter-generational issue. Once emitted, GHGs remain in the atmosphere for decades. Even if states invest now in cutting their GHG emissions, the benefits for global temperatures will only be visible later. Combined, these factors reduce states' willingness to mitigate climate change, as they are unlikely to spend considerable public resources to cut emissions when the current generation of their citizens does not feel climate change's impact or might actually reap some benefits from it.⁶⁶

Successful climate change mitigation is known in economic terms as a "global public good".⁶⁷ By definition, the benefits of public goods are non-excludable, meaning that no state can be excluded from enjoying them, even if that state has not contributed to the supply of the public good. The benefits of public goods are also non-rivalrous, meaning that their enjoyment by one state does not reduce their enjoyment by another state.⁶⁸ The benefits of climate change mitigation through emission reductions present these characteristics. The atmosphere cannot be parcelled up into sections where GHG emissions are reduced, and climate change mitigated, and others where GHG emissions continue to increase and climate change occurs. This means that states that do not contribute to climate change mitigation cannot be excluded from benefiting. Moreover, the benefit that one state draws from climate change mitigation does not reduce the benefits drawn by other states.

Because of these characteristics, global public goods are notoriously hard to supply. While the provision of the global public good may be in the collective interest of all states, for every state

⁶⁵ Stern, *supra* note 33, 13.

⁶⁶ For example, in cold areas such as Russia agriculture will benefit from a longer growing season if climate change leads to a milder climate, see Schenck, "Climate Change 'Crisis'-Struggling for Worldwide Collective Action", 19 *Colorado Journal of International Environmental Law and Policy* 319 (2008), 343.

⁶⁷ Sandler, *Global Collective Action* (2004), 47.

⁶⁸ Barrett, *supra* note 42, 1.

individually it may be a more rational option to wait for other states to provide the global public good and then enjoy the benefits from which they cannot be excluded anyway. Of course, states know that other states will have this tendency to free ride and this may convince them not to contribute to the provision of the global public good either.

The practical experience with the development of an international agreement on GHG emission reductions confirms this theoretical insight. The negotiations on a climate change regime have been protracted, and it is still unclear whether there will continue to be binding emission reductions commitments from 2013 onwards. Negotiations on an international response to the threat of climate change started in December 1990, when the UN General Assembly established the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change (INC).⁶⁹ Consistent with the instruction to complete the work before the UN Conference on Environment and Development (“UNCED”) in June 1992 in Rio de Janeiro,⁷⁰ the INC adopted the United Nations Framework Convention on Climate Change (“UNFCCC”) by acclamation on 9 May 1992. The UNFCCC was opened for signature during UNCED, entered into force on 21 March 1994 and now has 194 parties.⁷¹ While this two-year process was fast, the UNFCCC is only a framework convention and imposes very limited obligations to reduce emissions, as Chapter 6 discusses.

Article 7 UNFCCC established a Conference of the Parties (“COP”) to develop the UNFCCC framework for the stabilization of GHG emissions through amendments, annexes or protocols. The COP was required to meet within a year of the entry into force of the UNFCCC⁷² to review the adequacy of the UNFCCC’s obligations.⁷³ At its 1995 meeting in Berlin, COP 1 decided that new negotiations were required to strengthen the commitments of developed states, known in UNFCCC jargon as Annex I Parties.⁷⁴ This “Berlin Mandate” specified that the commitments of

⁶⁹ Protection of Global Climate, *supra* note 43.

⁷⁰ *Ibid.*, para. 7.

⁷¹ UNFCCC, *Status of Ratification of the Convention*, at <http://unfccc.int/essential_background/convention/status_of_ratification/items/2631.php>.

⁷² UNFCCC, art. 7(4).

⁷³ UNFCCC, art. 4(2)(d).

⁷⁴ UNFCCC COP, *The Berlin Mandate: Review of the adequacy of Article 4, paragraph 2(a) and (b), of the Convention, including proposals related to a protocol and decisions on follow-up*, Decision 1/CP.1, FCCC/CP/1995/7/Add.1, 4-6 [“Berlin Mandate”]. The Annex I Parties are Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, European Community, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Portugal, Poland, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom and US. At the Copenhagen Conference of the Parties, Annex I was amended to include Malta as an Annex I Party, see

Annex I Parties had to be strengthened by setting “quantified limitation and reduction objectives within specified timeframes” and that no new obligations could be imposed on other Parties.⁷⁵

Negotiations based on the “Berlin Mandate” resulted in the 1997 Kyoto Protocol adopted by COP 3 in Kyoto.⁷⁶ The Kyoto Protocol thus took only two years to negotiate, but like the UNFCCC it required further implementation, as a number of key technical issues were left to the “Conference of the Parties to the Convention serving as the meeting of the Parties to the Kyoto Protocol” (“CMP”).⁷⁷ These negotiations took until the end of 2001 to finish,⁷⁸ at which point most Annex I Parties ratified the Kyoto Protocol.⁷⁹ However, it still took until Russia’s ratification in November 2004 before the Kyoto Protocol gained the necessary ratifications⁸⁰ to enter into force on 16 February 2005,⁸¹ almost 15 years after the start of the original negotiations on the UNFCCC.

The development of direct limits on GHG emissions did not end with the Kyoto Protocol’s entry into force. The Kyoto Protocol only provides for binding emission reductions in the “first commitment period” from 2008 to 2012. It foresees a continuation of commitments for Annex I Parties beyond 2012 through amendments to Annex B of the Kyoto Protocol. Negotiations on these amendments had to start at least seven years before the end of the first commitment period.⁸² In practice, the start of these negotiations hence coincided with the entry into force of

UNFCCC COP, *Amendment to Annex I to the Convention*, Decision 3/CP.15, FCCC/CP/2009/11/Add.1, 10 [“*Decision 3/CP.15*”].

⁷⁵ Berlin Mandate, *supra* note 74, para. 2(a) and (b).

⁷⁶ For general discussions of the Kyoto Protocol, see Breidenich et al., “Current Developments: The Kyoto Protocol to the United Nations Framework Convention on Climate Change”, 92 *American Journal of International Law* 315 (1998); French, “1997 Kyoto Protocol to the 1992 UN Framework Convention on Climate Change”, 10 *Journal of Environmental Law* 227 (1998); Yamin, “The Kyoto Protocol: Origins, Assessment and Future Challenges”, 7 *Review of European Community and International Environmental Law* 113 (1998); Bryce, “Controlling the Temperature: An Analysis of the Kyoto Protocol”, 62 *Saskatchewan Law Review* 379 (1999); Grubb et al., *Kyoto Protocol: A Guide & Assessment* (1999); Nanda, “The Kyoto Protocol on Climate Change and the Challenges to Its Implementation: A Commentary”, 10 *Colorado Journal of International Environmental Law and Policy* 319 (1999); Freeland, “The Kyoto Protocol: An Agreement without a Future?”, 24 *UNSW Law Journal* 532 (2001).

⁷⁷ See for example, *Kyoto Protocol*, art. 2(b), 3(14), 5(1), 6(2), 7(4) and 8(4).

⁷⁸ UNFCCC COP, Decisions 2-24/CP.7, FCCC/CP/2001/13/Add.1, FCCC/CP/2001/13/Add.2, FCCC/CP/2001/13/Add.3; an important preceding step were UNFCCC COP, *The Bonn Agreements on the Implementation of the Buenos Aires Plan of Action*, Decision 5/CP.6, FCCC/CP/2001/5, 36-49, concluded in July 2001.

⁷⁹ Yamin and Depledge, *The International Climate Change Regime: A Guide to Rules, Institutions and Procedures* (2004), 28.

⁸⁰ *Kyoto Protocol*, art. 25(1).

⁸¹ UNFCCC, *Kyoto Protocol Status of Ratification* (October 2010), at <http://unfccc.int/files/kyoto_protocol/status_of_ratification/application/pdf/kp_ratification.pdf>.

⁸² *Kyoto Protocol*, art. 3(9).

the Kyoto Protocol.⁸³ Because the membership of the UNFCCC's COP and of the Kyoto Protocol's CMP does not overlap, a two-track process was adopted in the "Montreal Action Plan".⁸⁴ The CMP would start negotiations to continue the commitments of Annex I Parties.⁸⁵ An "Open-ended Ad Hoc Working Group of Parties to the Kyoto Protocol" (AWG-KP)⁸⁶ was established aiming to have its work completed as soon as possible so that there would be no gap at the end of the first commitment period.⁸⁷ To include the UNFCCC parties that were not parties to the Kyoto Protocol, the COP initiated a "Dialogue on Long-term Cooperative Action".⁸⁸ The dialogue was specifically not intended to open up new negotiations.⁸⁹ This changed in December 2007 when the UNFCCC parties adopted the Bali Roadmap,⁹⁰ which contained yet another action plan: the "Bali Action Plan".⁹¹ This Plan continued the two-track approach, but established an "Ad Hoc Working Group on Long-term Cooperative Action" ("AWG-LCA") for the UNFCCC track to work in parallel to the already existing AWG-KP.⁹² The aim was for the AWG-LCA to submit "the outcome of its work" to the COP 15/CMP 5 in Copenhagen at the end of 2009.⁹³

⁸³ Kyoto Protocol CMP, *Consideration of commitments for subsequent periods for Parties included in Annex I to the Convention under Article 3, paragraph 9, of the Kyoto Protocol*, Decision 1/CMP.1, FCCC/KP/CMP/2005/8/Add.1, 3 ["*Decision 1/CMP.1*"]. Informal negotiations about the development of a post-2012 regime had already started at COP 11 in Buenos Aires in December 2004, International Institute for Sustainable Development, "Summary of the First Session of the Ad Hoc Working Group on Long-Term Cooperative Action and the Fifth Session of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol: 31 March–4 April 2008", 12 *Earth Negotiations Bulletin* (2008), 2.

⁸⁴ The Honourable Stéphane Dion, *The Montreal Action Plan* (10 December 2005), at <http://unfccc.int/files/meetings/cop_11/application/pdf/cop11_dion_closing_speech.pdf>.

⁸⁵ Decision 1/CMP.1, *supra* note 83.

⁸⁶ This ad hoc working group sometimes also goes by the acronym "AWG". The "KP" was added after the Bali conference to distinguish this working group from the "Ad Hoc Working Group on Long-term Cooperative Action" or "AWG-LCA" created after the Bali Conference in December 2007, see text accompanying footnote 92.

⁸⁷ Decision 1/CMP.1, *supra* note 83, para. 3.

⁸⁸ UNFCCC COP, *Dialogue on Long-term Cooperative Action to Address Climate Change by Enhancing Implementation of the Convention*, Decision 1/CP.11, FCCC/CP/2005/5/Add.1 (2005).

⁸⁹ *Ibid.*, para. 2.

⁹⁰ Exactly what constitutes the "Bali Roadmap" has not been defined precisely, but it has been described as "a compendium of decisions and processes adopted and launched by the COP and COP/MOP", see International Institute for Sustainable Development, "Summary of the Thirteenth Conference of Parties to the UN Framework Convention on Climate Change and Third Meeting of Parties to the Kyoto Protocol: 3-15 December 2007", 12 *Earth Negotiations Bulletin* (2007), 19.

⁹¹ UNFCCC COP, *Bali Action Plan*, Decision 1/CP.13, FCCC/CP/2007/6/Add.1, 3-7, para. 1. For commentary on the Bali Roadmap, see *Ibid.*, 15; Ott et al., "The Bali Roadmap: New Horizons for Global Climate Policy", 8 *Climate Policy* 91 (2008).

⁹² International Institute for Sustainable Development, *supra* note 90, 15.

⁹³ Bali Action Plan, *supra* note 91, para. 2.

Despite high expectations, the Copenhagen COP failed to produce a successor to the Kyoto Protocol. Instead, both working groups were given until the end of 2010 to present the outcome of their work at the COP 16/CMP 6 in Cancun.⁹⁴ The political leaders of a subgroup of states also agreed on the Copenhagen Accord.⁹⁵ Objections to the negotiating tactics used and the substantive shortcomings of the Accord resulted in a refusal by a small group of states to adopt the Accord as a COP decision, but the COP nonetheless took note of it.⁹⁶

The main achievement of the Copenhagen Accord lies in its ambition of keeping temperature increases below 2°C.⁹⁷ This quantified goal is a significant improvement⁹⁸ on the Kyoto Protocol whose aim of reducing GHG emissions by at least 5% below 1990 levels⁹⁹ was not set on the basis of what was actually required to achieve stabilization.¹⁰⁰ Significant reductions of GHG emissions below 1990 levels are required if global warming is to be limited to 2°C. Developed states would need to reduce their emissions by 25-40% while developing states would need to reduce by 15-30% by 2020.¹⁰¹ By 2050, CO₂ emissions will need to halve, combined with reductions in emissions of other GHGs that have a shorter atmospheric lifespan.¹⁰²

Following the Copenhagen COP, many states notified the UNFCCC Secretariat of their wish to be listed as agreeing to the Accord.¹⁰³ However, states' pledges regarding GHG emission cuts are

⁹⁴ UNFCCC COP, *Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention*, Decision 1/CP.15, FCCC/CP/2009/11/Add.1, 3, para. 1; Kyoto Protocol CMP, *Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol*, Decision 1/CMP.5, FCCC/KP/CMP/2009/21/Add.1, 3, para. 3.

⁹⁵ UNFCCC COP, *Copenhagen Accord*, Decision 2/CP.15, FCCC/CP/2009/11/Add.1, 4-9 [*"Copenhagen Accord"*]. Bodansky, "The Copenhagen Climate Change Conference: A Postmortem", 104 *American Journal of International Law* 230 (2010), 234, lists 28 states that were reportedly involved in the negotiations.

⁹⁶ Bodansky, *supra* note 95, 238; Rajamani, "The Making and Unmaking of the Copenhagen Accord", 59 *International and Comparative Law Quarterly* 824 (2010), 826.

⁹⁷ Copenhagen Accord, *supra* note 95, para. 1.

⁹⁸ Bodansky, *supra* note 95, 240; Ramanathan and Xu, "The Copenhagen Accord for Limiting Global Warming: Criteria, Constraints, and Available Avenues", 107 *Proceedings of the National Academy of Sciences* 8055 (2010), 8055.

⁹⁹ *Kyoto Protocol*, art. 3(1).

¹⁰⁰ Bothe, "The United Nations Framework Convention on Climate Change—an Unprecedented Multilevel Regulatory Challenge", 63 *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht* 239 (2003), 246. The growth in emissions in developing states made the 5% goal even more unrealistic, see Den Elzen and Höhne, "Reductions of Greenhouse Gas Emissions in Annex I and Non-Annex I Countries for Meeting Concentration Stabilisation Targets", 91 *Climatic Change* 249 (2008), 264.

¹⁰¹ Den Elzen and Höhne, *supra* note 100; Den Elzen and Höhne, "Sharing the Reduction Effort to Limit Global Warming to 2°C", 10 *Climate Policy* 247 (2010).

¹⁰² Ramanathan and Xu, *supra* note 98, 8055, 8057.

¹⁰³ UNFCCC, *Copenhagen Accord* (12 August 2010), at <<http://unfccc.int/home/items/5262.php>>. Reportedly, China has since distanced itself from the roadmap in the Copenhagen Accord and expressed a preference to continue on the

insufficient to achieve the ambitious goal of limiting temperature increases to 2°C. An analysis by the United Nations Environment Programme has shown that, even if the most ambitious proposals are combined, the pledges made will not reduce emissions significantly enough by 2020.¹⁰⁴ Instead, the most ambitious proposals are more likely to achieve a temperature increase of between 2.5-5°C by the end of the 21st century.¹⁰⁵

Reflecting the reality that climate change mitigation is a global public good, most Annex I states have made their most ambitious proposals conditional upon an international agreement in which all major emitters, including major developing economies, participate.¹⁰⁶ In addition to the pledges by Annex I states, forty non-Annex I states notified the mitigation actions they intend to implement.¹⁰⁷ Of the four most important non-Annex I states, the so-called BASIC countries,¹⁰⁸ Brazil and South Africa intend to reduce emission levels compared to a “business as usual”-scenario.¹⁰⁹ India and China promise to reduce emissions per unit of GDP compared to 2005 levels.¹¹⁰ To result in actual emission reductions, emission reductions will need to outpace GDP growth. This is unlikely given India’s and China’s high economic growth rates.

The deadline of December 2010 on the development of legally binding GHG emission reductions came and went without a new agreement on the continuation of binding emission reduction commitments,¹¹¹ although the Cancun Agreements leave open the possibility for a second

Kyoto Protocol, see Hiar, *Is China Unwilling to Play the Climate Negotiation Game?* (7 September 2010), at <<http://www.undispatch.com/is-china-unwilling-to-play-the-climate-negotiation-game>>.

¹⁰⁴ UN Environment Programme, *The Emissions Gap Report: Are the Copenhagen Accord Pledges Sufficient to Limit Global Warming to 2°C or 1.5°C?* (November 2010), at <http://www.unep.org/publications/ebooks/emissionsgapreport/pdfs/The_EMISSIONS_GAP_REPORT.pdf>, 41.

¹⁰⁵ *Ibid.*, 55.

¹⁰⁶ See offers by Australia, the EU, Iceland, Japan, Liechtenstein, New Zealand, the Russian Federation and Switzerland on UNFCCC, *Appendix I–Quantified Economy-Wide Emissions Targets for 2020*, at <<http://unfccc.int/home/items/5264.php>>.

¹⁰⁷ UNFCCC, *Appendix II–Nationally Appropriate Mitigation Actions of Developing Country Parties*, at <<http://unfccc.int/home/items/5265.php>>.

¹⁰⁸ Brazil, India, China and South Africa, see Bodansky, *supra* note 95, 234.

¹⁰⁹ Brazil, *Letter Including Nationally Appropriate Mitigation Actions* (29 January 2010), at <http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/brazilcphaccord_app2.pdf>; South Africa, *Letter Including Nationally Appropriate Mitigation Actions* (29 January 2010), at <http://unfccc.int/files/meetings/application/pdf/southafricacphaccord_app2.pdf>.

¹¹⁰ China, *Letter Including Autonomous Domestic Mitigation Actions* (28 January 2010), at <http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/chinacphaccord.pdf>; India, *Letter Including India’s Domestic Mitigation Actions* (30 January 2010), at <http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/indiacphaccord.pdf>.

¹¹¹ International Centre for Trade and Sustainable Development, *Cancun Climate Summit Exceeds Low Expectations, but Sidesteps Trade Issues* (22 December 2010), at <<http://ictsd.org/i/news/bridgesweekly/99004/>>.

commitment period under the Kyoto Protocol.¹¹² The main achievement of the Cancun Agreements was to formalize the political Copenhagen Accord that set out a system in which states make individual pledges to reduce emissions, verified internationally through states' reporting on their emissions.¹¹³ The Agreements confirm the commitment to keep increases in global average temperature to a maximum of 2°C above pre-industrial levels,¹¹⁴ and recognize that this requires Annex I parties to reduce their emissions by 25-40% below 1990 levels by 2020.¹¹⁵ The parties are clearly aware of the shortfalls in their proposals given that the Agreements urge Annex I parties "to raise the level of ambition of the emission reductions".¹¹⁶ However, the pledges made by Annex I and non-Annex I parties remain similar to what was proposed under the Copenhagen Accord, and are thus insufficient to achieve the required emission reductions.¹¹⁷

Looking at the climate change negotiations to date, the conclusion unfortunately has to be that, over twenty years since the start of the negotiations, the only binding obligations to reduce GHG emissions are set to expire at the end of 2012 with no replacement in sight.¹¹⁸

In addition to the climate change regime based on the UNFCCC, states have taken other initiatives to respond to climate change. Some of these initiatives, such as the Asia-Pacific Partnership for Clean Development and Climate,¹¹⁹ deal specifically with climate change. Various existing international fora of a general nature, such as the G-8,¹²⁰ and international fora

¹¹² Kyoto Protocol CMP, *The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its fifteenth session*, Decision 1/CMP.6, FCCC/KP/CMP/2010/12/Add.1, 3, preamble ["Decision 1/CMP.6"].

¹¹³ Bodansky, *supra* note 95, 231.

¹¹⁴ UNFCCC COP, *The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention*, Decision 1/CP.16, FCCC/CP/2010/7/Add.1, 2, 4, para. 4.

¹¹⁵ Decision 1/CMP.6, *supra* note 112, paras 1, 2, 6.

¹¹⁶ *Ibid.*, para. 4.

¹¹⁷ UNFCCC SBI, *Compilation of economy-wide emission reduction targets to be implemented by Parties included in Annex I to the Convention* FCCC/SB/2011/INF.1; Ad Hoc Working Group on Long-term Cooperative Action under the Convention, *Compilation of information on nationally appropriate mitigation actions to be implemented by Parties not included in Annex I to the Convention* FCCC/AWGLCA/2011/INF.1.

¹¹⁸ Bodansky, "A Tale of Two Architectures: The Once and Future U.N. Climate Change Regime" (1 March 2011), *SSRN eLibrary*, at <<http://ssrn.com/paper=1773865>>, 3; Rajamani, "The Cancun Climate Agreements: Reading the Text, Subtext and Tea Leaves", 60 *International and Comparative Law Quarterly* 499 (2011), 511-512; Romano and Burlleson, *The Cancun Climate Conference* (21 January 2011), at <<http://www.asil.org/insights110121.cfm>>.

¹¹⁹ Asia-Pacific Partnership on Clean Development and Climate, *APP Fact Sheet*, at <http://www.asiapacificpartnership.org/pdf/translated_versions/Fact_Sheet_English.pdf>, 1.

¹²⁰ The Gleneagles Dialogue on Climate Change, Clean Energy and Sustainable Development, launched in 2005, resulted in a "vision" to be shared with other UNFCCC parties of reducing global emissions by 50% by 2050, see G-8,

specialized in other problems of interdependence, such as the WTO¹²¹ and various international environmental treaty bodies,¹²² have also considered responses to climate change.

At this stage, however, the regulatory responses under the UNFCCC umbrella are the only international regulatory efforts that have moved beyond the level of aspirational statements and into an extensive, albeit incomplete, regulatory regime to deal with climate change through reduced GHG emissions. Many of the alternative initiatives are still at a discussion stage and it is unclear whether, and if so, when, they will lead to direct limits on the freedom to regulate GHG emissions.

(2) *The Added Complexity of Mitigating Climate Change in A Global Economy*

The incentives to free ride that arise because climate change mitigation through emission reductions is a global public good are exacerbated in a global economy in which trade, capital and investment are liberalized.

Concerns about protecting the competitiveness of domestic industries in global markets often reduce states' willingness to adopt regulatory measures to help fight climate change, unless there is a guarantee that trading partners will adopt similar policies and regulation, or unless they can restrict trade with states that have more lenient regulation or policies. The concern is that when a state imposes emission reductions, industries will relocate to more lenient states

G8 Hokkaido Toyako Summit Leaders Declaration (8 July 2008), at <http://www.mofa.go.jp/policy/economy/summit/2008/doc/doc080714_en.html>. In 2009, the G-8 leaders affirmed that global average temperatures should not exceed 2°C compared to pre-industrial levels. To this end, the "50 by 50" goal was confirmed, as well as a goal to reduce developed countries' emissions by at least 80% by 2050, if major emerging economies "undertake quantifiable actions to reduce emissions", see G-8, *Responsible Leadership for a Sustainable Future* (8 July 2009), at <<http://www.g8.utoronto.ca/summit/2009laquila/2009-declaration.pdf>>, para. 65. This was repeated in 2010 in G-8, *G8 Muskoka Declaration: Recovery and New Beginnings* (25-26 June 2010), at <<http://www.g8.utoronto.ca/summit/2010muskoka/communique.pdf>>, para. 21.

¹²¹ The Doha Ministerial Declaration called for the liberalization of trade in environmental goods and services. See *Ministerial Declaration adopted on 14 November 2001* WT/MIN(01)/DEC/1 (2001), para. 31(iii). However, negotiations have yet to produce results, see Cosbey et al., *Environmental Goods and Services Negotiations at the WTO: Lessons from Multilateral Environmental Agreements and Ecolabels for Breaking the Impasse* (March 2010), at <http://www.iisd.org/pdf/2009/bali_2_copenhagen_egs_lessons.pdf>, 15. This is largely due to the fact that it is not entirely clear from the Doha Mandate how liberalization needs to take place and what degree of liberalization is considered appropriate, see *Ibid.*, 12.

¹²² See, e.g., Tenth Conference of the Contracting Parties to the Convention on Wetlands, *Resolution 24 on Climate Change and Wetlands* (28 October–4 November 2008), at <http://www.ramsar.org/pdf/res/key_res_x_24_e.pdf>; Tenth Conference of the Contracting Parties to the Convention on Wetlands, *Resolution 25 on Wetlands and "biofuels"* (28 October–4 November 2008), at <http://www.ramsar.org/pdf/res/key_res_x_25_e.pdf>; Tenth Conference of the Contracting Parties to the Convention on Biodiversity, *Biodiversity and Climate Change* (2 November 2010), at <<http://www.cbd.int/decision/cop/?id=12299>>.

where they can continue to emit.¹²³ As a result there is no net reduction in global emissions. This is known in the context of climate change as “leakage”.¹²⁴ The chance that their climate change measures will have no effect on global emissions, may convince states not to undertake them. The research summarized in the IPCC’s Fourth Assessment Report, while not fully conclusive,¹²⁵ indicates that carbon leakage may not be as substantial as often portrayed, because transport costs, local preferences, or an unstable investment climate in the potential host state reduce the incentives for producers to shift overseas.¹²⁶ However, concerns about competitiveness as a result of leakage, even if unwarranted, are an important political argument against stringent regulation,¹²⁷ and often prompt states to exempt energy-intensive production from regulation.¹²⁸

III. STUDY 2: MACRO-FINANCIAL INSTABILITY AND MONETARY MANAGEMENT POLICIES

The choice of international monetary relations as an area to study increasing interdependence is inspired by the centrality of macro-financial instability concerns since the outbreak of the Global Financial Crisis in 2007. The Global Financial Crisis has shown just how much states are exposed to financial instability in other states and to other states’ monetary and financial decisions. Section A discusses the concept of “money” and introduces the concept of “monetary management policies” that is central to the study. Section B then argues that these monetary management policies are linked to macro-financial stability and that they are an example of increasing interdependence. Section C describes the difficulties states have experienced to achieve international co-operation in relation to the conduct of these monetary management policies.

A. *Money and Monetary Management Policies in Increasing Interdependence*

Central to this study are “monetary management policies”, a term adopted in this thesis to refer to a range of policies through which states directly or indirectly manage and supply money to their domestic economies.

¹²³ Cooper, *supra* note 42, 21; Low et al., “The Interface between the Trade and Climate Change Regimes: Scoping the Issues” (12 January 2011), *SSRN eLibrary*, at <<http://ssrn.com/abstract=1742803>>, 1.

¹²⁴ Intergovernmental Panel on Climate Change, “Appendix I: Glossary”, in Metz et al. (Eds.), *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (2007), 811.

¹²⁵ Barker et al., *supra* note 46, 667.

¹²⁶ *Ibid.*, 665-666.

¹²⁷ The World Bank, *International Trade and Climate Change* (2008), 29-34.

¹²⁸ Barker et al., *supra* note 46, 666.

Monetary management policies are applied in an increasingly integrated global financial market that has grown as a result of the liberalization of trade, capital and investment flows. This increased integration, and particularly the inclusion of developing states, is at least partially attributable to international law and international institutions. Through its conditional lending, the IMF has pushed developing states to remove capital controls,¹²⁹ to liberalize trade in financial services,¹³⁰ to liberalize investment¹³¹ and to adopt light-handed standards for financial regulation.¹³² Similarly, loans by the World Bank and its subsidiary the International Finance Corporation have often been conditional upon the adoption of financial models applied by financial institutions in developed economies¹³³ or banking sector reform.¹³⁴ Many developing states have also made new commitments to liberalize trade in financial services when negotiating accession to the WTO,¹³⁵ often beyond the commitments made by existing WTO Members,¹³⁶ or when negotiating preferential trade agreements.¹³⁷

Sections (2) and (3) discuss the different types of monetary management policies in the context of an increasingly interdependent global economy. As a preliminary matter, Section (1) briefly addresses what constitutes “money”.

¹²⁹ Leiteritz, “Explaining Organizational Outcomes: The International Monetary Fund and Capital Account Liberalization”, 8 *Journal of International Relations and Development* 1 (2005), 5-6.

¹³⁰ Saner and Guilherme, “The International Monetary Fund’s Influence on Trade Policies of Low-Income Countries: A Valid Undertaking?”, 41 *Journal of World Trade* 931 (2007), 936, 950.

¹³¹ Kalderimis, “IMF Conditionality as Investment Regulation: A Theoretical Analysis”, 13 *Social and Legal Studies* 103 (2004).

¹³² Alexander et al., *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (2006), 36; Yokoi-Arai, “GATS’ Prudential Carve Out in Financial Services and Its Relation with Prudential Regulation”, 57 *International and Comparative Law Quarterly* 613 (2008), 637-638.

¹³³ Alexander et al., *supra* note 132, 36, 143; dos Santos, *The World Bank, the IFC and the Antecedents of the Financial Crisis* (27 November 2008), at <<http://www.brettonwoodsproject.org/art-563119>>.

¹³⁴ World Bank Independent Evaluation Group, *World Bank Assistance to the Financial Sector: A Synthesis of IEG Evaluations* (2006), at <[http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/55901055A53BCDE085257172007AF978/\\$file/financial_sector_synthesis.pdf](http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/55901055A53BCDE085257172007AF978/$file/financial_sector_synthesis.pdf)>.

¹³⁵ Thomas, “Globalization in Financial Services—What Role for GATS?”, 21 *Annual Review of Banking Law* 323 (2002), 332; Adlung, “Services Liberalization from a WTO/GATS Perspective: In Search of Volunteers”, *World Trade Organization—Economic Research and Statistics Division Staff Working Paper* (2009), 6.

¹³⁶ Jara and Dominguez, “Liberalization of Trade in Services and Trade Negotiations”, 40 *Journal of World Trade* 113 (2006), 115.

¹³⁷ Fink and Molinuevo, “East Asian Preferential Trade Agreements in Services: Liberalization Content and WTO Rules”, 7 *World Trade Review* 641 (2008), 647.

(1) *What is Money?*

The traditional economic functions of money are as a medium of exchange that removes the need for individuals to trade by barter, as a unit of account allowing for easy comparison of the price of all goods or services, and as an asset that stores value for future purchases.¹³⁸ In a capitalist economy, money is also a commodity¹³⁹ that is traded for its own sake and whose intrinsic value can rise or fall depending on supply and demand.

When thinking of money, traditional bank notes and coins that are usually issued by the central bank spring to mind first. Cash is however not the only kind of “money” in an economy. The central bank, or the bankers’ bank, also controls the money supply through the reserves that commercial banks are commonly required to hold with it.¹⁴⁰ The reserves are simply bookkeeping entries on the liabilities side of the central bank’s balance sheet.¹⁴¹ When the central bank purchases assets, such as government securities or foreign exchange, from commercial banks in open market operations¹⁴² or when it lends to commercial banks using specific safe assets as collateral,¹⁴³ commercial bank reserves increase. Conversely, when the central bank sells assets to the commercial banks or when it calls in, or refuses to roll over, existing loans, the reserves shrink.

Taken together, cash and bank reserves with the central bank are known as the “monetary base”.¹⁴⁴ The aggregate money supply in an economy is much wider than this monetary base. Most cash holders deposit their cash with commercial banks in broader categories of assets with varying degrees of liquidity,¹⁴⁵ such as on-call bank deposits, term deposits or bonds.¹⁴⁶ As financial intermediaries, banks use these deposits to extend loans. These loans become a new

¹³⁸ Burda and Wyplosz, *Macroeconomics: A European Text*, 4th ed. (2005), 177; Baumol and Blinder, *Macroeconomics: Principles and Policy*, 10th ed. (2007), 244.

¹³⁹ Kelsey, “The Denationalization of Money: Embedded Neo-Liberalism and the Risks of Implosion”, 12 *Social and Legal Studies* 155 (2003), 156.

¹⁴⁰ Burda and Wyplosz, *supra* note 138, 203.

¹⁴¹ Friedman, “Monetary Policy”, in Smelser and Baltes (Eds.), *International Encyclopedia of the Social & Behavioral Sciences* (2001), 9977-9978; Baumol and Blinder, *supra* note 138, 266.

¹⁴² Burda and Wyplosz, *supra* note 138, 210-211; Baumol and Blinder, *supra* note 138, 267-268.

¹⁴³ Burda and Wyplosz, *supra* note 138, 211.

¹⁴⁴ *Ibid.*, 203.

¹⁴⁵ “Liquidity” expresses the speed and ease by which the assets can be converted into the medium of exchange used in a particular economy, see Stonecash, *Principles of Macroeconomics*, 4th ed. (2009), 257.

¹⁴⁶ Burda and Wyplosz, *supra* note 138, 175; Baumol and Blinder, *supra* note 138, 247.

deposit, in addition to the original one.¹⁴⁷ For example, a bank accepts a \$50,000 deposit from A and lends \$20,000 thereof to B for the purchase of a car. Once the loan to B has been approved, A will still have \$50,000 in his account and B will have \$20,000 in his account. Thus, through the process of credit creation, the aggregate money supply in the economy has increased by \$20,000, illustrating how commercial banks play an important and direct role in the money supply.

In the run up to the Global Financial Crisis, the financial system had gone through considerable changes that have transformed the ways in which credit is created.

First, financial systems evolved from being bank-based, where banks are intermediaries between borrowers and lenders, to being an increasingly market-based system where borrowers deal directly with a variety of lenders through the stock or bond markets.¹⁴⁸ Financial institutions developed innovative over-the-counter financial products, such as securities and derivatives intended to provide the lender an investment with the desired degree of risk.¹⁴⁹ A study by IMF Staff points to the “rapid expansion of credit sources in wholesale funding markets over the period 1999 to 2007.”¹⁵⁰

Particularly in the US, a “shadow financial system” of non-bank institutions developed.¹⁵¹ This term covers various non-bank institutions, such as hedge funds, investment banks, private equity funds, structured investment vehicles and conduits. These non-bank institutions are not subject to the stricter prudential regulation and supervision requirements applicable to traditional banks.¹⁵² The shadow financial system relies on issuing short-term commercial paper, i.e. debt instruments such as bonds,¹⁵³ rather than on deposits to obtain the funding to extend credit. Traditionally, commercial paper was unsecured, but commercial paper backed by assets

¹⁴⁷ Baumol and Blinder, *supra* note 138, 252-258.

¹⁴⁸ Hendricks et al., “Systemic Risk and the Financial System”, 13 *Federal Reserve Bank of New York Economic Policy Review* 65 (2007), 69; Hoenig, “Maintaining Stability in a Changing Financial System: Some Lessons Relearned Again?”, 93 *Federal Reserve Bank of Kansas City Economic Review* 5 (2008), 6; Crockett, “Rebuilding the Financial Architecture”, September 2009 *Finance & Development* 18 (2009), 18.

¹⁴⁹ Jenkinson et al., “Financial Innovation: What Have We Learnt?”, 48 *Bank of England Quarterly Bulletin* 330 (2008), 332.

¹⁵⁰ Merrouche and Nier, “What Caused the Global Financial Crisis? — Evidence on the Drivers of Financial Imbalances 1999-2007” (December 2010), *IMF Working Paper WP/10/265*, at <<http://www.imf.org/external/pubs/ft/wp/2010/wp10265.pdf>>, 6.

¹⁵¹ *Ibid.*, 24.

¹⁵² International Monetary Fund, *Initial Lessons of the Crisis* (6 February 2009), at <<http://www.imf.org/external/np/pp/eng/2009/020609.pdf>>, 3.

¹⁵³ “Commercial Paper”, in Law and Smullen (Eds.), *A Dictionary of Finance and Banking* (2008).

or mortgages has become more widespread in recent years.¹⁵⁴ By late 2007, the shadow financial system in the US held the same amount of assets as the traditional banking system.¹⁵⁵ By March 2008, its liabilities were significantly higher than those held by traditional banks and it still plays an important role in credit creation.¹⁵⁶

This change also affected traditional banks that changed their business model from the traditional “originate to hold” model, in which they originate loans and hold on to them as assets on their books, to an “originate to distribute” model, in which they originate loans and sell the underlying claims to other investors through securitization.¹⁵⁷ This sale removes the loan as an asset on the banks’ books, which means that banks can create more credit without having to increase their capital, or can reduce their capital without violating their capital adequacy requirements, discussed in Section (2).

In addition to the important changes in the identity of financial intermediaries, a second major change in the creation of credit stems from the liberalization of capital, trade in services and investment. Liberalization has made it possible for financial intermediaries to provide credit beyond their state of origin and for companies to seek credit in other states. The ramifications will be discussed in Section B.

(2) *Monetary Policy and Credit Creation Limits*

Monetary policy can be defined as “the management by the central bank of liquidity conditions in the economy”.¹⁵⁸ “Liquidity conditions” refer to “the price and availability of funding for the economy’s expenditure”.¹⁵⁹

A first way for central banks to set monetary policy is by providing the “monetary base”, consisting of cash and the central bank reserves of commercial banks.¹⁶⁰ If the central bank

¹⁵⁴ *Ibid.*

¹⁵⁵ International Monetary Fund, *Lessons of the Financial Crisis for Future Regulation of Financial Institutions and Markets and for Liquidity Management* (4 February 2009), at <<http://www.imf.org/external/np/pp/eng/2009/020409.pdf>>, 9.

¹⁵⁶ Pozsar et al., “Shadow Banking” (July 2010), *Federal Reserve Bank of New York Staff Reports*, at <http://www.newyorkfed.org/research/staff_reports/sr458.pdf>, 4-5.

¹⁵⁷ Goodhart, “The Background to the 2007 Financial Crisis”, 4 *International Economics and Economic Policy* 331 (2008), 334; Mizen, “The Credit Crunch of 2007-2008: A Discussion of the Background, Market Reactions, and Policy Responses”, 90 *Federal Reserve Bank of St. Louis Review* 531 (2008), 550.

¹⁵⁸ Stonecash, *supra* note 145, 263.

¹⁵⁹ *Ibid.*, 263.

wishes to increase or decrease the money supply it can change the supply of either of these components. In practice, central banks work through the reserves rather than going through the slow and cumbersome process of changing the supply of physical bank notes or coins.

Only the monetary base is under the central bank's direct control.¹⁶¹ Private financial institutions, such as commercial banks, provide the largest part of the aggregate money supply in an economy. Nonetheless, the central bank's monopoly over the monetary base allows it indirectly to influence credit creation by financial institutions and thus the aggregate money supply.¹⁶² Changes in the amount of central bank reserves supplied will affect their "price",¹⁶³ which is expressed by the interest rate. An increase in the interest rate leads to higher debt servicing costs and will slow down demand for debt, thus tempering credit creation by banks. Conversely, lower interest rates increase demand for debt, resulting in an expansion of the money supply through increased lending by commercial banks.

In addition to setting the interest rate, authorities can regulate credit creation through "reserve ratios" and "capital adequacy ratios". Some states operate a fractional reserve banking system, in which banks have to hold a minimum amount of cash or other liquid assets in reserves, defined as a percentage of their deposit liabilities.¹⁶⁴ This "reserve ratio" determines how much banks can lend and as a result limits the money supply.¹⁶⁵ Reserve ratios protect financial stability by ensuring that banks have sufficient liquidity when depositors call in their funds. The percentage, or the "reserve ratio", can be regulated.¹⁶⁶ However, not all states require their banks to hold reserves. Indeed, some states, such as the UK, do not require their banks to hold any reserves at all, but instead rely on other forms of prudential regulation to ensure the safety of deposits,¹⁶⁷ such as character requirements of board members. Due to competitive pressures in the global financial markets, reserve ratios have become quite low.¹⁶⁸

¹⁶⁰ Burda and Wyplosz, *supra* note 138, 203.

¹⁶¹ *Ibid.*, 200.

¹⁶² Friedman, *supra* note 141, 9977.

¹⁶³ Burda and Wyplosz, *supra* note 138, 212.

¹⁶⁴ "Fractional Reserve Banking", in Black et al. (Eds.), *A Dictionary of Economics* (2009).

¹⁶⁵ Baumol and Blinder, *supra* note 138, 251.

¹⁶⁶ *Ibid.*, 270; Burda and Wyplosz, *supra* note 138, 212; Stonecash, *supra* note 145, 271.

¹⁶⁷ Burda and Wyplosz, *supra* note 138, 205, 209.

¹⁶⁸ *Ibid.*, 209.

In contrast, states impose capital adequacy ratios, which are subject to international gentlemen's agreements discussed in Chapter 7. The capital adequacy ratio defines the amount of capital¹⁶⁹ banks need to maintain relative to their risk-weighted assets. Thus, whereas the reserve ratio determines the amount of credit that can be created, the capital adequacy ratio determines the amount of capital banks need to raise when extending that credit to ensure adequate protection against the risks involved in financial intermediation.¹⁷⁰ Capital adequacy ratios and credit creation are closely linked, because a requirement on banks to hold more capital against their assets acts as a brake on their ability to extend credit. The following example illustrates this. Under a 1:10 capital adequacy ratio, banks can extend a loan of 10 units for every unit of capital they hold. If the ratio were to lower to 1:5, banks would have to reduce the amount of credit extended by half or double their capital to be able to maintain the same amount of loans as under a 1:10 capital adequacy ratio.

The emergence of non-bank financial institutions has removed an important source of credit creation from regulatory supervision. To ensure that credit creation by the financial system remains in check, monetary authorities now face the challenge of improving regulation and of broadening oversight over players and products in the financial system.¹⁷¹

(3) *Exchange Rates and Official Reserves*

The currency component of the monetary base links monetary policy to exchange rate policy. A currency's exchange rate expresses the price of a foreign currency in terms of domestic currency.¹⁷² In an open economy, the exchange rate is the "most important single price"¹⁷³ as it determines the price of imports and exports. It is a key macroeconomic variable that links the domestic economy to the global economy.¹⁷⁴

When the value of a currency is tied to another currency (the anchor currency) or to a basket of other currencies, the central bank can intervene in the foreign exchange market to ensure that

¹⁶⁹ Lowenfeld, *International Economic Law*, 2nd ed. (2008), 820 defines "capital" as "the residual amount available to common equity holders after all other claims—of creditors and others—have been satisfied."

¹⁷⁰ Singer, *Regulating Capital: Setting Standards for the International Financial System* (2007), 16.

¹⁷¹ Crockett, *supra* note 148, 18.

¹⁷² Blanchard, *Macroeconomics* (1997), 209. An alternative definition of the exchange rate is the price of domestic currency in terms of the foreign currency.

¹⁷³ UN Conference on Trade and Development, *Trade and Development Report 2007* (2007), 25.

¹⁷⁴ Moosa, *Exchange Rate Regimes: Fixed, Flexible or Something in Between* (2005), 29; UN Conference on Trade and Development, *Trade and Development Report 2008* (2008), 5.

the exchange rate of its currency does not change. Even under a floating exchange rate regime, the central bank sometimes intervenes when the exchange rate is at a level that is considered harmful to the domestic economy because it does not reflect the underlying economic fundamentals. For example, inflation erodes the value of a state's currency in terms of the currency of another state where inflation is lower. As a result, the former's exchange rate should depreciate and the latter's exchange rate should appreciate. However, the higher interest rate used to fight inflation could attract speculative capital flows to the former. This increased demand for the former's currency raises its price in terms of the latter's currency. In other words, the former's exchange rate appreciates. The inflows of funds can trigger further inflation that can lead to price instability.

Central banks intervene in the foreign exchange market by buying or selling their currency or the foreign currencies they hold in reserves. Buying back the domestic currency by selling foreign currency reserves takes domestic currency out of circulation, reducing the monetary base and, by extension, the aggregate supply of money. Conversely, selling the domestic currency not only lowers its price, but also increases the currency component of the monetary base.

*B. The Link between Monetary Management Policies and Macro-Financial Stability
in Increasing Interdependence*

Following the previous Section's overview of monetary management policies, this Section explains that many of the financial crises that have plagued the international monetary and financial system in recent decades can be linked to monetary management policies.¹⁷⁵ Moreover, increased economic links between states and between inhabitants of different states have created an economic environment in which states' monetary management policies can easily have a transboundary impact. This illustrates the reading that states are increasingly interdependent, because they find themselves in situations where they are affected by another state's decisions. States will need to adapt their behaviour in response to other states' decisions or they will need to work together to develop an international monetary and financial system that aims to contain episodes of financial instability within the state in which they occur. Moreover, once financial instability affects the "real" economy,¹⁷⁶ the integrated global market

¹⁷⁵ Saccomanni, *Managing International Financial Instability: National Tamers Versus Global Tigers* (2008), 133-137.

¹⁷⁶ The real economy can be defined as "the part of the economy that is concerned with actually producing goods and services, as opposed to the part of the economy that is concerned with buying and selling on the financial markets", see Financial Times Lexicon, *Real Economy*, at <<http://lexicon.ft.com/term.asp?t=real-economy>>.

for goods can be a further vehicle for economic contagion.¹⁷⁷ As the current Global Financial Crisis has shown, economies following an export-led growth model are particularly vulnerable to a reduction in demand due to a financial crisis in their main export markets.¹⁷⁸ Sections (1) to (3) explain the links between recent financial crises and monetary management policies.

(1) *Credit Creation Limits and Macro-Financial Stability*

Credit creation limits are clearly linked to macro-financial instability. Looser limits on credit creation will encourage banks to extend more credit,¹⁷⁹ including to debtors they might otherwise not have lent to due to higher risks of default. Strict credit creation limits can slow growth in credit extended by banks, but can also create incentives to develop potentially riskier innovative financial products to circumvent these limits as was the case with the development of the shadow financial system and the “originate to distribute” business model for banks.

A state’s credit creation limits can affect other states, particularly if cross-border financial institutions are involved or if the financial products are traded internationally. The Global Financial Crisis illustrates this. The collapse of US sub-prime mortgages and its spread to related financial products and financial systems across the globe are well known. The immediate origins of the crisis lie in specific solvency problems of sub-prime mortgages, primarily in the US,¹⁸⁰ which resulted in liquidity problems in the money markets that in turn led to further solvency problems, first in the financial sector and later in the “real” economy as the financial sector stopped lending to address its own liquidity and solvency issues.¹⁸¹

¹⁷⁷ Finger and Schuknecht, *Trade, Finance and Financial Crises* (1999), 19.

¹⁷⁸ Pisani-Ferry and Santos, “Reshaping the Global Economy”, 46 *Finance & Development* 8 (2009), 10; World Bank, *2009 World Development Indicators* (2009), at <<http://go.worldbank.org/U0FSM7AQ40>>, 10.

¹⁷⁹ Levine, *An Autopsy of the US Financial System: Accident, Suicide, or Negligent Homicide?* (25 May 2010), at <<http://www.voxeu.org/index.php?q=node/5096>>.

¹⁸⁰ International Monetary Fund, *Lessons of the Global Crisis for Macroeconomic Policy* (19 February 2009), at <<http://www.imf.org/external/np/pp/eng/2009/021909.pdf>>, 7.

¹⁸¹ *Ibid.*; Blundell-Wignall and Atkinson, “The Sub-Prime Crisis: Causal Distortions and Regulatory Reform”, Lessons from the Financial Turmoil of 2007 and 2008 (H.C. Coombs Centre for Financial Studies, Kirribili, Australia, 2008), at <www.rba.gov.au/publications/confs/2008/blundell-wignall-atkinson.pdf>, 64; Financial Stability Forum, *Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience* (2008), 6; Hoenig, *supra* note 148, 9-10; International Monetary Fund, *Global Financial Stability Report–October 2008* (2008), 3-25; Mizen, *supra* note 157, 532, 539-545; Wehinger, “Lessons from the Financial Market Turmoil: Challenges Ahead for the Financial Industry and Policy Makers”, 2008/2 *Financial Market Trends* (2008), 4, fig. 2. For a timeline of events as the Global Financial Crisis unfolded, see Head, “Symposium: Local to Global: Rethinking Spheres after a World Financial Crisis: The Global Financial Crisis of 2008-2009 in Context–Reflections on International Legal and Institutional Failings, ‘Fixes,’ and Fundamentals”, 23 *Pacific McGeorge Global Business & Development Law Journal* 43 (2010), 48-52.

A regional example is that of three Icelandic banks—Landsbanki, Glitnir and Kaupthing—that had been privatized and deregulated without having in place the appropriate supervisory infrastructure.¹⁸² Starting from around 2002,¹⁸³ these banks were able to borrow large amounts of foreign currency, often with short repayment terms. Part of this funding originated from high interest on-call savings accounts offered to retail depositors in the EU. By 2007, the Icelandic banking sector had expanded to about nine times the size of Iceland’s economy.¹⁸⁴ This spectacular growth hid a maturity mismatch between long-term assets and short-term liabilities as well as a currency mismatch between assets and liabilities denominated in different currencies.¹⁸⁵ Both mismatches can trigger financial problems when a liability becomes due and insufficient assets are available to meet these liabilities because they are tied up for a longer term (maturity mismatch) or because they have, as a result of exchange rate movements, lost value compared to the liabilities when converted into the currency in which the liabilities are denominated (currency mismatch).

When the Global Financial Crisis made it harder for the Icelandic banks to refinance their loans,¹⁸⁶ the markets to which they had extended their activities were affected. In the UK, a bank run on Landsbanki’s branch Icesave occurred.¹⁸⁷ Within a week, Landsbanki collapsed.¹⁸⁸ Given the incapacity of the Icelandic authorities to act as a lender of last resort without external assistance,¹⁸⁹ it was unclear whether they would be able to compensate the UK depositors¹⁹⁰ as required under the Depositor Guarantee Directive that is part of the legislation of the European

¹⁸² Danielsson and Zoega, *Entranced by Banking* (9 February 2009), at <<http://www.voxeu.org/index.php?q=node/3029>>. Overviews of the events can be found in Agius, “Dying a Thousand Deaths: Recurring Emergencies and Exceptional Measures in International Law”, 2 *Göttingen Journal of International Law* 219 (2010), 226-230 and Waibel, *Iceland’s Financial Crisis—Quo Vadis International Law* (1 March 2010), at <<http://www.asil.org/insights100301.cfm>>.

¹⁸³ Lewis, “Wall Street on the Tundra” *Vanity Fair*, at <<http://www.vanityfair.com/politics/features/2009/04/iceland200904>>.

¹⁸⁴ Eiger and Tanenbaum, “Regulation of Financial Institutions, Financial Crises and Rescue Packages in Europe: The Iceland Case”, in Bruno (Ed.) *Global Financial Crisis: Navigating and Understanding the Legal and Regulatory Aspects* (2009), 111.

¹⁸⁵ Buiter and Sibert, *The Icelandic Banking Crisis and What to Do About It: The Lender of Last Resort Theory of Optimal Currency Areas* (October 2008), at <<http://www.cepr.org/pubs/PolicyInsights/PolicyInsight26.pdf>>, 4-5.

¹⁸⁶ *Ibid.*, 17-18.

¹⁸⁷ Danielsson and Zoega, *supra* note 182.

¹⁸⁸ Sibert, *The Icesave Dispute* (13 February 2010), at <<http://www.voxeu.org/index.php?q=node/4611>>.

¹⁸⁹ Buiter and Sibert, *supra* note 185, 7-9.

¹⁹⁰ Ibson and Parker, “Transcript Challenges Darling’s Claim over Iceland Compensation”, *Financial Times*, 24 October 2008.

Economic Area.¹⁹¹ In a controversial move, the UK Treasury froze Landsbanki's assets under the Anti-terrorism, Crime and Security Act 2001 to protect UK depositors.¹⁹² A few days later, the other Icelandic banks collapsed.¹⁹³ The UK and the Netherlands, where depositors were also affected, then negotiated a deal with Iceland to advance the funds necessary to reimburse the deposits up to the guaranteed maximum.¹⁹⁴ The Icelandic bill approving the negotiated repayments to the UK and the Netherlands passed in January 2010.¹⁹⁵ However, applying his constitutional powers, Iceland's President referred the bill to a referendum, in which it was rejected on 6 March 2010.¹⁹⁶ On 9 April 2011, the Icelandic population also rejected the renegotiated agreement that Iceland's Parliament had approved in February 2011.¹⁹⁷ The Surveillance Authority of the European Free Trade Association is expected to file a complaint against Iceland for violation of its obligations under the European Economic Area Agreement.¹⁹⁸

(2) *The Effect of Monetary Policies and Exchange Rate Policies on Macro-Financial Stability*

As discussed in Section A(2), monetary policies affect the amount of credit extended in an economy.¹⁹⁹ Contractionary as well as expansionary monetary policies can trigger macro-financial instability. On the one hand, expansionary monetary policies can fuel an unsustainable increase in asset prices.²⁰⁰ From early 2001 until June 2004, the US Federal Reserve lowered interest rates²⁰¹ to stimulate the economy in the aftermath of the bursting of the dotcom bubble

¹⁹¹ Directive 94/19/EC of the European Parliament and of the Council of 30 May 1994 on Deposit-Guarantee Schemes (1994) *Official Journal* L 135/5.

¹⁹² The Landsbanki Freezing Order 2008, Statutory Instrument 2008 No. 2668 (UK).

¹⁹³ Sibert, *supra* note 188.

¹⁹⁴ Waibel, *supra* note 182.

¹⁹⁵ *Ibid.*

¹⁹⁶ Ward, "Reykjavik to seek fresh debt agreement", *Financial Times* (6 March 2010).

¹⁹⁷ BBC News, *Iceland Parliament Votes for New Icesave Deal* (16 February 2011), at <<http://www.bbc.co.uk/news/business-12485819>>; BBC News, *Iceland President Calls Referendum on New Icesave Deal* (20 February 2011), at <<http://www.bbc.co.uk/news/world-europe-12519355>>.

¹⁹⁸ Danielsson and Zoega, *Lessons from the Icesave Rejection* (27 April 2011), at <<http://www.voxeu.org/index.php?q=node/6391>>.

¹⁹⁹ De Graeve et al., "Monetary Policy and Financial (In)Stability: An Integrated Micro-Macro Approach", 4 *Journal of Financial Stability* 205 (2008), 218.

²⁰⁰ Calvo, *Reserve Accumulation and Easy Money Helped to Cause the Subprime Crisis: A Conjecture in Search of a Theory* (27 October 2009), at <<http://www.voxeu.org/index.php?q=node/4135>>.

²⁰¹ Federal Reserve Board (US), *Monetary Policy: Open Market Operations* (26 January 2010), at <<http://www.federalreserve.gov/fomc/fundsrate.htm>>.

and the terrorist attacks of 9/11.²⁰² This expansionary monetary policy is thought to have contributed to the credit and mortgage distortions that eventuated in the sub-prime crisis and the Global Financial Crisis.²⁰³ On the other hand, a contractionary monetary policy can push debtors over the precipice because higher interest rates will increase debt-servicing costs. An example of the former is the US Federal Reserve decision in 1979 to embark upon a sharply contractionary monetary policy, triggering financial instability globally.²⁰⁴

The effect of a state's monetary policies on another state depends, firstly, on whether capital flows freely between them. According to a fundamental principle of macro-economics, known as the "Impossible Trinity", a state can only have two out of the following three policies: an independent monetary policy, a fixed exchange rate and capital mobility.²⁰⁵ Given the role of capital account liberalization in increasing interdependence between states, the analysis below assumes capital mobility between the affecting and the affected state to explain the different impact of other states' monetary policies depending on whether a state floats or fixes its exchange rate. Given this assumption of capital mobility, the Impossible Trinity implies that states will have to choose between a fixed exchange rate and an independent monetary policy. Thus, a second factor influencing the effect of a state's monetary policies on another state is whether the exchange rate of their currencies is fixed or floating.

If capital flows are liberalized, a *fixed* exchange rate arrangement makes an independent monetary policy impossible. Instead, the anchor's monetary policy will automatically be "imported", regardless of whether this is suitable for the fixing state's economy. Unsuitable monetary policies can lead to financial instability in the fixing state if large inflation differentials prevail between it and the anchor state, because higher inflation in the fixing state will erode the value of the fixed currency faster than the value of the anchor currency, resulting in overvaluation of the former compared to the latter. For example, in the early 1980s, Mexico maintained a peg to the US dollar, but its inflation was much higher than in the US, leading to an

²⁰² Blundell-Wignall and Atkinson, *supra* note 181; Goodhart, *supra* note 157, 332.

²⁰³ International Monetary Fund, *supra* note 152, 7; Schwartz, "The Role of Monetary Policy in the Face of Crises", 27 *Cato Journal* 157 (2007), 157-158; Taylor, *Getting Off Track: How Government Actions and Interventions Caused, Prolonged, and Worsened the Financial Crisis* (2009), 2, 8, 11.

²⁰⁴ Kindleberger and Aliber, *Manias, Panics, and Crashes: A History of Financial Crises*, 5th ed. (2005), 4.

²⁰⁵ Frieden, "Exchange Rate Politics: Contemporary Lessons from American History", 1 *Review of International Political Economy* 81 (1994), 83; Rodrik, "Governance of Economic Globalization", in Nye (Ed.) *Governance in a Globalizing World* (2000), 351-352.

overvalued peso.²⁰⁶ When a currency is overvalued, it can become exposed to a speculative attack anticipating a drop in value. To maintain the value of its currency, the fixing state will either have to increase the domestic interest rate to attract foreign funds or buy up its own currency using official foreign currency reserves. The first option can stymie domestic economic growth, whereas the second option can only last as long as the official foreign currency reserves last. In the case of Mexico, the government eventually ordered the conversion of US dollar bank deposits into pesos at a rate fixed below the prevailing market rate, creating havoc on international financial markets on which it had borrowed.²⁰⁷ Similar problems with fixed exchange rates occurred again in Mexico in the mid-1990s,²⁰⁸ in Thailand and other Asian states in 1997-1998²⁰⁹ and in Argentina in 2001.²¹⁰

In case of *floating* exchange rates, market forces determine the value of a state's currency. When combined with capital mobility, states can have an independent monetary policy. However, they are exposed to the monetary policies of other states because their exchange rate will fluctuate in response to their and other states' monetary policies. This is so because higher interest rates to stop an economy from overheating will make domestic investment more attractive to local and offshore investors. The increased demand for the domestic currency will increase its price, expressed in the exchange rate.²¹¹ A lower interest rate to stimulate an economy can have the opposite effect. Moreover, differences in prevailing interest rates between two open economies can trigger so-called "carry trades".²¹² These are "the specific financial operation of borrowing and selling a low-yielding currency to buy and lend in a high-yielding currency".²¹³ The state with the higher interest rate, i.e. the state with the currency in which investments yield more, will experience an inflow of foreign funds. This increases the money supply in that state, possibly causing inflation, which can worsen the problems of inflation that its central bank set out to battle in the first place. The increased demand for the high yielding currency will also

²⁰⁶ Lowenfeld, *supra* note 169, 672.

²⁰⁷ *Ibid.*, 673.

²⁰⁸ *Ibid.*, 688-689.

²⁰⁹ Eichengreen, *supra* note 1, 193-194.

²¹⁰ Lowenfeld, *supra* note 169, 719-733.

²¹¹ Blanchard, *supra* note 172, 259.

²¹² Merrouche and Nier, *supra* note 150, 28-29.

²¹³ UN Conference on Trade and Development, *supra* note 173, 15.

push its price upwards, even if this is not warranted on the basis of other economic fundamentals, for example if the state is running a current account deficit.²¹⁴

An example of how a state's monetary policy can affect other states where a higher interest rate prevails is visible in the wake of the US Federal Reserve's decision in November 2010 to inject \$600 billion into the ailing US economy by buying back government bonds.²¹⁵ This second round of quantitative easing, also known as QE2, resulted in depreciation of the US dollar and of all the currencies pegged to it, such as the Chinese Yuan, and in an appreciation of other currencies, particularly those of emerging economies with higher interest rates. While the US denied an intention to lower the US dollar, other states saw this QE2 as a deliberate move to undermine the value of the dollar and improve the competitive position of US exports on the global markets.²¹⁶ The latter states' concerns about the effects of QE2 are twofold. First, there is a concern that the inflows of "hot money" into their economies as a result of the cash injection in the US economy will be easily reversed, triggering a financial crisis similar to the 1997 Asian Financial Crisis when foreign investors withdrew funds from emerging Asian economies which caused the value of their currencies to drop.²¹⁷ Second, there are concerns about the impact of exchange rates on the competitiveness of emerging economies' exports on global markets.

The events even led the Brazilian Minister of Finance to warn of an "International Currency War".²¹⁸ The fear is that states engage in successive competitive devaluations to make their exports cheaper internationally and increase the relative price of imports in an effort to create growth for their economies at the expense of other economies. This warning has been triggered by the significant decline in the value of the US dollar and, given its peg, of the value of the Chinese Yuan. Various central banks have intervened in international currency markets to prevent their own currencies from rising.²¹⁹ These events illustrate how in an interdependent

²¹⁴ *Ibid.*, 15-17.

²¹⁵ Kakuchi, *Development: Currency Friction A Test of G-20 Mettle* (8 November 2010), at <<http://www.globalissues.org/news/2010/11/08/7570>>.

²¹⁶ International Centre for Trade and Sustainable Development, *G-20 Falls Short of Agreement on Trade Balances, Makes New Plug for Doha* (17 November 2010), at <<http://ictsd.org/i/news/bridgesweekly/96519/>>.

²¹⁷ Eichengreen, *supra* note 1, 194.

²¹⁸ Bowley, "As Dollar's Value Falls, Currency Conflicts Rise", *New York Times*, 20 October 2010; International Centre for Trade and Sustainable Development, *Brazilian Finance Minister Warns of 'International Currency War'* (29 September 2010), at <<http://ictsd.org/i/news/bridgesweekly/85803/>>.

²¹⁹ Portes, *Currency Wars and the Emerging-Market Countries* (4 November 2010), at <<http://www.voxeu.org/index.php?q=node/5740>>.

world, states' domestic policies have an impact on other states.²²⁰ This is so for the exchange rates, as well as for the other monetary management policies that have an impact on other states through their impact on the exchange rate.

(3) *Official Foreign Currency Reserves and Macro-Financial Stability*

Decisions regarding the accumulation and management of official foreign currency reserves create links between the monetary management policies of a state accumulating the reserves and a state issuing the reserve currency. Based on the idea that the US government will never default on its debts, the US dollar has become the preferred reserve currency worldwide.²²¹ In the past decade, official US dollar reserves held by developing states have grown significantly due to increased savings.²²² Their reserve holdings are now five times what they were about ten years ago.²²³ As a percentage of global GDP, reserves more than doubled over the same period.²²⁴

One factor behind the increased savings is the current account surpluses in oil-producing states resulting from the increase in oil prices.²²⁵ Another is the systematic undervaluation of fixed exchange rates by Asian economies. In the aftermath of the 1997 Asian financial crisis, many emerging economies successfully adopted this strategy to improve the competitiveness of their exports on the international markets.²²⁶ To avoid the resulting influx of money overheating the

²²⁰ Dadush and Eidelman, *The International Monetary System: If It Ain't Broke, Don't Fix It* (26 February 2011), at <<http://www.voxeu.org/index.php?q=node/6156>>.

²²¹ UN Conference on Trade and Development, *Trade and Development Report 2009* (2009), 121. Between 1999 and 2006, the US absorbed 85% of the net external financing from surplus countries, see Higgins and Klitgaard, "Financial Globalization and the U.S. Current Account Deficit", 13 *Current Issues in Economics and Finance* 1 (2007), 1.

²²² Commission of Experts, *Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System* (21 September 2009), at <http://www.un.org/ga/econcrisissummit/docs/FinalReport_CoE.pdf>, 27; World Bank, *supra* note 178, 7.

²²³ Korinek and Servén, *Undervaluation through Foreign Reserve Accumulation: Static Losses, Dynamic Gains* (10 May 2010), at <<http://www.voxeu.org/index.php?q=node/5022>>.

²²⁴ Commission of Experts, *supra* note 222, 112.

²²⁵ Bernanke, "The Global Saving Glut and the U.S. Current Account Deficit", *Sandridge Lecture, Virginia Association of Economists* (Richmond, Virginia, 10 March 2005), at <<http://www.federalreserve.gov/boarddocs/speeches/2005/200503102/>>; Setser, "A Neo-Westphalian International Financial System?", 62 *Journal of International Affairs* 17 (2008), 22-25.

²²⁶ Bernanke, *supra* note 225; UN Conference on Trade and Development, *Trade and Development Report 2005* (2005), ix-x; UN Conference on Trade and Development, *Trade and Development Report 2006* (2006), 7, 12; Setser, *supra* note 225, 19.

economy and causing inflation, oil-producing and export-oriented states absorbed their newfound wealth in official reserves or in sovereign wealth funds.²²⁷

Reserve accumulation can be perfectly justified based on the economic conditions of the state involved, such as the need to save current income out of non-renewable resources for future use.²²⁸ Many developing states accumulate reserves out of a desire for self-insurance against financial instability.²²⁹ Self-insurance decreases the need to rely on the IMF's funding with its demanding conditions, the appropriateness of which is questioned given the IMF's poor record during the Asian Financial Crisis.

However, reserve accumulation comes at a considerable cost.²³⁰ First, when funds are tied up in reserves, they cannot be invested in other projects, such as the development of infrastructure, hospitals or schools. Second, the assets in which reserves are invested (usually US Treasury Bills) yield a low return on investment. Domestic investment could have yielded a much higher return. Third, any international monetary system based on a national currency will inevitably produce global imbalances, as a state providing a reserve currency will run a continuous capital account surplus, to reflect the exports of financial assets to states holding the reserves. The more reserves other states hold, the more a state providing the reserve currency will become indebted.²³¹

Reserve accumulation links the economic fates of the emerging economies and the US economy. This has influenced monetary conditions in the US,²³² where the resulting increased liquidity has made it possible for policymakers to lower interest rates to stimulate growth because other states have been willing to hold US assets as reserves.²³³ At the same time, the states

²²⁷ Setser, *supra* note 225, 25 explains the sterilisation procedures undertaken by the Chinese government to absorb the domestic currency that would be added to the money supply when exporters convert the US dollars in the Chinese Renminbi.

²²⁸ International Monetary Fund, *Review of the 1977 Decision—Proposal for a New Decision Companion Paper* (22 May 2007), at <<http://www.imf.org/external/np/pp/2007/eng/nd.pdf>>, para. 43 [*“Companion Paper”*].

²²⁹ International Monetary Fund, *Review of the Fund's Financing Role in Member Countries* (28 August 2008), at <<http://www.imf.org/external/pp/longres.aspx?id=4287>>, 5.

²³⁰ Stiglitz, *Making Globalization Work* (2006), 248-260; Verma, *Brazil Rebuff for IMF Reserves Plan* (22 March 2010), at <<http://www.emergingmarkets.org/article.asp?PositionID=2601&ArticleID=2449724>>.

²³¹ Stiglitz, *supra* note 230, 254. The “Triffin Dilemma” suggests that this will eventually undermine the reserve currency's qualities as a reserve currency, see Commission of Experts, *supra* note 222, 109.

²³² Setser, *supra* note 225, 27.

²³³ Blundell-Wignall and Atkinson, *supra* note 181; Gowan, “Crisis in the Heartland”, 55 *New Left Review* 5 (2009), 26; International Monetary Fund, *supra* note 152, 8.

accumulating US dollars in their official reserves have exposed themselves to the monetary management policies of the US.²³⁴ Indeed, US monetary policy determines the yield of these investments, its exchange rate policies determine their value in terms of the investing state's currency and its credit creation regulation determines the safety of the investment.

C. The Difficulties Achieving International Co-Operation on Monetary Management Policies

Sections A and B discussed how monetary management policies relate to macro-financial instability and how one state's monetary management policies can have an adverse impact on other states in increasing interdependence. This Section discusses the difficulties states face to develop co-operative agreements on the conduct of monetary management policies as another reason why states are increasingly interdependent to avoid macro-financial instability.

States have agreed to limit their discretion regarding monetary management policies through the IMF Articles of Agreement. However, as Chapter 8 discusses, the agreed limits are often weak or, if stronger, difficult to apply in practice.

States have made few attempts to negotiate other international agreements imposing direct limits on the exercise of their sovereignty in relation to macro-financial stability. In 2009, the UN General Assembly's Commission of Experts, led by Stiglitz, argued for the creation of a "Global Economic Coordination Council" to address "areas of concern in the functioning of the global economic system in a comprehensive and sustainable way".²³⁵ The Council would be supported by an International Panel of Experts, which would play a role similar to the one played by the IPCC in relation to climate change.²³⁶ In the longer term, the Council would be at the same organisational level as the Security Council and the General Assembly.²³⁷ It would not only oversee the activities of the UN but also those of the IMF, the World Bank and the WTO.²³⁸ However, it is highly unlikely that this Council will ever see the light of day.²³⁹ During the preparation of the Commission of Experts' report, many developed states disputed the UN's

²³⁴ UN Conference on Trade and Development, *supra* note 221, 122.

²³⁵ Commission of Experts, *supra* note 222, 90.

²³⁶ *Ibid.*, 91.

²³⁷ *Ibid.*, 91.

²³⁸ *Ibid.*, 91.

²³⁹ For a recent call to reconsider the Stiglitz Commission's recommendations, see Gallagher, *Financial Reform: Whatever Happened to the Stiglitz Commission* (9 May 2011), at <<http://triplecrisis.com/stiglitz-commission/>>.

competency in financial matters.²⁴⁰ A few days after the Stiglitz Commission issued its report, the main developed and developing states chose the G-20, rather than the UN or the G-8, as the primary vehicle for international economic co-operation.²⁴¹

The G-20 is an informal grouping of the finance ministers and central bank governors of 19 developed and developing states as well as the EU.²⁴² The IMF and the World Bank also participate. In 2008, the G-20 heads of state started meeting at semi-annual summits.²⁴³ Although “unsustainable global macroeconomic outcomes” have been recognized as one of the Global Financial Crisis’ major underlying factors, the G-20 has, according to its own assessment, focused primarily on microeconomic reforms such as regulatory standards for individual financial institutions or measures combating terrorist financing.²⁴⁴ At the Seoul summit in November 2010, concerns about an “International Currency War” prompted a statement that G-20 members would undertake macro-economic policies that would, inter alia, involve “enhancing exchange rate flexibility to reflect underlying economic fundamentals, and refraining from competitive devaluation of currencies”.²⁴⁵ A US proposal to limit current account surpluses or deficits to a specific percentage of GDP was however rejected by other states.²⁴⁶ In early 2011, G-20 Finance Ministers and Central Bank Governors developed indicative guidelines to assess

²⁴⁰ *Ibid.*, 9.

²⁴¹ G-20, *Leaders’ Statement: The Pittsburgh Summit* (24-25 September 2009), at <http://www.g20.org/Documents/pittsburgh_summit_leaders_statement_250909.pdf>, para. 19; Arner and Buckley, “Redesigning the Architecture of the Global Financial System”, 11 *Melbourne Journal of International Law* 1 (2010), 24.

²⁴² The 19 states are Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, Korea, Turkey, United Kingdom and the United States. G-20 members represent 85% of global GDP and 2/3 of the world’s population, see G-20, *The Group of Twenty: A History* (2008), at <http://www.g20.org/Documents/history_report_dm1.pdf>, 8.

²⁴³ G-20, *Washington Declaration of the Summit on Financial Markets and the World Economy* (15 November 2008), at <http://www.g20.org/Documents/g20_summit_declaration.pdf>, para. 1. Later statements are G-20, *The G-20 Toronto Summit Declaration* (26-27 June 2010), at <http://g20.gc.ca/wp-content/uploads/2010/06/g20_declaration_en.pdf>; G-20, *The Global Plan for Recovery and Reform* (2 April 2009), at <<http://www.g20.org/Documents/final-communique.pdf>>; G-20, *supra* note 241.

²⁴⁴ G-20, *supra* note 242, 50.

²⁴⁵ G-20, *The G20 Seoul Summit Leaders’ Declaration* (12 November 2010), at <http://media.seoulsummit.kr/contents/dlobo/E1_Seoul_Summit_Leaders_Declaration.pdf>, para. 9.

²⁴⁶ International Centre for Trade and Sustainable Development, *supra* note 216.

“persistently large imbalances”.²⁴⁷ At this stage, the indicators in these guidelines only serve to identify the states that run such imbalances, and not as policy targets.²⁴⁸

The various G-20 leaders’ statements thus outline a big picture approach as to what needs to be done, but fail to specify how to implement this vision.²⁴⁹ Despite the lofty words of the statements, the agreed changes are still awaiting practical implementation,²⁵⁰ and the wait may be long. Implementation has to happen domestically and will therefore need to overcome domestic political obstacles. Further, the G-20 is not a formal organisation that can ensure that states undertake effective commitments and comply with them. The G-20 cannot provide global leadership due to diversity of opinions between the members and due to their competing domestic priorities.²⁵¹

IV. CONCLUSION

Both case studies illustrate how states are increasingly interdependent because they are affected by policy and regulatory decisions taken by other states. International agreements liberalizing trade and capital flows play an important role in transferring the transboundary effects of one state’s actions or omissions to another state. The transboundary impact in increasing interdependence is not only the impact of emissions or macro-financial instability within one territory on another, but also the impact of decisions not to regulate or to regulate minimally on the economic competitiveness of other states. Increasing interdependence can be addressed through co-operative agreements between states in which they voluntarily agree to limit how they exercise their sovereignty or in which they develop a regulatory framework in response to a specific global problem. However, in both case studies there is evidence of a clear dissonance between theory and practice. States generally understand that restrictions on unilateral decisions are needed to avoid transboundary problems, but fail to agree on effective limits on their sovereignty for which international law requires sovereign consent.

²⁴⁷ G-20, *Meeting of Finance Ministers and Central Bank Governors. Communiqué–Washington DC* (14-15 April 2011), at <<http://www.g20.org/Documents2011/04/G20%20Washington%2014-15%20April%202011%20-%20final%20communiqué.pdf>>.

²⁴⁸ *Ibid.*, para. 3.

²⁴⁹ Davies, “Global Financial Regulation after the Credit Crisis”, 1 *Global Policy* 185 (2010), 188.

²⁵⁰ Godoy, *No Sign of Financial Regulation* (20 July 2010), at <<http://www.globalissues.org/news/2010/07/20/6350>>.

²⁵¹ Roubini, *Our G-Zero World* (11 February 2011), at <<http://www.project-syndicate.org/commentary/roubini35/English>>.

A first question for this thesis is therefore whether there are principles that can provide guidance on how exercises of state sovereignty should be limited in order to protect the equal rights of other sovereign states. The next Chapter looks into liberal principles that have traditionally governed inter-state relations, and argues that these principles are still relevant even in increasing interdependence.

CHAPTER 2. INTERNATIONAL LAW AS A LIBERAL SYSTEM

A key part of this thesis' argument is that inter-state relations should be guided by liberal principles to achieve a balance between competing exercises of state sovereignty even in situations of increasing interdependence. Various scholars have described the international system as a liberal system, because of the central position given to state sovereignty and its corollaries of sovereign equality, the principle of non-intervention and sovereign consent.²⁵² This concept and its corollaries are studied in Chapter 3. This Chapter examines liberalism more closely. Section I describes the core tenets of liberal theory. Section II develops the normative argument for a liberal system of international law on the basis that it enables co-existence between highly different sovereign states. Section III concludes.

I. THE CORE TENETS OF A LIBERAL SYSTEM

Traditionally, liberalism is a political theory that is primarily concerned with the relationships between people and their relationship with the state. In this thesis, liberal theory is, however, used to assess inter-state relations and to determine the scope of states' rights and obligations in the exercise of their sovereignty. The core tenets of a liberal system are, first, a distinction between an unlimited private and a limited public sphere, and second, the concept of freedom. The following two Sections explore these tenets in the specific context of inter-state relations.

A. *The Distinction between Private and Public Spheres*

Liberalism is a moral and political philosophy that provides a justification for the priority given to individuals' liberties and rights in society.²⁵³ Liberalism propounds individual autonomy and freedom of choice so that people can lead "their lives as they see fit, within a broad range of legitimate variation, in accordance with their own understanding of what gives life meaning and value".²⁵⁴

The preference for individual freedom provides the basis for a model for political and social organisation.²⁵⁵ In traditional applications of liberal theory, the actors whose freedom merits

²⁵² See the references quoted in footnote 18.

²⁵³ Hall, "Liberalism", in Krieger (Ed.) *The Oxford Companion to the Politics of the World* (2001); Hovden and Keene, "Introduction", in Hovden and Keene (Eds.), *The Globalization of Liberalism* (2002), 4; "Liberalism", in McLean and McMillan (Eds.), *The Concise Oxford Dictionary of Politics* (2009).

²⁵⁴ Galston, *Liberal Pluralism: The Implications of Value Pluralism for Political Theory and Practice* (2002), 3.

²⁵⁵ Hovden and Keene, *supra* note 253, 4.

protection are private individuals within the domestic society of a nation, whether they are natural or legal persons. In the application of liberalism to international law, the relevant actors whose freedom merits protection are states.²⁵⁶ Thus, the principles of a domestic liberal society of individuals are applied to the international society of states.²⁵⁷

Liberal theories argue for a separation between a public and a private sphere.²⁵⁸ Within the private sphere, every individual is in principle free to act. To reconcile this freedom with the need for social order, the “harm principle” formulated by John Stuart Mill provides an exception to freedom, acceptable even to liberal theorists who promote a very wide interpretation of freedom.²⁵⁹ In his essay “On Liberty”, Mill noted as the object of his essay:²⁶⁰

to assert one very simple principle, as entitled to govern absolutely the dealings of society with the individual in the way of compulsion or control, [...] That principle is, that the sole end for which mankind are warranted, individually or collectively, in interfering with the liberty of action of any of their number, is self-protection. That the only purpose for which power can be rightfully exercised over any member of a civilised community, against his will, is to prevent harm to others. His own good, either physical or moral, is not a sufficient warrant. He cannot rightfully be compelled to do or forbear because it will be better for him to do so, because it will make him happier because, in the opinion of others, to do so would be wise, or even right.

In contrast to the almost unlimited nature of an individual person’s private sphere, liberals argue that the state’s actions, in the public sphere, should be limited to ensure the basic individual freedom in the private sphere.²⁶¹

A liberal system of international law starts from the premise that states should be able to decide independently on their domestic affairs²⁶² which, expressed in terms used in liberal theory, can be considered as a state’s “private sphere”.²⁶³ The “public sphere” of a state in international law is more difficult to identify. Except in the specific areas where states have created a supranational institution, there is no international government in the “public sphere” whose competences need to be circumscribed to protect states’ private sphere. Neither is there a

²⁵⁶ Koskenniemi, “The Future of Statehood”, 32 *Harvard International Law Journal* 397 (1991), 404; Simpson, *supra* note 18, 541.

²⁵⁷ Simpson, “Imagined Consent: Democratic Liberalism in International Legal Theory”, 15 *Australian Year Book of International Law* 103 (1994), 113; Simpson, *supra* note 18, 540-541.

²⁵⁸ Crowder, *Liberalism and Value Pluralism* (2002), 23; Hovden and Keene, *supra* note 253, 4.

²⁵⁹ Conway, *Classical Liberalism: The Unvanquished Ideal* (1995), 10.

²⁶⁰ Mill, *On Liberty and the Subjection of Women* (1859), 13.

²⁶¹ Galston, *supra* note 254, 4.

²⁶² The current scope of states’ domestic affairs under international law is examined in Chapter 3, Section I.B.

²⁶³ Simpson, *supra* note 257, 113.

central authority that can arbitrate between conflicting freedoms of equal actors, such as in the case of conflicts between one individual's privacy and another's right to free speech at the domestic level. Due to international law's decentralized nature, states are both subjects and rulers in international law. This congruence of subjects and rulers is very different to the domestic situations from which liberal theory is extrapolated. As a result of this congruence in international law, not every action taken by a state within its territory is therefore also within its private sphere. When states take regulatory decisions that have an impact on other states, they are effectively regulating beyond their own private sphere and in the public sphere. For example, a state's decision not to reduce GHG emissions or to set its interest rate at a particular level, even though *prima facie* limited to its own territory, can have transboundary consequences in other states' private spheres. When such transboundary impacts occur, actions should be recognized as taken in the public rather than in the private sphere.²⁶⁴ This implies that limits on state sovereignty are not necessarily incompatible with liberal principles, as long as they do not interfere with the "private sphere" of states' domestic affairs.

B. *The Concept of Freedom in Liberal Theory*

Despite the concept's centrality to liberal theory, an agreed definition of "freedom" is lacking.²⁶⁵ Liberalism does not promote a particular understanding of justice to aid the interpretation of "freedom", but instead leaves such matters to the individual.²⁶⁶ But individuals often disagree on what is valuable and make different choices when incommensurable values—i.e. values that cannot be weighed and balanced against because there is no "common currency" to quantify their relative values²⁶⁷—conflict.²⁶⁸ As a result, self-proclaimed liberal theories aiming to reach a consensus between all actors on a particular understanding of justice and on an accepted

²⁶⁴ For the purposes of this argument, the private sphere of the individual as opposed to the public sphere of the state is irrelevant. The emergence of international human rights agreements indicates the growing involvement of international law with how states, when regulating in the domestic public sphere, affect the private sphere of individuals. However, this thesis is not concerned with this vertical relationship. Instead, it focuses on the horizontal relationship between states and how their actions or omissions in the exercise of state sovereignty affect the sovereignty of other states.

²⁶⁵ Waldron, "Theoretical Foundations of Liberalism", 37 *The Philosophical Quarterly* 127 (1987), 130; "Liberalism", in Iain McLean and Alistair McMillan (Eds.) *The Concise Oxford Dictionary of Politics* (2009); Gaus and Courtland, "Liberalism", in Zalta (Ed.) *The Stanford Encyclopedia of Philosophy* (2010).

²⁶⁶ Hall, *supra* note 253.

²⁶⁷ Crowder, "Pluralism, Liberalism and Distributive Justice", 46 *San Diego Law Review* 773 (2009), 776.

²⁶⁸ Berlin, *supra* note 9, 212; Crowder, *supra* note 258, 2.

hierarchy between different values, rather than allowing for co-existence between diverse approaches to morality, are inconsistent with the basic premise of freedom in liberalism.²⁶⁹

This rejection of “monist” theories does not mean that liberalism’s commitment to freedom should be entirely unconditional or that freedom can never be restricted. Liberalism does not need to result in disorder and anarchy.²⁷⁰ Despite its neutrality towards the moral choices made by individual actors, liberalism is not neutral about the desirability of freedom itself.²⁷¹ Systemic arguments can be made that justify limits on the exercise of freedom. An individual or a state does not exercise this freedom in a vacuum, but in interactions with other individuals or other states. It follows logically from the need to respect an individual or a state’s freedom that the freedom of other individuals or other states needs to be respected as well.

A useful distinction to better understand “freedom” and the limitations that may be needed on freedom is that between the concepts of positive and negative freedom, usually associated with Berlin’s famous essay, “Two Concepts of Liberty”.²⁷² This distinction is central to the argument developed in this thesis.

“Positive freedom or liberty”²⁷³ is the ability to be “one’s own master” or the “freedom *to*”.²⁷⁴ It is “the possibility of acting—or the fact of acting—in such a way as to take control of one’s life and realize one’s fundamental purposes”.²⁷⁵ It is labelled “positive” because it requires the presence of something, e.g. control over oneself.²⁷⁶ “Negative freedom or liberty” represents a different way of looking at “freedom”. It designates “the area within which a man can act unobstructed by others”.²⁷⁷ The label “negative” indicates the absence of obstacles or interference.²⁷⁸ It is the

²⁶⁹ Gray, *supra* note 22, 2-3; Simpson, *supra* note 18, 539; Galston, *supra* note 254, 6.

²⁷⁰ Waldron, *supra* note 265, 134; Galston, *supra* note 254, 7.

²⁷¹ Hall, *supra* note 253; Galston, *supra* note 254, 23, 66.

²⁷² Berlin, *supra* note 9, 166-217. The roots of this distinction can be traced to earlier liberal thinking, e.g. by Kant, but Berlin’s formulation is the most famous, see Crowder, *Isaiah Berlin: Liberty and Pluralism* (2004), 66; Carter, “Positive and Negative Liberty”, in Zalta (Ed.) *The Stanford Encyclopedia of Philosophy* (2008).

²⁷³ The terms “freedom” and “liberty” can be used interchangeably, see Berlin, *supra* note 9, 169; Carter, *supra* note 272.

²⁷⁴ Berlin, *supra* note 9, 178; Galipeau, *Isaiah Berlin’s Liberalism* (1994), 104; Crowder, *supra* note 272, 66-67.

²⁷⁵ Carter, *supra* note 272.

²⁷⁶ *Ibid.*

²⁷⁷ Berlin, *supra* note 9, 169.

²⁷⁸ Carter, *supra* note 272.

freedom *from* external interference.²⁷⁹ Negative freedom implies the “choice among alternatives or options that is unimpeded by others.”²⁸⁰ Both concepts ultimately protect the same goal, namely to ensure a private sphere for action. As Berlin put it:²⁸¹

The essence of the notion of liberty, in both the ‘positive’ and ‘negative’ senses, is the holding off of something or someone –of others who trespass on my field or assert their authority over me, or of obsessions, fears, neuroses, irrational forces– intruders and despots of one kind or another.

Both conceptions of freedom complement each other, but they can also conflict. The potential conflict between both conceptions of freedom raises the question which conception should receive priority: should a liberal system start by protecting negative freedom in order to ensure positive freedom or vice versa? A crucial part of Berlin’s argument is that negative freedom, or “freedom from”, is the most basic conception of freedom. Berlin considered negative freedom to be foundational.²⁸² Without negative freedom, no individual is capable of the “self-mastery” that is central to positive freedom.²⁸³ Berlin emphasised the need to protect negative freedom because of the need to accommodate the wide variety of values that will perpetually characterize the human condition.²⁸⁴ He argued that²⁸⁵

[p]luralism, with the measure of ‘negative’ liberty that it entails, seems to me a truer and more humane ideal than the goals of those who seek in the great disciplined, authoritarian structures the ideal of ‘positive’ self-mastery by classes, or peoples, or the whole of mankind. It is truer, because it does, at least, recognise the fact that human goals are many, not all of them commensurable, and in perpetual rivalry with one another.

Giving priority to negative freedom rather than positive freedom is thus important because it allows for this diversity and for rivalry between different values.²⁸⁶ A different way of looking at this is that negative freedom is a necessary condition for positive freedom;²⁸⁷ protection of negative freedom provides a basis for the exercise of positive freedom, because external interference limits the ability of being “one’s own master”. For states, protection of their

²⁷⁹ Berlin, *supra* note 9, 172; Galipeau, *supra* note 274, 89.

²⁸⁰ Gray, *Isaiah Berlin* (1996), 15.

²⁸¹ Berlin, *supra* note 9, 203.

²⁸² *Ibid.*, 207, 208.

²⁸³ Galipeau, *supra* note 274, 90-91, 95-96, 105.

²⁸⁴ *Ibid.*, 111; Berlin, *supra* note 9, 214.

²⁸⁵ Berlin, *supra* note 9, 216.

²⁸⁶ Gray, *supra* note 280, 23.

²⁸⁷ Galipeau, *supra* note 274, 105.

negative freedom ensures the existence of a regulatory space, free from external interference, in which they can exercise their positive freedom. For example, if a state can restrict inflows or outflows of hot money to avoid macro-financial instability (protection of negative freedom), it can adopt monetary policies (exercise of positive freedom) without having to fear a rush to the exit by speculators.²⁸⁸ If states' negative freedom is not ensured, their ability to exercise their positive freedom is considerably impaired.²⁸⁹

However, protection of negative freedom is not a sufficient condition for the protection of positive freedom. Various obstacles towards "self-mastery" exist, not all of which are caused by external interference. For example, an individual may experience limited positive freedom due to internal limits on his or her ability or capacity. Applied to the context of states, states may lack the resources to pursue the development policies they would prefer. Solely ensuring negative freedom will not remove such obstacles. Therefore, once negative freedom is protected, positive freedom should be protected as well. Positive freedom merits protection, because without it negative freedom is little more than an empty promise.

Thus, the order of protection is important. International law's priority should be protecting states' negative freedom rather than positive freedom. If the order in which these freedoms are protected is reversed so that the protection of positive freedom occurs first, risks arise for the protection of negative freedom. Protection of positive freedom is not a sufficient condition for the protection of negative freedom. For example, international law can claim that states are independent in setting their monetary policy. However, this independence does not shield them from capital inflows or outflows in response to their monetary policy decisions that may lead to undesired exchange rate fluctuations affecting the economy's competitiveness on the global markets. Moreover, these decisions can have a negative impact on other states, as explained in Chapter 1. The two case studies offer numerous other examples of how one state's exercise of its positive freedom can affect other states' negative freedom, and as a result can restrict their enjoyment of their positive freedom.

The next Section develops the normative argument for a liberal system of states. It will be argued that giving priority to the protection of negative freedom is important to ensure states' co-existence and their co-operation in a pluralistic society of states.

²⁸⁸ See Chapter 1, Section III.B(2) for a discussion of the "hot money".

²⁸⁹ Jackson, "Sovereignty in World Politics: A Glance at the Conceptual and Historical Landscape", 47 *Political Studies* 431 (1999), 455.

II. THE NORMATIVE ARGUMENT FOR A LIBERAL SYSTEM OF STATES

Having described in the previous Section the core tenets of a liberal system as applied to inter-state relations, this Section argues that liberal principles should govern inter-state relations because this best ensures co-existence in a pluralistic society of states and, if needed, inter-state co-operation.

An important task for international law is to determine the relative boundaries of competing exercises of state sovereignty. This balancing act requires a series of normative choices as to which aspect of freedom deserves relative protection over the other. It is argued here that the exercise of balancing states' positive and negative freedom should be guided by the need to ensure co-existence in a pluralistic society of states and, where required due to the scale of the problems states face, their co-operation.

Liberal principles offer a way to organize the international society of widely different states to help ensure their co-existence, and if needed their co-operation. This does not necessarily mean that liberal principles provide the only possible model of political organisation that can ensure co-existence and co-operation. However, an alternative model of international organisation, e.g. one in which state sovereignty is not as important as it currently is, would require fundamental changes in the structure of international society before it could be implemented. A liberal model of political organisation best fits the current reality of the international society of sovereign states.²⁹⁰ Moreover, although it is not essential for states to be liberal internally to behave in accordance with liberal principles in their external relations, many states are domestically organised as liberal democracies, and are thus receptive to liberal principles.

A. *Ensuring States' Co-Existence*

In his seminal work, "The Changing Structure of International law", Friedmann distinguished between the international law of co-existence and the international law of co-operation.²⁹¹ In his taxonomy, the "international law of co-existence" covers the rules and principles guaranteeing mutual respect for each state's territorial sovereignty, regardless of social or economic structure.²⁹²

²⁹⁰ Cottier, "Multilayered Governance, Pluralism, and Moral Conflict", 16 *Indiana Journal of Global Legal Studies* 647 (2009), 657.

²⁹¹ Friedmann, *The Changing Structure of International Law* (1964), 60-61.

²⁹² *Ibid.*, 60-61.

Mutual respect for state sovereignty is a crucial element in Friedmann's definition of "co-existence". This is also the understanding given to "co-existence" in this thesis. This interpretation corresponds to the dictionary meaning of "co-existence" as "existing together or in conjunction",²⁹³ in which the addition of "together or in conjunction" expresses the mutuality in Friedman's definition. Jackson likewise uses "co-existence" to mean "mutual regard of separate states as, *prima facie*, worthy of recognition and respect".²⁹⁴

During the Cold War, "co-existence" had a loaded meaning because of the cynical usage of the term in Soviet foreign policy. From 1956 onwards, the Soviets used the term to refer to the side-by-side existence of communist and capitalist states through repudiation of war and any other form of interference as a tool in the ideological competition between them.²⁹⁵ Their usage of the term "co-existence" was cynical because the policy did not apply to relations between states that shared the same ideology.²⁹⁶ Moreover, the USSR's commitment to co-existence was mainly pragmatic as it was only professed when the competing objective of world revolution was unsuccessful or had reached its limits.²⁹⁷

Despite falling into disuse following the end of the Cold War,²⁹⁸ the term has not entirely disappeared from legal discourse.²⁹⁹ The maintenance of co-existence or "friendly relations" between states remains important as it ensures a minimum amount of order in what would otherwise be anarchy.³⁰⁰ Ensuring states' co-existence is important because of the wide diversity between states. They differ, firstly, when it comes to size of their territory and population. A state's territory can range from two km² for Monaco to over 17 million km² for Russia and a

²⁹³ "Coexistence", in *Oxford English Dictionary* 2nd ed. (1989).

²⁹⁴ Jackson, *supra* note 289, 455.

²⁹⁵ Khrushchev, "On Peaceful Coexistence", 38 *Foreign Affairs* 1 (1959), 3. As mentioned in Lerner, "The Historical Origins of the Soviet Doctrine of Peaceful Coexistence", in Baade (Ed.) *The Soviet Impact on International Law* (1965), 21, the element of competition however remained, as the doctrine only excluded force and interference from the methods of competition.

²⁹⁶ Lipson, "Peaceful Coexistence", in Baade (Ed.) *The Soviet Impact on International Law* (1965), 34.

²⁹⁷ Lerner, *supra* note 295, 26.

²⁹⁸ Dupuy, "International Law: Torn between Coexistence, Cooperation and Globalization. General Conclusions", 9 *European Journal of International Law* 278 (1998), 279.

²⁹⁹ See, for example, Fitzgerald, "Trade-Based Constitutionalisms: The Framework for Universalizing Substantive International Law?", 5 *University of Miami Yearbook of International Law* 111 (1996-1997); Spiermann, "Lotus and the Double Structure of International Legal Argument", in Boisson de Chazournes and Sands (Eds.), *International Law, the International Court of Justice and Nuclear Weapons* (1999), 144-145; Casanovas, *supra* note 11, 171; Yee, *Towards an International Law of Co-Progressiveness* (2004), 2; Preuss, "Equality of States—Its Meaning in a Constitutionalized Global Order", 9 *Chicago Journal of International Law* 17 (2008), 35.

³⁰⁰ Abi-Saab, "Whither the International Community?", 9 *European Journal of International Law* 248 (1998), 251.

state's population can range from 48 in the Pitcairn Islands to 1.3 billion in China.³⁰¹ Population and territory size do not always correlate, as some large states have relatively small populations and some large populations live in relatively small territories. An example of the first type is Canada, which is the second largest state but only ranks 36th in population. An example of the second is the UK with the 22nd largest population for the 79th largest territory.³⁰² Secondly, states differ politically, although the end of the Cold War has significantly reduced these differences. Thirdly, states differ in their economic structure. In some states subsistence or commercial agriculture is an important part of the economy, whereas other states' economies are centred on services or manufacturing. Finally, strong differences also exist in the cultural or religious make-up of states' populations.

In light of these differences, it is important that each state has its own "space" in which it can regulate as appropriate to its specific characteristics in terms of size, population and development. A liberal system, with its emphasis of ensuring a private sphere in which states' can exercise their freedoms, provides such a space.

A liberal system of international law can ensure co-existence by protecting states' negative freedom as well as their positive freedom. However, states' exercises of their freedom can lead to conflicts when a state's exercise of its positive freedom affects other states' negative freedom. As argued in Section I.B, the protection of states' negative freedom should receive priority over the protection of states' positive freedom. Prioritizing protection of states' negative freedom is necessary because of the diversity between states. Support for the argument that priority should be given to protection of states' negative freedom can be found in Jackson's statement that the negative dimension of sovereignty is the "legal foundation upon which a society of independent and formally equal states fundamentally rests."³⁰³ Peters similarly argues that protection of states' negative freedom is crucial for states' co-existence. As will be discussed in Chapter 3, this is made possible legally through the principle of non-intervention. She argues that³⁰⁴

[t]he principle of non-intervention is conventionally considered as the corollary of external state sovereignty, conceived as state autonomy. However, both principles have slightly different rationales. State sovereignty was initially ascribed to the holder of factual political power, and the legal principle still incorporates elements of

³⁰¹ Central Intelligence Agency, *The World Factbook*, at <<https://www.cia.gov/library/publications/the-world-factbook/index.html>> [*"World Factbook"*]

³⁰² *Ibid.*

³⁰³ Jackson, *Quasi-States: Sovereignty, International Relations, and the Third World* (1990), 27.

³⁰⁴ Peters, *supra* note 10, 533 (citations omitted).

effectiveness. Therefore, sovereignty inevitably has an extra-legal or 'untamed' face. In contrast, the rule of non-intervention has its origin in the society of states. It arises from their coexistence and provides for their continued existence. So non-intervention is constitutive for the international legal order, while sovereignty is not. The prior imperative is therefore non-intervention.

An international system that prioritises the protection of states' positive freedom over the protection of states' negative freedom cannot properly ensure co-existence between states. Ensuring co-existence requires limits on states' positive freedom to ensure that their actions do not negatively affect other states. Otherwise, in a situation of increasing interdependence, other states' negative freedom will be affected which will impair states' ability to co-exist.

In increasing interdependence, where states' actions or omissions increasingly affect other states, improving the protection of states' negative freedom may involve limitations on other states' positive freedom. These limitations are not necessarily incompatible with the distinction between the private and public spheres in liberal theory. Not all instances in which states exercise their positive freedom take place in their private sphere. As argued in Section I.A, some exercises of positive freedom in international law actually take place in the public sphere, given the decentralized nature of international law. In contrast, a state's negative freedom is congruent with its private sphere. Thus, this negative freedom should remain unlimited. Limits on positive freedom are possible if actions taken in pursuit of this positive freedom are in the "public sphere" of international law.

B. Ensuring States' Co-Operation

In increasing interdependence, states will need to co-operate with each other to develop global solutions through the creation of an international institution or through the development of rules and principles that define when, where or how states are allowed to exercise their sovereignty in specific circumstances of increasing interdependence. Friedmann argued that the "proliferation of sovereignties" put pressure on the traditional international law of co-existence, and described how international law needed to extend to subject matters previously outside its reach in order to bring states together to achieve what they cannot do alone.³⁰⁵

A liberal system is therefore not only required to ensure the co-existence of states in increasing interdependence, but also their co-operation. An international legal system that prioritizes the protection of states' positive freedom over the protection of their negative freedom will experience major difficulties in getting states to co-operate. This is because, as Chapter 3

³⁰⁵ Friedmann, *supra* note 291, 61-71.

discusses, co-operation between states relies on their consent. Although decisions on whether or not to co-operate, and on the extent and means of any possible co-operation, can take place under international political pressure, they are ultimately domestic political decisions that are usually focused on short-term domestic costs and benefits rather than on long-term global interests. It cannot be assumed that governments will always be willing to sacrifice domestic policy objectives to advance solutions to global problems, even if it is important for the international community that the problem be avoided.³⁰⁶

This will particularly be so if the problem's impacts around the world are asymmetric or if states have asymmetric interests in the various possible co-operative solutions. As discussed above,³⁰⁷ this is the case with respect to climate change mitigation. There is an asymmetry between the states that are affected by the risk of climate change and those that contribute the most to increased atmospheric GHG emissions. States for whom mitigation will be costly but who are not at risk of climate change will be unwilling to co-operate.

Similar problems arise in the case study on macro-financial instability and monetary management policies. All states benefit from macro-financial stability, but may benefit differently depending on the measures needed to ensure macro-financial stability. A clear example is that of the "global imbalances" between states. Some states, such as the US, are running a chronic current account deficit, whereas others, such as China and Germany, are running a chronic surplus. The imbalances are the product of various factors, such as undervalued fixed exchange rates, different domestic savings rates and the export-oriented nature of industries. The question is which states should have to change which policies. Should China allow appreciation of the Yuan? Should China take measures to reduce the savings rate by developing a social safety net so its citizens no longer need to save and can consume more? Or, should the US adopt measures to increase savings and reduce consumption?

III. CONCLUSION

This Chapter proceeded from the premise of much international law literature, namely that international law is based on liberal principles. It has described how liberal principles can provide guidance on the balance between potentially competing exercises of state sovereignty to maintain sovereignty's relative nature and to ensure the decisional sovereignty of states, even in

³⁰⁶ Rodrik, *Don't Count on Global Governance* (8 November 2010), at <<http://www.project-syndicate.org/commentary/rodrik50/English>>.

³⁰⁷ See Chapter 1, Section II.B(1).

situations of increasing interdependence. It has further been argued that for international law to be a liberal system of states, priority should be given to the protection of states' negative freedom over the protection of their positive freedom to ensure co-existence and co-operation between states.

Chapter 3 focuses on the concept of state sovereignty that has been the basis for inter-state relations for the past few centuries. The rules and principles governing the exercise of state sovereignty in general international law will be analysed to assess the scope of states' positive freedom when their actions have a negative impact on other states. As will be argued, general international law currently gives states broad positive freedom. This is incompatible with the requirements of a liberal system in which the focus should be on protecting states' freedom from external interference.

CHAPTER 3. THE CENTRALITY OF STATE SOVEREIGNTY IN INTERNATIONAL LAW

Chapter 1 discussed how states increasingly find themselves in situations where their decision-making options and the potential outcomes of their decisions are affected by other states' decisions. This Chapter describes the traditional basic structure of the international legal system as a system centred on the idea of state sovereignty. Despite the reality of states' increasing interdependence, it will be argued that state sovereignty continues to be central to international law.

Section I analyses the two components of "state sovereignty": the state and sovereignty. Section II discusses the traditional emphasis on state sovereignty because of its connection to self-determination, and argues that the most appropriate way to think about state sovereignty is as "decisional sovereignty". Section III discusses how state sovereignty is a relative concept that is limited by the equal sovereignty of other states. However, it will be argued that the reality of increasing interdependence puts the idea of "relative sovereignty" under pressure. This is because the legal limits on the exercise of state sovereignty that traditionally ensure its relative nature are insufficiently flexible to accommodate the complex situations that arise out of increasing interdependence. Section IV concludes.

I. STATES AND SOVEREIGNTY

In international law, sovereignty is closely associated with statehood³⁰⁸ with the result that "sovereignty" is nowadays often used synonymously with "state sovereignty". However, sovereignty has historically belonged to different entities.³⁰⁹ Originally, it rested with the person of the sovereign. Between the 16th and early 19th century, sovereignty became attributed to states that were considered legally equal by virtue of their sovereignty. State sovereignty is traditionally linked to the 1648 Peace of Westphalia, the umbrella term for the Peace Treaties of Münster and Osnabrück that ended the Thirty Years' War.³¹⁰ The state-centred system of

³⁰⁸ Crawford, *The Creation of States in International Law*, 2nd ed. (2006), 32.

³⁰⁹ Jackson, *Sovereignty: Evolution of an Idea* (2007), 8.

³¹⁰ Janis, "Sovereignty and International Law: Hobbes and Grotius", in MacDonald (Ed.) *Essays in Honour of Wang Tieya* (1993), 392-393; Brand, "The Role of International Law in the Twenty-First Century: External Sovereignty and International Law", 18 *Fordham International Law Journal* 1685 (1995), 1688; Fowler and Bunck, *Law, Power, and the Sovereign State: The Evolution and Application of the Concept of Sovereignty* (1995), 65; Taylor, "A Modest Proposal: Statehood and Sovereignty in a Global Age", 18 *University of Pennsylvania Journal of International Economic Law* 745 (1997), 751; Harding and Lim, "The Significance of Westphalia: An Archeology of the International Legal Order", in Harding and Lim (Eds.), *Renegotiating Westphalia: Essays and Commentary on the European and Conceptual Foundations of Modern International Law* (1999), 5; Perrez, *Cooperative Sovereignty: From Independence to Interdependence in the Structure of International Environmental Law* (2000), 18-25.

international law and international relations is therefore commonly referred to as the “Westphalian system”.³¹¹ An increasing number of scholars argue that this link to the Peace of Westphalia is historically inaccurate,³¹² or at the very least an oversimplification,³¹³ as neither treaty explicitly refers to sovereignty. Nevertheless, the term “Westphalian” is still a useful “professional code word”³¹⁴ to refer to the fact that state sovereignty is the cornerstone of international law and international relations.³¹⁵ It is not inconceivable that state sovereignty will in the future be abandoned in favour of another arrangement of sovereignty.³¹⁶ However, as Section A argues, states continue to play a central role in contemporary international law,³¹⁷ and future systemic changes are, for now, in the realm of speculation. Nevertheless, this discussion illustrates that the ideas of the “state” and of “sovereignty” are two components that make up “state sovereignty”. Section A focuses on the idea of states and Section B examines the meaning of state sovereignty.

A. *States as Vehicles for Political and Social Organisation*

A state is an institution for the political and social organisation of a community of individuals.³¹⁸ States do not physically exist separately from the individuals that make up the community, but are a “fiction”³¹⁹ or an “abstraction”³²⁰ individuals identify with. A political community is

³¹¹ Lyons and Mastanduno, “Introduction: International Intervention, State Sovereignty, and the Future of International Society”, in Lyons and Mastanduno (Eds.), *Beyond Westphalia? State Sovereignty and International Intervention* (1995), 5; Jackson, “Sovereignty-Modern: A New Approach to an Outdated Concept”, 97 *American Journal of International Law* 782 (2003), 786; Engle, “The Transformation of the International Legal System: The Post-Westphalian Legal Order”, 23 *Quinnipiac Law Review* (2004-2005), 23-24; Hayman and Williams, “Westphalian Sovereignty: Rights, Intervention, Meaning and Context”, 20 *Global Society* 521 (2006), 522.

³¹² Osiander, “Sovereignty, International Relations, and the Westphalian Myth”, 55 *International Organization* 251 (2001), 267; Besson, “Sovereignty in Conflict”, in Warbrick and Tierney (Eds.), *Towards an ‘International Legal Community’? The Sovereignty of States and the Sovereignty of International Law* (2006), 141.

³¹³ Schreuer, “The Waning of the Sovereign State: Towards a New Paradigm for International Law?”, 4 *European Journal of International Law* 447 (1993), 447; Beaulac, “The Westphalian Legal Orthodoxy—Myth or Reality?”, 2 *Journal of the History of International Law* 148 (2000), 162.

³¹⁴ Pulkowski, “Structural Paradigms of International Law”, in Broude and Shany (Eds.), *The Shifting Allocation of Authority in International Law: Considering Sovereignty, Supremacy and Subsidiarity. Essays in Honour of Professor Ruth Lapidoth* (2008), 64.

³¹⁵ *Nicaragua*, para. 263; Commission on Global Governance, *Our Global Neighbourhood: The Report of the Commission on Global Governance* (1995), 68; Brunnée and Toope, *Legitimacy and Legality in International Law: An Interactional Account* (2010), 71.

³¹⁶ Jackson, *supra* note 309, 112-113.

³¹⁷ Delbruck, *supra* note 29, 13; Schermers, *supra* note 7, 186, 192.

³¹⁸ Raič, *Statehood and the Law of Self-Determination* (2002), 20-21.

³¹⁹ McCorquodale, “International Community and State Sovereignty: An Uneasy Symbiotic Relationship”, in Warbrick and Tierney (Eds.), *Towards an ‘International Legal Community’?: The Sovereignty of States and the Sovereignty of International Law* (2006), 245.

recognized as a state under international law if certain criteria are met. These criteria are reflected in the first article of the 1933 Montevideo Convention on the Rights and Duties of States:³²¹

The state as a person of international law should possess the following qualifications:
a) a permanent population; b) a defined territory; c) government; and d) capacity to enter into relations with other states.

In international law, states are recognized as international legal persons that can interact with other legal persons. States are no longer the only actors in international law.³²² However, this thesis takes the position that sovereign states remain the preferred vehicles for political organisation even in increasing interdependence. There are a number of reasons for this. First, suitable alternatives to a state-based system of international relations are not immediately available.³²³ Second, as instruments for political and social organisation between individuals, states serve a useful role. State sovereignty is not a central concept of international law for its own sake.³²⁴ Rather, as the following Sections explain, the concept is central because it expresses notions of self-assertion, self-rule and self-hood³²⁵ and incorporates values such as sovereign equality, self-determination and order between states.³²⁶

A state-based international legal system is far from perfect. States do not always appropriately represent all their inhabitants. For example, in former colonies the application of the *uti possidetis* principle meant that the boundaries of newly independent states were often drawn along the lines of demarcation prevailing before independence.³²⁷ A discussion of what makes states legitimate or when states are an adequate reflection of self-determination is, however, not of direct relevance to this thesis and will therefore be left aside.

³²⁰ Henkin, *supra* note 18, 7.

³²¹ *Montevideo Convention*, art. 1.

³²² Lowe, *International Law* (2007), 14-18.

³²³ Jackson, *supra* note 289, 456; Brooks, "Failed States, or the State as Failure?", 72 *University of Chicago Law Review* 1159 (2005), 1182; Marauhn, "Changing Role of the State", in Bodansky et al. (Eds.), *The Oxford Handbook of International Environmental Law* (2007), 728.

³²⁴ Brooks, *supra* note 323, 1191; Peters, *supra* note 10, 518; Brunnée and Toope, *supra* note 315, 36.

³²⁵ Delbruck, *supra* note 29, 5; Koskenniemi, "What Use for Sovereignty Today?", 1 *Asian Journal of International Law* 61 (2011), 68-69.

³²⁶ Jackson, *supra* note 289, 454; Bederman, *The Spirit of International Law* (2002), 85; Sarooshi, "The Essentially Contested Nature of the Concept of Sovereignty: Implications for the Exercise by International Organizations of Delegated Powers of Government", 25 *Michigan Journal of International Law* 1107 (2003-2004), 1115; Besson, *supra* note 312, 148.

³²⁷ Brownlie, *Principles of Public International Law*, 6th ed. (2003), 129-130.

B. *State Sovereignty and its Corollaries*

As soon as there exists more than one community of individuals organized in a state, there is a need to regulate states' interactions. Between the 17th and 19th century, states' interactions started being organized on the basis of the idea of sovereignty over a specific territory.

"Sovereignty" can be defined as the ultimate legal authority to decide to the exclusion of others.³²⁸ States exercise this authority over their "domestic affairs". Often, the term "domestic affairs" is used interchangeably with "reserved domain"³²⁹ or "domestic jurisdiction".³³⁰ Therefore, to understand the scope of state sovereignty, a crucial question is the extent of a state's "domestic affairs". The 1923 *Nationality Decrees* Advisory Opinion of the Permanent Court of International Justice ("PCIJ") is still regarded as the authoritative interpretation of "domestic jurisdiction", "reserved domain" or "domestic affairs".³³¹ The background to his Opinion is a dispute between the UK and France about the impact on British citizens of the nationality decrees issued by France in Tunis—at the time a French protectorate—and in Morocco's French Zone. The League of Nations' Council asked the PCIJ whether the dispute related to a matter which, by international law, was solely within France's domestic jurisdiction. This question was important because Article 15(8) of the Covenant of the League of Nations precluded the Council of the League of Nations from making recommendations about the settlement of a dispute arising "out of a matter which by international law is solely within the domestic jurisdiction of that party".³³² The PCIJ held that³³³

[t]he question whether a certain matter is or is not solely within the jurisdiction of a State is an essentially relative question; it depends upon the development of international relations. [...] [I]t may well happen that, in a matter which [...] is not, in principle regulated by international law, the right of a State to use its discretion is nevertheless restricted by obligations which it may have undertaken towards other States.

³²⁸ *Island of Palmas*, 838; Sarooshi, *supra* note 326, 1108; Jackson, *supra* note 309, 10-11; Lake, "The State and International Relations", in Reus-Smit and Snidal (Eds.), *The Oxford Handbook of International Relations* (2008), 43.

³²⁹ A literal translation of the French "domaine réservé". Brownlie, *supra* note 327, 291; Ziegler, "Domaine Réservé", in Wolfrum (Ed.) *The Max Planck Encyclopedia of Public International Law*, at <www.mpepil.com>.

³³⁰ Friendly Relations Declaration, *supra* note 10; D'Amato, "Domestic Jurisdiction", in Bernhardt (Ed.) *Encyclopedia of Public International Law*, 1090.

³³¹ Nolte, "Article 2 (7)", in Simma (Ed.) *The Charter of the United Nations: A Commentary* (2002), 157; Brownlie, *supra* note 327, 291.

³³² *Covenant of the League of Nations*, art. 15(8).

³³³ *Nationality Decrees Advisory Opinion*, 24.

Given its dependence on the evolution of international relations, the scope of a state's domestic affairs is inherently in flux. As the passage above indicates, the evolution of international law and international relations can restrict the scope of a state's domestic affairs. Attempts at abstractly categorizing matters as within or outside domestic jurisdiction are considered a meaningless exercise.³³⁴ This can only be determined for each state individually, depending on its specific obligations under international law.³³⁵

State sovereignty is an abstract concept. To imbue the concept with greater meaning, a number of its corollaries can be identified.³³⁶ The following Sections give an overview of the basic corollaries of state sovereignty: sovereign equality, the principle of non-intervention and the requirement of sovereign consent to international obligations.

(1) *Sovereign Equality*

Despite the factual differences between states, described above,³³⁷ the legal equality of states as international legal persons is central to international law.³³⁸ Legal equality follows logically from the idea of sovereignty as ultimate authority;³³⁹ if one state were hierarchically higher than another, the latter's authority would no longer qualify as ultimate.

The legal equality of sovereign states is expressed in the UN Charter, where it is the first proclaimed principle on which the United Nations is based.³⁴⁰ The UN General Assembly confirmed the principle of sovereign equality in the Friendly Relations Declaration,³⁴¹ considered to be an authoritative interpretation of the UN Charter.³⁴² According to this Declaration, sovereign equality means that all states "have equal rights and duties and are equal

³³⁴ Preuss, "Article 2, Paragraph 7 of the Charter of the United Nations and Matters of Domestic Jurisdiction", 74 *Recueil des Cours* 553 (1949), 568; Rajan, *The Expanding Jurisdiction of the United Nations* (1982), 232; Nolte, *supra* note 331, 157; Brownlie, *supra* note 327, 291.

³³⁵ Abi-Saab, "Some Thoughts on the Principle of Non-Intervention", in Suy and Wellens (Eds.), *International Law: Theory and Practice* (1998), 230.

³³⁶ Brownlie, *supra* note 327, 287.

³³⁷ See Chapter 2, Section II.A.

³³⁸ Preuss, *supra* note 299, 25-26.

³³⁹ Jackson, *Sovereignty, the WTO and Changing Fundamentals of International Law* (2006), 58; Peters, *supra* note 10, 528-529.

³⁴⁰ *UN Charter*, art. 2(1).

³⁴¹ Friendly Relations Declaration, *supra* note 10.

³⁴² Schrijver, *supra* note 4, 372.

members of the international community, notwithstanding differences of an economic, social, political or other nature.”

All states are thus entitled to the same set of rights,³⁴³ such as the right to be free from external intervention and the right to consent to international obligations. Each is discussed in turn in the following two Sections. These rights allow for the diversity of states and protect a state’s internal structure from external interference. Ultimately, these rights are more important in determining inter-state relations than the abstract principle of sovereign equality that underpins them.³⁴⁴

(2) *Principle of Non-Intervention*

A second corollary of state sovereignty is the principle of non-intervention.³⁴⁵ This principle protects states against external interference in their domestic affairs by other states, non-state actors and international organisations.³⁴⁶ Prohibiting external interference, whether that interference is by armed force or by other means, can help to protect states’ ability to exercise their legal authority.³⁴⁷ The principle of non-intervention can be seen as ensuring the existence of a “private sphere” in which states can exercise their sovereignty free from any international interference. Thus, the principle of non-intervention illustrates how international law is set up as a liberal system.³⁴⁸

In practice, a crucial issue in the protection of state sovereignty through the principle of non-intervention is the definition of “intervention”. A wide definition of prohibited interventions, i.e. one that includes a wide range of externally caused impacts, will provide better protection of the affected state’s domestic affairs at the expense of other states’ freedom to act. A strict definition of prohibited intervention, i.e. one that only includes a specific subset of externally caused impacts, will protect affected states’ negative freedom only in specific situations, and result in a wider scope of action for other states. Section III.C(1) will argue that “intervention” is interpreted narrowly which reduces the principle’s utility in situations of increasing interdependence. Therefore, in situations of increasing interdependence, the principle of non-

³⁴³ Simpson, *supra* note 21, 53-54.

³⁴⁴ Lowe, *supra* note 322, 115.

³⁴⁵ *Nicaragua*, para. 202; Abi-Saab, *supra* note 335, 225.

³⁴⁶ Peters, *supra* note 10, 515, 533.

³⁴⁷ *Ibid.*, 518.

³⁴⁸ Simpson, *supra* note 257, 113.

intervention does not sufficiently restrict states in the exercise of their sovereignty to shield other states from external interference.

(3) *Sovereign Consent*

States can restrict the exercise of their sovereignty by voluntarily entering into an agreement with other actors to exercise their sovereignty in a particular way.³⁴⁹ The requirement of consent is analogous to the exercise of individuals' contractual freedom in a liberal system. Consent opens up opportunities for states to refine the parameters of the legitimate exercise of sovereignty when conflicts arise or when co-operation is necessary to deal with global problems, allowing them to make the most of their sovereignty. In this respect, the PCIJ has held that³⁵⁰

the discretion left to states by international law explains the great variety of rules which they have been able to adopt without objections or complaints on the part of other States; it is in order to remedy the difficulties resulting from such variety that efforts have been made [...] to prepare conventions the effect of which would be precisely to limit the discretion at present left to States in this respect by international law, thus making good the existing lacunae in respect of jurisdiction or removing the conflicting jurisdictions arising from the diversity of principles adopted by the various states.

Once states have consented to an international agreement that limits how they can exercise their sovereignty, these limits are considered compatible with their sovereignty.³⁵¹ The consent requirement is useful to ensure that states are not subject to international obligations to which they have not consented and protects states against external interference.³⁵² This is particularly important given the wide diversity between states and between the opinions that they may hold on the substantive matters covered by the international agreement.³⁵³

II. STATE SOVEREIGNTY AS DECISIONAL SOVEREIGNTY

Traditionally, state sovereignty had normative value because it was seen as promoting self-determination, self-reliance and self-sufficiency, while at the same time ensuring sovereign equality between states.³⁵⁴ A different way of expressing this notion of self-determination is the notion of "decisional sovereignty", a notion first used by Australia in its pleadings before the ICJ

³⁴⁹ Weil, *supra* note 18, 420.

³⁵⁰ *Lotus*, 19.

³⁵¹ *Wimbledon*, 25.

³⁵² Henkin, *supra* note 18, 28; Sweetser, "Humanity as the A and Ω of Sovereignty: Four Replies to Anne Peters", 20 *European Journal of International Law* 549 (2009), 551.

³⁵³ Cottier, *supra* note 290, 650.

³⁵⁴ Delbruck, *supra* note 29, 5; Besson, *supra* note 312, 148, 160.

in the *Nuclear Tests* case. Australia argued that sovereignty does not only entitle states to territorial inviolability, but also to decisional inviolability. Each state, Australia argued, has an “independent right to determine what acts shall take place within its territory.”³⁵⁵ Therefore, “decisional sovereignty is violated by such an intrusion as impairs or destroys the unfettered capacity to decide.”³⁵⁶

Although the concept of decisional sovereignty was not analysed by the ICJ³⁵⁷ and is only mentioned in passing in legal literature,³⁵⁸ it is a useful concept that merits further exploration. Adding the qualifier “decisional” to sovereignty may seem superfluous, given that sovereignty is defined as the ultimate authority to decide. However, the qualifier is useful to shift the focus from the traditional “Westphalian” conception of sovereignty as states’ independent decision-making within their territory towards states’ independent decision-making in relation to their domestic affairs. Traditionally, sovereignty is often considered as a “title to territory”³⁵⁹ that allows states to take independent decisions within their territory and bans them from acting in another state’s territory without the latter’s consent.³⁶⁰ As famously articulated by Huber in the *Island of Palmas* arbitration:³⁶¹

Sovereignty in the relations between States signifies independence. Independence in regard to a portion of the globe is the right to exercise therein, to the exclusion of any other State, the functions of a State.

However, in increasing interdependence, states’ domestic affairs are often affected by events happening outside their territory. Likewise, actions within their territory can increasingly affect other states’ domestic affairs. Therefore, the link between territory and sovereignty has become more complex than it was when states were less interdependent. Although territorial

³⁵⁵ Nuclear Test Cases (Australia v. France), *Memorial on Jurisdiction and Admissibility Submitted by the Government of Australia*, 336, para. 454, at <<http://www.icj-cij.org/docket/files/58/9443.pdf>>.

³⁵⁶ Nuclear Test Cases (Australia v. France), *Oral arguments on Jurisdiction and Admissibility—Minutes of the public sittings held at the Peace Palace, The Hague, on 4, 5, 6, 8, 9 and 11 July and 20 December 1974*, 496, at <<http://www.icj-cij.org/docket/files/58/11829.pdf>>.

³⁵⁷ Judge Barwick discusses it briefly in his dissenting opinion, where he mentions though that, despite initial impressions, decisional sovereignty was not a major basis of Australia’s claim, see *Nuclear Tests*, dissenting opinion Judge Barwick, 428.

³⁵⁸ See, e.g., Brownlie, *State Responsibility* (1983), 68-69 who states that “it is not unreasonable to propose the concept of ‘decisional sovereignty’”, but does not analyse it, or Giref, “Legal Aspects of Nuclear Testing”, 23 *Bracton Law Journal* 25 (1991), 34.

³⁵⁹ Lauterpacht, *supra* note 7, 139-140. See also, Brownlie, *supra* note 327, who devotes a whole Part to the discussion of territorial sovereignty.

³⁶⁰ Malanczuk and Akehurst, *Akehurst’s Modern Introduction to International Law*, 7th rev. ed. (1997), 109.

³⁶¹ *Island of Palmas*, 838.

boundaries remain an important factor in determining whether states can exercise sovereignty over a specific matter, the simple fact that a state's decision relates to an act or actor within its territory may, under a decisional approach to sovereignty, not be a sufficient basis for sovereignty when other states are negatively affected by the decision. What is important nowadays is to protect states' entitlement to take independent decisions regarding their domestic affairs, unrestricted by external actions but limited by the equal sovereignty of other states.

Like sovereign equality, decisional sovereignty is integral to the stability of an international system based on sovereign states. Decisional sovereignty and sovereign equality imply that exercises of sovereignty are inherently limited to ensure the sovereignty of other states. This is the topic of the following Section.

III. STATE SOVEREIGNTY AS A RELATIVE CONCEPT

Since state sovereignty is applied in a world of about 200 states, this ultimate legal authority is not absolute but is limited by the equal sovereignty of other states.³⁶² Given the existence of other states and their legal equality, state sovereignty is by definition a relative rather than an absolute concept.³⁶³ This means that sovereignty is inherently limited by the equal sovereignty of other states. Section A explains the need for limits on the exercise of state sovereignty. Sections B and C then argue how the reality of increasing interdependence puts pressure on the rules and principles governing the exercise of state sovereignty in general international law. It will be argued that these rules and principles give too much leeway for states to act in a way that has a negative impact on other states. Section B discusses first how states are traditionally given a broad freedom in the exercise of their sovereignty. Section C argues that any restrictions on the exercise of state sovereignty are subject to strict conditions, resulting in a failure to protect states against negative impacts of other states' actions in increasing interdependence.

A. *The Need for Limits on States' Freedoms in the Exercise of Their Sovereignty*

The need for limitations on the exercise of state sovereignty is recognized in international case law and jurisprudence. In the *Island of Palmas* arbitration, Huber argued:³⁶⁴

³⁶² Fowler and Bunck, *supra* note 310, 44-45.

³⁶³ Lauterpacht, *supra* note 7, 140.

³⁶⁴ *Island of Palmas*, 839.

Territorial sovereignty [...] involves the exclusive right to display the activities of a State. This right has as corollary a duty: the obligation to protect within the territory the rights of other States, in particular their right to integrity and inviolability in peace and in war, together with the rights which each State may claim for its nationals in foreign territory.

Abi-Saab similarly points to the need to protect the sovereignty of other states:³⁶⁵

The omnipotent state exercises its full powers within the ambit of its jurisdiction, but has to recognize that other states have the same faculty, by abstaining from encroaching on their ambits, whether it be by force (the principle of non-use of force) or by other means (the principle of non-intervention). Otherwise, the exercise of sovereignty without the counterweight of equality leads inexorably to the universal empire of the most powerful, and the system changes in nature.

More recently, Preuss has argued that equal sovereignty of states leads to restrictions on the exercise of sovereignty:³⁶⁶

A state's sovereignty is defined by its embeddedness in the society with other states, and this membership has priority over its independent status. The principle does not read "equal sovereignty," where "sovereignty" is the substantive term qualified by the adjective "equal". Instead, it is the reverse: equality is the substantive, which means a state's membership is its defining feature, while the adjective "sovereign" explicates that membership does not involve dependence from other states but leaves the principle intact that no state is superior to any other state.

A crucial question is however whether sovereignty really is a relative legal concept in situations of increasing interdependence such as the two case studies examined in this thesis. The remainder of this Section analyses the reach of state sovereignty and its corollaries in increasing interdependence. To this end, the rules and principles governing the exercise of state sovereignty in general international law will be examined to evaluate whether they limit the exercise of state sovereignty when this (potentially) has transboundary impacts. These rules and principles include the Lotus Principle, the various principles allocating jurisdiction, as well as various "rules of abstention"³⁶⁷ in the exercise of state sovereignty, such as the principle of non-intervention and the no harm principle.

B. Broad Protection for States' Positive Freedom

The analysis starts with the principles of general international law that clarify when, where and how states can exercise their sovereignty through policy setting or regulation of private actors. A central element in this discussion is when states are allowed to exercise jurisdiction under international law. "Jurisdiction" refers to the authority and power of a state to affect people,

³⁶⁵ Abi-Saab, *supra* note 300, 254.

³⁶⁶ Preuss, *supra* note 299, 27.

³⁶⁷ Friedmann, *supra* note 291, 62.

property and circumstances.³⁶⁸ The focus in this thesis is on states' ability to regulate and thus on prescriptive jurisdiction.

Various international principles determine the boundaries of states' jurisdiction. A first principle is the Lotus Principle. Section (1) discusses how this Principle is generally understood as giving states a very wide scope of jurisdiction, limited only by *prohibitive* rules. In contrast, the principles allocating jurisdiction, briefly discussed in Section (2), take a different approach by providing grounds defining when states are *permitted* to exercise jurisdiction.³⁶⁹ As will be argued, these grounds do not exclude competing exercises of jurisdiction, and are therefore insufficient to determine the balance between states' positive and negative freedom. Section (3) discusses how the broad freedom to act is reflected in the requirement of sovereign consent to international obligations.

(1) *The Lotus Principle*

The Lotus Principle is derived from the PCIJ's *Lotus* judgment. The case involved the criminal prosecution in a Turkish Court under Turkish law of a French national, Lieutenant Demons, for involuntary manslaughter as a result of a collision on the high seas between his ship, the S.S. Lotus, flying under the French flag, and the S.S. Boz-Kourt, flying under the Turkish flag. The latter sank as a result of the collision, killing eight Turkish nationals travelling on board. These events posed the question whether Turkey could institute such proceedings under international law.³⁷⁰

In its judgment the PCIJ held³⁷¹

International law governs relations between independent States. The rules of law binding upon States therefore emanate from their own free will as expressed in conventions or by usages generally accepted as expressing principles of law and established in order to regulate the relations between these co-existing independent communities or with a view to the achievement of common aims. Restrictions upon the independence of States cannot therefore be presumed.

Now the first and foremost restriction imposed by international law upon a State is that –failing the existence of a permissive rule to the contrary– it may not exercise its power in any form in the territory of another State. [...]

It does not, however, follow that international law prohibits a State from exercising jurisdiction in its own territory, in respect of any case which relates to acts which have

³⁶⁸ Shaw, *International Law*, 5th ed. (2003), 572; Lowe, "Jurisdiction", in Evans (Ed.) *International Law* (2006), 342.

³⁶⁹ Ryngaert, *Jurisdiction in International Law* (2008), 27.

³⁷⁰ *Lotus*, 15.

³⁷¹ *Ibid.*, 18-19.

taken place abroad, and in which it cannot rely on some permissive rule of international law. [...] Far from laying down a general prohibition to the effect that States may not extend the application of their laws and the jurisdiction of their courts to persons, property and acts outside their territory, it leaves them in this respect a wide measure of discretion which is only limited in certain cases by prohibitive rules.

This statement is traditionally interpreted as recognizing the rights of states to exercise their authority freely within their own territory, even when the exercise of their jurisdiction affects persons, property and acts outside their territory, unless prohibited by international law (“the Lotus Principle”).³⁷²

The traditional interpretation of the *Lotus* judgment results in a very broad positive freedom of states, including when the exercise of this freedom has a potentially detrimental impact on other states. The basic idea that states have a broad positive freedom in the exercise of their sovereignty is visible in both case studies.

In the context of environmental policies, of which climate change mitigation policies are a part, the traditional viewpoint is that states have the sovereign right to determine the environmental policies regarding the resources within their territory.³⁷³ Of course, from a practical perspective, due to the transboundary nature of natural resources and dynamics such as wind and water currents, state sovereignty “can only be a claim, never a fact”.³⁷⁴ Such practical limitations are, however, not of direct concern in this thesis. What matters is that, in the absence of international obligations, the presumption of freedom over environmental and economic policies still applies.³⁷⁵ In the dispute between France and Spain on the usage of the waters of Lake Lanoux and the diversion of water from a transboundary river for the generation of electricity, the arbitral tribunal confirmed that “territorial sovereignty plays the part of a presumption. It must bend before all international obligations, whatever their origin, but only before such obligations.”³⁷⁶

Consistent with the Lotus Principle, international obligations can prohibit certain exercises of territorial sovereignty. International environmental law recognizes the need to protect global

³⁷² Weil, “‘The Court Cannot Conclude Definitively...’ *Non Liquet* Revisited”, 36 *Columbia Journal of Transnational Law* 109 (1998), 112. See overview in Handeyside, “The *Lotus* Principle in ICJ Jurisprudence: Was the Ship Ever Afloat?”, 29 *Michigan Journal of International Law* 71 (2007-2008), 72.

³⁷³ Melkas, “Sovereignty and Equity within the Framework of the Climate Regime”, 11 *Review of European Community and International Environmental Law* 115 (2002), 117; Elliot, “Sovereignty and the Global Politics of the Environment: Beyond Westphalia?”, in Jacobsen et al. (Eds.), *Re-Envisioning Sovereignty: The End of Westphalia?* (2008), 198.

³⁷⁴ Marauhn, *supra* note 323, 730. See also, Elliot, *supra* note 373, 195-196.

³⁷⁵ Schrijver, *supra* note 4, 252.

³⁷⁶ *Lac Lanoux*, 120.

commons, such as the oceans and the atmosphere, as well as the need to protect the environment of other states, as reasons for legal limits on the exercise of state sovereignty.³⁷⁷ In the specific context of climate change, the UNFCCC's preamble recognizes both state sovereignty and the goal of protecting the global commons and the environment of other states:³⁷⁸

Recalling also that States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

To determine where the boundaries of legitimate exercises of state sovereignty are in the context of climate change mitigation and whether they promote a relative concept of state sovereignty, Chapter 6 will examine the direct limits on the states' policies regarding GHG emissions. Chapter 7 will assess whether affected states are limited by trade liberalization agreements in their ability to regulate unilaterally in protection of their domestic affairs against the negative impact of climate change.

In the case study on monetary management policies and macro-financial stability, the starting point is the concept of monetary sovereignty. An 80 year old PCIJ judgment holding that "a state is entitled to regulate its own currency"³⁷⁹ is still considered the legal basis for a state's monetary sovereignty, despite considerable changes in international monetary conditions since then.³⁸⁰ The monetary management policies central to the case study on macro-financial instability are considered attributes of monetary sovereignty.³⁸¹ Thus, in principle, states are presumed to be free to set their monetary management policies.

Nonetheless, the exercise of monetary sovereignty is not unlimited and its external effects are not beyond international law's reach.³⁸² Treaty law and customary international law temper its

³⁷⁷ *Nuclear Weapons Advisory Opinion*, 241-242, para. 229; Schrijver, *supra* note 4, 232; French, "A Reappraisal of Sovereignty in the Light of Global Environmental Concerns", 21 *Legal Studies* 376 (2001), 380; Melkas, *supra* note 373, 117-118.

³⁷⁸ UNFCCC, preamble.

³⁷⁹ *Serbian Loans*, 44.

³⁸⁰ Treves, "Monetary Sovereignty Today", in Giovanoli (Ed.) *International Monetary Law: Issues for the New Millennium* (2000), 111; Lastra, *Legal Foundations of International Monetary Stability* (2006), 16-18.

³⁸¹ Gianviti, "Current Legal Aspects of Monetary Sovereignty", 4 *Current Developments in Monetary and Financial Law* 3 (2004), 4-5; Lastra, *supra* note 380, 22-23.

³⁸² Proctor and Mann, *Mann on the Legal Aspect of Money*, 6th ed. (2005), 510.

exercise.³⁸³ Thus, while monetary sovereignty is still recognized by international law, this is only the starting point of the analysis.³⁸⁴ To obtain a full picture, a review of international law relating to the exercise of monetary sovereignty is required. This review will be performed in Chapters 8 and 9.

To conclude, analysing the breadth of states' freedom in the exercise of their sovereignty starts by evaluating whether international law prohibits their behaviour. The broad positive freedom in which this approach results can be criticized from the perspective of requiring a relative concept of state sovereignty. Chapter 5 will discuss alternative interpretations of the *Lotus* judgment that are more consistent with the idea of relative sovereignty and therefore preferred in situations of increasing interdependence.

(2) Principles Allocating Jurisdiction

Despite the *Lotus* Principle's starting point of a presumption of freedom, customary international law requires a sufficient nexus between a state and the object of regulation before the exercise of jurisdiction is presumed to be valid. A number of principles help with the identification of such a nexus. A first nexus is a state's territory. This nexus exists when acts take place (partly) within a state's territory,³⁸⁵ or, more controversially, when an act's effects are felt within the territory ("effects doctrine").³⁸⁶ Other nexuses allow for extra-territorial action on the basis of the nationality of the actors ("active personality principle")³⁸⁷ or of those affected by an act ("passive personality principle"),³⁸⁸ and the protection of a state's vital interests ("protective principle").³⁸⁹

³⁸³ Carreau, *Souveraineté et Coopération Monétaire Internationale* (1970), 52; Proctor and Mann, *supra* note 382, 500, footnote 506.

³⁸⁴ Treves, *supra* note 380, 113.

³⁸⁵ Oxman, "Jurisdiction of States", in Bernhardt (Ed.) *Encyclopedia of Public International Law*, 56; Jennings, "The Limits of States Jurisdiction (1962)", *Collected Writings of Sir Robert Jennings* (1998); Brownlie, *supra* note 327, 297.

³⁸⁶ Lowe, *supra* note 368, 344-345. It has been used by the US to apply its antitrust legislation to non-US companies whose cartelistic behaviour has had economic repercussions in the US, see *US v. Aluminium Co of America* [1945] 148 F.2d 416 (USA).

³⁸⁷ Oxman, *supra* note 385, 56.

³⁸⁸ This principle has been given recognition as of late in the context of terrorism, *Ibid.*, 58; Lowe, *supra* note 368, 351-352.

³⁸⁹ Precisely what may constitute a vital interest under international law is not exhaustively defined, but a typical example of the protective principle is a state's exercise of jurisdiction to criminalize the counterfeiting of its currency, Lowe, *supra* note 368, 347-348.

A state is presumed to be validly exercising its jurisdiction when it acts in accordance with these principles.³⁹⁰ Conversely, if there is no sufficient nexus, states will have to show why they are nevertheless entitled to exercise jurisdiction.³⁹¹ Thus, these principles can be seen as limits on states' positive freedom to reduce instances where other states are affected by the exercise of extra-territorial jurisdiction. Hence, they support the idea of state sovereignty as a relative concept.

However, these principles cannot exclude transboundary impacts of a state's actions. Given that they can justify extra-territorial exercises of jurisdiction, some form of impact on another state is inevitable. Nor do they exclude conflicting exercises of jurisdiction. If these principles are applied to specific problems, such as climate change or macro-financial instability, various states can legitimately claim jurisdiction over acts or actors that contribute to climate change or macro-financial instability. Hence, conflicts can still arise in which one state's positive freedom conflicts with another state's negative freedom. The principles do not guarantee exclusivity of jurisdiction and do not determine which ground for jurisdiction prevails over another.³⁹² States can and do agree on formal or informal international instruments that allocate jurisdiction in specific cross-border situations to reduce regulatory conflicts. The Basel Concordat, discussed in Chapter 8, is an example of such an international instrument. In the absence of such instruments, considerations of reasonableness may need to guide the exercise of jurisdiction.³⁹³

(3) *Sovereign Consent's Janus Faced Nature*

As argued above,³⁹⁴ consent is an important corollary of state sovereignty. Consent provides a way for states to agree on restrictions on their freedoms in response to transboundary problems. Consent also protects states against the creation of unwanted international obligations. However, in situations of increasing interdependence, the development of effective international co-operative instruments that combine broad participation, effective enforcement and in-depth regulation, has proven difficult.³⁹⁵ Sovereign consent to international co-operation requires states to agree on the existence of the problem, on how to respond to a particular global issue

³⁹⁰ *Ibid.*, 342.

³⁹¹ *Ibid.*, 342.

³⁹² Ryngaert, *supra* note 369, 134.

³⁹³ *Ibid.*, 134-135.

³⁹⁴ See Section I.B(3).

³⁹⁵ Raustiala, "Form and Substance in International Agreements", 99 *American Journal of International Law* 581 (2005), 582, 609.

and on how to divide responsibilities amongst states. The “community of interests” that is a prerequisite for the development of co-operative international law³⁹⁶ is often lacking in increasing interdependence. The widely divergent opinions on whether and how to deal with a problem and its side effects reduce the likelihood of achieving substantive regulation.

A novel element in increasing interdependence is that co-operation is not merely desirable, but may actually be required. A failure to consent to co-operative measures when these are necessary to supply a global public good can have negative consequences for other states that may be more vulnerable to the specific problem. For example, in climate change, developing states are more vulnerable to the negative impact of climate change, but they contribute little to the aggregate GHG emissions. A lack of co-operation could even affect the very existence of some states, particularly weaker ones, as most aptly illustrated by the threat posed by climate change to low-lying island states such as Tuvalu and the Maldives.

The need for co-operation means that states’ freedom to decide whether or not to co-operate may need to be curtailed. Some limits on the consent requirement already exist. States are not only bound by obligations to which they have expressly consented. Customary international law does not rely for its creation on the express consent of states to which it applies, but still requires some consent, albeit in a tacit form.³⁹⁷ The need for consent also underpins the concept of the persistent objector,³⁹⁸ according to which a state that has persistently objected to the formation of a rule based on a specific practice will not be bound when a rule eventually emerges.³⁹⁹ In some instances, states are deemed to have consented to new rules of customary international law.⁴⁰⁰ This is the case for peremptory rules of international law or *ius cogens*. Nevertheless, even these rules do not arise unless the wider community of states has recognized them.⁴⁰¹ Likewise, general principles of law are a recognized source of international obligations to the extent that they are recognized by states.⁴⁰²

³⁹⁶ Friedmann, *supra* note 291, 17.

³⁹⁷ Watson, “State Consent and the Sources of International Obligation”, 86 *ASIL Proceedings* 118 (1992), 111.

³⁹⁸ Lowe, *supra* note 322, 55.

³⁹⁹ *Fisheries Case (United Kingdom v. Norway)*, 131.

⁴⁰⁰ Simpson, *supra* note 257, 127.

⁴⁰¹ *Vienna Convention on the Law of Treaties*, art. 53.

⁴⁰² *ICJ Statute*, art. 38(1)(c); Lowe *supra* note 322, 87-88.

Moreover, states can consent to international agreements in which they delegate or even transfer sovereign powers to international organisations. The protection of states' sovereignty does not require their consent to every separate decision adopted by such organisations, provided of course that the decisions are not *ultra vires*. States have a right to participate in the discussions at the international organisations, but can usually not veto decisions.⁴⁰³ This is particularly so when the international agreement setting up the organisation provides for majority or weighed voting and states have no choice but to implement the decision as is within their domestic legal order.⁴⁰⁴ When an international organisation's decision-making powers depend on consensus, states' on-going consent to the international obligations is better protected, as a consensus requirement is traditionally seen as only allowing measures to be adopted without a formal vote if no state objects.⁴⁰⁵ This may have changed as a result of the decision of the Mexican Chair at the latest UNFCCC COP to allow adoption of the Cancun Agreements despite Bolivia's objections on the basis that a single country could not block consensus.⁴⁰⁶ Whilst it is too early to tell at this stage, this approach may have ramifications for the interpretation of consensus requirements in other international fora.⁴⁰⁷

There are, however, no general limits on consent that would force states to co-operate with each other to avoid a negative impact on other states' sovereignty. A duty to co-operate with other states has been suggested in the literature.⁴⁰⁸ But, to the extent that such a duty exists it is a duty to negotiate rather than a duty to reach an actual agreement on specific limits on the exercise of state sovereignty with respect to global problems.⁴⁰⁹

In sum, the consent requirement, despite its limits, still gives states broad freedom to determine whether or not to co-operate with other states, and if so, what the nature of this co-operation

⁴⁰³ Peters, "Compensatory Constitutionalism: The Function and Potential of Fundamental International Norms and Structures", 19 *Leiden Journal of International Law* 579 (2006), 591.

⁴⁰⁴ Sarooshi, "Sovereignty, Economic Autonomy, the United States, and the International Trading System: Representations of a Relationship", 15 *European Journal of International Law* 651 (2004), 30-32.

⁴⁰⁵ Rajamani, *supra* note 118, 515-517.

⁴⁰⁶ International Institute for Sustainable Development, "Summary of the Cancun Climate Change Conference: 29 November - 11 December 2010", 12 *Earth Negotiations Bulletin* (2010), 5-6.

⁴⁰⁷ Khor, *Complex Implications of the Cancun Climate Conference* (March 2011), at <<http://www.southcentre.org/files/policy%20briefs/Climate%20PB%205%20cancunissue.pdf>>, 1, 4.

⁴⁰⁸ Perrez, *supra* note 310.

⁴⁰⁹ In the context of international monetary relations: Proctor and Mann, *supra* note 382, 562. In the context of international environmental law: *Kyoto Protocol*, art. 2(1)(b); *US-Shrimp 21.5 (AB)*, paras. 123-124; Barrett, *supra* note 28, 127.

should be. This freedom exists even if the lack of co-operation affects other states' negative freedom because of the increasing interdependence between them. Thus, the requirement of consent is Janus-faced in situations of increasing interdependence. On the one hand, it protects states against unwanted international obligations, but on the other hand, it can hamper the creation of much needed co-operative instruments when states use their power not to consent.

C. *The Limited Reach of Principles Protecting States' Domestic Affairs*

So far, the analysis of the relative nature of state sovereignty in situations of increasing interdependence has focused on the rules and principles determining the scope of states' positive freedom. To obtain a more accurate picture of the relative nature of state sovereignty, we need to look into the provisions that impose limits on the exercise of state sovereignty. International law has long known "rules of abstention" that limit states' behaviour to protect the equal sovereignty of their peers.⁴¹⁰ The following Sections discuss the principle of non-intervention and the no harm principle. These rules and principles protect states' negative freedom against external interferences by limiting other states' positive freedom if and to the extent that their actions affect other states. As these limits are conditional upon a negative impact on other states, this thesis will refer to them as "conditional limits".

(1) *The Principle of Non-Intervention*

At first sight, the principle of non-intervention gives broad protection to states' negative freedom by prohibiting any direct and indirect interventions in the internal or external affairs of a state.⁴¹¹ The threshold of "internal or external affairs" is not difficult to meet. The ICJ's judgment in the *Nicaragua* case rather circularly mentions that "the internal or external affairs of a state" include "matters in which each State is permitted, by the principle of State sovereignty, to decide freely".⁴¹² The relevant paragraphs on the principle of non-intervention in the Friendly Relations Declaration of the UN General Assembly refer to a state's "personality [...] or [...] its political, economic and cultural elements."⁴¹³

⁴¹⁰ Friedmann, *supra* note 291, 60-62; Henkin, *supra* note 18, 102; Lauterpacht, *supra* note 7, 140; Fassbender, "Sovereignty and Constitutionalism in International Law", in Walker (Ed.) *Sovereignty in Transition* (2003), 117.

⁴¹¹ Friendly Relations Declaration, *supra* note 10. While only attached to a non-binding UN General Assembly Resolution, this Declaration is seen as an authoritative interpretation of the UN Charter, see Schrijver, *supra* note 4, 372. The ICJ also relied on the Friendly Relations Declaration in its *Nicaragua* judgment, see *Nicaragua*, paras 203-204.

⁴¹² *Nicaragua*, para. 205.

⁴¹³ Friendly Relations Declaration, *supra* note 10.

In an increasingly interdependent world, the actions of one state will often have an impact on another state's internal or external affairs. As described in Chapter 1, both case studies provide ample examples of how one state's decisions can affect others. However, it is undesirable to consider all transboundary impacts as prohibited interventions. Such a prohibition would severely restrict states' positive freedom. Thus, we need a criterion to distinguish between acceptable and unacceptable transboundary impacts to determine when the negative impact of a state's actions or omissions in another state's domestic affairs amounts to a prohibited intervention.

Traditionally, only "dictatorial" interventions into the affairs of another state for the purpose of maintaining or changing the existing state of affairs are prohibited by the principle of non-intervention.⁴¹⁴ An intervention must be intended to force the target state to change a policy.⁴¹⁵ In the *Nicaragua* judgment, the ICJ referred to this coercive element as the "very essence of prohibited intervention".⁴¹⁶

Contrary to the standard position, which conceived of coercion as involving armed force,⁴¹⁷ the concept of intervention has expanded beyond the traditional confines of armed intervention.⁴¹⁸ The Friendly Relations Declaration prohibits not only armed intervention, but also "all other forms of interference".⁴¹⁹ The ICJ confirmed in the *Nicaragua* case that the prohibition on the use of force and the principle of non-intervention are separate principles in international law.⁴²⁰ Limiting the principle of non-intervention solely to forcible interventions would result in its redundancy given that the prohibition on the use of force already outlaws such interventions.

⁴¹⁴ Oppenheim and Roxburgh, *International Law: A Treatise*, 3rd ed. (1920), 222; Van Wynen Thomas and Thomas Jr., *Non-Intervention: The Law and Its Import in the Americas* (1956), 68.

⁴¹⁵ Jamnejad and Wood, "The Principle of Non-Intervention", 22 *Leiden Journal of International Law* 345 (2009), 348. See also Van Wynen Thomas and Thomas Jr., *supra* note 414, 71; Mayer-Schonberger, "Into the Heart of the State: Intervention through Constitution-Making", 8 *Temple International and Comparative Law Journal* 315 (1994), 315; Kegley Jr. et al., "The Rise and Fall of the Nonintervention Norm: Some Correlates and Potential Consequences", 22 *The Fletcher Forum of World Affairs* 81 (1998), 83.

⁴¹⁶ *Nicaragua*, para. 205.

⁴¹⁷ Van Wynen Thomas and Thomas Jr., *supra* note 414, 68; Mitrovic, "Non-Intervention in the Internal Affairs of States", in Sahovic (Ed.) *Principles of International Law Concerning Friendly Relations and Cooperation* (1972), 224.

⁴¹⁸ Mitrovic, *supra* note 417, 227.

⁴¹⁹ Friendly Relations Declaration, *supra* note 10.

⁴²⁰ *Nicaragua*, para. 209.

However, the ICJ did not indicate how to identify coercion in the absence of armed force, but merely stated that coercion⁴²¹

is particularly obvious in the case of an intervention which uses force, either in the direct form of military action, or in the indirect form of support for subversive or terrorist military armed activities within another State.

The principle of non-intervention has not been tested independently in ICJ jurisprudence, as the very few cases in which it has been discussed all involved the use of armed force too.⁴²²

The ICJ's response to Nicaragua's assertion that the US had indirectly intervened in its domestic affairs due to the cessation of US aid to Nicaragua, the imposition of a trade embargo and like measures, seems to indicate that the principle of non-intervention is not a blanket prohibition covering any action that triggers a negative impact in another state. The Court held that "it is unable to regard such action on the economic plane (...) as a breach of the customary-law principle of non-intervention".⁴²³ Disappointingly, the Court gave no reasons for this conclusion. In a different passage of its judgment, the ICJ stated that that the cessation of economic aid would only violate the FCN Treaty between the US and Nicaragua in very exceptional circumstances given the unilateral and voluntary nature of economic aid.⁴²⁴ The Court did not indicate what could qualify as such "very exceptional circumstances". There is a fine line between a withdrawal of a benefit that was unilaterally and voluntary given and economic coercion to bring about structural change or pre-empt the sovereign will of the aid's recipient.⁴²⁵ Presumably, the Court was of the opinion that this particular cessation of aid was not severe enough to bring about structural change in Nicaragua or to pre-empt Nicaragua's sovereign will. The ICJ's conclusion also suggests that no intervention arises when a state causes a negative impact that it was under no obligation to avoid. Unless there is some internationally agreed standard that prohibits certain actions, it will be very difficult to argue that states have violated other states' sovereignty through the negative impact of their actions.

⁴²¹ *Ibid.*, para. 205.

⁴²² *Ibid.*, para. 15; *Armed Activities on the Territory of the Congo*. See also Schröder, "Principle of Non-Intervention", in Bernhardt (Ed.) *Encyclopedia of Public International Law*, 619 (arguing that "[a]ttempts to exclude armed intervention from the principle [of non-intervention] and to reserve the latter to other forms of intervention are possible by means of definition, but they have found little resonance in international practice.")

⁴²³ *Nicaragua*, para. 245.

⁴²⁴ *Ibid.*, para. 276.

⁴²⁵ Jamnejad and Wood, *supra* note 415, 370-371.

Both case studies illustrate the difficulty of meeting the element of coercion under the traditional test for intervention. Situations in which states have deliberately used monetary management policies to effect structural change in other states have arisen in the past, but are uncommon. Kirshner describes how Iraq, in the aftermath of the first Gulf war, could no longer import banknotes printed in Switzerland due to economic sanctions.⁴²⁶ Instead, it had to resort to domestically printed banknotes. These domestic banknotes were less desirable than the original “Swiss” dinars alongside which they continued to circulate. In May 1993, Saddam Hussein ruled that the Swiss dinars were no longer legal tender. He provided for a one-week transition, during which he sealed Iraq’s only open international border with Jordan. Kirshner argues that the currency action was partly directed against Jordan’s King Hussein,⁴²⁷ who had indicated his reluctance to continue supporting Saddam Hussein’s regime. Many Jordanians held Swiss dinars as a store of value and saw their savings wiped out. In addition, Saddam Hussein blocked Kurds from exchanging Swiss dinars. Turkey interpreted this as a threat to its stability, as it could have pushed Kurdistan towards creating its own currency, a highly symbolic step towards independence. It is only in such exceptional situations that the principle of non-intervention will limit states’ freedom to decide on their monetary management policies. When the negative external impact of monetary management policies does not amount to coercion, the principle of non-intervention would not effectively limit states, because the threshold of “intervention” would not be met.

The element of coercion that is essential for a finding of “intervention” will be difficult to establish in the context of GHG emissions. GHG emissions would be a very ineffective tool to coerce other states, because the causal link between specific emissions in one state and a specific impact in another state is too remote for states strategically to emit to manipulate another state’s structure or behaviour.

A further obstacle to the application of the principle of non-intervention in situations of increasing interdependence is that the principle of non-intervention is often said to require an affirmative action of a state.⁴²⁸ The Oxford English Dictionary defines “intervention” as “the action of intervening, ‘stepping in’, or interfering in any affair, so as to affect its course or issue.” The requirement of an affirmative action limits the availability of the principle of non-

⁴²⁶ Kirshner, “Currency and Coercion in the Twenty-First Century”, in Andrews (Ed.) *International Monetary Power* (2006), 142-147.

⁴²⁷ *Ibid.*

⁴²⁸ Vincent, *Nonintervention and International Order* (1974), 7; Mayer-Schonberger, *supra* note 415, 315.

intervention as a mechanism to ensure the relative nature of state sovereignty in situations of increasing interdependence. In these situations, the transboundary impacts often result from actions by private actors rather than from state actions. In the climate change case study, most emissions are caused by the actions of private individuals or private economic actors, such as in the transport sector or in energy-intensive industries. These actions cannot be attributed to a state.⁴²⁹ A state's responsibility for climate change lies primarily⁴³⁰ in a failure to take (sufficient) actions to regulate GHG emissions or increased carbon capture in sinks.⁴³¹ Similarly, macro-financial instability can result from credit creation by financial institutions active on the global financial markets. In these situations, states can at most be faulted for a failure to regulate private actors' GHG emissions or credit creation. Thus, their omissions, rather than their actions, lead to negative impacts in other states and these omissions legally do not amount to an intervention.

To conclude, in a case of conflict between one state's positive freedom and another state's negative freedom, the principle of non-intervention, by only considering as prohibited intervention actions that are intended to change the authority structure or policies of the affected state through coercion, does not adequately protect states' negative freedom.⁴³²

(2) *The No Harm/Due Diligence Principle*

A second limit on states' sovereignty to ensure the relative nature of state sovereignty is the no harm principle, which expresses the maxim *sic utere tuo ut alienum non laedas*.⁴³³

The *Trail Smelter* arbitration between the US and Canada is traditionally seen as the first expression of this principle in international law. In this arbitration, the Panel held that⁴³⁴

Under the principles of international law [...] no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.

⁴²⁹ Voigt, "State Responsibility for Climate Change Damages", 77 *Nordic Journal of International Law* 1 (2008), 9.

⁴³⁰ "Primarily" is used here because it cannot be excluded that some states operate industrial activities. Moreover, state agencies, such as the police, require transport and in that sense contribute to climate change.

⁴³¹ Tol and Verheyen, "State Responsibility and Compensation for Climate Change Damages—a Legal and Economic Assessment", 32 *Energy Policy* 1109 (2004), 1112.

⁴³² Jamnejad and Wood, *supra* note 415, 348.

⁴³³ "so to use your own property as not to injure another's", see Verheyen, *Climate Change Damage and International Law: Prevention Duties and State Responsibility* (2005), 149.

⁴³⁴ *Trail Smelter*, 1965.

Like the principle of non-intervention, the no harm principle aims to limit states' sovereignty in order to protect the equal sovereignty of other states.⁴³⁵ An important advantage of the no harm principle over the principle of non-intervention is that the no harm principle is premised on the potential occurrence of harm, rather than on the specific usage a state makes of its territory.⁴³⁶ As a result, in contrast to the principle of non-intervention, states' actions as well as their omissions can violate the no harm principle, and trigger state responsibility under the secondary rules of international law.⁴³⁷

The balance between states' freedoms in the exercise of their sovereignty depends on whether the no harm principle is seen as an obligation of result or an obligation of conduct. Classifying the no harm principle as an obligation of result that is violated as soon as harm occurs has a limiting impact on states' positive freedom,⁴³⁸ but gives a wide protection to states' negative freedom. Concerns about sovereignty generally lead to the conclusion that the no harm principle is an obligation of conduct that requires states to act diligently to prevent harm,⁴³⁹ but does not hold them responsible for the mere occurrence of harm.

The due diligence principle can be traced to the 1949 *Corfu Channel* case, in which the ICJ confirmed the "obligation not to allow knowingly its territory to be used contrary to the rights of other states" as one of the "general and well-recognized principles" that govern international law.⁴⁴⁰

In practice, the no harm/due diligence principle does not significantly restrain acting states.⁴⁴¹ As a result, the principle fails to protect states' negative freedom adequately to ensure the relative nature of state sovereignty in situations of increasing interdependence. The difficulty with applying the no harm principle can be seen in the saga of a 2005 petition filed with the

⁴³⁵ Verheyen, *supra* note 433, 150, 181.

⁴³⁶ Birnie and Boyle, *International Law and the Environment*, 2nd ed. (2002), 106-107.

⁴³⁷ Nanda and Pring, *International Environmental Law for the 21st Century* (2003), 21, 42. The secondary rules of international law are not studied further in this thesis, which focuses on the balance between states' positive and negative freedom in primary rules of international law.

⁴³⁸ Birnie and Boyle, *supra* note 436, 114.

⁴³⁹ Kiss and Shelton, *International Environmental Law*, 2nd ed. (2000), 263-264; Birnie and Boyle, *supra* note 436, 114-115; Koivurova, "Due Diligence", in Wolfrum (Ed.) *The Max Planck Encyclopedia of Public International Law*, at <www.mpepil.com>; Hafner and Buffard, "Obligations of Prevention and the Precautionary Principle", in Crawford et al. (Eds.), *The Law of International Responsibility* (2010), 524.

⁴⁴⁰ *Corfu Channel*, 22.

⁴⁴¹ Barton, "State Responsibility and Climate Change: Could Canada Be Liable to Small Island States?", 11 *Dalhousie Journal of Legal Studies* 65 (2002), 87; Bodansky, *supra* note 63, 38; Elliot, *supra* note 373, 200.

Inter-American Commission on Human Rights. In this petition, a group of Inuit sought relief from the US for damage done by global warming allegedly triggered by the latter's failure to regulate GHG emissions. The petition mentions that an obligation not to cause harm exists in international law, that the US is the main GHG emitter and that GHG emissions trigger climate change.⁴⁴² A year later, the Commission declined to look into the claim because the petition did not "enable [it] to determine whether the alleged facts would tend to characterize a violation of the rights protected by the American Declaration".⁴⁴³ The Commission invited the petitioners to an extraordinary hearing in early 2007, but this hearing did not reopen the case.⁴⁴⁴

Three problems with the no harm/due diligence principle are evident in situations of increasing interdependence. First, the scope of the principle is limited because only specific instances of "harm" are recognized as legally relevant. Second, it is difficult to establish that harm results from a lack of diligent behaviour. Third, the causation requirement is unsuitable for situations of increasing interdependence.

The first difficulty stems from the lack of precision in international law concerning what constitutes "harm". When thinking of "harm", physical harm first springs to mind, but harm could also be of a pecuniary nature, for example, income lost as a result of another's actions or omissions. Finally, "harm" can also be of an intangible nature, for example, the "moral" harm that results when one state's actions are considered objectionable or unacceptable by another state.

There is, however, no primary rule covering all types of harm that states can inflict upon other states. The UN International Law Commission (ILC)'s 2001 Draft Articles on Prevention and the 2006 Draft Principles on Allocation of Loss have taken an even narrower approach to "harm". These instruments are limited to the *physical* consequences of actions that must themselves be of a physical quality,⁴⁴⁵ a condition that could be met in the context of the climate change case

⁴⁴² Inuit Circumpolar Conference, *Petition to the Inter American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States* (7 December 2005), at <http://www.ciel.org/Publications/ICC_Petition_7Dec05.pdf>, 99-100.

⁴⁴³ Orellana et al., *Climate Change in the Work of the Committee on Economic, Social and Cultural Rights* (May 2010), at <http://www.ciel.org/Publications/CESCR_CC_03May10.pdf>, 19.

⁴⁴⁴ Earthjustice, *Inter-American Commission on Human Rights to Hold Hearing on Global Warming* (6 February 2007), at <<http://www.earthjustice.org/news/press/2007/inter-american-commission-on-human-rights-to-hold-hearing-on-global-warming>>.

⁴⁴⁵ International Law Commission, *Draft Articles on Prevention of Transboundary Harm from Hazardous Activities with Commentaries*, UN Doc A/56/10, 144-170, 151, point 17 ["2001 Draft Articles on Prevention"]; International Law Commission, *Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities with Commentaries*, UN Doc A/61/10, 101-182, 117-118 ["2006 Draft Principles on Allocation of Loss"]; International Law Commission, *Fifth Report on International Liability for Injurious Consequences Arising out of Acts Not*

study but not in the context of the macro-financial instability case study. This is because economic policy decisions, such as monetary management policies, are intangible and thus excluded from this notion of harm.⁴⁴⁶ This conclusion is not altered by the inclusion in the 2006 Draft Principles on Allocation of Loss of “loss or damage by impairment of the environment”⁴⁴⁷ as a basis for compensation for economic losses that result from physical damage to the environment. As there is still a link required between the economic loss and physical damage, this inclusion does not cover any economic losses state A experiences when state B’s policies put state A’s industries at a competitive disadvantage, because this disadvantage does not follow from the physical consequences to the environment caused by the regulation.

As mentioned, the mere occurrence of harm is not considered sufficient to establish a violation of international law. Instead, customary international law and the ILC’s Draft Articles on Prevention require due diligence as the required standard of care.⁴⁴⁸ This leads to the second obstacle towards applying the no harm/due diligence principle: the difficulties identifying which actions are required of a diligent state.

In the *Pulp Mills* judgment, the ICJ described the obligation of due diligence as⁴⁴⁹

an obligation which entails not only the adoption of appropriate rules and measures, but also a certain level of vigilance in their enforcement and the exercise of administrative control applicable to public and private operators, such as the monitoring of activities undertaken by such operators, to safeguard the rights of the other party.

Importantly, in the context of both case studies where many of the decisions that lead to climate change or macro-financial instability are actually made by private actors, due diligence requires regulation of private actors. This does not yet clarify which regulatory actions are required.⁴⁵⁰

An important element of a due diligence obligation is that the potential harm in response to which action is required needs to be foreseeable.⁴⁵¹ A lack of scientific certainty may hinder a

Prohibited by International Law, by Mr. Robert Q. Quentin-Baxter, UN Doc A/CN.4/383 and Corr.1 (French only) and Add.1 (1984), 161, para. 118.

⁴⁴⁶ 2001 Draft Articles on Prevention, *supra* note 445, 151, para. 16. See also International Law Commission, *Fourth Report on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law*, by Mr. Robert Q. Quentin-Baxter, UN Doc A/CN.4/373 (1983), 205.

⁴⁴⁷ 2006 Draft Principles on Allocation of Loss, *supra* note 445, Principle 2 (a)(iii).

⁴⁴⁸ 2001 Draft Articles on Prevention, *supra* note 445, 154, paras 7-11; Birnie and Boyle, *supra* note 436, 113; Koivurova, *supra* note 439.

⁴⁴⁹ *Pulp Mills*, para. 197.

⁴⁵⁰ Birnie and Boyle, *supra* note 436, 113.

⁴⁵¹ 2001 Draft Articles on Prevention, *supra* note 445, 155, para. 18; Verheyen, *supra* note 433, 176.

finding of foreseeability, particularly if the standard of “clear and convincing evidence” from the *Trail Smelter* arbitration is adopted.⁴⁵² However, the development of a precautionary approach or principle can assist with overcoming the barrier of scientific uncertainty when a state wants to argue that another state has failed to act diligently.⁴⁵³ As formulated in the Rio Declaration, this principle holds that “where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.”⁴⁵⁴

In the context of seabed mining, the Seabed Disputes Chamber of the International Tribunal for the Law of the Sea recently issued an Advisory Opinion in which it underlined the importance of including a precautionary approach in the due diligence analysis:⁴⁵⁵

it is appropriate to point out that the precautionary approach is also an integral part of the general obligation of due diligence of sponsoring States [...]. The due diligence obligation of the sponsoring States requires them to take all appropriate measures to prevent damage that might result from the activities of contractors that they sponsor. This obligation applies in situations where scientific evidence concerning the scope and potential negative impact of the activity in question is insufficient but where there are plausible indications of potential risks. A sponsoring State would not meet its obligation of due diligence if it disregarded those risks. Such disregard would amount to a failure to comply with the precautionary approach.

This statement interprets the precautionary principle not just as justifying action when there is scientific uncertainty, but also as requiring action when there is scientific uncertainty about the risks linked to particular activities.⁴⁵⁶ Even so, it remains unclear what actions are required. As Chapters 6 and 8 will discuss, international benchmarks for diligent state behaviour in response to climate change or macro-financial instability are lacking despite the existence of international instruments. Uncertainty about which actions are diligent makes it difficult for states affected by another state’s actions to establish that the latter has acted in violation of the no harm/due diligence principle.⁴⁵⁷

⁴⁵² *Trail Smelter*, 1965.

⁴⁵³ Hafner and Buffard, *supra* note 439, 525.

⁴⁵⁴ UN Conference on Environment and Development, *Rio Declaration on Environment and Development*, UN Doc A/CONF.151/26 (Vol. I), 14 June 1992, Principle 15 [“*Rio Declaration*”].

⁴⁵⁵ *Responsibilities and Obligations of Sponsoring States Advisory Opinion*, 131.

⁴⁵⁶ On the different interpretations of the precautionary principle, see Wiener, “Precaution”, in Bodansky et al. (Eds.), *The Oxford Handbook of International Environmental Law* (2007), 604-605.

⁴⁵⁷ Foster, “Compensation for Material and Moral Damage to Small Island States’ Reputations and Economies Due to an Incident During the Shipment of Radioactive Material”, 37 *Ocean Development & International Law* 55 (2006), 67-68; Voigt, *supra* note 429, 21.

An important note in relation to the case studies is that the precautionary approach so far has been limited to physical harm in the broader context of the environment and health, although domestically the US and the UK have argued for a precautionary approach in the context of counterterrorism.⁴⁵⁸ Chapter 5 will address whether the precautionary approach could be applied to a non-environmental context such as that of macro-financial instability. If so, this would require states to regulate in ways that do not contribute to macro-financial instability abroad if there is an indication of risk.

A third problem for the application of the no harm/due diligence principle is the need to establish a causal link between activities or omissions in one state and the potential harm arising therefrom in another state.⁴⁵⁹ International law does not prescribe a specific standard of causation.⁴⁶⁰ A traditional test is a “but for” test.⁴⁶¹ Applying a “but for” test would imply that the no harm principle would only prohibit actions if the harm would not occur in the absence of such actions. While this test may work in the context of bilateral relations, it does not work well in the highly multilateral contexts of the case studies. Both climate change and macro-financial instability are complex situations of increasing interdependence in which various factors combine to bring about a particular outcome.

In increasing interdependence, requiring that an action or omission in one state is the *conditio sine qua non* for a potential negative impact in another state is too narrow as it excludes actions or omissions that combine with prior or later other actions or omissions to trigger the negative impact.⁴⁶² The example of climate change is a clear illustration. Despite wide acceptance nowadays that cumulative GHG emissions cause climate change and can lead to environmental damage,⁴⁶³ establishing a causal link between one state’s actions or omissions and the specific negative impact in another state is nigh impossible. Given the continuing increases in cumulative GHG emissions, it is unlikely that the environmental damage would not occur if one state reduced its GHG emissions. Thus, it cannot be said that “but for” these individual GHG emissions, the environmental damage would not occur. Admittedly, lower cumulative GHG emissions may result in a lower risk of environmental damage, but the link between GHG emissions and damage

⁴⁵⁸ Wiener, *supra* note 456, 611.

⁴⁵⁹ Xue, *Transboundary Damage in International Law* (2003), 86-87.

⁴⁶⁰ Voigt, *supra* note 429, 16.

⁴⁶¹ Barton, *supra* note 441, 83.

⁴⁶² Verheyen, *supra* note 433, 253.

⁴⁶³ Intergovernmental Panel on Climate Change, “Summary for Policymakers”, *supra* note 34, 10.

is not necessarily linear. For example, to reduce the risk of rising sea level for low-lying island states significant GHG emission reductions may be required to limit sea level rise. For a state like Tuvalu, whose highest point is five metres,⁴⁶⁴ it matters little whether sea level rises five or six metres. Therefore, the “but for” test of the causation requirement further reduces the relevance of the no harm/due diligence principle, as currently interpreted, as a limit on states’ exercise of their positive freedom.

To summarize, by incorporating due diligence as the required standard of care based on considerations about protecting state sovereignty, the no harm principle protects states’ positive freedom at the expense of negative freedom. This preference is further enhanced by the restricted definition of “harm”, the difficulties establishing a lack of due diligence, and the strict requirement of causality between the actions or omissions and the harm caused in other states.

IV. CONCLUSION

This Chapter has discussed the concept of state sovereignty and its corollaries, which are traditionally central to international law. State sovereignty was defined as the ultimate authority of states to determine their domestic affairs. It has been discussed how logic dictates that state sovereignty and its corollary of equal sovereignty imply that sovereignty is by definition a relative concept as soon as more than one state exists. A state’s sovereignty in international law can never be absolute, because this would encroach upon the sovereignty of other states and thus reduce their ability to decide on their domestic affairs. To ensure relative sovereignty, international law contains a number of rules and principles that govern when, where and how state sovereignty can or cannot be exercised.

It has been argued that the reality of increasing interdependence puts significant pressure on the ability of these traditional rules and principles to ensure the relative nature of state sovereignty. This pressure is particularly felt in the context of the conditional limits where the traditional interpretation of crucial elements, such as “intervention”, “harm” or the required causal link, is unsuitable to cover transboundary impacts that result from complex problems of increasing interdependence.⁴⁶⁵ At the same time, the basic presumption of state freedom expressed in the Lotus Principle stands.

⁴⁶⁴ World Factbook, *supra* nota 301.

⁴⁶⁵ See in the context of the causation requirement: Perrez, *supra* note 310, 158-161; Barrett, *supra* note 28, 122; Jacobs, “Treading Deep Waters: Substantive Law Issues in Tuvalu’s Threat to Sue the United States in the International Court of Justice”, 14 *Pacific Rim Law & Policy Journal* 103 (2005), 121.

The result is effectively an absolute concept of sovereignty, rather than a relative concept with inherent limits that ensure respect for other states' equal sovereignty and balance competing exercises of state sovereignty. In practice, states retain an almost unrestricted ability to exercise their sovereignty whereas affected states face reduced opportunities to protect their domestic affairs against external interference. This is contrary to what is needed in increasing interdependence.

In Part II, attention turns to the question whether a liberal system of sovereign states can be maintained in situations of increasing interdependence. Since the problems with ensuring a relative concept of sovereignty arise out of the current interpretation of the rules and principles of general international law on the exercise of state sovereignty, the thesis proposes to alter the interpretation of these rules and principles through dialectical processes of normative change.

PART II. A LIBERAL SYSTEM OF SOVEREIGN STATES IN INCREASING INTERDEPENDENCE

Part I described how increasing interdependence, and the resulting increase in frequency of collisions of sovereignty, poses a challenge to the traditional approach to international law as a liberal system of sovereign states. The traditional rules and principles on the exercise of state sovereignty are far less capable of ensuring the relative nature of state sovereignty than is necessary to ensure states' co-existence and their co-operation in increasing interdependence. All of these elements make it more difficult for international law to support a liberal system of states. Having argued in Chapter 2 that international law should support such a system, and that this implies prioritizing states' negative freedom over their positive freedom, the six Chapters that make up Part II of the thesis examine how to ensure that the legal scaffolding remains in place to support a liberal system of states despite their increasing interdependence.

Three questions guide this examination. The first arises out of Chapter 3's argument that the existing rules and principles governing the exercise of state sovereignty in general international law are insufficient to ensure the relative nature of state sovereignty. In terms of liberal theory, the broad freedom to exercise state sovereignty, expressed in the Lotus Principle and the principles allocating jurisdiction, combined with the limited scope of the principle of non-intervention and the no harm/due diligence principle, prioritizes states' positive freedom over their negative freedom. As argued in Chapter 2, such prioritization is incompatible with liberal principles. The central question therefore is how to remove the prioritization of states' positive freedom and to ensure international law's consistency with liberal principles. Chapter 4 argues for dialectical processes to reinterpret existing rules and principles governing the exercise of state sovereignty. It proposes a set of "interstitial norms" to guide the reinterpretation of these rules and principles towards a liberal system of states even in increasing interdependence. Chapter 5 examines whether the existing rules and principles governing the exercise of state sovereignty in general international law, criticized in Chapter 3, can be reinterpreted using the interstitial norms so as to render them more compatible with the requirements of a liberal system.

The second question considered in Part II is whether there is a balance between states' positive and negative freedom in specialized international law. This question is analysed in Chapters 6 to 9, using the two case studies as examples. Chapters 6 and 8 examine whether states have agreed to specific direct limits on the exercise of their sovereignty in each of the two case studies. Chapters 7 and 9 examine whether international law affects the legality of defensive mechanisms used by states to protect their domestic affairs against the actual or potential

negative impact of another state's actions or omissions in the context of climate change (Chapter 7) or macro-financial instability (Chapter 9). The goal is to look at the degree to which international law limits states in the exercise of their sovereignty. It will be argued that international law does not function as a liberal system in situations of increasing interdependence, such as the two case studies. The problem is twofold. First, the rules and principles governing states' GHG emissions policies or their monetary management policies do not adequately regulate states' decisions that can adversely affect other states' domestic affairs. Second, limits exist on the legality of mechanisms through which affected states protect their domestic affairs against the negative impacts of other states' decisions. As a result, positive freedom is protected generously at the expense of negative freedom. The imbalance between states' positive and negative freedom, already identified in general international law, thus continues in specialized international law, further undermining international law's liberal nature.

Finally, the third question for Part II is whether the interstitial norms discussed in Chapter 4 can help to remedy the existing imbalances by guiding the reinterpretation of rules and principles governing the exercise of state sovereignty. Particular candidates for reinterpretation, discussed in Chapters 7 and 9, are the rules and principles that limit the legality of defensive mechanisms. This discussion will include suggestions as to how these rules and principles can be reinterpreted in order to achieve a liberal system of states in increasing interdependence.

CHAPTER 4. PROTECTING A LIBERAL SYSTEM OF STATES IN INCREASING INTERDEPENDENCE

If, as argued in Chapter 2, liberal principles should guide the exercise of state sovereignty so as to ensure co-existence and co-operation in a pluralistic society of states, how can liberal principles shape international law so as to balance states' positive and negative freedoms? There are two components to this question: one procedural and the other substantive. Sections I and II focus on the procedural question. These Sections address the dynamic processes that can guide international law towards a balance between states' positive freedom and other states' negative freedom. Section III examines the interstitial norms of locality, reasonableness and good neighbourliness as normative principles that can provide substantive guidance and drive these dynamic processes. Section IV argues that the reinterpretation of the existing rules and principles on the exercise of state sovereignty should focus on reinterpreting the conditional limits as well as the limits on the legality of defensive mechanisms. Section V concludes the theoretical analysis regarding reinterpretation and explains how this analysis fits into the remaining chapters of Part II.

I. THEORETICAL INSIGHTS INTO THE DYNAMICS OF NORMATIVE CHANGE

The inquiry into the dynamic processes through which liberal principles can guide the development of international law is not just a question about the creation of positive international law. It extends into the domain of international relations theory to assess how norms emerge and evolve. A description of the dynamic process of normative change can be found in Sandholtz and Stiles:⁴⁶⁶

In every social system, the evolution of norms follows a cyclical, or dialectical, pattern. The cycle begins with the constellation of existing norms, which provides the normative structure within which actors decide what to do, decide how to justify their acts, and evaluate the behaviour of others. Because rules cannot cover every contingency and because conflicts among rules are commonplace, actions regularly trigger disputes. Actors argue about which norms apply and what the norms require or permit. As actors seek to resolve disputes, they reason by analogy, invoke precedents, and give reasons, whether their audience is a judge or a set of other governments. The outcome of such discourses is always to change the norms under dispute, making them stronger or weaker, more specific (or less), broader or narrower. [...] The process of disputing reveals the extent to which states and other actors agree on the international rules in question. The crucial point, however, is that the cycle of normative change has completed a turn and modified the norms underlying the dispute. The altered norms establish the context for subsequent actions, disputes and discourses.

To lawyers, the terms "dispute" may conjure up images of a formal judicial proceeding. However, the term is not necessarily this narrow. Instead, normative change can be triggered from any

⁴⁶⁶ Sandholtz and Stiles, *supra* note 18, 6-7.

interaction or contestation between states due to a lack of clarity of the rules, uncertainty about their applicability in a given context, or a conflict between rules.⁴⁶⁷

Norms regarding the exercise of state sovereignty are thus in a continuous state of flux, and their crystallization into positive international law is only a temporary “resting” point that does not exclude the possibility of continuing engagement and contestation. Even norms crystallized in a treaty provision are rarely set in stone, and can evolve without formal amendment due to changes in the interpretation of the treaty provision’s central terms. Should the circumstances of interdependence change, or should the beliefs about the proper balance between states’ freedoms in increasing interdependence evolve, the norms can evolve to incorporate these changes. The evolved norm is not necessarily clearer than the starting point; sometimes it can be more ambiguous.⁴⁶⁸ Disappointing as ambiguity might be, the cycle of normative change is perpetually in motion and the increased opacity of the rules will lead to new disputes.⁴⁶⁹ These new disputes will eventually clarify the boundaries of states’ rights and responsibilities under the interpreted rules.

The role of engagement between actors in shaping international law is central in Brunnée and Toope’s interactional account of international law.⁴⁷⁰ They build on insights from constructivist literature to argue that international law is created and maintained through on-going learning processes about shared understandings regarding social norms within a “community of practice” of states and non-state actors.⁴⁷¹ Through their interactions, actors can change the applicable norms and structures. Legal procedures are important to facilitate the interactions, but Brunnée and Toope argue that legality requires more than just creation through a specific formal procedure.⁴⁷² Any formal instrument must be backed up by shared understandings about the meaning of the law as well as reflected in practical applications.⁴⁷³

⁴⁶⁷ Sandholtz, “Dynamics of International Norm Change: Rules against Wartime Plunder”, 14 *European Journal of International Relations* 101 (2008), 105.

⁴⁶⁸ *Ibid.*, 110.

⁴⁶⁹ *Ibid.*, 110.

⁴⁷⁰ Brunnée and Toope, *supra* note 315.

⁴⁷¹ *Ibid.*, 62.

⁴⁷² *Ibid.*, 72.

⁴⁷³ *Ibid.*, 75, 77, 351-353.

Section II identifies the processes in which contestation or interaction can take place. Section III then discusses the substantive drivers that can direct these processes towards a liberal system of states.

II. THE WIDE RANGE OF PROCESSES FOR NORMATIVE CHANGE

A variety of processes exist in international law to provide a space in which the dialectical process of contestation is facilitated. They can be seen as part of international law's ever expanding "operating system".⁴⁷⁴ The following overview of the available options is not intended to be exhaustive, nor does it express a preference between the different processes available to states for their interaction and contestation that drives normative change.

A state's motives for selecting one mechanism over another can vary considerably, and states are not necessarily limited to one mechanism alone. Often these processes can be combined in a multi-pronged strategy involving other states, international institutions or non-state actors. Specific combinations of processes will depend on the strategies chosen and the resources available to the different sides in a debate about the meaning of a norm. As the following discussion will explain, all processes have their advantages and disadvantages.

Given that the availability of resources determines the choice of processes, not all options will be available to all states. Power asymmetries between states can make it difficult for less powerful states to influence international negotiations or decision-making in international institutions and to enforce international judgments, particularly if their desired outcome is incompatible with the desired outcome of more powerful states.

However, these asymmetries do not mean that less powerful states are completely unable to influence the development of international law.⁴⁷⁵ For example, in trade negotiations, developing states have used various negotiating tactics to improve their chances of being heard and achieving their desired outcomes.⁴⁷⁶ Moreover, powerful states do not automatically dominate this cyclical process of normative change, even if they can more easily get away with

⁴⁷⁴ Diehl et al., "The Dynamics of International Law: The Interaction of Normative and Operating Systems", 57 *International Organization* 43 (2003), 46-47, 49-50.

⁴⁷⁵ Brunnée and Toope, *supra* note 315, 84-85, 353.

⁴⁷⁶ Cottier, "A Two-Tier Approach to WTO Decision Making", in Steger (Ed.) *Redesigning the World Trade Organization for the Twenty-First Century* (2010), 48-49; Odell, "Negotiating from Weakness in International Trade Relations", 44 *Journal of World Trade* 545 (2010).

non-compliance.⁴⁷⁷ This is not to say that non-compliance can never lead to normative change, but only that non-compliance by a powerful state does not automatically lead to normative change, particularly not in the face of opposition by other states. If non-compliance is widespread, then normative change may occur. This is known as desuetude, which happens when, through non-compliance and non-enforcement, a given rule falls out of practice in international law resulting in its extinction as a valid norm for state behaviour.⁴⁷⁸ An example from the case studies is the par value system that remained on the books of the IMF Articles of Agreement until the entry into force of the Second Amendment on 1 April 1978, even though it was not applied after US President Nixon's refusal to convert US dollars into gold on 15 August 1971.⁴⁷⁹

There is no silver bullet for the obstacles to meaningful participation in international processes of normative change faced by small or otherwise vulnerable states. However, overcoming these obstacles is not a prerequisite for normative change. Importantly, colliding sovereignties are not restricted to traditional North-South lines; collisions also occur between developed states or major economies. If the balance between states' positive and negative freedom in this collision needs to be addressed, the outcome of the dialectical process of change does not only affect the relationship between the specific states whose exercises of sovereignty collide, but relationships generally among all other states subject to the changed rule or principle concerning the exercise of their sovereignty. For example, if the WTO Appellate Body expands its interpretation of the environmental exception or the prudential carve-out,⁴⁸⁰ this new interpretation will inform not only the trade relations between the applicant and the respondent in the particular case before the Appellate Body, but also similar relations between other WTO Members due to the *de facto stare decisis* of their decisions, as discussed in Section B(2).

A. *Diplomatic Interactions between States*

The traditional thinking is that when faced with an inability to regulate a transboundary phenomenon, states will be tempted to co-operate with each other to determine how sovereignty should be exercised. Co-operation can take place through bilateral or multilateral

⁴⁷⁷ Sandholtz, *supra* note 467, 108.

⁴⁷⁸ Glennon, "How International Rules Die", 93 *Georgetown Law Journal* 939 (2004-2005), 971; Wouters and Verhoeven, "Desuetudo", in Wolfrum (Ed.) *The Max Planck Encyclopedia of Public International Law*, at <www.mpepil.com>.

⁴⁷⁹ These events are discussed in more detail in Chapter 8, Section I.

⁴⁸⁰ See Chapter 7, Section I.D for a discussion on the interpretation of the environmental exception and Chapter 9, Section IV.D for a discussion of the prudential carve-out.

interactions, depending on the scale of the underlying problem. Through co-operation, states can create new limitations on the exercise of state sovereignty, or revise existing ones. In the context of both case studies, these limitations can be direct limits on states' actions that can trigger climate change damage or macro-financial instability in other states. However, limitations can also be imposed on the legality of defensive mechanisms used by states to protect their domestic affairs against the negative impact of climate change or macro-financial instability triggered by other states' actions or omissions. The limits that are agreed to, therefore, have a direct influence on the balance between states' positive and negative freedom.

The first reaction of many international lawyers and policy makers to an international problem is to co-operate through the creation of new formal international instruments.⁴⁸¹ Formal agreements have the advantage that they can provide binding rules regarding states' obligations in the specific subject matter to which they relate. For example, the Kyoto Protocol binds all states listed in Annex I to the UNFCCC to reduce their aggregate emissions by 5% compared to 1990 levels. Formal agreements are particularly useful to create obligations of a level of specificity that is not possible in other sources of international law such as custom or general principles.

However, it is not straightforward to achieve formal agreements that are binding, specific and effective.⁴⁸² Effectiveness is undermined by the fact that formal agreements reflect only the lowest common denominator. In situations of increasing interdependence, this lowest common denominator may not be sufficient to resolve the transboundary problem targeted. As discussed in Chapter 1, both case studies illustrate the difficulties of achieving meaningful co-operation between states. The examination of the direct limits on states' GHG emissions (Chapter 6) and on their monetary management policies (Chapter 8) further illustrates these difficulties.

The traditional approach of negotiating an international agreement to limit specific exercises of state sovereignty is inappropriate for many situations of increasing interdependence, because it overlooks the asymmetry of states' interests, power and policy preferences. All of these can make the negotiating process very lengthy, as illustrated above.⁴⁸³ The lengthy nature of negotiations extends to the negotiation of amendments to adapt international agreements to the changing needs of the parties. Formal amendments of the UNFCCC, the Kyoto Protocol, the IMF

⁴⁸¹ Jackson, *supra* note 339, 59; Rodrik, *supra* note 306.

⁴⁸² Raustiala, *supra* note 395, 582, 609.

⁴⁸³ See Chapter 1, Section II.B and Chapter 1, Section III.C.

Articles of Agreement or the various agreements under the WTO umbrella are lengthy procedures that require a large majority vote, if not consensus.⁴⁸⁴ While a difficult amendment procedure may ensure the stability of a carefully crafted compromise, later events can disturb the delicate balance between stability and flexibility. The WTO offers an example of this. When states originally negotiated the GATT exceptions for the protection of the environment, they were not yet aware of climate change. Instead, the concern in the 1950s was about global cooling rather than about global warming.⁴⁸⁵ The need for aggregate GHG emission reductions hence was not yet appreciated. From the 1970s onwards, concerns about global warming increased, but as Chapter 7 will discuss, a state's trading obligations can limit its ability to respond to climate change when its responses have a negative impact on trade.

Fortunately, a “big bang” creation of a new formal international agreement is not necessarily the only outcome of states' diplomatic interactions. Diplomatic interactions between states can also lead to more incremental changes in international rules and principles on the exercise of state sovereignty, such as the development of informal instruments. A prominent example is the no harm/due diligence principle in international environmental law expressed in the Stockholm Declaration of the 1972 UN Conference on the Human Environment and Rio Declaration of the 1992 UN Conference on Environment and Development.⁴⁸⁶

B. Normative Change through International Institutions

A second avenue for normative change is through existing international institutions which play an important role in providing an arena in which the dialectical process of normative change can take place. First, these institutions provide fora to states to interact. Second, depending on its constitutive instrument, an international institution may have a dispute settlement arm to settle disputes between member states regarding the scope of their rights and obligations under the international agreement.

(1) Fora for Inter-State Interactions

The inter-state interactions that can lead to normative change are not necessarily limited to traditional diplomatic interactions between states, but can take place within an international

⁴⁸⁴ *UNFCCC*, art. 15; *Kyoto Protocol*, art. 20; *IMF Articles of Agreement*, art. XXVIII; *WTO Agreement*, art. X.

⁴⁸⁵ Fleming, *supra* note 30, 82, 115, 131-134.

⁴⁸⁶ UN Conference on the Human Environment, *Stockholm Declaration of the United Nations Conference on the Human Environment*, UN Doc A/CONF.48/14/REV.1, 16 June 1972; Rio Declaration, *supra* note 454. The no harm principle is discussed in more detail in Chapter 3, Section III.C(2).

institution. For example, the UN provides a forum for multilateral interactions through the General Assembly and Security Council. In the past, UN General Assembly resolutions, such as the Friendly Relations Declaration, have played an important role in defining the scope of the principle of non-intervention.⁴⁸⁷ Debates in the UN Security Council on the legality of forcible humanitarian intervention have also been significant in redefining the duties of sovereign states towards their own citizens and the rights of other states to intervene.⁴⁸⁸

Another example is the range of formal mechanisms available to the WTO political bodies to drive normative change. First, the Ministerial Conference and the General Council can issue “authoritative interpretations”, based on recommendations by one of the specialized councils in charge of overseeing particular agreements,⁴⁸⁹ such as the Council for Trade in Goods or the Council for Trade in Services for the issues studied in this thesis.⁴⁹⁰ An interpretation is binding upon all members and can affect the scope of their rights and obligations, although the procedure of an authoritative interpretation cannot replace the amendment procedure.⁴⁹¹ Second, in the context of the GATS, the Council for Trade in Services is charged with the development of disciplines regarding domestic measures relating to qualification requirements and procedures, technical standards and licensing requirements.⁴⁹² Once developed, these disciplines will have an important impact on the balance between competing exercises of state sovereignty. While the WTO political bodies can thus drive normative change, even between trade rounds, Cottier points out that in practice instances of these formal mechanisms of normative change have been exceptional.⁴⁹³

In addition, informal mechanisms exist within the WTO. Examples are the technical work and discussions within various committees and working parties such as the Committee on Trade and Environment, the Committee on Balance-of-Payments Restrictions or the Committee on Trade in Financial Services that work independently under the authority of the Council for Trade in

⁴⁸⁷ See Chapter 3, Section III.C(1).

⁴⁸⁸ Sandholtz and Sweet, “Law, Politics, and International Governance”, in Reus-Smit (Ed.) *Politics of International Law* (2004), 259.

⁴⁸⁹ *WTO Agreement*, art. IX:2.

⁴⁹⁰ *Ibid.*, art. IX:2 *jo.* art. IV:5.

⁴⁹¹ *Ibid.*, art. IX:2; Van den Bossche, *The Law and Policy of the World Trade Organization: Text, Cases, and Materials*, 2nd ed. (2008), 141-142.

⁴⁹² *GATS*, art. VI:4.

⁴⁹³ Cottier, *supra* note 476, 50.

Goods or the Council for Trade in Services.⁴⁹⁴ Another example are the discussions on the legality of technical regulations or standards that can take place within the Committee on Technical Barriers to Trade.⁴⁹⁵ Likewise, the WTO Secretariat can play a role in influencing norm development through various background notes it develops, even if these officially do not affect member states' rights and obligations.⁴⁹⁶

Still in the trade context, both FTAs studied in this thesis will establish an organisational structure that can play a role in on-going normative development. The US–Korea FTA will create a Joint Committee⁴⁹⁷ as well as a Financial Services Committee to report to the Joint Committee.⁴⁹⁸ Similarly, the EU–Korea FTA will establish a Trade Committee and various specialized committees, including a Committee on Trade in Services, Establishment and Electronic Commerce.⁴⁹⁹ Within the specific context of the FTAs, these bodies will provide a forum for normative change.

(2) *Dispute Settlement*

In addition to providing a forum for state interaction, some international institutions also provide a forum for dispute settlement, such as the ICJ or the Permanent Court of Arbitration. This avenue is particularly useful in efforts to rebalance states' freedoms in the exercise of state sovereignty under general international law. Disputes that arise under trade liberalization agreements such as the WTO agreements and the FTAs studied in this thesis are handled through the specialized dispute settlement procedures instituted by these agreements.⁵⁰⁰ Since at least the 1970s, the dispute settlement bodies under the GATT, and later on the WTO agreements, have been very active in interpreting and developing the relevant provisions.⁵⁰¹ Given the lack of success in the Doha Round, dispute settlement by the Appellate Body has been

⁴⁹⁴ Van den Bossche, *supra* note 491, 126-127.

⁴⁹⁵ *TBT Agreement*, art. 14.

⁴⁹⁶ See for example the recent note which includes statements on how the prudential carve-out should be interpreted Council for Trade in Services and Committee on Trade in Financial Services, *Financial Services: Background Note by the Secretariat*, S/C/W/312, S/FIN/W/73 (3 February 2010), 8-9. This note was more lenient towards regulating states than an earlier note on the same topic: Council for Trade in Services, *Financial Services: Background Note by the Secretariat*, S/C/W/72 (2 December 1998). For further discussion, see Chapter 9, Section V.

⁴⁹⁷ *US–Korea FTA*, art. 22.2.

⁴⁹⁸ *US–Korea FTA*, art. 13.16.

⁴⁹⁹ *EU–Korea FTA*, art. 15.1-15.2.

⁵⁰⁰ *DSU*, art. 23; *US–Korea FTA*, art. 13.18 *jo.* Chapter 22 and art. 13.19 *jo.* Chapter 11; *EU–Korea FTA*, art. 7.45 *jo.* Chapter 14.

⁵⁰¹ Sandholtz and Sweet, *supra* note 488, 250; Cottier, *supra* note 476, 50-51.

a more important force for normative development within the WTO than the development of new agreements or the amendment of existing agreements.⁵⁰²

An advantage of dispute settlement as a place for contestation and interaction is that it allows for the immediate testing of the “tension” that arises out of colliding exercises of state sovereignty. As soon as a state feels the negative impact of another state’s actions or omissions, it could invoke a violation of an existing limit such as an exercise of jurisdiction incompatible with one of the principles allocating jurisdiction. This violation would initially be raised in negotiations and consultations with the other state and, if unsuccessful, through formal dispute settlement procedures. The affected state does not need to wait until all the other states agree on the importance of the issue, commit resources to international negotiations, and develop new rules or principles governing the exercise of state sovereignty. Obviously, claiming a violation does not necessarily entail a confirmation of the affected state’s rights. Nevertheless, the ensuing debate will illustrate tangible problems with the application of the prevailing international rules and principles in the context of increasing interdependence. It also provides an opportunity to refine these rules and principles through the exchange of arguments, comments and justifications.

This dynamic is particularly clear in the context of defensive mechanisms used to protect macro-financial stability. Capital controls can protect state A against the negative impact of state B’s monetary management policies, for example an expansive monetary policy or lax credit creation limits. These controls do not require state B to change its monetary management policies, although the controls will restrict its ability to trade with or invest in state A. If state A imposes these capital controls, state B could start negotiations or consultations. If state B is not pleased with the outcome of these steps, it can lodge a claim against state A before a WTO Panel, with the possibility of appeal to the Appellate Body, or before an FTA Panel if state A and B have concluded a FTA between them. The dispute process can clarify the scope of the obligations to liberalize capital flows, and exceptions thereto, in the FTA or GATS. A formal decision by the competent dispute settlement body sets a precedent for future interactions between state A and state B, as well as between other WTO Members if the dispute is under GATS.

In the context of climate change, an affected state could consider trade restrictions against another state. Even if a win in a WTO or FTA dispute may not directly lead the other state to change its GHG emission policies, the clarification of the applicable rules and of the

⁵⁰² McRae, *supra* note 15, 336-337.

environmental exception, in particular, will set an important precedent. Even if the other state decides not to comply with the decision, this rule-breaking behaviour is, as argued above,⁵⁰³ not necessarily rule-making.⁵⁰⁴

Normative change through dispute settlement is an incremental process that can at times move slowly and in various directions. However, it is not necessarily as slow as might be expected. For example, in the context of the link between trade and the environment, the outcome in *US–Shrimp* was very different from the outcome in *Tuna–Dolphin I*. Yet only seven years separate these decisions. As the long process to develop the Kyoto Protocol illustrates, treaty making is not necessarily faster.

Despite the absence of a doctrine of binding legal precedent in international law, dispute settlement outcomes are very influential. In the WTO context, Bhala argues that Appellate Body decisions are highly authoritative in the reasoning of later cases⁵⁰⁵ and create expectations about how future cases will be decided.⁵⁰⁶ He describes this phenomenon as *de facto stare decisis*.⁵⁰⁷ Any arguments to change the prevailing interpretations of some of the crucial articles of the GATT and the GATS need to counter the authoritative force of the existing “precedents”.

This *de facto stare decisis* is both a blessing and a curse for normative change. On the one hand, it is a blessing because without their authority, decisions would not be able to sustain normative change. On the other hand, it is a curse if the imbalance between states’ positive and negative freedom stems from an existing decision, because the authoritative force of the existing decision creates an obstacle to redressing the imbalance, particularly if there is no effective political mechanism that can react swiftly to correct any imbalances created through dispute settlement, as is the case in the context of the WTO.⁵⁰⁸

⁵⁰³ See text accompanying footnote 477.

⁵⁰⁴ Sandholtz, *supra* note 467, 108-109.

⁵⁰⁵ Bhala, “The Precedent Setters: *De Facto Stare Decisis* in WTO Adjudication (*Part Two of a Trilogy*)”, 9 *Journal of Transnational Law and Policy* 1 (1999), 3-4.

⁵⁰⁶ *Japan–Alcoholic Beverages II (AB)*, 14.

⁵⁰⁷ Bhala, *supra* note 505, 4.

⁵⁰⁸ Alter, “Resolving or Exacerbating Disputes? The WTO’s New Dispute Resolution System”, 79 *International Affairs* 783 (2003), 795.

Nevertheless, *stare decisis* does not require rigid adherence to earlier decisions.⁵⁰⁹ A trade-off can and should be made between, on the one hand, the stability and predictability created by consistency in interpretation over time⁵¹⁰ and, on the other hand, the need to adapt to the changing times and circumstances.⁵¹¹ Making this trade-off between stability and adaptation is particularly important in the WTO context. Panels and the Appellate Body often need to decide on sensitive issues related to the interaction between trade and other societal values, such as protection of the environment or macro-financial stability, on which the WTO's political bodies are slow to act.⁵¹²

Finally, it needs to be borne in mind that formal dispute settlement is but one pathway to normative change. Admittedly, it is a very important one in increasing interdependence, given the power vested by trade liberalization agreements in dispute panels. It is probably also the most realistic one. Nevertheless, other pathways remain open, and some of these can ultimately lead to the "highway" of a re-interpretation by an adjudicator such as the Appellate Body. For example, the non-state actors discussed in the next Section play an important role in developing alternative interpretations, and in convincing not only the adjudicators but also the states that are parties to the disputes into adopting the alternative interpretation of a specific rule or principle that is central to a dispute.

C. *Non-State Actors*

While states are the main actors in international law, a wide range of non-state actors such as non-governmental organisations, religious groups and lobbyists, play an important role in shaping the outcome of a process of normative change. For example, they identify problems, analyse different possible outcomes or actively promote norms and persuade a critical mass of states of the appropriateness of the proposed new norms.⁵¹³ Once a norm has been modified, its evaluation by non-state actors can furthermore bring the attention of states to the implications of this modification and set in motion a new cycle of change.⁵¹⁴

⁵⁰⁹ Bhala, *supra* note 505, 130-137.

⁵¹⁰ Hilf, "Power, Rules and Principles-Which Orientation for WTO/GATT Law?", 4 *Journal of International Economic Law* 111 (2001), 116-117.

⁵¹¹ Bhala, *supra* note 505, 130.

⁵¹² *Ibid.*, 149.

⁵¹³ Finnemore and Sikkink, "International Norm Dynamics and Political Change", 52 *International Organization* 887 (1998), 895-901; Brunnée and Toope, *supra* note 315, 60-65.

⁵¹⁴ Sandholtz and Sweet, *supra* note 488, 268.

Non-state actors can feed into the dialectical processes of normative change, discussed in Sections A and B, in both direct and indirect ways. First, non-state actors can participate directly by assisting states in diplomatic interactions or in dispute settlement proceedings through expert advice about negotiation or litigation strategies. Non-state actors can also be included in official state delegations, or their views can be incorporated into a state's submissions in a dispute settlement procedure.⁵¹⁵ Another avenue for direct participation is through assistance to international institutions or dispute settlement bodies. For example, in 2009, the Stiglitz Commission discussed earlier,⁵¹⁶ provided input into the UN General Assembly's deliberations on the Global Financial Crisis.⁵¹⁷ Likewise, the International Law Commission, whose work for the UN General Assembly on the codification and progressive development of international law is considered highly influential, can shape the dialectical process of normative change. When it comes to assisting dispute settlement bodies, experts can assess the risks related to a particular state decision to allow a dispute settlement body to determine whether the state decision was diligent. Non-state actors can also assist dispute settlement bodies through *amicus curiae* briefs where the dispute settlement bodies allow this.⁵¹⁸

Second, non-state actors can indirectly influence the dialectical process of normative change through campaigns to affect public opinion with the goal of prompting political decision-makers domestically and internationally into action.⁵¹⁹ In addition, they can also lobby states or international institutions directly.

The role played by non-state actors may not always be of major importance. For example, Bartholomeusz points out that *amicus curiae* briefs play a relatively modest role.⁵²⁰ However, the precise role of these non-state actors is not important for present purposes, which is to give a sample of the various dialectical processes through which normative change can take place. The main point of this particular Section is to clarify that states are not the only actors in this process of normative change. Bianchi develops Cheng's metaphor of a play with the states as the stage

⁵¹⁵ Bartholomeusz, "The Amicus Curiae before International Courts and Tribunals", 5 *Non-State Actors and International Law* 209 (2005), 256, 266.

⁵¹⁶ See text accompanying footnote 235.

⁵¹⁷ Commission of Experts, *supra* note 222, 7.

⁵¹⁸ On *amicus curiae* briefs, see Bartholomeusz, *supra* note 515.

⁵¹⁹ Finnemore and Sikkink, *supra* note 513, 895-901.

⁵²⁰ Bartholomeusz, *supra* note 515, 212.

actors, but with various other participants involved in the production.⁵²¹ This thesis considers the script of the play more important in the quest for a liberal system of international law in increasing interdependence than the question of the identity of the actors, whether on stage or behind the scenes. The substantive drivers of normative change discussed in the next Section determine this script.

III. SUBSTANTIVE DRIVERS OF NORMATIVE CHANGE TOWARDS A LIBERAL SYSTEM OF STATES

Section II gave an overview of the wide variety of formal and informal dialectical processes through which the contestation between different positions on the legality of specific exercises of state sovereignty in increasing interdependence can take place. However, these processes themselves do not guarantee an international legal system that creates the foundations for a liberal system of states. The dialectical process of normative change is rudderless without guidance on the substantive changes that should be made to the current rules and principles of international law as a normative system.⁵²² It is incumbent upon international lawyers and scholars to take a position on what the outcome of the dialectical processes ought to be for the prevailing situation of interdependence. This Section looks into substantive norms that can drive these processes towards an outcome that is compatible with liberal principles.

Suggesting possible outcomes of the normative “cycle” is not an easy task. As Special Rapporteur Quentin-Baxter pointed out in his Fourth Report on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law, “there is no simple formula to reconcile one State’s right to freedom of action with another State’s right to freedom from adverse transboundary effects”.⁵²³ This thesis does not intend to devise such a formula. Instead, it identifies normative principles that, consistent with the desirability of a liberal system of states, can address existing imbalances between states’ freedoms in the exercise of their sovereignty in increasing interdependence. Consistent with the dialectal nature of the process, any substantive changes, if successful, will also only establish the new benchmark for states’ behaviour for the time being.

⁵²¹ Bianchi, “Introduction: Relativizing the Subjects or Subjectivizing the Actors: Is That the Question?”, in Bianchi (Ed.) *Non-State Actors and International Law* (2009), xiv.

⁵²² Diehl et al., *supra* note 474, 51.

⁵²³ International Law Commission, *supra* note 446, 203-204, para. 209.

This Section examines substantive normative principles that can drive the dynamic processes discussed in Section II and ensure a balance between states' positive and negative freedom, thereby promoting states' co-existence and co-operation. It is argued that "interstitial norms", described by Lowe, can provide that guidance.

A. *What are Interstitial Norms?*

Interstitial norms are norms "operating in the interstices between [...] primary rules", where they can usefully direct the interaction between overlapping primary norms that compete for application to a specific set of facts.⁵²⁴ Lowe has described "interstitial norms" as "the engine of change in international law"⁵²⁵ and as providing colour in the "black-and-white" world of primary rules.⁵²⁶ He added that these norms "do not themselves have a normative force of the traditional kind but instead operate by modifying the normative effect of other, primary norms of international law".⁵²⁷ Unlike primary norms, interstitial norms are not backed by formal state consent or by state practice combined with *opinio iuris*.⁵²⁸ This is not a reflection of the underdeveloped state of these norms that can be overcome over time. Rather, their conceptual nature makes their coherent formulation into primary rules that define the rights and obligations of states in the exercise of their sovereignty difficult.⁵²⁹

Interstitial norms are "drawn out" by a wide variety of participants, including political representatives of states, international institutions and members of civil society or academia.⁵³⁰ However, that does not imply that the proponents of interstitial norms can make up these norms as they see fit, but only that these interstitial norms are not derived from the same sources as primary rules of international law.⁵³¹ Rather, they are based on considerations of equity and the general cohesion of the legal system in which interstitial norms operate.⁵³²

⁵²⁴ Lowe, *supra* note 13, 213-214.

⁵²⁵ *Ibid.*, 212.

⁵²⁶ *Ibid.*, 218.

⁵²⁷ *Ibid.*, 213.

⁵²⁸ *Ibid.*, 213, 216.

⁵²⁹ *Ibid.*, 216.

⁵³⁰ *Ibid.*, 219-220.

⁵³¹ *Ibid.*, 219.

⁵³² *Ibid.*, 216.

Lowe's arguments on the development of interstitial norms resonate with Brunnée and Toope's insights on interactional international law. Brunnée and Toope argue that it is through social interaction between and participation of various actors in a "community of practice" that shared understandings⁵³³ develop to support and maintain social norms, and through which these social norms develop and maintain legal norms.⁵³⁴ Lowe's interstitial norms can be seen as instances of these social norms that assist in developing and grounding legal norms. Brunnée and Toope point out that the shared understandings underlying the social norms can be very "thin", and that in a diverse world such as ours this is often the case.⁵³⁵ However, continued interaction can deepen shared understandings and allow for more ambitious international law to develop.⁵³⁶

Sections B to D discuss three possible interstitial norms that can create conditions conducive to the development of more ambitious international law.

B. *Locality*

Locality incorporates the idea that states feeling the effects of an action should be allowed to act in response. For example, when a state's emission standards or regulation of credit creation by internationally active banks conflict with those of its trading partners, the former should be authorized to make the political decision on the appropriate hierarchy between trade and other societal values.

Leaving the political decision to the state that feels the effects of an action is preferable for several reasons. First, if an act and its negative effects are not located within the same territory, the state in which the act takes place has very little incentive to regulate, as illustrated by the free riding that is prevalent in relation to climate change mitigation efforts. Second, it is consistent with decisional sovereignty, because it enables states to take decisions regarding acts that affect them. Third, states are responsible towards their inhabitants for the protection of the environment, health or financial stability.⁵³⁷ If the decision on how to regulate activities that have an impact on these matters is left to states where the activity takes place rather than the

⁵³³ "Shared understandings" are defined by Brunnée and Toope as "collectively background knowledge, norms or practices [...]. They are *shared* understandings precisely because they are generated and maintained through social interaction", see Brunnée and Toope, *supra* note 315, 64.

⁵³⁴ *Ibid.*, 15, 75.

⁵³⁵ *Ibid.*, 42, 81-82, 86.

⁵³⁶ *Ibid.*, 81-82, 356-357.

⁵³⁷ Alter, *supra* note 508, 797.

state where the impact is felt, the acting state will be able to affect people to whom it bears no responsibility.

As a norm that identifies the appropriate locus for political decision-making, locality is a close relative of subsidiarity. Subsidiarity is often applied when there are overlapping levels of governance, for example in federal states or between states and supranational institutions, to express a preference for the exercise of authority at the lowest possible level of government,⁵³⁸ depending on the scale of the problem to be addressed. If there is a collective interest in regulation, the matter should be dealt with at the federal or supranational level. Locality performs a similar function, albeit in the horizontal relationships between equally sovereign states, by allowing the political decision to be made by the state that is closest to the negative effects of actions that need to be regulated.

By shifting the focus away from the action itself towards the effects of this action, locality can provide better protection for states' negative freedom, compared to the current priority given to states' positive freedom. However, locality does not fully exclude collisions of sovereignty, as it is possible that an act has an impact in both the state where it takes place as well as in other states. Moreover, even if the state should be able to regulate a specific act because it feels the impact of that act, the state should not therefore be allowed to regulate at its discretion and in turn cause a negative impact on another state. Therefore, locality alone is not enough, and there is a need for further normative principles to govern the exercise of state sovereignty to help ensure a balance between states' negative and positive freedom.

C. Reasonableness

The second interstitial norm that can facilitate a better balance between states' negative and positive freedom is that of "reasonableness". Lowe described reasonableness as "perhaps the most obvious example" of an interstitial norm.⁵³⁹ As an interstitial norm, it can accommodate tensions between conflicting primary rules, such as conflicting exercises of state sovereignty that all benefit from a presumption of legality by virtue of one of the principles allocating jurisdiction. Overlaying these principles with considerations of reasonableness is one step towards limiting the positive freedom of states so as to avoid their exercises of jurisdiction having a negative impact on other states.

⁵³⁸ Feichtner, "Subsidiarity", in Wolfrum (Ed.) *The Max Planck Encyclopedia of Public International Law*, at <www.mpepil.com>.

⁵³⁹ Lowe, *supra* note 13, 217.

D. Good Neighbourliness

The third interstitial norm is good neighbourliness. Elements of this interstitial norm are incorporated in the no harm/due diligence principle. However, good neighbourliness is broader than the no harm/due diligence principle. As discussed above,⁵⁴⁰ the no harm principle only exists as a primary rule of international law in the environmental context, and even in that context is rather limited. In other contexts, such as the regulation of economic affairs, good neighbourliness could be employed to support a broader understanding of harm that occurs through the exercise of sovereignty. Support for a broader conception of harm than currently available under the no harm/due diligence principle can be found in the Preliminary Report on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law, in which Special Rapporteur Quentin-Baxter described the “concept of harm” as a “principle governing legal development”.⁵⁴¹ To avoid confusion with the no harm/due diligence principle, this thesis will refer to the interstitial norm as “good neighbourliness”.

The standard against which good neighbourly behaviour should be tested is one of due diligence. Due diligence may even go as far as requiring states to adopt a precautionary approach and not take a particular action when there is scientific uncertainty as to whether this action will lead to harm or not. A precautionary approach is relevant beyond the context of international environmental law in which it is currently recognized. For example, when it comes to actions and omissions that threaten macro-financial stability, the precise link between financial regulation and the macro-economy is in general poorly understood and is something to which mainstream economists have only recently turned their attention.⁵⁴²

Closely related to good neighbourliness is the abuse of rights doctrine.⁵⁴³ Under this doctrine of civil law origins⁵⁴⁴ abusive exercises of rights are violations of international law. The doctrine is useful for several purposes: to limit broadly defined rights, such as the wide freedoms granted to states in the exercise of their sovereignty; to reduce conflicts with other rights of similar

⁵⁴⁰ See Chapter 3, Section III.C(2).

⁵⁴¹ International Law Commission, *Preliminary Report on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law*, by Mr. Robert Q. Quentin-Baxter, *Special Rapporteur*, UN Doc A/CN.4/334 and Add.1 & Corr.1 and Add.2 (1980), para. 38.

⁵⁴² Pavlova and Rigobon, *International Macro-Finance* (15 February 2011), at <<http://www.voxeu.org/index.php?q=node/6110>>.

⁵⁴³ Kiss and Shelton describe abuse of rights as “the conduit towards a legal solution based on the existence of an autonomous norm”, see Kiss and Shelton, *supra* note 439, 273; Kiss, “Abuse of Rights”, in Wolfrum (Ed.) *The Max Planck Encyclopedia of Public International Law*, at <www.mpepil.com>.

⁵⁴⁴ Byers, “Abuse of Rights: An Old Principle, A New Age”, 47 *McGill Law Journal* 389 (2002), 395.

standing in international law; and to fill normative gaps.⁵⁴⁵ It is no surprise, then, that states often invoke it in state-to-state litigation.⁵⁴⁶ However, because the abuse of rights doctrine turns otherwise lawful exercises of sovereignty into a breach of international law, it is not universally accepted.⁵⁴⁷ Moreover, continuing disagreement on the precise contours of the abuse of rights doctrine in current international law undermines the doctrine's utility as an effective limit on states' exercise of their positive freedom when this exercise reduces other states' negative freedom. Brownlie argues that the principle does not exist as a general principle in positive law.⁵⁴⁸ Rather than attempting to find common ground on the meaning of "abuse of rights" as a primary norm, an alternative approach would be to consider the abuse of rights doctrine as an interstitial norm,⁵⁴⁹ closely related to the idea that rights and obligations needs to be exercised in good faith.

Good neighbourliness can help to guarantee the liberal nature of international law by clarifying the boundaries on states' positive freedom necessary to ensure that it is not prioritized over negative freedom. At the same time, states cannot expect to have their negative freedom completely shielded from external interference in increasing interdependence. Some external effects, even negative ones, may need to be tolerated to ensure that other states' positive freedom, and by extension their decisional sovereignty, is not unduly restricted. In these situations, good neighbourliness combines with the interstitial norm of reasonableness to require that states negatively affected by another states' actions or omissions in the exercise of their positive freedom tolerate reasonable exercises of sovereignty, despite the impacts. A determination of what constitutes "reasonable" behaviour of a "good neighbour" cannot be made in the abstract, but will have to be assessed on a case-by-case basis. These assessments are part and parcel of the dynamic processes for normative change as they help to refine the boundaries of acceptable state behaviour.

IV. REINTERPRETATION OF CONDITIONAL LIMITS AND DEFENSIVE MECHANISMS

Having identified the processes and the substantive drivers of normative change in Sections II and III, this Section argues that the prime candidates for reinterpretation are the conditional

⁵⁴⁵ *Ibid.*, 397, 403, 423.

⁵⁴⁶ *Ibid.*, 398-402.

⁵⁴⁷ *Ibid.*, 410; Kiss, *supra* note 543.

⁵⁴⁸ Brownlie, *supra* note 327, 430.

⁵⁴⁹ Lowe, *supra* note 13, 218; Byers, *supra* note 544, 422-423.

limits on the exercise of state sovereignty in general international law and the limits on the legality of defensive mechanisms in specialized international law. As discussed above,⁵⁵⁰ conditional limits, such as the no harm/due diligence principle, restrict exercises of positive freedom if these would adversely affect other states. In contrast, rules that determine the legality of defensive mechanisms take the form of “a State may do X to avoid an adverse external impact”. The remaining Chapters of this Part analyse how the interstitial norms discussed in Section III can drive the dialectical processes through which the reinterpretation of the limits on the legality of defensive mechanisms and the conditional limits that currently exist in international law can occur.

The choice to reinterpret conditional limits and limits on the legality of defensive mechanisms does not exclude the development of new direct limits on the exercise of state sovereignty as a pathway to protecting the liberal nature of international law. However, as Section II.A discussed, the requirement of consent in practice is often an obstacle to the creation of direct limits in situations of increasing interdependence.

The aim of the reinterpretation would be to improve the availability of conditional limits to restrict states’ actions or omissions that can negatively affect other states as well as the availability of defensive mechanisms through a more lenient interpretation of the current limits on their legality. This approach has a number of advantages.

To start, the foundations of conditional limits and defensive mechanisms are already available in international law. Moreover, conditional limits and limits on the legality of defensive mechanisms are inherently flexible. There are at least four reasons for this flexibility. First, conditional limits and defensive mechanisms are only available when there is a potential threat of an externally caused impact on a state’s negative freedom. When such a threat is absent, the acting state’s positive freedom is not affected. Second, they are more future proof than direct limits. Should there no longer be a need to protect domestic affairs against a particular negative effect, the conditional limits and the limits on the legality of defensive mechanisms become redundant. Acting states thus will not have to fear unnecessary restraints on their positive freedom. In contrast, direct limits would continue to limit states’ actions, with potentially detrimental effects on state sovereignty, even if no longer needed to protect other states’ negative freedom. Third, the no harm/due diligence principle and the limits on the legality of

⁵⁵⁰ See Chapter 3, Section III.C.

defensive mechanisms are expressed in general terms.⁵⁵¹ The inherent flexibility allows for the progressive adaptation of the law to a complex and continuously changing reality, which should ultimately lead to more effective responses to global problems. No legal system can anticipate all situations, particularly not complex situations of increasing interdependence. This is even more so for international law, which is notoriously slow to develop.

While the thesis argues for the reinterpretation of both conditional limits and limits on the legality of defensive mechanisms, it considers defensive mechanisms to be more suitable to protect states' domestic affairs in increasing interdependence and therefore expresses a preference for improving the legality of defensive mechanisms.

Defensive mechanisms are preferable over conditional limits because they focus on protecting the domestic affairs of a state against a negative external impact, regardless of whether the impact results directly from an action of another state or from a more complex interaction of various contributory factors originating from different states. Therefore, defensive mechanisms can offer protection against actions of other states that are not necessarily intended to have a negative impact abroad. For example, the US Federal Reserve Bank's decision in November 2010 to engage in a second round of "quantitative easing" through the buyback of government bonds injected cash into the US economy. While this decision was not officially intended to manipulate the exchange rate of the US dollar, US investors used the newly available funds to invest in higher yielding emerging markets. These investments increased the demand for foreign currencies and increased the supply of the US dollar, resulting in an appreciation of the foreign currencies compared to the US dollar. If legally available, the use of defensive mechanisms such as capital controls⁵⁵² could protect the "destination" states of these funds against the inflows of "hot money".

Moreover, in increasing interdependence, private actors engaged in cross-border trade often cause the negative impact when they are inadequately regulated by their home state. When an affected state uses a defensive mechanism that involves a trade restriction, these private actors of foreign origin are directly affected. If the private actors want to continue trading with the affected state, they will have to adapt their behaviour or put domestic political pressure on their own government to make the political choice between a lower level of regulation and a lower level of exporting opportunities. For example, US investment banks convinced the US Securities

⁵⁵¹ de Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules* (2002), 259.

⁵⁵² The legality of capital controls is discussed in Chapter 9, Sections II.C and IV.E.

and Exchange Commission to develop a voluntary regulatory framework based on Basel II,⁵⁵³ which the US had not fully implemented, to ensure that its regulation would meet the requirement of equivalence with regulations imposed by the EU on any financial conglomerates that want to operate within the EU.⁵⁵⁴ Private actors could also put pressure on the affected state to remove the trade restriction, but this may not always be possible, particularly not when the affected state is a strong economy that does not depend on the private actor's good or services. In contrast, when invoking conditional limits such as the no harm/due diligence principle when other states fail to regulate private actors within their territory, the affected state still depends on the territorial state to adopt the necessary regulation.

Defensive mechanisms are also preferable over conditional limits when it comes to a formal legal dispute. When a state affected by another state's actions or omissions invokes the violation of a conditional limit, it will be the claimant. Thus, it will have to prove that the other states' actions are illegal and establish the causal link between the other state's actions and the negative impact it has felt. Establishing causation in complex situations of increasing interdependence is an important obstacle to the success of a claim based on a conditional limit. If, on the other hand, the state relies on a defensive mechanism, i.e. a trade restriction, the other state will have to challenge the legality of the defensive mechanism before a WTO or FTA Panel. If another state chooses to challenge, it will then have to establish that international law was violated whereas the state using the defensive mechanism has to make a prima facie case that an exception exculpates the violation.

Despite this preference for defensive mechanisms, conditional limits can still play a useful role when the negative impact does not result from a lack of regulation but rather from the policies of another state. Examples of these are decisions relating to the management of official reserves that affect the exchange rate, and by extension the economy, of the state issuing the reserve currency, or, decisions regarding the level of a fixed exchange rate. In the climate change case study, emissions of a state-owned steel producer can contribute to climate change that has a negative impact on other states.

A potential downside of relying on defensive mechanisms is that they can increase conflicting exercises of sovereignty, which can lead to disputes. For example, state A might feel harmed by

⁵⁵³ The Basel Accords are discussed in Chapter 8, Section III.

⁵⁵⁴ Scott, "Reducing Systemic Risk through the Reform of Capital Regulation", 13 *Journal of International Economic Law* 763 (2010), 765.

state B's lack of environmental or financial regulation and restrict imports or services that fail to meet a minimum standard. State B might in turn experience this as a limit on its trading opportunities to which it needs to respond. Some international lawyers may find this a disturbing evolution. However, this thesis considers such regulatory conflicts are an important part of the dialectical process of normative change, as long as the disputes are settled peacefully either through consultations between parties or by a third party adjudicator if consultations fail. Regulatory conflicts provide an opportunity for states to have a discourse about the appropriate rules in any given situation and to modify the rules through contestation.⁵⁵⁵

V. CONCLUSION

This Chapter has argued for dialectical processes of change, driven by interstitial norms, to ensure that international law provides the legal scaffolding to support a liberal system of states in increasing interdependence.

The remaining Chapters of Part II have two overarching goals. One is to analyse whether the rules and principles governing the exercise of state sovereignty in specific situations of increasing interdependence, such as climate change mitigation and macro-financial instability, support a liberal system of states. It will be argued that states' freedom to decide on their climate change policies or on their monetary management policies is currently subject to very few direct limits, even if their chosen policy mix adversely affects other states. States can thus take policy decisions without having to take into account the full costs of their actions. The existence of a broad positive freedom has an impact on the likelihood of international agreements in response to international problems, which in international law relies on states' consent. If an effective response to an international problem requires states to give up much of the positive freedom to which they are entitled under international law, the consent needed for the development of new international agreements will often not be forthcoming. Chapters 7 and 9 discuss how trade liberalization obligations further increase the incentives to free ride, because if states do not regulate within their territory, their exporters can gain a competitive advantage over producers in another state that has decided to regulate. The knowledge that other states will free ride and enjoy a competitive advantage if it regulates can dampen a state's willingness to regulate.

⁵⁵⁵ Sandholtz and Sweet, *supra* note 488, 254-255, 257-258.

The other goal of the following Chapters is to make suggestions for changes to international law to help ensure that it continues to support a liberal system of sovereign states, even in increasing interdependence. To this end, suggestions will be made as to how the interstitial norms can assist with the reinterpretation of existing rules and principles on the exercise of state sovereignty in line with the requirements of a liberal system of states. These suggestions will be made in the context of general and specialized international law.

CHAPTER 5. RETURNING TO RELATIVE SOVEREIGNTY IN GENERAL INTERNATIONAL LAW

A recurring theme of this thesis is the pressure building under a legal system of sovereign states in increasing interdependence. To ensure that international law continues to function as a liberal system in which each state's decisional sovereignty is protected, including through limits on the exercise of sovereignty to ensure the equal sovereignty of other states, it has been argued that it is necessary to prioritize the protection of states' negative freedom rather than their positive freedom. As discussed in Chapter 3, the current rules and principles of general international law that govern the exercise of state sovereignty result in a concept of state sovereignty that is far less relative than it ought to be because of the emphasis on positive freedom at the expense of negative freedom. The analysis in the current Chapter examines whether there is scope to reinterpret these rules and principles in line with the overall goal of a liberal system of states and the requirements of the interstitial norms discussed in Chapter 4.

The thesis does not argue that all the rules and principles of general international law that govern the exercise of state sovereignty require reinterpretation. In light of the importance of a liberal system of states to ensure co-existence and co-operation of very different states, Chapter 2 has argued that international law should remain a liberal system of states. Section I therefore argues that, because of their fundamental importance to a liberal system of states and to states' decisional sovereignty, the principle of non-intervention and sovereign consent should not be reinterpreted. However, Section II suggests changes in two areas: a reinterpretation of the Lotus Principle and the principles allocating jurisdiction guided by the interstitial norms to reduce the broad protection given to states' positive freedom; and a reinterpretation of the no harm/due diligence principle to ensure better protection of states' negative freedom. Section III concludes that it is possible to address the imbalance between positive and negative freedom in general international law through reinterpretation.

I. ENSURING THE FUNDAMENTAL ELEMENTS OF A LIBERAL SYSTEM OF STATES: NON-INTERVENTION AND SOVEREIGN CONSENT

Due to the central position of concepts such as sovereign equality, the principle of non-intervention and sovereign consent, international law is often described as a liberal system.⁵⁵⁶ The principle of non-intervention and the requirement of consent to international obligations

⁵⁵⁶ See the references quoted in footnote 18.

are both important to protect states' decisional sovereignty and should therefore not be reinterpreted.

Addressing first the principle of non-intervention, it should be noted that it underwent a significant transformation during the second half of the 20th century, when it was extended to include instances of coercion that did not involve the use of armed force.⁵⁵⁷ This transformation allowed it to be distinguished from the prohibition on the use of force. If we take a step further and remove the coercion requirement, any state action that has a transboundary impact on another state could potentially be seen as an intervention. In increasing interdependence, this could expose a state to claims of violations of the principle of non-intervention almost every time it exercises its sovereignty. Thus, an expansion of the principle of non-intervention would erode the idea of decisional sovereignty. Concerns regarding this could be addressed by adding a due diligence standard of care, but then the principle of non-intervention would become coterminous with the no harm/due diligence principle.

Alternatively, including inaction in the definition of intervention could expand the principle of non-intervention, e.g. when states fail to regulate the private actors whose actions are responsible for climate change or macro-financial instability, but only if the omission is done for the purpose of coercing another state. If coercion is not required, inclusion of inaction in the definition of intervention would lead to the untenable situation in which a state can be found to be intervening in another state's affairs when it acts as well as when it fails to act.⁵⁵⁸ This is not a concern for the no harm/due diligence principle because the obligations under the no harm/due diligence principle are not triggered unless there is harm to another state. The principle of non-intervention, however, is premised on the actions of a state, regardless of their consequences.

As for the requirement of sovereign consent to international obligations, it is undesirable to reduce the importance of this requirement, despite it sometimes being an obstacle towards the development of international obligations in situations of increasing interdependence.⁵⁵⁹ Lessening the importance of consent can affect states' negative freedom by exposing them to international obligations that go against values and interests that they hold dear. Hence, a reduced consent requirement would affect states' decisional sovereignty. Watson has compared

⁵⁵⁷ See text accompanying footnotes 417-422.

⁵⁵⁸ Rosenau, "Intervention as a Scientific Concept", 13 *Journal of Conflict Resolution* 149 (1969), 153.

⁵⁵⁹ For a discussion of these difficulties in each of the case studies, see Chapter 1, Section II.B(1) and Chapter 1, Section III.C.

efforts to disregard the importance of state consent to a physicist “disregarding the law of gravity because he prefers the results that can thus be obtained.”⁵⁶⁰

Rather than reducing the importance of consent, this thesis argues that the focus should be on addressing the imbalances between states’ positive and negative freedom. States still hold the ultimate authority to decide in international law, not only on matters regarding their domestic affairs, but also regarding co-operation on solutions to global problems. International law needs to make it more attractive for states to co-operate in the provision of these solutions. One way is to make states internalize the costs of their actions. International law has been able to do this with some success in the context of trade liberalization agreements. Although these have not fully liberalized trade, they have reduced instances of beggar-thy-neighbour behaviour, even during the recent Global Financial Crisis.⁵⁶¹ States’ agreement on co-operative instruments that force them to internalize the costs of their actions is thus not impossible, but depends on the incentives towards co-operation. This thesis suggests creating these incentives by improving existing limits on states’ freedom of action to achieve a balance between states’ positive and negative freedom in line with the requirements of a liberal system.

II. IMPROVED LIMITS ON STATES’ FREEDOM OF ACTION

Chapter 3 concluded that state sovereignty is not the relative concept it is often thought to be, due to the broad freedom to exercise state sovereignty combined with the limited reach of principles protecting states’ domestic affairs. This Section argues that interstitial norms can modify the current interpretations of the traditional rules and principles defining the boundaries of the legitimate exercise of state sovereignty to develop a better balance between states’ positive and negative freedom in situations of increasing interdependence.

A. *A Less Radical Interpretation of the Lotus Judgment*

As discussed in Chapter 3, the Lotus Principle derived from the PCIJ’s *Lotus* judgment gives states the right to exercise their authority freely within their own territory, even when the exercise of their jurisdiction affects persons, property and acts outside their territory, unless

⁵⁶⁰ Watson, *supra* note 397, 110.

⁵⁶¹ Baltensperger and Cottier, “The Role of International Law in Monetary Affairs”, 13 *Journal of International Economic Law* 911 (2010), 926-927; Viju and Kerr, “Protectionism and Global Recession: Has the Link Been Broken?”, 45 *Journal of World Trade* 605 (2011); Wolfe and Halle, *Did the Protectionist Dog Bark? Transparency, Accountability, and the WTO During the Global Financial Crisis* (March 2011), at <<http://www.iisd.org/publications/pub.aspx?id=1434>>.

prohibited by international law.⁵⁶² This wide freedom creates problems in increasing interdependence and it is therefore not surprising that there have been calls to disregard the *Lotus* judgment.

Some ICJ judges have argued that the Lotus Principle no longer has a place in international law and that the *Lotus* case is therefore no longer a relevant precedent. When the ICJ issued an *Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons*,⁵⁶³ President Bedjaoui attached a Declaration in which he dismissed the Lotus Principle as no longer consistent with current understandings of international law, stating that⁵⁶⁴

The resolutely positivist, voluntarist approach of international law still current at the beginning of the century –and which the Permanent Court did not fail to endorse in the [Lotus] Judgment– has been replaced by an objective conception of international law, a law more readily seeking to reflect a collective juridical conscience and respond to the social necessities of States organized as a community.

He argued that the ICJ's controversial decision not to reach a definitive conclusion on the legality of the threat or use of nuclear weapons "in an extreme circumstance of self-defence, in which the very survival of a state would be at stake"⁵⁶⁵ should not be seen by states as an authorization "to act as they please" because "the Court [...] is far more circumspect than its predecessor in the '*Lotus*' case in asserting today that what is not expressly prohibited by international law is not therefore authorized".⁵⁶⁶ If President Bedjaoui is correct, states' positive freedom is now more restricted than it was at the time of the *Lotus* judgment because states can no longer derive an authorization to act from the absence of an express prohibition on these acts.

However, President Bedjaoui's statement is at odds with the statement in the *Advisory Opinion* itself that the approach in customary international law and in international treaties towards the legality of the threat or use of nuclear weapons, or of any other weapon, is one of prohibition rather than authorization.⁵⁶⁷ The *Advisory Opinion* also started its analysis on the premise that

⁵⁶² See Chapter 3, Section III.B(1).

⁵⁶³ It is interesting to note that, unlike *Lotus*, the *Nuclear Weapons Advisory Opinion* did not deal with the exercise of jurisdiction but with the legality of a policy decision. Thus, the reach of the Lotus Principle extends to exercises of positive freedom that are broader than the exercise of jurisdiction.

⁵⁶⁴ *Nuclear Weapons Advisory Opinion*, Declaration of President Bedjaoui, 270-271.

⁵⁶⁵ *Ibid.*, 266.

⁵⁶⁶ *Ibid.*, Declaration of President Bedjaoui, 271-272.

⁵⁶⁷ *Ibid.*, 247.

it had to look for a prohibition,⁵⁶⁸ although it had been asked whether the threat or use of nuclear weapons was permitted under international law. The ICJ likewise looked for a prohibition in its recent *Advisory Opinion on the Accordance with International Law of the Unilateral Declaration of Independence by the Provisional Institutions of Self-Government of Kosovo*.⁵⁶⁹

The possibility that acts that are not expressly prohibited may nevertheless still run counter to international law, envisaged in President Bedjaoui's Declaration, is echoed in Judge Simma's Declaration attached to the *Kosovo* Advisory Opinion.⁵⁷⁰ In his Declaration, he criticised the ICJ's focus on whether international law prohibited Kosovo's declaration of independence as upholding the Lotus Principle. He argued that⁵⁷¹

[t]he Court could have considered the scope of the question from an approach which does not, in a formalistic fashion, equate the absence of a prohibition with the existence of a permissive rule; [...]

The Court's reading of the General Assembly's question and its reasoning, leaping as it does straight from the lack of a prohibition to permissibility, is a straightforward application of the so-called *Lotus* principle. By reverting to it, the Court answers the question in a manner redolent of nineteenth-century positivism, with its excessively deferential approach to State consent. Under this approach, everything which is not expressly prohibited carries with it the same colour of legality; [...]

[...] by moving away from "Lotus", the Court could have explored whether international law can be deliberately neutral or silent on a certain issue, and whether it allows for the concept of toleration, something which breaks from the binary understanding of permission/prohibition and which allows for a range of non-prohibited options. That an act might be "tolerated" would not necessarily mean that it is "legal", but rather that it is "not illegal".

However, Judge Simma's suggestion does not clarify a general standard for the appropriate behaviour of states when international law is neutral or silent. As Peters argues, this depends on the residual rule: in the example of a declaration of independence, the stability of the existing state or the self-determination of the inhabitants of the newly independent state.⁵⁷² If stability of the state is the residual rule, the declaration of independence is illegal. In contrast, if self-determination is the residual rule, the declaration of independence is at the very least tolerated. In the absence of a residual rule that would restrict a specific exercise of state sovereignty, the

⁵⁶⁸ Greenwood, "The Advisory Opinion on Nuclear Weapons and the Contribution of the International Court to International Humanitarian Law", 37 *International Review of the Red Cross* 65 (1997), 68.

⁵⁶⁹ *Kosovo Advisory Opinion*, para. 56 (emphasis added).

⁵⁷⁰ In Simma and Paulus, "The 'International Community': Facing the Challenge of Globalization", 9 *European Journal of International Law* 266 (1998), 277, Bedjaoui's declaration is quoted with approval.

⁵⁷¹ *Kosovo Advisory Opinion*, Declaration of Judge Simma, paras 3, 8-9.

⁵⁷² Peters, "Does Kosovo Lie in the Lotus-Land of Freedom?", 24 *Leiden Journal of International Law* 95 (2011), 99.

practical effect of adding a dimension of “toleration” of behaviour that is “not illegal” to the traditional binary analysis of legal or illegal is the same as that dictated by the Lotus Principle, namely that states are free to act as they see fit. If a state should be restricted from taking actions that, while not necessarily legal, are not illegal either, Judge Simma does not advance a residual rule that would support this proposition. One possibility would be to consider the need for relative sovereignty as central to the public order of an international society. An international legal system that fails to recognize the relative nature of sovereignty will collapse upon itself.⁵⁷³ Thus, when international law seems neutral or silent on the legality of a particular state action, the question to be considered is whether the action respects the equal sovereignty of other states. If it does, the action would be “tolerated”.

There is, however, a further problem with Judge Simma’s position. As Peters points out, the decentralized structure of international law-making makes it difficult to apply concepts such as “deliberate silence”, as it is rarely clear in international law whether silence is deliberate or whether it is the result of “unwanted or unconscious non-regulation”.⁵⁷⁴

The positions advanced by President Bedjaoui and Judge Simma both have in common that they reject the Lotus Principle. However, it can be debated whether the Lotus Principle appropriately encapsulates the actual judgment.⁵⁷⁵ Handeyside argues that the Lotus Principle is based on the exaggerated reading of the majority’s opinion by the dissenters.⁵⁷⁶ A reinterpretation would mean that the PCIJ’s precedent does not need to be discarded, but rather the inaccurate reading of the majority’s opinion that has thrived in the literature.

A different approach to the *Lotus* judgment that can lead to a better balance between states’ positive and negative freedom than the Lotus Principle can be seen in Judge Shahabuddeen’s dissenting opinion in the *Nuclear Weapons* Advisory Opinion. Rather than arguing that states are allowed to act unless they are prohibited to do so, he argued that the PCIJ in *Lotus* accepted inherent limits on state sovereignty:⁵⁷⁷

The existence of a number of sovereignties side by side places limits on the freedom of each State to act as if the others did not exist. These limits define an objective structural

⁵⁷³ Mosler, *The International Society as a Legal Community* (1980), 18.

⁵⁷⁴ *Ibid.*, 99.

⁵⁷⁵ See page 76 above for a quote of the relevant paragraphs.

⁵⁷⁶ Handeyside, *supra* note 372, 76.

⁵⁷⁷ *Nuclear Weapons*, Dissenting Opinion Judge Shahabuddeen, 393-394 (citations omitted).

framework within which sovereignty must necessarily exist; the framework, and its defining limits, are implicit in the reference in *Lotus* to “co-existing independent communities” [...]. Thus, however far-reaching may be the rights conferred by sovereignty, those rights cannot extend beyond the framework within which sovereignty itself exists; in particular, they cannot violate the framework. [...] It is difficult for the Court to uphold a proposition that, absent a prohibition, a State has a right in law to act in ways which could deprive the sovereignty of all other States of meaning.

Thus, rather than arguing that there is no longer a place in international law for the Lotus Principle, Judge Shahabuddeen’s argument is that the majority opinion in *Lotus* never intended to proclaim a principle as wide as the Lotus Principle, because the PCIJ was aware of the need to ensure co-existence between states.

Spiermann makes a similar argument. He argues that although the traditional interpretation of the Lotus Principle is as a presumption of freedom,⁵⁷⁸ the *Lotus* judgment expresses a residual principle instead.⁵⁷⁹ Applied to the freedom of states, a presumption of freedom holds that “states are free to act, unless there are prohibitive rules”. In contrast, a residual principle holds that “if there are no prohibitive rules, then states are free to act”. The difference between the two is plain in situations where it is unclear whether there are prohibitive rules or not. Under a presumption of freedom, states are free to act when there is no specific prohibition.⁵⁸⁰ They are also free to act when it is unclear whether there is a prohibition. In contrast, under a residual principle, states are not free to act when it is unclear whether or not their actions are prohibited.

Spiermann argues that the PCIJ did not express a “presumption of freedom” but only rejected a “presumption against freedom”.⁵⁸¹ An important element in his argument is the mention in the judgment that states cannot exercise their power in the territory of another state “failing the existence of a permissive rule to the contrary”.⁵⁸² If there were indeed a presumption of freedom, permissive rules would not be necessary. The inclusion of this reference in the *Lotus* judgment suggests that international law is not just a system of prohibitive rules, but a system in which a state may require permission before it can act, particularly when exercising power in any form in other states’ territories. Thus, it is not sufficient to determine that there is no prohibition on action in order to know the scope of a state’s freedom to act.

⁵⁷⁸ See, e.g., Peters, *supra* note 572, 100.

⁵⁷⁹ Spiermann, *supra* note 299, 132-134, 142. The distinction between a presumption and a residual principle is also discussed in Handeyside, *supra* note 372, 79-80.

⁵⁸⁰ See, e.g., Christakis, “The ICJ Advisory Opinion on Kosovo: Has International Law Something to Say About Secession?”, 24 *Leiden Journal of International Law* 73 (2011), 79.

⁵⁸¹ Spiermann, *supra* note 299, 142.

⁵⁸² Handeyside, *supra* note 372, 76.

This interpretation of the *Lotus* judgment as expressing a residual principle rather than a presumption of freedom is more compatible with a liberal system of international law than the traditional interpretation of the judgment expressed in the Lotus Principle. The need to ensure co-existence between states and the need to achieve common aims, mentioned in the majority's opinion in *Lotus*, and to which Judge Shahabuddeen also refers, can help to clarify whether there is a prohibition. Contrary to the traditional interpretation, the alternative interpretation does not prioritize states' positive freedom, but accepts the possibility of limits, particularly those that are required to ensure the co-existence of states. Moreover, this alternative interpretation is compatible with the role played by interstitial norms discussed in Chapter 4. The majority's opinion in *Lotus* refers explicitly to the principles that follow from the need for the co-existence of independent communities.⁵⁸³ It also expresses the idea of locality where it confirms that states do not require permission to exercise jurisdiction within their own territory over actions that have taken place abroad.

B. Guidance on the Exercise of Jurisdiction

The principles allocating jurisdiction that help to identify the situations in which states are presumed to be validly exercising their jurisdiction can be seen as expressions of the idea of locality. They allow the exercise of jurisdiction not only over acts that take place within a state's territory, but also over acts in other territories that nevertheless have a nexus with the acting state due to their effects. However, the principles suffer from the same problems as locality. As discussed in Chapter 4, locality by itself cannot determine the balance between positive and negative freedom, as it does not exclude conflicting exercises of jurisdiction when a specific act affects multiple states. Therefore, to achieve a balance between positive and negative freedom in the exercise of jurisdiction, reasonableness and good neighbourliness need to be considered.

Ryngaert argues that difficulties applying reasonableness to a given collision of sovereignties may reduce its ability to restrict specific exercises of jurisdiction.⁵⁸⁴ However, the aim here is not to use reasonableness as a primary rule, but instead as an interstitial norm. The possibility of using reasonableness as an interstitial norm does not depend on international law's ability to set the limits of reasonableness in stone.

⁵⁸³ Lowe, *supra* note 368, 341-342.

⁵⁸⁴ Ryngaert, *supra* note 369, 135, 178-182.

The interpretation of reasonableness in such situations can be further “coloured” by other interstitial norms such as good neighbourliness. Good neighbourliness finds a particular expression in the no harm/due diligence principle, which is the topic of the next Section.

C. A Broader Approach to the No Harm/Due Diligence Principle

The interstitial norm of good neighbourliness, discussed above,⁵⁸⁵ expresses the need for states to exercise their positive freedom in a way that ensures other states’ negative freedom, even in situations of increasing interdependence where transboundary impacts are rife. Its main expression in primary international law is in the no harm/due diligence principle. Chapter 3 identified three limitations of the current interpretation of the no harm/due diligence principle: the restricted definition of harm, the difficulty establishing a lack of due diligence and the requirement of a cause between a state’s actions or omissions and the real or potential impact thereof on other states.

A first possible change to the no harm/due diligence principle would be to recognize that states’ negative freedom is not only affected when another state’s actions of a physical nature cause it to experience harm, but also when harm results from economic policy decisions. As the Global Financial Crisis illustrates, economic policies can pose “tail risks”, i.e. risks of low probability but with very serious implications if realized,⁵⁸⁶ similar to the hazardous activities that are the topic of the ILC’s Draft Principles on the Allocation of Loss and its Draft Articles on the Prevention of Transboundary Harm. However, achieving this incorporation of economic policies in the no harm/due diligence principle is likely to be difficult. In the discussions on the ILC’s Draft Principles on Allocation of Loss and its Draft Articles on Prevention, the inclusion of economic harm was considered too delicate by the ILC and the state representatives on the UN General Assembly’s Sixth Committee, who made it clear that “the wholesale transfer of pioneering experience in the field of the physical uses of territory to the even less developed field on economic regulation” was a line that should not be crossed.⁵⁸⁷ Special Rapporteur Quentin-Baxter added that although the no harm/due diligence principle could be very useful for

⁵⁸⁵ See Chapter 4, Section III.D.

⁵⁸⁶ International Monetary Fund, “The Acting Chairman’s Summing up—2008 Triennial Surveillance Review—Overview Paper, Executive Board Meeting 08/84, September 26, 2008” *Selected Decisions and Selected Documents of the International Monetary Fund*, 33, 42.

⁵⁸⁷ Quentin-Baxter, *supra* note 446, 204-205, para. 212.

achieving a balance in the economic area between “liberty of action” and “freedom from adverse effects”,⁵⁸⁸

there is no possibility of proceeding inductively from the evidence of State practice in the field of the physical uses of territory to the formulation of rules or guidelines in the economic field.

In light of the painstaking deliberations in the ILC to recognize the need to prevent physical harm, it is unlikely that the no harm/due diligence principle will be reinterpreted to include economic policies.

Moreover, even if such an extension of the no harm/due diligence principle were achievable, it would be insufficient in itself to make the principle better suited for situations of increasing interdependence. The no harm/due diligence principle requires a causal link between the actions or omissions and the negative impact felt in other states. There is no categorical problem with such a requirement. After all, frivolous claims based on a tenuous link between negative effects and the actions or omissions of another state should not be tolerated. However, the standard of causation used to identify the causal link between the actions or omissions and the negative impact is crucial. This question is particularly acute in complex situations of increasing interdependence, such as climate change and macro-financial instability, because there is rarely a single cause that directly leads to a negative impact.

In increasing interdependence, the standard of causation used should not allow states to hide behind the complexity of increasing interdependence to avoid accountability for their actions or omissions. However, as discussed above,⁵⁸⁹ the “but for” test does exactly that. A better option than a “but for” test would be to base causation on the contribution of an action or omission to the overall negative impact of a transboundary problem on another state. This option is regularly suggested in the context of climate change, where it is difficult for small island states to link the rising sea levels to specific emissions in a developed state, such as the US.⁵⁹⁰ In complex situations, this alternative test for causation would allow states to be held responsible for a violation of the no harm/due diligence principle, even if their action or omission would not have triggered the negative impact by itself. It would acknowledge sovereignty’s relative nature in the international community through the recognition of limits on the exercise of state sovereignty to

⁵⁸⁸ *Ibid.*, 205, para. 215.

⁵⁸⁹ See text accompanying footnotes 461-464.

⁵⁹⁰ Verheyen, *supra* note 433, 254; Stallard, “Turning up the Heat on Tuvalu: An Assessment of Potential Compensation for Climate Change Damage in Accordance with State Responsibility under International Law”, 15 *Canterbury Law Review* 163 (2009), 184. This was also the strategy in the Inuit Petition, *supra* note 442, 99-100.

ensure the equal sovereignty of other states. Although the specific contribution of each factor is often impossible to quantify, this is not a major concern when the focus is on the need to prevent transboundary harm rather than on compensation for harm done. Specific shares of contribution to the overall impact are not required. Instead, the due diligence standard can provide guidance to interpret whether the state contributed to the overall impact or not. Of particular importance would be whether the state's actions, or lack thereof, were diligent. Was it, for example, foreseeable that its actions or omissions would combine with other states' actions and omissions to lead eventually to a negative impact on other states?

However, it will be very difficult for any state affected by another state's actions or omissions to establish a lack of due diligence. The affected state will need to argue that the harm was foreseeable at the moment of action or omission, which can be difficult when the harm of particular actions or omissions only becomes apparent later in time. As discussed in Chapter 3, a precautionary approach can make room for a finding of insufficient diligence even if there was scientific uncertainty about the consequences of the actions or omissions. However, international law only recognizes the precautionary approach in the context of protecting the environment and health, but not in the context of economic policy decisions. This goes hand in hand with the restrictive approach to the definition of harm. If the definition of harm were expanded to include the negative consequences of economic policies, the precautionary approach should also be extended to the non-environmental context such as that of macro-financial instability. As a result, states would be required to regulate in ways that do not contribute to macro-financial instability abroad if there is a plausible indication of potential risk. Yet, states would not be exposed to liability claims whenever their economic policies have a negative impact abroad, but only when their actions or omissions are not those of a diligent state.

III. CONCLUSION

This Chapter has argued that it is possible to reinterpret existing provisions of general international law to achieve a balance between states' positive and negative freedom that is more in line with the requirements of a liberal system. These improvements can be achieved, first, by a more limited interpretation of the rules and principles that currently confer a broad positive freedom on states and, second, through a broader interpretation of the no harm/due diligence principle as a limit on this positive freedom. Importantly, Section I argued that no changes should be made to the corollaries of sovereignty that express international law's nature as a liberal system, i.e. the principle of non-intervention and sovereign consent.

Contemporary international law is of course broader than the general rules and principles discussed in this Chapter. In increasing interdependence, states have concluded international agreements that limit how they can exercise their sovereignty. Therefore, the next step in the analysis is to assess the balance between states' positive and negative freedom struck in specialized international law that applies in the case studies. Is the imbalance between states' positive and negative freedom that exists in general international law reproduced? Chapters 6 and 7 deal with the rules and principles governing the exercise of state sovereignty in the context of climate change mitigation, whereas Chapters 8 and 9 deal with monetary sovereignty and macro-financial stability.

CHAPTER 6. DIRECT LIMITS ON STATES' POLICIES REGARDING GHG EMISSIONS

This Chapter is the first of two that examine the balance between states' positive and negative freedom in the context of climate change. As discussed in Chapter 3, states are in principle sovereign to set environmental policies within their territory. However, international law can limit how states exercise this sovereignty by prohibiting behaviour that leads to pollution. This Chapter examines whether international law imposes any limits on states' policies regarding GHG emissions within their territories.

The main source of direct limits on the exercise of state sovereignty to ensure climate change mitigation can be found in the UNFCCC and the Kyoto Protocol implementing the UNFCCC. However, the UNFCCC and the Kyoto Protocol are not the only possible source of direct emission reduction obligations. The Kyoto Protocol leaves it to the International Civil Aviation Organization ("ICAO") and the International Maritime Organization ("IMO") to develop emission reduction obligations for fuels used in aviation and maritime transport. In addition, the Montreal Protocol on Substances that Deplete the Ozone Layer ("Montreal Protocol")⁵⁹¹ restricts the production and consumption of ozone depleting substances, some of which are also greenhouse gases. The UNFCCC and the Kyoto Protocol explicitly do not apply to greenhouse gases that are covered by the Montreal Protocol.⁵⁹²

In practice, none of these agreements provides effective limits on states' policies regarding GHG emissions, even when emissions adversely affect other states. The result is a broad protection of states' positive freedom to decide on regulation of GHG emissions at the expense of other states' negative freedom from the negative effects of climate change. This is incompatible with the requirements of a liberal system that respects the decisional sovereignty of states.

I. THE UNFCCC

The UNFCCC does not provide strong limits on how state sovereignty should be exercised when it comes to reducing GHG emissions. It allows for "specific national and regional development priorities, objectives and circumstances" to be taken into account in the implementation of precautionary measures.⁵⁹³ Annex I Parties⁵⁹⁴ agree to limit emissions or enhance sinks to

⁵⁹¹ *Montreal Protocol*, art. 4.

⁵⁹² *UNFCCC*, art. 4(2)(a); *Kyoto Protocol*, art. 2(2) and Annex A.

⁵⁹³ *UNFCCC*, art. 4(1). See also art. 3(4), 4(2)(a).

⁵⁹⁴ See footnote 74 for a list of Annex I Parties.

remove emissions through national policies and measures, but only “with the aim of returning” their GHG emissions to 1990 levels by 2000.⁵⁹⁵ The language of this provision is too ambiguous to constitute a legally binding target or a binding timetable for emission reductions,⁵⁹⁶ although some argue that a general obligation of conduct to reduce emissions applies to Annex I Parties.⁵⁹⁷ Within the group of Annex I Parties, the Economies in Transition (“EITs”)⁵⁹⁸ benefit from “a certain degree of flexibility” to comply with the commitment to reduce emissions.⁵⁹⁹ Developing states are allowed to give “first and overriding” priority to “economic and social development and poverty eradication”.⁶⁰⁰

Most of the obligations in the UNFCCC are not about actual emission reductions but are of a very general nature, such as the obligation to take the climate change impact into account in other policy decisions,⁶⁰¹ and various obligations to promote and cooperate on the development of technology,⁶⁰² on the conservation of sinks,⁶⁰³ on the preparation for adaptation to climate change,⁶⁰⁴ on climate change research⁶⁰⁵ and the exchange of knowledge about the climate system and climate change⁶⁰⁶ as well as on education and public awareness.⁶⁰⁷

The 2009 Copenhagen Accord and the 2010 Cancun Agreements represent a return to the UNFCCC’s “pledge and review system” that envisages unilateral emission reductions without allocating specific responsibilities or a specific time frame to achieve a global emission reduction goal.⁶⁰⁸ The approach in Copenhagen and Cancun is a “bottom up” approach.⁶⁰⁹ Under this

⁵⁹⁵ UNFCCC, art. 4(2)(a) and (b).

⁵⁹⁶ Bodansky, *supra* note 33, 512-517; Verheyen, *supra* note 433, 81.

⁵⁹⁷ Verheyen, *supra* note 433, 82; Voigt, *supra* note 429, 6-7.

⁵⁹⁸ The EITs are Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Monaco, Poland, Romania, Russian Federation, Slovakia, Slovenia and Ukraine.

⁵⁹⁹ UNFCCC, art. 4(6).

⁶⁰⁰ *Ibid.*, art. 4(7).

⁶⁰¹ *Ibid.*, art. 4(1)(f).

⁶⁰² *Ibid.*, art. 4(1)(c).

⁶⁰³ *Ibid.*, art. 4(1)(d).

⁶⁰⁴ *Ibid.*, art. 4(1)(e).

⁶⁰⁵ *Ibid.*, art. 4(1)(g) and 5.

⁶⁰⁶ *Ibid.*, art. 4(1)(h).

⁶⁰⁷ *Ibid.*, art. 4(1)(i) and 6.

⁶⁰⁸ Copenhagen Accord, *supra* note 95, paras 4-5; Decision 1/CP.16, *supra* note 114, paras 36, 40; Decision 1/CMP.6, *supra* note 112, para. 3.

approach, states pledge to reduce GHG emissions by a percentage determined by each of them individually, without assessing whether the individual pledges combined will reduce global GHG emissions sufficiently to mitigate the risks of climate change. This approach is illustrative of an approach that is respectful of states' positive freedom in the exercise of their sovereignty, but one that does not address the underlying fact that climate change mitigation is a global public good that depends on the aggregate efforts of states for its supply.

I. THE KYOTO PROTOCOL

The purpose of this Section is to analyse the extent to which the Kyoto Protocol directly limits states' GHG emissions. While Section A discusses how the Kyoto Protocol includes binding limits on GHG emissions, Section B argues that these limits are in practice ineffective in reducing GHG emissions to a degree sufficient to avert the threat of climate change.

A. *Binding yet Flexible Quantified Emission Limits for Annex I Parties*

Unlike the UNFCCC, the Kyoto Protocol employs a “top down” approach to the regulation of GHG emissions.⁶¹⁰ The Kyoto Protocol imposes direct limits on the amount of emissions in the form of “quantified emission limitation and reduction commitments”, referred to in literature as “qelrc”, “qelro” or “quelro”.⁶¹¹ During the first commitment period, running from 2008 until 2012, Annex I Parties have to reduce overall emissions of six GHGs⁶¹² by at least 5% below 1990 levels.⁶¹³ Individually, most Annex I Parties have to reduce their emissions to 92% of the 1990 levels, while some, such as New Zealand, need to maintain their emissions at 1990 levels and still others, such as Australia, may even increase their emissions compared to 1990 levels.⁶¹⁴ If fully implemented, the Kyoto Protocol will reduce the emissions of six GHGs by 5.8% compared to 1990 levels.

⁶⁰⁹ Bodansky, *supra* note 118, 3, 14; Khor, *supra* note 407, 2.

⁶¹⁰ Bodansky, *supra* note 118, 7-8.

⁶¹¹ “qelrc” stands for **q**uantified **e**mission **l**imitation and **r**eduction **c**ommitment, “q(u)elro” stands for **q(u)**antified **e**mission **l**imitation and **r**eduction **o**bjectives, see *Bali Action Plan*, *supra* note 91, para. (1)(b)(i) and Yamin and Depledge, *supra* note 79, xxix.

⁶¹² The Kyoto Protocol only applies to the emissions of CO₂, CH₄, N₂O, HFCs, PFCs and SF₆, see *Kyoto Protocol*, Annex A.

⁶¹³ *Kyoto Protocol*, art. 3(1).

⁶¹⁴ *Kyoto Protocol*, Annex B. This list was amended by at the Second Meeting of the Parties to the Kyoto Protocol in November 2006 to include Belarus, see *Kyoto Protocol CMP, Proposal from Belarus to amend Annex B to the Kyoto Protocol*, Decision 10/CMP.2, FCCC/KP/CMP/2006/10/Add.1, 36-37. This Amendment did not receive sufficient ratifications to enter into force, see UNFCCC, *Amendment to Annex B of the Kyoto Protocol*, at <http://unfccc.int/kyoto_protocol/amendment_to_annex_b/items/4082.php>.

The Kyoto Protocol is flexible as to how Annex I Parties achieve their quotas.⁶¹⁵ First of all, they only have to comply with their quota by the end of 2012. Second, a basket approach has been taken to the six GHGs covered by the Kyoto Protocol. Rather than imposing a specific reduction target for each of these gases, the Kyoto Protocol imposes an overall target based on the “CO₂ equivalence” of each gas.⁶¹⁶ Third, emission reductions do not necessarily have to take place within the state that claims them. States can fulfil their quotas jointly.⁶¹⁷ The only states to have done so are the Annex I Parties of the EU.⁶¹⁸ In addition, the Kyoto Protocol provides for three flexibility mechanisms: Joint Implementation,⁶¹⁹ Emissions Trading⁶²⁰ and the Clean Development Mechanism.⁶²¹ Nonetheless, Annex I Parties cannot completely buy their way out of taking domestic action to curb climate change.⁶²² Flexibility mechanisms have to be supplemental to significant domestic actions, but the Kyoto Protocol does not define the term “significant”.⁶²³

In sum, the Kyoto Protocol directly limits the positive freedom of Annex I Parties by obliging them to reduce their GHG emissions by 2012. The various facets of flexibility, however, leave a significant amount of discretion as to how to reach the ultimate reduction target. This flexibility is indicative of the strong focus on the protection of states’ positive freedom in international law.

⁶¹⁵ Bodansky, “International Law and the Design of a Climate Change Regime”, in Luterbacher and Sprinz (Eds.), *International Relations and Global Climate Change* (2001), 210; Frankel, “You’re Getting Warmer: The Most Feasible Path for Addressing Global Climate Change Does Run through Kyoto”, in Maxwell and Reuveny (Eds.), *Trade and Environment: Theory and Policy in the Context of EU Enlargement and Economic Transition* (2005), 46.

⁶¹⁶ Intergovernmental Panel on Climate Change, *supra* note 62, 3, footnote 2. See also *Kyoto Protocol*, art. 5(3) on the calculation of CO₂ equivalence.

⁶¹⁷ *Kyoto Protocol*, art. 3(1) and 4(1). The legal basis can be found in *UNFCCC*, art. 3(3), final sentence.

⁶¹⁸ Council Decision (EC) No 2002/358 of 25 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder (2002) *Official Journal* L 130/1. Austria, Denmark, Germany, Luxemburg and the UK have accepted more stringent emission reduction targets under EC law than they have under the Kyoto Protocol, whereas Belgium, Finland, France, Greece, Ireland, Portugal, Spain and Sweden have received more lenient targets. They remain however individually responsible for their Kyoto Protocol quotas should the EC as a whole not achieve the 8% reduction, see *Kyoto Protocol*, art. 4(5).

⁶¹⁹ *Kyoto Protocol*, art. 6.

⁶²⁰ *Ibid.*, art. 17. Additional eligibility requirements can be found in Kyoto Protocol CMP, *Modalities, rules and guidelines for emissions trading under Article 17 of the Kyoto Protocol*, Decision 11/CMP.1, FCCC/KP/CMP/2005/8/Add.2, p. 17-20, Annex, para. 2 [“Decision 11/CMP.1”].

⁶²¹ *Kyoto Protocol*, art. 12.

⁶²² Yamin and Depledge, *supra* note 79, 139.

⁶²³ Kyoto Protocol CMP, *Principles, nature and scope of the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol*, Decision 2/CMP.1, FCCC/KP/CMP/2005/8/Add.1, p. 4-5, para. 1. This decision confirms the draft decision 15/CP.7, FCCC/CP/2001/13/Add.2, p. 2-4.

B. Limited Effectiveness in Practice

While the Kyoto Protocol places direct limits on the exercise of state sovereignty in order to reduce the adverse effects of a global problem, these limits have not been effective in practice for two reasons: first, they only apply to a limited number of states, and, second, these states have so far made little progress towards achieving their quotas.

First, with 191 Parties including the European Community,⁶²⁴ the Kyoto Protocol is a widely applicable treaty. However, many Parties did not have to commit themselves to any emission reductions because they were not listed in Annex I to the UNFCCC. Annex B of the Kyoto Protocol lists the 39 states that have accepted quotas under the Kyoto Protocol.⁶²⁵ Of those, the US has refused to ratify the Protocol and is thus not bound by its 7% quota.⁶²⁶ To achieve wide and in-depth co-operation between states, a treaty should incentivize participation.⁶²⁷ The Kyoto Protocol's only incentive to secure Annex I Parties' participation is access to the Kyoto flexibility mechanisms.⁶²⁸ Since these mechanisms are only of interest to states that are bound by a quota under the Kyoto Protocol, they are hardly a strong incentive to induce participation. Given that climate change is a global public good that is prone to free riding, the absence of measures to deter non-participation is puzzling. In contrast, the Montreal Protocol, which provided the inspiration for the Kyoto Protocol, includes trade restrictions on non-participants.⁶²⁹ These restrictions have been very successful at incentivizing participation in the Protocol.⁶³⁰

Second, the remaining Annex I Parties are not making good progress towards reducing their emissions in accordance with their quotas. Admittedly, compliance with the quotas is only required by the end of 2012. However, the recent evolution of GHG emissions is not promising. The most recent UNFCCC data on Annex I Parties' aggregate emissions covers the period between 1990 and 2008.⁶³¹ The data are summarized in this table:

⁶²⁴ *Kyoto Protocol Status of Ratification*, *supra* note 81.

⁶²⁵ Ratification and entry into force of an amendment providing for the inclusion of Belarus in Annex B is pending, see *Amendment to Annex B of the Kyoto Protocol*, *supra* note 614.

⁶²⁶ *Kyoto Protocol Status of Ratification*, *supra* note 81.

⁶²⁷ Barrett, *supra* note 28, 355, sub 352.

⁶²⁸ *Kyoto Protocol*, art. 6, 12, 17.

⁶²⁹ *Montreal Protocol*, art. 4.

⁶³⁰ Barrett, *supra* note 42, 82-83.

⁶³¹ National greenhouse gas inventory data 1990-2008, *supra* note 35, paras 18-20.

	1990-2008	2000-2008	
Non EIT	+7.9%	-1.0%	Excluding LULUCF ⁶³²
	+8.3%	-2.2%	Including LULUCF
EIT	-36.8%	+8.0%	Excluding LULUCF
	-48.5%	+4.2%	Including LULUCF
Total Annex I	-6.1%	+0.8%	Excluding LULUCF
	-10.4%	-1.1%	Including LULUCF

Overall, these data show a decrease since 1990 beyond the 5% reduction required by the Kyoto Protocol. However, this overall reduction does not accurately reflect the scope of emission reductions under the Kyoto Protocol. This decrease is entirely on account of the EITs. Non-EIT Annex I Parties have increased their emissions since 1990 by around 8%, depending on whether net GHG emissions through LULUCF activities are taken into account. Since 2000, non-EIT Annex I Parties have managed to reduce their emissions, although not to the extent required by the Kyoto Protocol. Some non-EIT Annex I Parties have reduced their GHG emissions in compliance with their *quels*,⁶³³ but many are still far off their target. For example, New Zealand's emissions have increased by 22.7% excluding LULUCF and by 62.4% including LULUCF since 1990.⁶³⁴ These reductions achieved by non-EIT Annex I Parties since 2000 are, moreover, offset by emissions growth in the EITs. Most worryingly, EITs' emissions between 2000 and 2008 have grown almost twice as fast when LULUCF is excluded than when it is included. This shows that, rather than restraining emissions, EITs rely heavily on the use of sinks to reach the Kyoto Protocol target. Given the physical limits on available sinks, this strategy will not reduce overall GHG emissions when emissions from other sources, such as transport, keep increasing.

⁶³² "LULUCF" stands for "Land Use, Land Use Change and Forestry". The phrase refers to "a greenhouse gas inventory sector that covers emissions and removals of greenhouse gases resulting from direct human-induced land use, land-use change and forestry activities." See UNFCCC, *Glossary of Climate Change Acronyms*, at <http://unfccc.int/essential_background/glossary/items/3666.php>.

⁶³³ National greenhouse gas inventory data 1990-2008, *supra* note 35, figure 3.

⁶³⁴ National greenhouse gas inventory data 1990-2008, *supra* note 35, figure 3.

The Kyoto Protocol does not attach strong sanctions to non-compliance. One consequence of non-compliance is that excess emissions, increased by 30%, will be deducted from the state's assigned amount for the second commitment period.⁶³⁵ At this stage, it is unclear whether there will even be a second commitment period under their Kyoto Protocol. Even if there is one, this sanction is of no effect as states will take their excess emissions and the 30% penalty into account when negotiating the new assigned amounts.⁶³⁶

Despite its flaws, the Kyoto Protocol has helped to slow down emissions growth in the limited group of states on which it imposes a *quelro*. The fact that emissions in the two EU Member States that are not bound by the Kyoto Protocol—Cyprus and Malta—have increased significantly more than those of other EU Annex I Parties⁶³⁷ points in that direction. Nonetheless, too many Annex I Parties are not on track to reach their *quelro* by the end of 2012, and as of yet, there is no agreement on what should happen post-2012.

To sum up, there are few direct limits in the Kyoto Protocol that require states to reduce emissions to mitigate the adverse effects of climate change, because the agreement lacks mechanisms for ensuring participation and compliance by participating states.

II. AVIATION AND MARINE BUNKER FUELS

As mentioned, the Kyoto Protocol's *quelros* exclude emissions from bunker fuels.⁶³⁸ Instead, Article 2(2) stipulates that

The Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels working through the International Civil Aviation Organization and the International Maritime Organization.

Instruments developed by ICAO and the IMO could thus be a further source of direct limits on GHG emissions. However, effective direct limits have yet to be developed.

⁶³⁵ UNFCCC COP, *Procedures and mechanisms relating to compliance under the Kyoto Protocol*, Decision 24/CP.7, FCCC/CP/2001/13/Add.3, 64-77, formally adopted by the CMP in Kyoto Protocol CMP, *Procedures and mechanisms relating to compliance under the Kyoto Protocol*, Decision 27/CMP.1, FCCC/KP/CMP/2005/8/Add.3, 92-103, s XV(5)(a).

⁶³⁶ Barrett, *Rethinking Global Climate Change Governance* (15 October 2008), at <<http://www.economics-ejournal.org/economics/discussionpapers/2008-31>>, 5.

⁶³⁷ By respectively 78.3% and 38.8%, see European Environment Agency, *Annual European Union Greenhouse Gas Inventory 1990–2009 and Inventory Report 2011* (27 May 2011), at <<http://www.eea.europa.eu/publications/european-union-greenhouse-gas-inventory-2011/greenhouse-gas-inventory>>, vii. Malta has since been included in Annex I, Decision 3/CP.15, *supra* note 74.

⁶³⁸ The UNFCCC's Glossary on Climate Change Acronyms, *supra* note 632, describes "bunker fuels" as "a term used to refer to fuels consumed for international marine and air transport."

The current focus in ICAO is on protecting states' autonomy to regulate aviation rather than on protecting their autonomy to regulate against the negative impact of climate change. Between 2007 and 2010, the ICAO Council and Assembly developed and adopted⁶³⁹ a Programme of Action.⁶⁴⁰ The Programme does not require states to reduce their GHG emissions from bunker fuels, but only provides aspirational goals such as a reduction of in-service fleet average fuel efficiency of international aviation operations by 2% per year until 2050.⁶⁴¹ More ambitious goals, such as carbon neutral growth relative to 2005 by 2020 or carbon emission reductions for the long term between 2021 and 2050 were considered, but not accepted.⁶⁴² It is probably for this reason that some members considered that the Programme of Action "does not address the commitments under Article 2.2 of the Kyoto Protocol".⁶⁴³ The latest consolidation of ICAO principles and practices related to climate change explicitly specifies that no specific obligations are attributed to individual states and that contributions to the aspirational goal of fuel efficiency improvement are entirely voluntary.⁶⁴⁴

A particular issue is whether states can use market-based measures across national borders. This issue has been debated particularly in the context of the EU's decision to include aviation in its emission reduction target and Emission Trading Scheme from 2012.⁶⁴⁵ The inclusion of aviation is not limited to intra-EU flights, but extends to international flights arriving or

⁶³⁹ International Civil Aviation Organization Assembly, "A36-22: Consolidated Statement of Continuing ICAO Policies and Practices Related to Environmental Protection" in *Assembly Resolutions in Force (as of 28 September 2007)*, at <http://www.icao.int/icao/net/dcs/9902/9902_en.pdf>, Appendix K, I-69, operative clause 62; High-level Meeting on International Aviation and Climate Change, *Minutes of the 13th and 14th Meeting of the 187th Session of the ICAO Council (2009) HLM-ENV/09-IP/2*, at <http://www.icao.int/Highlevel2009/Docs/HLMENV_IP002_en.pdf>, Appendix B, para. 12 ["Minutes"].

⁶⁴⁰ The Programme of Action is included in High-level Meeting on International Aviation and Climate Change, *Information Paper-Report of the Group on International Aviation and Climate Change (7-9 October 2009) HLM-ENV/09-WP/4*, at <http://www.icao.int/Highlevel2009/Docs/HLMENV_WP004_en.pdf>, Appendix A ["Information Paper"].

⁶⁴¹ *Ibid.*, Appendix A, paras 8-10; High-level Meeting on International Aviation and Climate Change, *Minutes*, *supra* note 639, Appendix B, para. 12, h)-j).

⁶⁴² High-level Meeting on International Aviation and Climate Change, *Information Paper*, *supra* note 640, Appendix A, paras 11-12; High-level Meeting on International Aviation and Climate Change, *Minutes*, *supra* note 639, Appendix B, para. 12, k)-l).

⁶⁴³ High-level Meeting on International Aviation and Climate Change, *Information Paper*, *supra* note 640, Appendix A, para. 5; High-level Meeting on International Aviation and Climate Change, *Minutes*, *supra* note 639, Appendix B, para. 12, f).

⁶⁴⁴ International Civil Aviation Organization Assembly, *Resolution A37-19: Consolidated Statement of Continuing ICAO Policies and Practices Related to Environmental Protection-Climate Change (2010)*, at <http://www.icao.int/icao/en/env2010/A37_Res19_en.pdf>, para.5.

⁶⁴⁵ Directive 2008/101/EC of the European Parliament and of the Council of 19 November 2008 amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community (2009) *Official Journal* L 8/3.

departing within the EU.⁶⁴⁶ Within ICAO the reaction to this inclusion has been strong. Led by the US, the ICAO Assembly passed a resolution urging states “not to implement an emissions trading system on other Contracting States’ aircraft operators except on the basis of mutual agreement between those States”.⁶⁴⁷ The EU members and other members of the European Civil Aviation Conference registered a formal reservation to this particular part of the resolution.⁶⁴⁸ Despite this reservation, the resolution is a strong indication of the other states’ position towards the role of ICAO in regulating GHG emissions from aviation. A number of US airlines have challenged the legality of the EU Directive in the UK. The High Court has referred a request for a preliminary ruling to the European Court of Justice to determine whether the legality of the Directive can be challenged based on “the principle of customary international law that each state has complete and exclusive sovereignty over its air space” and article 2(2) of the Kyoto Protocol.⁶⁴⁹

In 2010, the ICAO resolution was superseded by a new one that no longer explicitly prohibits states to implement unilateral measures or to include foreign airlines in their emission trading schemes.⁶⁵⁰ However, the “guiding principles for the design and implementation of market-based measures” attached to the new resolution mention that these measures “should not be duplicative and international aviation CO₂ emission should be accounted for only once”.⁶⁵¹ Although there is little background information available on the precise meaning of this principle, it is not implausible to see this as a requirement that states should not regulate airlines that are already regulated in their state of origin. A global framework on market-based

⁶⁴⁶ *Ibid.*, Annex, 1) a).

⁶⁴⁷ International Civil Aviation Organization Assembly, *supra* note 639, Appendix L, operative clause 1 b) 1).

⁶⁴⁸ European Community and European Civil Aviation Conference *MEMO/07/391–Written statement of reservation on behalf of the member states of the European Community (EC) and the other states members of the European Civil Aviation (ECAC) [made at the 36th Assembly of the International Civil Aviation Organization in Montreal, 18-28 September 2007]* at <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/07/391&format=PDF&aged=1&language=EN&uiLanguage=fr>.

⁶⁴⁹ Reference for a Preliminary Ruling from High Court of Justice Queen’s Bench Division (Administrative Court) (United Kingdom) made on 22 July 2010 — *The Air Transport Association of America, American Airlines, Inc., Continental Airlines, Inc., United Airlines, Inc. v The Secretary of State for Energy and Climate Change*, Case C-366/10 (2010) *Official Journal C* 260/9.

⁶⁵⁰ International Civil Aviation Organization Assembly, *supra* note 644, para. 1.

⁶⁵¹ *Ibid.*, Annex, para. f.

measures would resolve any tensions between diverging national systems. However, ICAO has not moved beyond exploring the feasibility of such a framework.⁶⁵²

The *IMO* so far has only developed an interim package with voluntary measures to increase the energy efficiency of ships.⁶⁵³ Proposals to make these measures mandatory for new ships through an amendment to the International Convention for the Prevention of Pollution from Ships (MARPOL) have been circulated in the *IMO's* Marine Environment Protection Committee, but will not be discussed further until July 2011.⁶⁵⁴ The July 2011 meeting is also scheduled to discuss the use of market-based mechanisms, such as levies or emission trading, to reduce GHG emissions from ships.⁶⁵⁵

The focus of both ICAO and the *IMO* is on improving the fuel efficiency of airplanes or ships rather than on direct restrictions on emissions. Hence, to be successful at reducing emissions, efficiency standards will have to improve efficiency at a faster rate than growth in air or maritime transport. Since 1990 bunker fuel emissions have increased considerably. Emissions from aviation increased by 74.8% between 1990 and 2008 while marine transportation emissions grew 19.5%.⁶⁵⁶ Between 2007 and 2008, both aviation and marine transportation emissions increased by 1.9% and 0.1% respectively.⁶⁵⁷ Therefore, the required increases in energy efficiency will at least have to match these increases in emissions before they can result in a net reduction of GHG emissions.

III. THE MONTREAL PROTOCOL

Often the focus of climate change mitigation efforts is on limiting CO₂ emissions because these by far represent the largest volume of GHG emissions.⁶⁵⁸ However, as mentioned in Chapter 1, CO₂ is not the only GHG. Emissions of other GHGs are smaller in volume, but their global

⁶⁵² *Ibid.*, para. 18.

⁶⁵³ International Maritime Organization, *IMO Circs on GHG Issues* (28 August 2009), at <http://www.imo.org/Environment/mainframe.asp?topic_id=1831>.

⁶⁵⁴ International Maritime Organization, *Marine Environment Protection Committee (MEPC) 61st Session: 27 September to 1 October 2010* (1 October 2010), at <<http://www.imo.org/MediaCentre/MeetingSummaries/MEPC/Pages/MEPC-61st-Session.aspx>>.

⁶⁵⁵ *Ibid.*

⁶⁵⁶ National greenhouse gas inventory data 1990-2008, *supra* note 35, para. 28.

⁶⁵⁷ National greenhouse gas inventory data 1990-2008, *supra* note 35, para. 29.

⁶⁵⁸ In 2008, it accounted for 82.4% of total emissions in Annex I Parties, see National greenhouse gas inventory data 1990-2008, *supra* note 35, para. 22.

warming potential exceeds that of CO₂.⁶⁵⁹ The Kyoto Protocol only applies to HFCs and PFCs but does not limit CFC and HCFC emissions.⁶⁶⁰ Instead, the Montreal Protocol regulates the latter two gases, which are also ozone-depleting substances (ODS).

The Montreal Protocol's limits on the production and consumption of ODS have been successful at phasing out ODS, to the extent even that the original targets were lowered, brought forward in time and applied to a larger group of ODS.⁶⁶¹ Following sustained ODS emissions since the late 1980s,⁶⁶² atmospheric ODS concentrations are now decreasing.⁶⁶³ Unfortunately, the relation between climate change and ODS is ambiguous. While ODS reductions can help to avoid climate change, this is slightly offset by the regeneration of ozone, itself a GHG.⁶⁶⁴ Moreover, the Montreal Protocol's focus on ODS has led to the promotion of ozone-friendly, but climate unfriendly, ODS substitutes, such as HFCs.⁶⁶⁵ Although these alternatives reduce the Montreal Protocol's positive impact on climate change, the net impact is still thought to be positive.⁶⁶⁶

The Montreal Protocol's success provided inspiration for the Kyoto Protocol.⁶⁶⁷ However, as others have argued, the feasibility of reducing GHGs is very different from the feasibility of reducing ODS emissions.⁶⁶⁸ The need to reduce GHG emissions affects virtually every economic sector. Moreover, cost-effective alternatives to fossil fuels are not readily available.⁶⁶⁹ In the case of ODS, public pressure and increased domestic regulation since the late 1970s had prompted US industries to develop alternatives.⁶⁷⁰ They then lobbied the US government to

⁶⁵⁹ Oberthür, "Linkages between the Montreal and Kyoto Protocols", 1 *International Environmental Agreements: Politics, Law and Economics* 357 (2001), 359; Velders et al., "The Importance of the Montreal Protocol in Protecting Climate", 104 *Proceedings of the National Academy of Sciences* 4814 (2007), 4814.

⁶⁶⁰ *Kyoto Protocol*, Annex A.

⁶⁶¹ Barrett, *supra* note 42, 77.

⁶⁶² Velders et al., *supra* note 659, 4815.

⁶⁶³ World Meteorological Organization, *Twenty Questions and Answers About the Ozone Layer: 2006 Update* (2006), at <http://ozone.unep.org/Assessment_Panels/SAP/Scientific_Assessment_2006/Twenty_Questions.pdf>, Q.34, Question 16.

⁶⁶⁴ Velders et al., *supra* note 659, 4817.

⁶⁶⁵ Oberthür, *supra* note 659, 361.

⁶⁶⁶ Velders et al., *supra* note 659, 4818.

⁶⁶⁷ Oberthür, *supra* note 659, 360.

⁶⁶⁸ Barrett, *supra* note 42, 94-95; Sunstein, "Montreal vs. Kyoto: A Tale of Two Protocols", 31 *Harvard Environmental Law Review* 1 (2007), 5.

⁶⁶⁹ Cole, "Climate Change and Collective Action" (12 December 2007), *SSRN eLibrary*, at <<http://ssrn.com/paper=1069906>>, 11-16.

⁶⁷⁰ Sunstein, *supra* note 668, 12.

internationalise the domestic restrictions in order to protect their competitiveness and to reap the benefit of the competitive advantage they had obtained in ODS substitutes.⁶⁷¹ Given the available substitutes, ODS reductions could be achieved at low costs to reap high benefits. This is very different from climate change where the immediate costs of mitigation are high whereas the immediate benefits are low. Finally, some states, such as Russia, stand to benefit from a milder climate. In contrast, ozone depletion does not benefit any state.⁶⁷²

IV. CONCLUSION

While on paper the exercise of state sovereignty is subject to some direct limits to reduce GHG emissions, this Chapter has argued that in practice these limits do not always have the effect needed. The Montreal Protocol has been successful in reducing production and consumption of ODS, some of which are also GHGs. However, the agreements that deal specifically with GHG emissions have been far less successful at redirecting states' policies. Participation in and compliance with the Kyoto Protocol are insufficient to reduce GHG emissions by 5% below 1990 levels. The pledges made so far under the Copenhagen Accord and the Cancun Agreements are insufficient to limit global temperature increases to 2°C.

The bottom line is that in relation to climate change mitigation, few direct limits apply to the exercise of states' positive freedom. As a result, states currently have a broad freedom to decide whether to limit GHG emissions within their jurisdiction. While this may seem compatible with the idea of locality, concerns about good neighbourliness arise when states' actions or omissions regarding GHG emissions lead to climate change that negatively affects other states in the exercise of their sovereignty. The wide protection of states' positive freedom is incompatible with the need for a relative concept of sovereignty in increasing interdependence to ensure protection for all states' decisional sovereignty.

In theory, it would be possible for states to strengthen the relative nature of sovereignty in increasing interdependence through the negotiation of formal agreements imposing stronger direct limits on states' GHG emissions. However, as discussed above,⁶⁷³ climate change negotiations have historically been sluggish affairs. The 2011 Cancun Agreements may have

⁶⁷¹ *Ibid.*, 13-14.

⁶⁷² Barrett, *supra* note 42, 95.

⁶⁷³ See Chapter 1, Section II.B(1).

exceeded expectations, but these were extremely low to begin with.⁶⁷⁴ Despite the Kyoto Protocol Parties expressing their desire for there to be no gap between the first and second commitment period, ⁶⁷⁵ the necessary international measures and their domestic implementation will not be developed in time.⁶⁷⁶ Even if there is a seamless transition to the second commitment period at the end of 2012, this is unlikely to improve the chances of successfully mitigating climate change through emission reductions. The issue is not that states do not see the need for co-operation on climate change. They are clearly aware of the shared need to mitigate climate change. However, the nature of climate change mitigation as a global public good makes it difficult to convert this community of needs into a community of deeds.

⁶⁷⁴ International Centre for Trade and Sustainable Development, *supra* note 111; International Institute for Sustainable Development, *supra* note 406, 28; Bodansky, *supra* note 118, 13.

⁶⁷⁵ Decision 1/CMP.6, *supra* note 112, para. 1.

⁶⁷⁶ Rajamani, *supra* note 118, 511-512.

CHAPTER 7. LIMITS ON THE LEGALITY OF DEFENSIVE MECHANISMS IN RELATION TO CLIMATE CHANGE

The previous Chapter argued that the absence of limits on states' policies regarding GHG emissions gives a broad protection to states' positive freedom. However, to establish whether there is an imbalance between the protection of states' positive freedom and the protection of their negative freedom, the protection of states' negative freedom needs to be examined. This Chapter focuses on whether states are limited in their ability to protect their domestic affairs from adverse effects caused by other states' policies on GHG emissions.

In light of the broad protection given to states' positive freedom, this may seem an odd question. After all, if states have a broad positive freedom to exercise their sovereignty, they surely can employ this freedom in protection of their domestic affairs. However, international law often restricts states' ability to do so. Of particular importance are trade liberalization agreements. As argued in Chapter 1, liberalized trade flows expose states to the negative impact of insufficient regulation by their trading partners. To protect their domestic affairs against the negative impact of climate change felt through trade, states could consider restricting access to their markets. On paper, there are a number of options for restricting market access.

A drastic option would be to impose quantitative restrictions and limit the amount of all imported goods. The idea behind such restrictions would be that international transport emits GHGs. If the quantity of imports and exports is restricted, demand for international transport will fall. Restrictions such as these in the context of climate change are theoretical, as they are not something that states have tried or are actively considering, most likely because of the trade liberalization commitments they have accepted, and because many economies rely heavily on imports and exports.

A second, more likely, option is the taxation or regulation of certain goods offered for sale within the state. A wide variety of taxes or regulations are possible. States could, for example, tax or regulate fuels differently depending on their carbon content or their renewable nature. They could also condition market access of goods, such as cars or other appliances, on minimum requirements of energy efficiency. Likewise, these goods could be taxed differently depending on their energy efficiency to encourage the consumption of energy efficient ones. Finally, rather than the energy efficiency of the goods themselves, states might also want to tax or regulate market access of goods depending on the climate change impact of the processes used for their production, including transport to the point of sale.

If the taxation or market access regulation affects trade, it will need to meet the requirements of the applicable multilateral and bilateral trade liberalization agreements to be legal under international law. The net result of the prohibitions and exceptions in these agreements determines states' freedom to ban all imports, regulate market access or tax imported goods when aiming to protect their domestic affairs against the negative impact of climate change triggered by insufficient action by exporting states. This net result also determines the balance between states' freedom to trade and other states' negative freedom from the adverse effects of climate change that are transferred through trade, as well as between the latter's freedom to regulate and other states' freedom from interference with their trading opportunities.

Sections I and II argue that the current emphasis in trade liberalization agreements is on states' freedom to trade rather than on their freedom to protect their domestic affairs against negative impacts that are transferred through trade. This broadens the protection of emitting states' positive freedom resulting in incentives to free ride on other states' efforts to reduce GHG emissions, in addition to the incentives that already exist given the global public good characteristics of climate change mitigation. Section III offers suggestions as to how to use the interstitial norms discussed in Chapter 4 to reinterpret the limits on defensive mechanisms. The goal of this reinterpretation is to ensure that liberal principles govern inter-state relations, sovereignty is recognized as relative, and that co-existence and co-operation between states are more achievable. Section IV concludes.

I. FOCUS ON MARKET INTEGRATION

This Section assesses the extent to which international agreements liberalizing trade in goods allow market access restrictions to protect states' domestic affairs against the negative impact of climate change triggered by other states' actions or omissions. Sections A and B address limitations on states' ability to tax or regulate products sold within their territories. A relevant distinction in this context is between negative and positive integration. The approach of the national treatment obligation discussed in Section A is one of negative integration, allowing each state to develop its own non-discriminatory policies.⁶⁷⁷ Negative integration can still lead to regulatory differences that may have an impact on international trade. In contrast, positive integration efforts aim to remove obstacles resulting from regulatory diversity through the

⁶⁷⁷ Marceau and Trachtman, "The Technical Barriers to Trade Agreement, the Sanitary and Phytosanitary Measures Agreement, and the General Agreement on Tariffs and Trade: A Map of the World Trade Organization's Law of Domestic Regulation of Goods", 36 *Journal of World Trade* (2002), 838; Mavroidis, *Trade in Goods: The GATT and the Other Agreements Regulating Trade in Goods* (2007), 215.

development of internationally agreed common policies and harmonization of domestic policies. In the WTO context, positive integration is visible in the Agreement on Technical Barriers to Trade (“TBT Agreement”), discussed in Section B. Section C examines the prohibition on quantitative restrictions. Sections D and E analyse rules on the relationship between trade and other societal values to complete the picture of the balance struck between states’ freedom to trade and other states’ freedom to regulate to avoid negative impacts triggered by trade.

A. *Negative Integration through the National Treatment Obligation*

Trade liberalization agreements can expose states to other states’ decisions in relation to climate change mitigation in two ways. First, states may have to accept goods produced in other states. These goods can contribute to GHG emissions in their operation, or their production process may have emitted GHGs. Second, if a state uses taxation or regulation to ensure that domestically produced goods or production processes meet minimum energy efficiency requirements, production of these goods could move abroad. Alternatively, if production is not relocated and the higher production costs are passed on to consumers, consumers could switch towards imported products that are not subject to the same stringent production requirements. Therefore, regulating states may want to limit imports of these goods or of goods produced through these processes to avoid leakage and protect the competitiveness of their domestic producers. However, the national treatment obligation of Article III GATT limits states’ ability to do so. In light of this Article’s incorporation *mutatis mutandis* in both FTAs studied, the analysis below will only deal with Article III GATT.⁶⁷⁸ Section (1) gives an overview of the scope of Article III. Sections (2) and (3) discuss how the current interpretation of two crucial elements of Article III—likeness and discrimination—limits the legality of defensive mechanisms used to protect states’ domestic affairs against the negative impact of climate change. Section (4) summarizes the findings regarding the impact of the national treatment obligation on the legality of defensive mechanisms.

(1) *An Overview of Article III GATT*

Article III obliges WTO Members to assimilate imported products, once imported, to domestically produced goods.⁶⁷⁹ Article III:1 includes a general non-discrimination provision which stipulates that WTO members will not apply internal taxation or regulation “so as to afford protection to domestic production”. This general provision is seen as part of the context

⁶⁷⁸ *US–Korea FTA*, art. 2.2; *EU–Korea FTA*, art. 2.1.

⁶⁷⁹ Mavroidis, *supra* note 677, 194.

of each of the other paragraphs of Article III.⁶⁸⁰ Of particular relevance for the current analysis are the second and fourth paragraphs that deal respectively with internal taxation and internal regulation.

Article III:2 contains two restrictions with respect to internal *taxation*. Its first sentence requires that imported products not be subject to internal taxes “in excess of” those applied to “like domestic products”. According to the Appellate Body “even the smallest amount of ‘excess’ is too much”.⁶⁸¹ Moreover, if taxation is “in excess of”, there is no need to assess whether the excess taxation is done “so as to afford protection to domestic production”, because there is no explicit reference to this requirement in the first sentence of Article III:2.⁶⁸²

The requirement of Article III:1 is mentioned in the second sentence of Article III:2. An Ad Note to Article III in Annex I GATT explains that when imported goods are not “like” domestic goods, they must still be taxed similarly to a broader group of “directly competitive or substitutable” domestic goods.⁶⁸³ The broader character of the comparator group is offset by the Appellate Body’s decision that “not similarly taxed” must be more than *de minimis*.⁶⁸⁴ As a result, the standard of “not similarly taxed” leaves more discretion for the importing state than the “in excess of” standard in the first sentence. Because of the reference to Article III:1, a tax measure that does not tax imported goods similarly to domestic goods still needs to be tested under the “so as to afford protection to domestic production” clause before it can be found to be illegal. Whether a domestic tax protects domestic production is to be judged on a case-by-case basis, taking into account the structure and application of the taxation measure at issue.⁶⁸⁵

Internal *regulations* are disciplined by Article III:4. Under this paragraph, imported products are discriminated against if their treatment under domestic regulation is “less favourable” than that accorded to like domestic products. In *Korea–Beef*, the Appellate Body specified that this test requires an examination of whether the measure “modifies conditions of competition in the

⁶⁸⁰ *Japan–Alcoholic Beverages II (AB)*, p. 18.

⁶⁸¹ *Ibid.*, p. 23.

⁶⁸² *Ibid.*, p. 18.

⁶⁸³ Epps and Green, *Reconciling Trade and Climate: How the WTO Can Help Address Climate Change* (2010), 96.

⁶⁸⁴ *Japan–Alcoholic Beverages II (AB)*, p. 27.

⁶⁸⁵ *Ibid.*, p. 29.

relevant market to the detriment of imported products.”⁶⁸⁶ This test is seen as including the “so as to afford protection to domestic production” test of Article III:1 GATT.⁶⁸⁷

In principle, the national treatment obligation only applies to internal measures⁶⁸⁸ and not to border measures.⁶⁸⁹ Nevertheless, the Ad Note to Article III in Annex I GATT provides that:

[a]ny internal tax or other internal charge, or any law, regulation or requirement of the kind referred to in paragraph 1 which applies to an imported product and to the like domestic product and is collected or enforced in the case of the imported product at the time or point of importation, is nevertheless to be regarded as an internal tax or other internal charge, or a law, regulation or requirement of the kind referred to in paragraph 1, and is accordingly subject to the provisions of Article III.

This Ad Note is relevant to determine the legality of “border tax adjustments” or BTAs. These adjustments occur when domestic taxes are imposed on imports or when taxes paid on exports are reimbursed to protect domestic industries against the loss of competitiveness.⁶⁹⁰

In the context of climate change mitigation, states could use BTAs to subject imported products to the same internal taxes as like⁶⁹¹ domestic products or to reimburse taxes on domestic products exported to markets with a lower level of taxation. Levelling the playing field between imports and exports can help to overcome concerns about “leakage”.

In practice, BTAs are often difficult to implement, particularly in the context of climate change,⁶⁹² as the calculation of the increased costs related to stricter regulation or higher taxation can be complex.⁶⁹³ If state A wishes to apply a BTA to goods imported from state B or to domestic goods exported to state B, a comparison is needed between the costs resulting from state A’s regulation and the costs resulting from state B’s regulation. This exercise would need to be performed for all imports from and all exports to every state with which state A trades. This

⁶⁸⁶ *Korea–Beef (AB)*, paras 135-137.

⁶⁸⁷ *EC–Asbestos (AB)*, para. 100.

⁶⁸⁸ *GATT*, art. III:1.

⁶⁸⁹ Van den Bossche, *supra* note 491, 346-347.

⁶⁹⁰ Epps and Green, *supra* note 683, 122.

⁶⁹¹ BTAs are limited to “like” products and are thus not allowed for “directly competitive or substitutable” products, see *Ibid.*, 130-131.

⁶⁹² Barrett, *supra* note 636, 6; Epps and Green, *supra* note 683, 201.

⁶⁹³ Tamiotti et al., *Trade and Climate Change: A Report by the United Nations Environment Programme and the World Trade Organization* (2009), at <http://www.wto.org/english/res_e/booksp_e/trade_climate_change_e.pdf>, 101; Low et al., *supra* note 123, 13.

would be impractical and could give rise to considerable litigation about the precise calculation of the adjustment.

Legally, BTAs on imports need to comply with Article III.⁶⁹⁴ An initial reading of this Article seems to ensure states' ability to regulate, as long as there is no discrimination between like imported and domestic products to protect domestic products. However, as the following two Sections argue, the interpretation of crucial aspects of this obligation—"like products" and discrimination—erects legal barriers to internal regulation and taxation, particularly in situations of increasing interdependence such as climate change mitigation.

(2) *A Broad Definition of "Like Products"*

The practical application of "likeness" is one of the thorniest issues in international trade law.⁶⁹⁵ The concept of "like" products directly determines whether imported products can be treated differently from domestic products for the purposes of internal taxation or regulation. A narrow conception of likeness restricts the group of imported products that cannot be treated differently from domestic products, whereas a broad conception increases the group of imported products that are protected from differential treatment.⁶⁹⁶ For example, when it comes to the regulation or taxation of energy sources, are biofuels "like" fossil fuels or does their renewable nature set them apart from the latter? Are all fossil fuels "alike" or can their different carbon content be taken into consideration? Similarly, is the higher fuel efficiency of a small car enough to set it apart from a large car? Is a hybrid car "like" one of the same make but with a traditional engine? Finally, is aluminium produced using electricity generated through renewable resources the same as aluminium produced using electricity generated by burning fossil fuels?

Precise criteria to identify likeness have proven elusive. In 1970, a GATT Working Party on Border Tax Adjustments suggested evaluating likeness on a case-by-case basis, taking into consideration "the product's end-uses in a given market; consumers' tastes and habits, which change from country to country; the product's properties, nature and quality".⁶⁹⁷ These criteria

⁶⁹⁴ Epps and Green, *supra* note 683, 129-136.

⁶⁹⁵ Matsushita et al., *The World Trade Organization: Law, Practice, and Policy*, 2nd ed. (2006), 236.

⁶⁹⁶ Choi, 'Like Products' in *International Trade Law: Towards a Consistent GATT/WTO Jurisprudence* (2003), 5; Bernasconi-Osterwalder, *Environment and Trade: A Guide to WTO Jurisprudence* (2006), 8; Diebold, *Non-Discrimination in International Trade in Services: 'Likeness' in WTO/GATS* (2010), 66.

⁶⁹⁷ Working Party on Border Tax Adjustments, *Border Tax Adjustments*, L/3464 BISD 18S/97 (2 December 1970), para. 18.

are only the basic approach. The Appellate Body has held that “[t]he criteria in *Border Tax Adjustments* should be examined, but there can be no one precise and absolute definition of what is ‘like’.”⁶⁹⁸ To complicate matters further, “likeness” has a different meaning in different Articles of GATT, in different paragraphs of the same Article and even within different sentences of the same paragraph.⁶⁹⁹

There are two specific issues with the interpretation of “likeness” that are relevant for the legality of internal regulation or taxation through which a state aims to protect its domestic affairs against the negative impact of climate change triggered by other states’ policies. The first is the rejection of the “aims and effects” test. This test allowed distinctions between imported and domestic products unless the distinctions were intended for the protection of domestic production.⁷⁰⁰ Notably in the context of climate change, the “aims and effects” test was applied in an unadopted 1994 GATT Panel decision, holding that distinctions between cars with different fuel efficiency were not applied “so as to afford protection to domestic production.”⁷⁰¹ Therefore, the domestic and imported cars were not like products under Article III:2.⁷⁰² However, later decisions in the WTO have rejected the “aims and effects” test in the context of Article III:2, 1st sentence⁷⁰³ and of Article III:4.⁷⁰⁴ Excluding the aims and effects of a measure in the determination of likeness gives states less discretion to restrict trade based on the different energy efficiency of imported and domestic products or their production processes.⁷⁰⁵

A second issue in the determination of “likeness” arises from the debate about the legality of regulatory distinctions based on how goods are produced. From the perspective of states negatively affected by other states’ decisions regarding climate change mitigation, there are sound reasons to distinguish on this basis. If a state decides to regulate or tax domestic production based on the energy consumed during the production process, liberalized trade could lead to “leakage”. If leakage occurs, the impact of domestic emission reductions will, at

⁶⁹⁸ *Japan–Alcoholic Beverages II (AB)*, p. 21.

⁶⁹⁹ Choi, *supra* note 696, 104; Matsushita et al., *supra* note 695, 237-239.

⁷⁰⁰ *US–Malt Beverages*, paras 5.24-5.25.

⁷⁰¹ *US–Taxes on Automobiles*, paras 5.26, 5.32, 5.36.

⁷⁰² *Ibid.*

⁷⁰³ *Japan–Alcoholic Beverages II (Panel)*, para. 6.16; *Japan–Alcoholic Beverages II (AB)*, p. 18.

⁷⁰⁴ *EC–Bananas III (AB)*, para. 216.

⁷⁰⁵ Charnovitz, *Beyond Kyoto: Advancing the International Effort against Climate Change* (July 2003), at <http://www.pewclimate.org/docUploads/Beyond_Kyoto_Trade.pdf>, 5; Vranes, *Trade and the Environment: Fundamental Issues in International Law, WTO Law, and Legal Theory* (2009), 392.

least partially, be cancelled out by emission increases in other states. Aggregate emissions worldwide would thus not reduce in step with domestic reductions. It is not required that leakage effectively occurs in practice, as the mere threat of it may reduce the political will to act without guarantees of emission reductions in other states.

The prevailing view is that the determination of likeness is based on the end product, regardless of how it has been produced. Differences in the processes or production methods (PPMs) of imported products compared to the PPMs of domestic products are irrelevant to determine “likeness”, unless the PPM has affected the product’s characteristics.⁷⁰⁶ The product/process distinction dates back to the first *Tuna-Dolphin* case in which a GATT Panel held that Article III did not apply to a measure restricting imports if caught in dolphin-unfriendly ways, because the measure did not apply to the product as such.⁷⁰⁷ WTO jurisprudence confirms that the likeness of products can only be determined on the basis of their physical characteristics, end uses, tariff classification and substitutability, and not on the basis of the different situation of their producers.⁷⁰⁸

Nevertheless, WTO jurisprudence does not fully exclude PPM-based distinctions.⁷⁰⁹ Given that consumer preferences are a recognized criterion to determine likeness, it may be possible to base differential regulation or taxation on non-produced related PPMs when consumers display a clear preference for products produced according to a particular process or method.⁷¹⁰ However, regulation or taxation is often needed to make goods produced in an undesired way

⁷⁰⁶ Hudec, “The Product-Process Doctrine in GATT/WTO Jurisprudence”, in Bronckers and Quick (Eds.), *New Directions in International Economic Law: Essays in Honour of John H. Jackson* (2000), 187; Gaines, “Processes and Production Methods: How to Produce Sound Policy for Environmental PPM-Based Trade Measures?”, 27 *Columbia Journal of Environmental Law* 383 (2002), 417; Marceau and Trachtman, *supra* note 677, 857; Matsushita et al., *supra* note 695, 271; Low et al., *supra* note 123, 5, 7. For specific arguments that PPM-based distinctions should not be *prima facie* GATT illegal, see Howse and Regan, “The Product/Process Distinction—an Illusory Basis for Disciplining ‘Unilateralism’ in Trade Policy”, 11 *European Journal of International Law* 249 (2000); Charnovitz, “The Law of Environmental “PPMs” in the WTO: Debunking the Myth of Illegality”, 27 *Yale Journal of International Law* 59 (2002); Potts, *The Legality of PPMs under the GATT: Challenges and Opportunities for Sustainable Trade Policy* (2008), at <http://www.iisd.org/pdf/2008/ppms_gatt.pdf>.

⁷⁰⁷ *US-Tuna I*, para. 5.14. The Panel’s reasoning that a PPM-based measure is not covered by Article III has been criticized in the literature, see, e.g., Howse and Regan, *supra* note 706, 251, 254; Hudec, *supra* note 706, 198-199; Van den Bossche et al., *Unilateral Measures Addressing Non-Trade Concerns: A Study on WTO Consistency, Relevance of Other International Agreements, Economic Effectiveness and Impact on Developing Countries of Measures Concerning Non-Product-Related Processes and Production Methods* (2007), 85.

⁷⁰⁸ *US-Reformulated Gasoline (Panel)*, paras 6.9, 6.11.

⁷⁰⁹ Green and Epps, “Is There a Role for Trade Measures in Addressing Climate Change?”, 15 *U.C. Davis Journal of International Law and Policy* 1 (2008-2009), 10.

⁷¹⁰ Van den Bossche, *supra* note 491, 381; Lydgate, “Consumer Preferences and the National Treatment Principle: Emerging Environmental Regulations Prompt a New Look at an Old Problem”, 10 *World Trade Review* 165 (2011), 181.

less attractive to consumers and affect the relative prices of desirable, *in casu* climate friendly, and undesirable, *in casu* climate unfriendly, goods before consumers will care about the difference.⁷¹¹

Furthermore, the Appellate Body accepted in *US-Shrimp*⁷¹² that distinctions based on PPMs can benefit from the exceptions of Article XX GATT.⁷¹³ Unfortunately, the Appellate Body was not in a position to discuss the legality of PPM-based distinctions under Article III, since the US had admitted that its ban on shrimp caught using nets that did not have turtle excluding devices violated the GATT.⁷¹⁴ As a result, the debate revolved around the availability of the Article XX exception and did not address the relevance of PPMs for the determination of likeness under Article III.

It is not argued here that the product/process distinction in the determination of likeness is devoid of merit. PPM based regulation can be disguised protectionism, as it may shield domestic production from cheaper imported products when the price difference is caused by higher domestic production standards.⁷¹⁵ The product/process distinction counters such protectionism and protects each state's opportunity to participate in and reap the rewards of the international economy. This is particularly important for developing states that may lack the capacity to implement other states' PPM requirements. Moreover, domestic markets in developing states often lack sufficient capacity to absorb production that does not meet PPM requirements. The ability to export is thus important, at the micro-economic level, to ensure the viability of production and, at the macro-economic level, to earn foreign currencies.

The idea reflected in the product/process distinction is that decisions on the production process belong to the states in whose territories the production takes place. States' ability to influence production processes abroad through the regulation or taxation of products imported into their territory is seen as unlawful, extra-territorial, interference in the exercise of the exporting state's territorial sovereignty.⁷¹⁶ The decision on how to produce is seen as more worthy of

⁷¹¹ Epps and Green, *supra* note 683, 122.

⁷¹² *US-Shrimp (AB)*, paras 128-131.

⁷¹³ Article XX is discussed in Section D.

⁷¹⁴ *US-Shrimp (Panel)*, para. 7.17.

⁷¹⁵ For an overview, and a rebuttal, of this argument, see Howse and Regan, *supra* note 706, 279-285.

⁷¹⁶ Jansen and Lugard, "Some Considerations on Trade Barriers Erected for Non-Economic Reasons and WTO Obligations", 2 *Journal of International Economic Law* 530 (1999), 532; Sampson, "WTO and Climate Change: The Need

protection than the decision on what to import or not, based on a belief that the GATT gives its contracting parties a general right of market access into other contracting parties' territories.⁷¹⁷ For importing states, the product/process distinction implies that they do not have full control about what enters their territory, but need to accept the regulatory choices made in or by another state unless these choices affect the product's characteristics. Of course, importing states can still regulate the PPMs used in domestic production. However, they must be prepared to accept reductions in competitiveness if they regulate the PPMs used by their import-competing industries. This may lead to leakage that undermines the environmental objectives of its domestic regulation.

Nevertheless, the main issue with the product/process distinction is that climate change is a global problem, as are many other problems of increasing interdependence. In such situations, the impact of PPMs is not limited to the state of production.⁷¹⁸ This gives other states a legitimate stake in the emissions caused by the production of their imports.⁷¹⁹ However, the product/process distinction leaves regulation of the production processes to the exporting states. When transboundary problems such as GHG emissions are at stake, this effectively allows exporting states to regulate extraterritorially.⁷²⁰ Section III.B will therefore argue against the inclusion of the product/process distinction in the determination of likeness when it comes to regulation in response to global problems.

(3) *Uncertainty About De Facto Discrimination*

The determination of "likeness" discussed in Section (2) is only a first step in the assessment of the legality of unilateral measures under Article III.⁷²¹ Before a violation can be found there must also be differential treatment of imported goods compared to domestic goods. It has been argued in the literature that the original idea behind Article III was to prohibit discrimination

for Policy Coherence", in Chambers (Ed.) *Global Climate Governance: Inter-Linkages between the Kyoto Protocol and Other Multilateral Regimes* (2001), 77. For a rebuttal, see Howse and Regan, *supra* note 706, 274-279.

⁷¹⁷ *US-Shrimp (AB)*, para. 156. This interpretation of states' rights under GATT has been criticized in relevant literature, see Howse and Regan, *supra* note 706, 251, 275-276; McRae, "GATT Article XX and the WTO Appellate Body", in Bronckers and Quick (Eds.), *New Directions in International Economic Law* (2000), 232; Charnovitz, "The WTO's Environmental Progress", 10 *Journal of International Economic Law* 685 (2007), 703.

⁷¹⁸ Brack et al., *International Trade and Climate Change Policies* (2000), 15-16.

⁷¹⁹ Doelle, "Climate Change and the WTO: Opportunities to Motivate State Action on Climate Change through the World Trade Organization", 13 *Review of European Community and International Environmental Law* 85 (2004), 94.

⁷²⁰ Howse and Regan, *supra* note 706, 251.

⁷²¹ Bernasconi-Osterwalder, *supra* note 696, 8.

based explicitly on the origin of a good.⁷²² However, GATT and WTO jurisprudence have applied Article III to treatment that is facially origin-neutral but de facto applies disproportionately to goods of a certain origin.⁷²³

The theoretical need for prohibiting de facto discrimination is clear.⁷²⁴ Without it, the GATT disciplines could easily be circumvented. For example, when a domestic measure prohibits the sale of energy inefficient cars, a state could set the minimum requirement of energy efficiency at a level that only domestic cars can meet. The outcome would be the same as a rule that imposes a higher tax or stricter regulation for imports, even though it would not explicitly include a distinction based on origin. However, the precise test for de facto discrimination becomes significant when the measure affects both domestic and foreign cars that fail to meet the energy efficiency threshold, but restricts a larger portion of potential imports, compared to potential domestic production.

It is unclear how broad the standard for de facto discrimination is under current WTO jurisprudence.⁷²⁵ The main question is whether to assess de facto discrimination on the basis of a “diagonal” or an “asymmetric impact” test. To understand both tests, four groups of “like” products need to be identified: 1) domestic products treated favourably, 2) domestic products treated less favourably, 3) imported products treated favourably, and 4) imported products less favourably.

Under a diagonal test, de facto discrimination arises as soon as there (potentially) are “like” products in the first and the fourth group. A diagonal test makes it very easy to establish de facto discrimination,⁷²⁶ particularly if “likeness” is interpreted broadly. In practice, this interpretation of de facto discrimination constructs the national treatment obligation as an obligation not to restrict trade.⁷²⁷ The implication for the legality of defensive mechanisms is that states will only be able to avoid a finding of discrimination if they treat imported products in the same way as

⁷²² Hudec, “GATT/WTO Constraints on National Regulation: Requiem for an “Aims and Effects” Test”, 32 *International Lawyer* 619 (1998), 622; Ehring, “De Facto Discrimination in World Trade Law: National and Most-Favoured-Nation Treatment—or Equal Treatment?”, 36 *Journal of World Trade* 921 (2002), 921.

⁷²³ Ehring, *supra* note 722, 931-948; Matsushita et al., *supra* note 695, 253.

⁷²⁴ Vranes, *supra* note 705, 233.

⁷²⁵ *Ibid.*, 223; Diebold, *supra* note 696, 40, 43.

⁷²⁶ Ehring, *supra* note 722, 924; Diebold, *supra* note 696, 40-41.

⁷²⁷ Diebold, *supra* note 696, 41.

domestic products that receive the best treatment.⁷²⁸ To avoid discrimination under such a broad test, a state would need a global monopoly on the production of a particular good or it would need to impose a lower standard of regulation than any of its trading partners. The first situation of a global monopoly is unlikely in practice, whereas the second situation is unhelpful in the context of the current question about how states can use trade restrictions to protect their domestic affairs against the negative impact of other states' policies, such as a failure to regulate GHG emissions.

In contrast, under the asymmetric impact test, de facto discrimination only arises if all foreign products taken together are treated less favourably than the "like" domestic products.⁷²⁹ Thus, this test requires an assessment whether the proportion of domestic products in the first group is similar to the proportion of imported products in the third group. This test leaves scope for domestic regulation that, even though it affects imported products, does so to the same extent as it affects domestic products.

WTO jurisprudence has not yet taken an explicit stance on the interpretation of de facto discrimination. However, in an *obiter dictum* in *EC-Asbestos* the Appellate Body held that while it gave broad scope to the interpretation of "like products" in Article III:4 GATT,⁷³⁰

A complaining Member must still establish that the measure accords to the **group** of "like" imported products "less favourable treatment" than it accords to the **group** of "like" domestic products. [...] a Member may draw distinctions between products which have been found to be "like", without, for this reason alone, according to the group of "like" imported products "less favourable treatment" than that accorded to the group of "like" domestic products.

Many commentators conclude that a comparison between the "group" of imported products and the "group" of domestic products means that a finding of de facto discrimination needs to be established using the asymmetric impact test.⁷³¹ De facto discrimination will thus be found to exist if domestic products are comparatively overrepresented in the group of like products that are subject to a lesser fiscal or regulatory burden. A measure is only de facto discriminatory if its geographical impact is asymmetric.⁷³²

⁷²⁸ *Ibid.*, 41.

⁷²⁹ Ehring, *supra* note 722, 924-925.

⁷³⁰ *EC-Asbestos (AB)*, para. 100 (emphasis added in bold).

⁷³¹ Ehring, *supra* note 722, 943-944, 964-965; Vranes, *supra* note 705, 235, 238; Diebold, *supra* note 696, 44; Epps and Green, *supra* note 683, 75-77.

⁷³² Vranes, *supra* note 705, 235.

That this *obiter dictum* should inform the interpretation of de facto discrimination is not accepted by all.⁷³³ Unless the Appellate Body clarifies its position, the possibility that de facto discrimination is established using the diagonal test cannot be excluded. Such a test would severely restrict states' fiscal and regulatory autonomy and their ability to protect their domestic affairs against the negative impact of other states' climate change policies.

(4) *Conclusion on the National Treatment Obligation*

Although the national treatment obligation of Article III at first sight appears to be consistent with importing states' fiscal and regulatory autonomy, the interpretation of likeness and discrimination reduces Members' freedom to act in defence of their domestic affairs against the negative impact of climate change triggered by their trading partners' policies. For example, a Member that wants to promote renewable energy sources or higher energy efficiency standards will not be able to restrict imports of competing products that have been produced in a less efficient way, because Article III is traditionally interpreted as prohibiting distinctions based on PPMs that are not reflected in the final product. This inability to restrict products generated through polluting processes worsens the free rider problem in the provision of a global public good such as climate change mitigation. Exporting Members know that the national treatment obligation obliges importing Members to accept their products, regardless of the PPMs used. This creates a disincentive to regulate, because exporters can increase their market share if importing Members' products become more expensive because of regulation. The wide reach of likeness, resulting from the rejection of the "aims and effects" test and the application of the product/process distinction, means that the precise test to establish de facto discrimination is of great moment. If de facto discrimination is defined broadly, allowing a finding of discrimination whenever a complainant can find one imported product treated differently from one domestic product, very little is left of the importing state's fiscal and regulatory autonomy. The Appellate Body's *obiter dictum* in *EC-Asbestos* indicates that the Appellate Body is aware of the problems of a broad definition of de facto discrimination. Nevertheless, no firm test for de facto discrimination has been developed so far.

If a tax or regulation is incompatible with the national treatment obligation, it can only be used as a defensive mechanism if one of the exceptions in GATT provides a justification. The availability in practice of these exceptions is analysed in Sections D and E.

⁷³³ As discussed by Ehring, *supra* note 722, 944-946. See also Matsushita et al., *supra* note 695, 254 (arguing that "the WTO seems to be locked into a very restrictive approach to *de facto* discrimination")

B. Positive Integration through the TBT Agreement

The national treatment obligation only removes trade restrictions that are de iure or de facto discriminatory. It does not lower the barriers to trade that can result from regulatory differences. The TBT Agreement is meant to address non-discriminatory obstacles to international trade through disciplines on technical regulations, standards and conformity assessment procedures. In both FTAs studied, the Parties affirm their existing rights under the TBT Agreement.⁷³⁴ According to the definitions in Annex I of the TBT Agreement, a technical regulation “lays down product characteristics or their related processes and production methods” with which compliance is mandatory.⁷³⁵ Standards perform a similar function, but are not mandatory.⁷³⁶ Conformity assessment procedures are the procedures through which compliance with the technical regulation or the standards is verified.⁷³⁷ Examples in the context of climate change are fuel efficiency standards or eco-labelling standards.

Given that such measures can also come within the scope of Article III GATT, the question is under which legal provision they have to be tested. No explicit provision in the TBT Agreement or in the GATT governs their relationship. The practice has emerged to assess a measure first under the TBT Agreement, on the basis of the *lex specialis* principle.⁷³⁸ If a domestic measure is found to be consistent with the TBT Agreement, it can still be found illegal under Article III.⁷³⁹

It is debated whether the reference to “related processes and production methods” in the TBT Agreement’s definitions of technical regulations and standards encompasses only PPMs that manifest themselves in the final product, such as traces of insecticide on plants, or extends to non-product related PPMs, such as the use of renewable energy in the production of steel.⁷⁴⁰ A number of sources consider that non-product related PPMs are outside the scope of the TBT

⁷³⁴ *US–Korea FTA*, art. 9.1; *EU–Korea FTA*, art. 4.1.

⁷³⁵ *TBT Agreement*, Annex I, para. 1.

⁷³⁶ *TBT Agreement*, Annex I, para. 2.

⁷³⁷ *TBT Agreement*, Annex I, para. 3.

⁷³⁸ Matsushita et al., *supra* note 695, 482-483.

⁷³⁹ *EC–Sardines*, paras 7.14-7.16. The Appellate Body did not reverse the order of this analysis and declined to address whether the disputed measure was inconsistent with Article III:4 GATT, see *EC–Sardines (AB)*, para. 313.

⁷⁴⁰ Marceau and Trachtman, *supra* note 677, 861-862; Charnovitz, *supra* note 705, 9; Matsushita et al., *supra* note 695, 808; Koebele, “Article I and Annex I TBT”, in Wolfrum et al. (Eds.), *WTO–Technical Barriers and SPS Measures* (2007), 196-197; Epps and Green, *supra* note 683, 78; Low et al., *supra* note 123, 22. For a good overview of the debate in the TBT negotiations and later discussions in the WTO’s Committee on Trade and Environment, see Van den Bossche et al., *supra* note 707, 143-145.

Agreement.⁷⁴¹ However, this does not imply that non-product related PPMs are prohibited under the TBT Agreement, but that technical regulations or standards based on non-product related PPMs need only comply with the relevant provisions under GATT.⁷⁴²

The TBT Agreement has the potential to affect the legality of domestic regulation to protect against the negative impact of climate change triggered by trading partners' policies, beyond the restrictions imposed by Article III:4 GATT. Article 2(1) imposes the equivalent of the national treatment obligation in Article III GATT by prohibiting discrimination between imported and domestic like products. So, as with Article III GATT, the national treatment obligation in Article 2(1) hinges upon the interpretation of "likeness" and of discrimination. It is unclear how "likeness" needs to be assessed under the TBT Agreement. Using the same criteria for "likeness" as under Article III GATT may result in too broad a national treatment obligation, because the TBT Agreement does not contain a list of exceptions allowing the exercise of regulatory autonomy in specific situations.⁷⁴³ Article 2(2) requires that domestic measures, including non-discriminatory measures, "shall not be more trade-restrictive than necessary to fulfil a legitimate objective". An indicative list of legitimate objectives is provided in Article 2(2), and includes measures to protect the environment and human health. Article 2(4) provides for an obligation to use international standards where available, unless these would be ineffective or inappropriate to achieve the objective. If a state uses an international standard as the basis for its domestic measures, these measures are, in accordance with Article 2(5), presumed not to create an unnecessary obstacle to international trade.

As argued by Hudec, this "post-discriminatory" WTO law of the TBT Agreement allows international tribunals to question the rationality of state's domestic regulatory decisions.⁷⁴⁴ A state wanting to impose technical regulations needs to ensure that all its measures, including its non-discriminatory ones, are necessary. Necessity is a positive obligation for states, not a

⁷⁴¹ Appleton, "Private Climate Change Standards and Labelling Schemes under the WTO Agreement on Technical Barriers to Trade", in Cottier et al. (Eds.), *International Trade Regulation and the Mitigation of Climate Change* (2009), 139. The OECD has taken the position that non-product related PPMs are not covered by the TBT Agreement, see OECD, *Processes and Production Methods (PPMs): Conceptual Framework and Considerations on Use of PPM-Based Trade Measures* OCDE/GC(97)137 (1997), 11. Vranes, *supra* note 705, 340-342 argues that this traditional understanding may be based on incorrect assumptions about the degree to which PPMs are prohibited under the GATT.

⁷⁴² Condon, "Climate Change and Unresolved Issues in WTO Law", 12 *Journal of International Economic Law* 895 (2009), 921; Low et al., *supra* note 123, 24.

⁷⁴³ Tamiotti, "Article 2 TBT", in Wolfrum et al. (Eds.), *WTO-Technical Barriers and SPS Measures* (2007), 217; Epps and Green, *supra* note 683, 79.

⁷⁴⁴ Hudec, "Science and 'Post-Discriminatory' WTO Law", 26 *Boston College International and Comparative Law Review* 185 (2003), 188.

justification as it is in the context of the exceptions in Article XX GATT,⁷⁴⁵ discussed in Section D. The interpretation of “necessity” is thus crucial to determine the legality of defensive mechanisms and, by implication, the balance between positive and negative freedom in increasing interdependence. As Section D will discuss in the context of Article XX GATT, the test is interpreted in a way that favours the interests of trade and exporters over the protection of non-trade values.

C. *The Prohibition on Quantitative Restrictions*

In addition to the limits on trade restrictions based on the quality of the goods sold within a state, an important goal of the GATT is to eliminate quantitative restrictions on trade. Quantitative restrictions to protect domestic affairs against the negative impact of climate change face a significant legal hurdle in Article XI GATT, which is incorporated *mutatis mutandis* in both FTAs studied.⁷⁴⁶

Article XI provides for the “general elimination of quantitative restrictions”. Its first paragraph stipulates that

[n]o prohibitions or restrictions other than duties, taxes or other charges, whether made effective through quotas, import or export licences or other measures, shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.

Article XI:1 has been interpreted expansively to cover virtually any non-fiscal measure that can potentially affect imports or exports of non-agricultural goods.⁷⁴⁷ This is further strengthened by the fact that the mere design of the measure can trigger a violation of Article XI, even in the absence of an actual effect on trade.⁷⁴⁸

The impact of Article XI on domestic measures aiming to protect a state’s domestic affairs against the negative impact of another state’s actions or omissions is much wider than prohibitions on restricting the quantity of imports. A particular point of discussion regarding its reach is whether the reference to “other measures” means that non-fiscal regulations that limit which goods can be sold on a domestic market are also covered by Article XI. Although these regulations restrict market access on the basis of the quality rather than the quantity of the

⁷⁴⁵ Marceau and Trachtman, *supra* note 677, 824-825, 831.

⁷⁴⁶ *US–Korea FTA*, art. 2.8(1); *EU–Korea FTA*, art. 2.9.

⁷⁴⁷ *India–QR (Panel)*, para. 5.142; Matsushita et al., *supra* note 695, 271.

⁷⁴⁸ *EEC–Oilseeds I*, para. 150.

goods, they have the effect of restricting all imports that fall below the qualitative threshold. The WTO Panel has held that Article XI:1 extends to restrictions “of a *de facto* nature”.⁷⁴⁹ This conclusion raises questions about the relationship between Article XI and the national treatment obligation in Article III.

As discussed in Section A, Article III comes with an Ad Note clarifying that Article III covers measures applied at the border. However, the Ad Note does not make clear whether this excludes the application of Article XI to these border measures.⁷⁵⁰ GATT and WTO cases debating the application of Articles III and XI tend towards a broad application of Article XI. The GATT Panel in the *US–Tuna I* first analysed the prohibition on tuna caught in dolphin-unfriendly circumstances under Article III, to decide that the import prohibition did not fall under Article III because it did not affect tuna as a product.⁷⁵¹ Subsequently, the Panel held the measure incompatible with Article XI.⁷⁵² As Driesen pointed out,⁷⁵³

[t]his broad construction of Article XI goes beyond the anti-mercantilist limit on quotas necessary to sustain the non-discrimination principle and embraces a laissez-faire rule limited only by applicable defenses. Hence, narrow construction of the ad note implies greater movement towards laissez-faire trade.

In 2000, the WTO Panel in *EC–Asbestos* examined the legality of the French bans on imports, exports and domestic marketing of asbestos fibres under Article III:4 rather than under Article XI. Once it found a violation of Article III:4, it declined to examine whether both Articles could apply cumulatively.⁷⁵⁴ A year later, the WTO Panel in *India–Autos* held that an overlap between the provisions could not be excluded in the exceptional circumstance “of state trading enterprises involving a monopoly over both importation and distribution of goods”.⁷⁵⁵ Moreover, India’s claim that Articles III:4 and XI were mutually exclusive was rejected on the basis that “different aspects of the same measure may be covered by different provisions”.⁷⁵⁶ Such a broad

⁷⁴⁹ *Argentina–Hides and Leather*, para. 11.17.

⁷⁵⁰ Van den Bossche, *supra* note 491, 347.

⁷⁵¹ *US–Tuna I*, paras 5.14-5.15.

⁷⁵² *Ibid.*, paras 5.17-5.18.

⁷⁵³ Driesen, “What Is Free Trade?: The Real Issue Lurking Behind the Trade and Environment Debate”, 41 *Virginia Journal of International Law* 279 (2000-2001), 340.

⁷⁵⁴ *EC–Asbestos (Panel)*, paras 8.99-8.100.

⁷⁵⁵ *India–Autos (Panel)*, paras 7.221 and 7.224.

⁷⁵⁶ *Ibid.*, para. 7.296.

application of Article XI restricts states' regulatory autonomy to situations in which one of the exceptions discussed in the next two Sections applies.

D. *The Environmental Exceptions*

The imbalance in favour of a state's positive freedom to trade over another state's negative freedom from the negative impact of climate change transferred through trade can still be corrected if an exception is available. Article XX GATT, incorporated *mutatis mutandis* with respect to trade in goods in both FTAs studied,⁷⁵⁷ contains general exceptions to balance trade with specifically listed non-trade objectives. Whether the Article XX exceptions are also available for the obligations under the TBT Agreement is unclear.⁷⁵⁸ Little turns on this point for the purposes of this thesis. Under both Article 2(2) TBT Agreement and Article XX GATT, domestic measures will have to meet a requirement of necessity. The difference between the two provisions is that a complainant will have to prove that the measure is not necessary under the TBT Agreement, whereas the defendant will have to prove that the measure is necessary if relying on an exception of Article XX GATT.⁷⁵⁹

Of the exceptions provided for in Article XX(a) to (j), the most relevant to climate change mitigation are those in paragraphs (b) and (g). Article XX(b) exempts measures "necessary to protect human, animal or plant life or health". Climate change can constitute a threat to health.⁷⁶⁰ Moreover, Article XX(g) provides an exemption for measures "relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption". In *US-Shrimp*, the Appellate Body interpreted "exhaustible natural resources" broadly, arguing that it had to "read by a treaty interpreter in the light of contemporary concerns of the community of nations about the protection and conservation of the environment".⁷⁶¹ The WTO Panel and Appellate Body have already accepted clean air as an exhaustible natural resource under Article XX(g).⁷⁶² GHG emission reductions, particularly of HFCs and CFCs that do not occur naturally, can be

⁷⁵⁷ *US-Korea FTA*, art. 23.1(1); *EU-Korea FTA*, art. 2.15.

⁷⁵⁸ Vranes, *supra* note 705, 303-305.

⁷⁵⁹ Marceau and Trachtman, *supra* note 677, 831.

⁷⁶⁰ Vanden Brink, "Competitiveness Border Adjustments in U.S. Climate Change Proposals Violate GATT: Suggestions to Utilize GATT's Environmental Exceptions", 21 *Colorado Journal of International Environmental Law and Policy* 85 (2010), 107.

⁷⁶¹ *US-Shrimp (AB)*, paras 128-131.

⁷⁶² *US-Reformulated Gasoline (Panel)*, para. 6.37. This conclusion was not appealed by the Parties and was followed in *US-Reformulated Gasoline (AB)*, p. 14.

considered as protecting clean air. Moreover, the atmosphere itself is arguably an exhaustible natural resource because its capacity to regulate the Earth's surface temperature is impaired by increased GHG concentrations.⁷⁶³

Paragraphs (b) and (g) require a different link between the domestic measure that violates a GATT obligation and its goal, with (b) requiring necessity and (g) only requiring a relation between both. To be necessary under paragraph (b), a domestic measure does not have to be indispensable.⁷⁶⁴ In a range of decisions, the Appellate Body has held that a determination of necessity for measures that are not indispensable involves⁷⁶⁵

a process of weighing and balancing a series of factors which prominently include the contribution [to the realization of the end pursued], the importance of the common interests or values protected by that law or regulation, and the accompanying impact of the law or regulation on imports or exports.

Subjecting measures that are not indispensable to a weighing and balancing test is difficult to reconcile with the Appellate Body's statements⁷⁶⁶ that it is up to the Member enacting a measure to choose its desired level of protection for non-trade objectives.⁷⁶⁷ Despite assertions by the Appellate Body that "necessity" is an objective standard,⁷⁶⁸ the weighing and balancing test involves inherently subjective assessments of the importance of the values pursued, the seriousness of the impact on trade and the strength of the contribution of the domestic measure to the non-trade goal.⁷⁶⁹ It may be an objective standard in the sense that is not a self-judging standard depending upon the regulating Member's subjective assessment of necessity. However,

⁷⁶³ Pauwelyn, *U.S. Federal Climate Policy and Competitiveness Concerns: The Limits and Options of International Trade Law* (April 2007), at <<http://nicholasinstitute.duke.edu/climate/policydesign/u.s.-federal-climate-policy-and-competitiveness-concerns-the-limits-and-options-of-international-trade-law>>, 35; Hawkins, "Skirting Protectionism: A GHG-Based Trade Restriction under the WTO", 20 *Georgetown International Environmental Law Review* 427 (2008), 445-446; Ponnambalam, "U.S. Climate Change Legislation and the Use of GATT Article XX to Justify a 'Competitiveness Provision' in the Wake of Brazil-Tyres", 40 *Georgetown Journal of International Law* 261 (2008), 272; Voigt, "WTO Law and International Emissions Trading: Is There Potential for Conflict?", 1 *Carbon and Climate Law Review* 54 (2008), 59-61; Vanden Brink, *supra* note 760, 109; Hertel, "Climate-Change-Related Trade Measures and Article XX: Defining Discrimination in Light of the Principle of Common but Differentiated Responsibilities", 45 *Journal of World Trade* 653 (2011), 670.

⁷⁶⁴ *Korea-Beef (AB)*, para. 161; *Brazil-Retreaded Tyres (AB)*, para. 141.

⁷⁶⁵ The test was first advanced in the context of Article XX(d) in *Korea-Beef (AB)*, paras 163-164 and was later applied in the context of Article XX(b) in *EC-Asbestos (AB)*, para. 172 and in *Brazil-Retreaded Tyres (AB)*, paras 142-183.

⁷⁶⁶ *Korea-Beef (AB)*, para. 180; *EC-Asbestos (AB)*, para. 168; *Brazil-Retreaded Tyres (AB)*, para. 140.

⁷⁶⁷ Marceau and Trachtman, *supra* note 677, 852; Regan, "The Meaning of 'Necessary' in GATT Article XX and GATS Article XIV: The Myth of Cost-Benefit Balancing", 6 *World Trade Review* 347 (2007), 348.

⁷⁶⁸ *US-Gambling (AB)*, para 304.

⁷⁶⁹ Doyle, "Gimme Shelter: The 'Necessary' Element of GATT Article XX in the Context of the *China-Audiovisual Products Case*", 29 *Boston University International Law Journal* 143 (2011), 166.

claiming that necessity is an objective standard creates the impression that necessity can be established using objective means. This is clearly not the case when a judgment is required on the relative merit of trade and the competing social values to determine which has priority over the other.

The weighing and balancing test allows the Panel and the Appellate Body to decide whether the contested measure is indispensable or, if not, whether the domestic regulation contributes to its goal, whether the interests pursued by the measure are important, and whether these factors outweigh the restrictive impact on trade.⁷⁷⁰ It also allows the Panel or the Appellate Body to decide whether the values protected by the trade restriction are important enough to restrict trade to the extent that they do.⁷⁷¹ In the end, it is the WTO Panel or Appellate Body rather than the regulating Member that decides on the appropriate level of protection. Given the Appellate Body's emphasis on Members' rights to trade,⁷⁷² the current interpretation of necessity creates obstacles to the legality of defensive mechanisms used in response to negative transboundary impacts in situations of increasing interdependence.

The requirement of paragraph (g) that the domestic measure "relate to" the environmental goal is not as strict as the necessity requirement of paragraph (b). It is thus more likely that WTO Members will choose to justify climate change measures that violate their trade commitments based on paragraph (g) rather than on paragraph (b).⁷⁷³ Moreover, paragraph (g)'s interpretation has become more lenient in the WTO era,⁷⁷⁴ providing more scope for defensive mechanisms to protect a state against the negative impact of climate change triggered by the actions or omissions of its trading partners.⁷⁷⁵ The traditional interpretation of "relating to" in Article XX(g) was that it meant "primarily aimed at".⁷⁷⁶ In *US-Reformulated Gasoline*, the Appellate Body noted that while this interpretation was accepted by all participants in the case, "the phrase 'primarily aimed at' is not itself treaty language and was not designed as a simple

⁷⁷⁰ Marceau and Trachtman, *supra* note 677, 827, 852-853.

⁷⁷¹ Du, "Autonomy in Setting Appropriate Level of Protection under the WTO Law: Rhetoric or Reality?", 13 *Journal of International Economic Law* 1077 (2010), 1097.

⁷⁷² *US-Shrimp (AB)*, para. 156.

⁷⁷³ Hertel, *supra* note 763, 669.

⁷⁷⁴ Pauwelyn, *supra* note 763, 34.

⁷⁷⁵ Ponnambalam, *supra* note 763, 271.

⁷⁷⁶ *Canada-Herring and Salmon*, para. 4.6.

litmus test for inclusion or exclusion from Article XX(g).⁷⁷⁷ In *US-Shrimp*, the Appellate Body accepted a wider interpretation of “relating to”. It concluded that the US import prohibition on shrimp and shrimp products caught in nets without turtle excluding devices was related to its environmental goal since its design was “not disproportionately wide in its scope and reach in relation to the policy objective of protection and conservation of sea turtle species.”⁷⁷⁸

Once the domestic measure is identified as promoting a policy objective listed in Article XX and found to comply with the requirements of the applicable paragraph, the analysis moves to examining the measure’s compatibility with Article XX’s chapeau.⁷⁷⁹ The chapeau requires that the domestic measure is “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.” As its wording indicates, the chapeau focuses on the application, rather than on the design of the measure.⁷⁸⁰ The jurisprudence regarding the chapeau is highly relevant to determine how international law allocates states’ rights to exercise their sovereignty when collisions are likely. As the Appellate Body remarked in *US-Shrimp*,⁷⁸¹

a balance must be struck between the right of a Member to invoke an exception under Article XX and the duty of that same Member to respect the treaty rights of the other Members. [...] The task of interpreting and applying the chapeau is, hence, essentially the delicate one of locating and marking out a line of equilibrium between the right of a Member to invoke an exception under Article XX and the rights of the other Members under varying substantive provisions (e.g., Article XI) of the GATT 1994, so that neither of the competing rights will cancel out the other and thereby distort and nullify or impair the balance of rights and obligations constructed by the Members themselves in that Agreement. The location of the line of equilibrium, as expressed in the chapeau, is not fixed and unchanging; the line moves as the kind and the shape of the measures at stake vary and as the facts making up specific cases differ.

In the interpretation of the chapeau, the Appellate Body has allowed more flexibility for regulating states compared to the GATT Panel’s unadopted decision in *US-Tuna I*. In 1991, the latter held that Article XX cannot be invoked to justify measures that reach beyond a state’s territorial jurisdiction.⁷⁸² In 1998, the WTO Panel in *US-Shrimp* held that Article XX’s chapeau cannot be interpreted so as to allow a Member “to adopt measures conditioning access to its market for a given product upon the adoption by the exporting Members of certain policies,

⁷⁷⁷ *US-Reformulated Gasoline (AB)*, p. 18-19.

⁷⁷⁸ *US-Shrimp (AB)*, para. 141.

⁷⁷⁹ This two-tiered approach was set out in *US-Reformulated Gasoline (AB)*, p. 22.

⁷⁸⁰ *US-Reformulated Gasoline (AB)*, p. 22; *US-Shrimp (AB)*, para. 160.

⁷⁸¹ *US-Shrimp (AB)*, paras 156-159.

⁷⁸² *US-Tuna I*, paras 5.25-5.32.

including conservation policies” as this would threaten “the security and predictability of trade relations”.⁷⁸³ The Panel’s interpretation of the regulation of market access was overruled by the Appellate Body, which stated that:⁷⁸⁴

conditioning access to a Member’s domestic market on whether exporting Members comply with, or adopt, a policy or policies unilaterally prescribed by the importing Member may, to some degree, be a common aspect of measures falling within the scope of one or another of the exceptions (a) to (j) of Article XX. [...] It is not necessary to assume that requiring from exporting countries compliance with, or adoption of, certain policies (although covered in principle by one or another of the exceptions) prescribed by the importing country, renders a measure *a priori* incapable of justification under Article XX. Such an interpretation renders most, if not all, of the specific exceptions of Article XX inutile, a result abhorrent to the principles of interpretation we are bound to apply.

As it found that the turtles’ migration through US territorial waters created a sufficient nexus between the US territory and the turtles, the Appellate Body declined to assess whether Article XX(g) contains an “implied jurisdictional limitation”.⁷⁸⁵ This does not cause particular problems for applying the exception to a domestic measure on climate change given that a sufficiently clear nexus exists between a state and the atmosphere.⁷⁸⁶

Another step towards more flexibility for regulating states under the chapeau, related to the discussion on extraterritoriality, is the acceptance that PPM-based distinctions can be justified under Article XX. In *US–Shrimp*, the follow-up Appellate Body’s decision to exempt the revised US legislation, which included the requirement that shrimp are caught using nets equipped with “turtle excluding devices”,⁷⁸⁷ indicates that even non-product related PPMs are a permissible basis for differential taxation or regulation. From the perspective of protecting a state’s domestic affairs against the negative impact of climate change, this is a welcome recognition in the WTO’s jurisprudence.

Despite the Appellate Body’s increased flexibility in the application of the paragraphs and the chapeau to environmental measures, there are still important restrictions on states’ regulatory autonomy that limit their ability to protect their domestic affairs against external interference. It has been argued in the literature that WTO jurisprudence has introduced a necessity test, even

⁷⁸³ *US–Shrimp (Panel)*, para. 7.45.

⁷⁸⁴ *US–Shrimp (AB)*, para. 121.

⁷⁸⁵ *US–Shrimp (AB)*, para. 133.

⁷⁸⁶ Van den Bossche et al., *supra* note 707, 96.

⁷⁸⁷ *US–Shrimp 21.5 (AB)*, para. 154.

though the text of the chapeau does not mention necessity. In *US–Reformulated Gasoline*,⁷⁸⁸ the Appellate Body held that a determination of whether the discrimination was arbitrary or unjustifiable involved a review of the availability of alternative measures that were less restrictive of trade.⁷⁸⁹

The impact of introducing a necessity test in the chapeau is compounded by the fact that the regulating state bears the burden of proving that the contested measure benefits from an exception under Article XX.⁷⁹⁰ This includes showing that the domestic measure falls within one of Article XX's paragraphs and that the measure is necessary in accordance with the chapeau. To this end, a WTO Panel will in all likelihood require scientific evidence.⁷⁹¹ In the context of climate change, there is considerable uncertainty about the precise mechanisms of climate change, the effectiveness of specific types of measures to reduce a state's emissions, and the impact of these measures on trade.⁷⁹² As argued by Sykes, in situations of scientific uncertainty, requirements to produce scientific evidence can prevent benign regulatory efforts intended to manage the risks to which a state finds itself exposed.⁷⁹³

Finally, the Appellate Body has indicated that, rather than undertaking unilateral measures, states should attempt to reach an international solution through “serious, across-the-board negotiations with the objective of concluding bilateral or multilateral agreements”.⁷⁹⁴ All trading partners must be offered similar opportunities to negotiate.⁷⁹⁵ The Appellate Body later clarified that a bilateral or multilateral solution is not required to benefit from an Article XX exemption as

⁷⁸⁸ *US–Reformulated Gasoline (AB)*, p. 25-29.

⁷⁸⁹ Hudec, *supra* note 722, 638; Marceau and Trachtman, *supra* note 677, 830; Neumann and Türk, “Necessity Revisited: Proportionality in World Trade Organization Law after *Korea-Beef*, *EC-Asbestos* and *EC-Sardines*”, 37 *Journal of World Trade* 199 (2003), 228, 230; Green, “Climate Change, Regulatory Policy and the WTO: How Constraining Are Trade Rules?”, 8 *Journal of International Economic Law* 143 (2005), 178; Vranes, *supra* note 705, 278-282; Reid, “Regulatory Autonomy in the EU and WTO: Defining and Defending Its Limits”, 44 *Journal of World Trade* 877 (2010), 894. See *contra* Appleton, “GATT Article XX’s Chapeau: A Disguised ‘Necessary’ Test?: The WTO Appellate Body’s Ruling in *United States–Standards for Reformulated and Conventional Gasoline*”, 6 *Review of European Community and International Environmental Law* 131 (1997), 134-135.

⁷⁹⁰ *US–Reformulated Gasoline (AB)*, p. 22-23. For a discussion of the rules on the burden of proof, see Foster, *Science and the Precautionary Principle in International Courts and Tribunals* (2011), Part III.

⁷⁹¹ Green, *supra* note 789, 171-173; Green and Epps, “The WTO, Science, and the Environment: Moving Towards Consistency”, 10 *Journal of International Economic Law* 285 (2007), 294.

⁷⁹² Green, *supra* note 789, 185-186.

⁷⁹³ Sykes, “Domestic Regulation, Sovereignty, and Scientific Evidence Requirements: A Pessimistic View”, 3 *Chicago Journal of International Law* 353 (2002), 354-355.

⁷⁹⁴ *US–Shrimp (AB)*, para. 166. See also *US–Reformulated Gasoline (AB)*, p. 27.

⁷⁹⁵ *US–Shrimp (AB)*, para. 172; *US–Shrimp 21.5 (AB)*, para. 122.

long as serious negotiations have been attempted in good faith.⁷⁹⁶ In addition, when acting unilaterally, states cannot require trading partners to adopt a domestic regulatory regime that is “essentially the same” as the importing state’s regime.⁷⁹⁷ Instead, the importing state must take into account the different conditions prevailing in exporting states and must analyse whether the regulatory program of the exporting state is appropriate to those conditions.⁷⁹⁸

In the context of climate change, an important factor when applying this procedural requirement is the existence of the UNFCCC and the Kyoto Protocol.⁷⁹⁹ These agreements arguably represent a concerted effort to reach a multilateral co-operative solution on climate change. Thus, the procedural requirement of Article XX’s chapeau would be met, opening up the exception to justify unilateral trade restrictions.⁸⁰⁰ However, it is not simply the case that good faith negotiations were attempted; the negotiations have led to actual agreements, even though these have not yet been very successful in mitigating climate change. As international agreements go, the Kyoto Protocol is unique in that it only obliges a minority of its Parties to reduce GHG emissions. Thus, when a state has accepted that the Kyoto Protocol does not oblige another state to reduce its emissions, a measure discriminating against the latter’s exports unless its GHG emissions are comparable to those in the importing state could be considered as arbitrary or unjustifiable discrimination. In contrast, such a measure could arguably be introduced against states that are bound by the Kyoto Protocol to restrict their emissions. Nevertheless, given that compliance is only required by the end of 2012, it may be too early to introduce discriminatory measures to address non-compliance.

In sum, domestic climate change measures containing trade restrictions can be considered to fall within the scope of Article XX(b) and (g). However, the application of Article XX’s chapeau leaves a considerable degree of discretion to a WTO Panel and the Appellate Body to decide on the legality of a Member’s measures adopted to protect its domestic affairs against the negative impact of climate change.⁸⁰¹ As argued in Chapter 6, there is no similar oversight of the domestic environmental measures that have an impact on other states through trade. The importing state

⁷⁹⁶ *US–Shrimp 21.5 (AB)*, paras 123-124.

⁷⁹⁷ *US–Shrimp (AB)*, paras 163-164.

⁷⁹⁸ *US–Shrimp (AB)*, para. 165.

⁷⁹⁹ Hertel, *supra* note 763, 676-678.

⁸⁰⁰ Voigt, *supra* note 763, 62-63.

⁸⁰¹ Buck and Verheyen, *International Trade Law and Climate Change—A Positive Way Forward* (July 2001), at <<http://library.fes.de/pdf-files/stabsabteilung/01052.pdf>>; Green, *supra* note 789; Charnovitz, *supra* note 717, 702.

will have to justify its regulation, whereas the exporting state does not have to justify its lack of regulation.

E. The Security Exception

A second exception that could be of relevance is the security exception in Article XXI GATT. Two openings are potentially available for climate change to be considered under the security exception, although it is unlikely that Members will use the security exception to justify their trade restrictive climate change measures. Tellingly, a recent book on the linkages between trade and climate change⁸⁰² does not even address the security exception.

A first opening is Article XXI(c) which provides an exception for actions by a WTO member “in pursuance of its obligations under the United Nations Charter for the maintenance of international peace and security”. For this exception to be available, the UN Security Council would first have to declare climate change a threat to international peace and security.⁸⁰³ The UN Security Council itself has only discussed the link between climate change and international peace and security once, in April 2007, but did not take any further action.⁸⁰⁴ The Chinese representative held that “the discussions at this meeting should be regarded as an exception giving rise to neither outcome documents nor follow-up actions”.⁸⁰⁵ Given the US and China’s opposition to climate change regulation and their status as permanent members on the UN Security Council, it is politically unlikely that the UN Security Council will declare climate change a threat to international peace and security in the near future.⁸⁰⁶ As long as such action is missing, Article XXI(c) is unavailable to states wishing to impose trade restrictions to protect their domestic affairs against the negative impact of climate change.

⁸⁰² Epps and Green, *supra* note 683.

⁸⁰³ Penny, “Greening the Security Council: Climate Change as an Emerging “Threat to International Peace and Security”, 7 *International Environmental Agreements: Politics, Law and Economics* 35 (2007), 58-59; German Advisory Council on Global Change (WBGU), *Climate Change as a Security Risk* (2008), 195-196; Meeks and Shank, “U.N. Security Council Must Act Pre-Emptively—on Climate Change”, *The Christian Science Monitor* 24 March 2008; Scott, “Climate Change and Peak Oil as Threats to International Peace and Security: Is It Time for the Security Council to Legislate?”, 9 *Melbourne Journal of International Law* 495 (2008), 505-506.

⁸⁰⁴ UN Security Council, *Letter dated 5 April 2007 from the Permanent Representative of the United Kingdom of Great Britain and Northern Ireland to the United Nations addressed to the President of the Security Council (S/2007/186)*, UN Doc S/PV.5663 (2007).

⁸⁰⁵ *Ibid.*, p. 13.

⁸⁰⁶ Penny, *supra* note 803, 63; German Advisory Council on Global Change (WBGU), *supra* note 803, 196; Scott, *supra* note 803, 508-510.

Both FTAs studied also contain an exception for the fulfilment of international obligations for the maintenance of international peace and security. However, the exceptions in these agreements are not limited to international obligations imposed by the UN,⁸⁰⁷ but would extend to obligations under regional security arrangements.

A second opening is the protection of essential security interests. Article XXI(b)(iii) provides an exception for measures

to prevent any contracting party from taking any action which it considers necessary for the protection of its essential security interests [...] taken in time of war or other emergency in international relations.

The phrase “which it considers necessary” suggests that the exception is self-judging, as argued by the US before a GATT Panel examining the legality of its 1985 trade embargo against Nicaragua. The GATT Panel did not have the opportunity to analyse the US claim, because its terms of reference explicitly precluded it from assessing the validity of invoking the exception of Article XXI(b)(iii).⁸⁰⁸ The Panel nevertheless raised the general question how it could be ensured that the exception “is not invoked excessively or for purposes other than those set out in this provision” if its interpretation is left to the state relying on it.⁸⁰⁹ This question can be seen as opposition to the claim that the exception is non-justiciable.⁸¹⁰ In the literature, the potential of abuse of a non-justiciable exception is pointed out,⁸¹¹ although this has not materialized so far in practice as the exception is very rarely invoked.⁸¹²

The EU–Korea FTA contains an identically worded exception for the protection of essential security interests. In contrast, the US–Korea FTA’s security exception is even broader. There is no reference to the existence of an “emergency in international relations”, only to “essential security interests”.⁸¹³ In line with the US position in GATT, a footnote to the FTA clarifies that if the exception is invoked in a dispute, “the tribunal or panel hearing the matter shall find that the

⁸⁰⁷ *US–Korea FTA*, art. 23.2(b); *EU–Korea FTA*, art. 15.9 (c).

⁸⁰⁸ *US–Nicaraguan Trade*, paras 1.4 and 5.3.

⁸⁰⁹ *Ibid.*, para. 5.17.

⁸¹⁰ Mavroidis, *supra* note 677, 330.

⁸¹¹ Jackson, *The World Trading System: Law and Policy of International Economic Relations*, 2nd ed. (1997), 230; Kennedy, “GATT 1994”, in Macrory et al. (Eds.), *The World Trade Organization: Legal, Economic and Political Analysis* (2005), 168.

⁸¹² Alexandroff and Sharma, “The National Security Provision–GATT Article XXI”, in Macrory et al. (Eds.), *The World Trade Organization: Legal, Economic and Political Analysis* (2005), 1572; Bhala, *Modern GATT Law: A Treatise on the General Agreement on Tariffs and Trade* (2005), 560.

⁸¹³ *US–Korea FTA*, art. 23.2.

exception applies”.⁸¹⁴ The essential security exception in the US–Korea FTA is thus a self-judging exception, giving parties a wide freedom to justify measures based on their essential security interests.

Although it can be debated whether Article XXI(b)(iii) and its equivalent provisions in the FTAs can extend to non-military threats,⁸¹⁵ it is not inconceivable that climate change could qualify as an “emergency in international relations”, under GATT or the EU–Korea FTA, or a threat to “essential security interests” under the US–Korea FTA. There is growing concern that insufficient climate change mitigation could lead to serious security problems around 2025–2040.⁸¹⁶ Some evidence is already emerging. For example, the crisis in Darfur has been linked to climate change.⁸¹⁷ The melting of the Arctic ice cap has revived debates about unresolved continental shelf claims⁸¹⁸ and the idea of open seas on the North Pole has raised concerns in the US about its and Canada’s exposure to Russia.⁸¹⁹

II. INSUFFICIENT GUARANTEES AGAINST “UNFAIR TRADE”

Section I focused on the legality of defensive mechanisms under provisions of the GATT and the FTAs studied that aim to guarantee market access to imported goods. These are not the only category of rules in the WTO framework. The Agreement on Subsidies and Countervailing Measures (“SCM Agreement”) aims to ensure the fairness of international trade by restricting WTO Members’ ability to give their exporters a competitive edge through subsidies.⁸²⁰ Members whose domestic industries suffer “material injury” because of imports that are subsidised by their home state may adopt countervailing duties.

An argument has developed in trade literature that a failure to regulate GHG emissions equates to a subsidy to domestic producers, since these producers are not required to internalize the

⁸¹⁴ *Ibid.*, art. 23.2, footnote 2.

⁸¹⁵ Hahn, “Vital Interests and the Law of GATT: An Analysis of GATT’s Security Exception”, 12 *Michigan Journal of International Law* (1990-1991), 580-581, 587-589; Pauwelyn, “How to Win a World Trade Organization Dispute Based on Non-World Trade Organization Law? Questions of Jurisdiction and Merits”, 37 *Journal of World Trade* 997 (2003), 997; Bhala, *supra* note 812, 560-561.

⁸¹⁶ CNA Corporation, *National Security and the Threat of Climate Change* (2007), 44; German Advisory Council on Global Change (WBGU), *supra* note 803, 6.

⁸¹⁷ UN Environment Programme, *Synthesis Report. Sudan. Post-Conflict Environmental Assessment* (2007), 7.

⁸¹⁸ BBC News, *Russia plants flag under N Pole* (2 August 2007), at <<http://news.bbc.co.uk/2/hi/europe/6927395.stm>>.

⁸¹⁹ CNA Corporation, *supra* note 816, 33, 38.

⁸²⁰ Van den Bossche, *supra* note 491, 37.

environmental cost of their activities whereas their competitors in importing jurisdictions are required to do so.⁸²¹ For a subsidy to arise, the producing Member must make a *financial contribution* or grant any form of income or price support in such a way that confers a *benefit*.⁸²² The subsidy will only be prohibited by or actionable under the SCM Agreement if it is *specific*.⁸²³ The argument that a lack of regulation qualifies as a subsidy is, however, tenuous since key concepts in the SCM Agreement need to be stretched to accommodate such a claim.

A crucial question is whether lack of regulation constitutes a financial contribution by a Member to its domestic producers.⁸²⁴ Opinion on this is divided. Bhagwati and Mavroidis argue that the failure to ratify the Kyoto Protocol does not amount to a financial subsidy.⁸²⁵ Green argues that a lack of regulation could be seen as an indirect subsidy, although he admits that this conclusion could open up Members' environmental laws to WTO scrutiny.⁸²⁶

The argument that a Member makes a financial contribution to its producers by not obliging them to reduce GHG emissions is unlikely to succeed. Article 1.1(iii) SCM Agreement stipulates that there is a financial contribution where "government revenue that is otherwise due is foregone or not collected". In the *US-FSC* case, the Appellate Body held that "[a] Member, in principle, has the sovereign authority to tax any particular categories of revenue it wishes. It is also free not to tax any particular categories of revenues."⁸²⁷ Hence, national tax legislation of the state allegedly giving a subsidy sets the benchmark against which to judge whether the government is foregoing revenue that would otherwise be due. A Member's decision not to impose a carbon tax is therefore not enough to find a subsidy under the SCM Agreement. The situation is different when a Member decides to impose a carbon tax, but exempts specific

⁸²¹ Wolf, "Countervailing a Hidden Subsidy: The US Failure to Require Greenhouse Gas Emission Reductions", 19 *Georgetown International Environmental Law Review* 83 (2006), 91.

⁸²² *SCM Agreement*, art. 1-2.

⁸²³ *Ibid.*, art. 2(3). Under Article 3, prohibited subsidies are those that are contingent upon export performance or the use of domestic goods over imported ones. Other subsidies are not necessarily prohibited, but are "actionable" under Part III when they adversely affect other WTO Members by injuring its domestic industry, nullifying or impairing its benefits under GATT or by causing serious prejudice to its interests. Part IV of the SCM Agreement also contains a list of "non-actionable" subsidies. In accordance with Article 31 SCM Agreement, this part was only valid for five years following the entry into force of the WTO Agreement after which the Committee on Subsidies and Countervailing Measures had to decide whether to extend its application. The Committee however did not reach an agreement on the extension, see Lowenfeld, *supra* note 169, 245.

⁸²⁴ Wolf, *supra* note 821, 101.

⁸²⁵ Bhagwati and Mavroidis, "Is Action against US Exports for Failure to Sign Kyoto Protocol WTO-Legal?", 6 *World Trade Review* 299 (2007), 302.

⁸²⁶ Green, "Trade Rules and Climate Change Subsidies", 5 *World Trade Review* 377 (2006), 381, 395.

⁸²⁷ *US-FSC (AB)*, para. 90.

industries due to their exposure to international competition. This exemption qualifies as a “financial contribution” because the Member foregoes revenue that was otherwise due. This thesis is not concerned with this situation, which does not involve the question of the allocation of jurisdiction between Members and the balance between Members’ positive and negative freedom.

This interpretation of “financial contribution” in Article 1.1 SCM Agreement stops Members from imposing countervailing measures to protect their domestic affairs against the negative impact of another Member’s decision not to oblige its producers to internalize the costs of their GHG emissions. But would such countervailing measures be desirable? It needs to be borne in mind that although this thesis argues that protection of Members’ negative freedom should be prioritized over protection of Members’ positive freedom, protection of positive freedom remains important.

Opening up the possibility that importing Members may impose countervailing duties against the exporting Member’s more lenient regulation would allow importing Members to influence the regulatory framework of exporting Members, even if the regulation is part of a broader regulatory framework that is overall equivalent to the regulatory framework of the importing state. This goes directly against the idea of decisional sovereignty and the interstitial norm of locality, because it erodes the exporting Member’s authority to regulate for the conditions within its own territory. Some accommodation could be possible when the lack of regulation relates to a global problem such as climate change. However, this would require an amendment of the SCM Agreement. It is questionable whether Members are willing to accept such a restriction on their sovereignty.

In addition, there are considerable practicable difficulties with the calculation of the “benefit” that a Member is allegedly granting to its exporters through the lower regulatory standard. What if one Member imposes an emissions tax and the other imposes stringent efficiency standards for production processes? Are the costs of these two different responses to climate change comparable? Moreover, the costs of the overall framework of regulation might not be different.

The intuitive attractiveness of the argument in favour of countervailing duties in response to regulatory differences results from the push towards market integration in the absence of international regulation for trade-related problems. However, this problem is not one that can or should be solved through an expansive interpretation of the SCM Agreement. Rather, as the

next Section argues, it should be solved through a reinterpretation of the various provisions discussed in Section I.

III. MODIFICATIONS TO LIMITS ON THE LEGALITY OF DEFENSIVE MECHANISMS

Sections I and II discussed how the current interpretation of states' obligations under trade liberalization agreements restricts the legality of defensive mechanisms used by states affected by other states' actions or omissions in relation to climate change mitigation. Trade liberalization agreements include exceptions that allow some scope for employing trade restrictions in defence of domestic affairs. To benefit from an exception, regulating WTO Members will have to establish that no less trade restrictive alternatives are available. In combination with the lack of direct limits discussed in Chapter 6, the uncertain legality of defensive mechanisms in the context of climate change leads to an imbalance between a Member's right to trade and other Members' right to be free from the adverse impact of its trading partners' actions or omissions.

As discussed above,⁸²⁸ this thesis suggests addressing the imbalance between states' positive and negative freedom through a reinterpretation of the existing limits on the legality of defensive mechanisms to ensure states' decisional sovereignty in increasing interdependence. This reinterpretation should begin with a fresh look at the GATT obligations, rather than resorting to the exceptions as the means of justifying the legality of defensive mechanisms. It is argued here that the basic provisions need to be taken for what they are: obligations regarding specific acts of states. For example, Article III:2 obliges states not to tax imported products in excess of like domestic products; Article XI prohibits quantitative restrictions. WTO jurisprudence has conceptualized these provisions as measures expressing market access rights of exporting states.⁸²⁹ In *US-Shrimp*, the Appellate Body decided that the application of Article XX's chapeau involved⁸³⁰

making out a line of equilibrium between the right of a Member to invoke an exception under Article XX and the *rights of other Members under varying substantive provisions (e.g., Article XI) of the GATT 1994.*

The difference between interpreting the provisions as rights of exporting states or prohibitions on importing states may seem slight. After all, the prohibitions on importing Members exist to

⁸²⁸ See Chapter 4, Section IV.

⁸²⁹ Howse and Regan, *supra* note 706, 257.

⁸³⁰ *US-Shrimp (AB)*, paras 156-159 (emphasis added).

ensure exporting opportunities for other Members. However, the two interpretations are not interchangeable: conceptualizing the limits on importing Members as rights of exporting Members has important consequences. By treating the GATT provisions as conferring rights on exporting Members as opposed to disciplines regarding domestic regulation by importing Members, the Appellate Body has laid the foundation for a broad interpretation of these provisions to ensure optimal protection of Members' freedom to export. As a result, Members' freedom to regulate in trade-related areas is limited, unless one of the exceptions provides a justification.

Instead, this thesis argues for a reinterpretation of existing GATT provisions that is more loyal to the text and its purposes. The following Sections discuss each of the relevant provisions and some of the potential reinterpretations.

A. *Limiting Article XI GATT*

Section I.C discussed how Article XI is often interpreted to prohibit any non-fiscal measure applied at the border that hampers imports. This expansive interpretation, it was argued, complicates its relationship with Article III.

To ensure WTO Members' decisional sovereignty, a clear distinction between Articles III and XI is required. In line with the idea of locality, it should be up to states to ban all goods, regardless of their origin, which they consider being of unacceptable quality because of the potential negative impact on their inhabitants. Non-discriminatory regulation that determines which kind of products can be imported, even if applied to imported products at the moment of importation, should only need to comply with Article III:4 and should not also be subject to the stricter requirements of Article XI. To this end, the Ad Note to Article III should be interpreted as bringing non-discriminatory regulation applied to imported products at the moment of importation *exclusively* within the scope of Article III, and therefore as excluding the application of Article XI to these measures.⁸³¹ Article XI needs to be limited to non-fiscal measures that deal directly and only with the importation of goods.

This interpretation is not contrary to the text of the Ad Note to Article III or of Article XI. Moreover, it is in line with the context of the provisions in the GATT. The reference to "quantitative restrictions" in the title of Article XI is of relevance here. By virtue of its title, Article XI's scope should be limited to quantitative restrictions, despite the reference to "other

⁸³¹ Vranes, *supra* note 705, 252-253.

measures” in its text. Regulations that determine the criteria goods need to meet before they can be sold within a territory de facto restrict imports that fail to meet these criteria, as there is no sense in importing products that cannot legally be sold within the territory. However, that does not change the nature of these restrictions from qualitative into quantitative. If any regulation that imposes a regulatory limit on the products allowed for sale within a territory can be converted into a quantitative restriction on the importation of goods, significant parts of Article III would become redundant. In fact, only Article III’s provisions on taxation of imported goods would be effective in practice given that Article XI allows “duties taxes and other charges”. A GATT Panel report adopted in 1984 stated that the GATT⁸³²

distinguishes between measures affecting the “importation” of products, which are regulated in Article XI:1, and those affecting “imported products”, which are dealt with in Article III. If Article XI:1 were interpreted broadly to cover also internal requirements, Article III would be partly superfluous.

However, as Section I.C discussed, later decisions by WTO Panels are not as clear about the distinction between Articles III and XI.

This thesis agrees with the GATT Panel’s argument that Article III:4 should not be made redundant by an expansive interpretation of Article XI. This argument does not necessarily imply that different provisions cannot apply to different aspects of the same measure. However, the aspects considered must be different. This is not the case when a measure is considered a qualitative restriction for the purposes of Article III, but a quantitative restriction for the purposes of Article XI. This would amount to the creation of artificial divisions between an internal restriction solely applicable to domestic products, outside the scope of GATT, and a border restriction on imported products, prohibited under Article XI. The inclusion of the Ad Note to Article III advocates against such an illogical and artificial division.

The argument that Article XI should be limited to purely quantitative restrictions does not imply that the prohibition cannot be interpreted broadly to include a wide variety of measures. A quantitative restriction on imports can clearly be protectionist and undermine other states’ ability to reap the rewards of their comparative advantage. However, domestic measures should only be prohibited if they impose a quantitative restriction, and not if they relate to the quality of the imported products. Qualitative restrictions on imported products should only be illegal under GATT if they discriminate in favour of like domestic products. The reinterpretation of the non-discrimination obligation under Article III is the topic of the next Section.

⁸³² *Canada-FIRA*, para. 5.14.

B. *Emphasizing Non-Discrimination*

A second pathway towards ensuring a liberal system of states in increasing interdependence relates to the national treatment obligation in Article III GATT. As Section I.A argues, the application of the national treatment obligation depends crucially on the interpretation of “like products” and on the criteria for identifying de facto discrimination. Currently “like products” and “de facto discrimination” are interpreted broadly, reducing Members’ ability to protect their domestic affairs against the negative impact of climate change triggered by their trading partners’ policies. Instead, the national treatment obligation should be interpreted more narrowly in order to allow regulation that aims to protect Members’ domestic affairs against problems of increasing interdependence while at the same time prohibiting protectionist behaviour. Finding a new balance between protectionism and protection is needed to help ensure decisional sovereignty in conformity with the interstitial norms. Good neighbourliness and reasonableness require that there is a balance between, on the one hand, the impact of regulatory decisions on trade and, on the other hand, the impact of trade on the ability to regulate in situations of increasing interdependence. Locality implies that the Member experiencing the negative impact should make this decision.

It is worth pointing out that the idea of locality already applies under Article III in relation to taxation. The possibility of BTAs provided for under the Ad Note to Article III theoretically allows a Member to protect the competitiveness of its domestic producers when imposing taxes that are not imposed by other Members that export to it. This reflects the “destination principle” under international tax law according to which states can tax products used or consumed within their territory.⁸³³

The principle of non-discrimination provides guidance as to when a trade restrictive regulation is protectionist and when it is a tool to protect another societal value. Regan defines a protectionist regulation as one “adopted for the purpose of improving the competitive position of some group of domestic economic actors *vis-à-vis* their foreign competitors”.⁸³⁴ Increasing interdependence requires a more nuanced approach to what constitute protectionist measures. In addition to measures that do not improve the competitive position of domestic producers, the category of non-protectionist measures should be extended to include trade restrictions applied

⁸³³ Working Party on Border Tax Adjustments, *supra* note 697, para. 4; Schoenbaum, “International Trade and Protection of the Environment: The Continuing Search for Reconciliation”, 91 *American Journal of International Law* 268 (1997), 307; Epps and Green, *supra* note 683, 127.

⁸³⁴ Regan, “What Are Trade Agreements For?—Two Conflicting Stories Told by Economists, with a Lesson for Lawyers”, 9 *Journal of International Economic Law* 951 (2006), 962.

in response to the lack of regulation in the exporting Member necessary for the provision of a global public good. Thus, measures that restrict market access to goods produced in a manner that contributes to a global problem such as climate change should not be considered protectionist. The lack of regulation in the exporting Member means that its producers are not obliged to internalize a significant part of their production costs. Instead, these costs fall onto other Members that experience the negative impact of the global problem. The insufficient internalization creates a competitive advantage for the producers in the exporting Member and a competitive disadvantage for their competitors in the importing Member that are obliged by regulation to internalize the costs of their actions. A trade restriction can compensate for this difference in cost internalization without distorting the comparative advantage that is often invoked as a justification for liberalized trade.⁸³⁵

It is important that this second group of protective, but non-protectionist, trade restrictions is limited to the regulation of global problems. Decisional sovereignty, reasonableness, good neighbourliness and locality require that trade restrictions are not used in response to regulatory decisions of exporting Members regarding their domestic affairs. As discussed,⁸³⁶ “domestic affairs” is a flexible concept that evolves along with international law. Many areas that previously were part of a state’s domestic jurisdiction may no longer be, depending on the state’s international obligations. For example, human rights protection, certain labour rights and environmental protection are increasingly covered by international agreements or customary international law. The ability for importing Members to impose trade restrictions to compensate for a competitive advantage in exporting Members will depend on the scope for domestic regulation in the exporting Member left by international law.

Unilateral trade restrictions are often approached with suspicion in international law because they are seen as extra-territorial actions.⁸³⁷ However, it would be wrong to consider the current interpretation of the national treatment obligation as protecting against extra-territorial actions. Rather, the current interpretation effectively allows exporting Members to regulate extra-

⁸³⁵ Howse and Regan, *supra* note 706, 281. For a discussion of comparative advantage, see McRae, “The Contribution of International Trade Law to the Development of International Law”, 260 *Recueil des Cours* 99 (1996), 141-144; Sykes, “Comparative Advantage and the Normative Economics of International Trade Policy”, 1 *Journal of International Economic Law* 49 (1998); Lowenfeld, *supra* note 169, 4-5.

⁸³⁶ See Chapter 3, Section I.B.

⁸³⁷ Jansen, “The Limits of Unilateralism from a European Perspective”, 11 *European Journal of International Law* 309 (2000).

territorially⁸³⁸ by claiming a trade restriction whenever an importing Member regulates, even if the regulation is non-discriminatory. This result is incompatible with the idea of locality because it allows Members to regulate when they do not feel the full impact of a global problem while restricting Members that are negatively affected in their ability to regulate.

It is fully recognized here that unilateral trade restrictions will not solve global problems such as climate change. However, that is not the aim of this argument. Rather, its aim is to increase the likelihood of co-operation between states to address global problems. The current imbalance between acting states' positive freedom and affected states' negative freedom stands in the way of co-operation. Reinterpretation of Article III addresses this imbalance by opening up possibilities for trade restrictive domestic regulation, and can thus assist in removing obstacles to co-operation.

Having made the argument that Article III should be reinterpreted, the question then becomes what the new interpretation should be. As Section I.A discussed, the prevailing interpretation of Article III holds products to be "like" despite differences in processes and production methods, unless these differences have affected the final product. Moreover, non-protectionist aims and effects of a measure cannot be taken into account for the determination of likeness. This broad interpretation of "likeness" significantly reduces Members' ability to tax and regulate products sold within their territory, unless they can rely on an exception, in which case they will face the difficult task of establishing the necessity of their measure.

The following Sections suggest alternative interpretations of the national treatment obligation that offer Members more freedom to protect their domestic affairs through trade restrictions without having to rely only on the exceptions provided by the trade liberalization agreements. These suggestions involve a narrower concept of "likeness" and a clarified test for de facto discrimination based on the origin of the goods.

(1) Rejection of the Product/Process Distinction

A first change to the interpretation of Article III would be to reject the product/process distinction in relation to transboundary problems. This would allow Members to regulate or tax in a non-discriminatory fashion whenever they bear some of the negative costs of a PPM used, even if the method does not leave any trace in the final product and even if the production does not take place within their territory.

⁸³⁸ Howse and Regan, *supra* note 706, 251.

Currently, the product/process distinction means that products cannot be considered “unlike”, and as a result cannot be treated differently, based on how they are produced unless the process affects the final product. In essence, the product/process distinction allocates territorial jurisdiction between importing and exporting WTO Members.⁸³⁹ It does so in a way that is incompatible with the idea of locality when global problems are involved. A traditional objection to the product/process distinction was that it would allow for the extra-territorial exercise of jurisdiction by importing Members, impinging upon the sovereignty of exporting Members. However, as convincingly argued by Howse and Regan, accepting the product/process distinction has the opposite effect: by allowing exporting Members to not only regulate how products are produced within their territory, but also to determine which products other Members should accept to be marketed within their territory, the sovereignty of importing Members is restricted.⁸⁴⁰

If a PPM creates costs outside the territory of production, the Member that decides not to regulate should not be able to tar with a protectionist brush another Member that restricts trade to protect its domestic affairs against these costs. This may mean that developing Members cannot get access to developed Members’ markets on which their production is dependent. However, as Howse and Regan point out, the same argument can be made regarding non-discriminatory regulation based on product characteristics, which is accepted under Article III.⁸⁴¹

Allowing PPMs as a basis for domestic regulation or taxation does not involve amending Article III. There is no explicit reference in its text that only permits distinctions based on product characteristics and prohibits those based on PPMs. Moreover, this change would not even require a reversal of existing case law. The *Tuna-Dolphin I* GATT Panel decision on which the product/process distinction is based was never adopted. The Appellate Body was never asked to rule explicitly on the legality of PPM based distinctions under Article III. What may be required is a willingness of Members to challenge the existing approach, rather than accepting that a

⁸³⁹ Trachtman and Nicolaidis, “From Policed Regulation to Managed Recognition: Mapping the Boundary in GATS”, in Trachtman (Ed.) *The International Economic Law Revolution and the Right to Regulate* (2006), 293.

⁸⁴⁰ Howse and Regan, *supra* note 706, 275.

⁸⁴¹ *Ibid.*, 277.

specific GATT provision was violated and only debating the exceptions under Article XX, as the US did in *US-Shrimp*.⁸⁴²

(2) *Relevance of Regulatory Intent*

A second option for the interpretation of Article III would be to take into account the goals of a regulatory action, despite the rejection of the “aims and effects” test by the WTO Panel in *Japan-Alcoholic Beverages II*, discussed in Section I.A(2). This test allows the assessment of likeness based on whether the product differentiation has a protectionist purpose or not. A related approach would be to recognize that non-economic factors, such as a different environmental impact of products or the processes through which they are produced, can make domestic and imported products unlike. In *EC-Asbestos*, the Appellate Body recognized that non-economic factors, such as health risks, could be relevant to assess the competitive relationship between products.⁸⁴³ One of the Appellate Body members even argued in a concurring statement that non-economic factors should be relevant to determine the likeness of domestic and imported products independently of their competitive relationship.⁸⁴⁴

However, this thesis does not consider the adoption of an “aims and effects” test for likeness to be a promising pathway towards addressing the current imbalances between Members’ positive and negative freedom. An important argument against the “aims and effects” test is that it conflates the analysis of likeness with the analysis of a protectionist purpose. Since likeness is part of the analysis of whether a measure is protectionist, it is circular to establish likeness based on whether the measure is protectionist. Moreover, including an evaluation of the “aims and effects” in the determination of likeness makes the exceptions under Article XX redundant because if the domestic and imported products are considered unlike Members can discriminate between them without the need for an exception.

Nevertheless, the goals of a measure could still be relevant under Article III, just not as part of the likeness analysis. Rather, they could be evaluated separately to determine whether the domestic measure is applied “so as to afford protection to domestic production”, as expressed in Article III:1, or as part of the test of “less favourable treatment”.⁸⁴⁵

⁸⁴² See text accompanying footnote 715.

⁸⁴³ *EC-Asbestos (AB)*, para. 130.

⁸⁴⁴ *EC-Asbestos (AB)*, paras 149-154.

⁸⁴⁵ Diebold, *supra* note 696, 74.

Whether a separate test of a measure's purpose exists is debated in jurisprudence on Article III. In *Japan–Alcoholic Beverages II* and *EC–Bananas III*, the Appellate Body applied a strict reading of, respectively, Article III:2, 1st sentence and Article III:4 to conclude that there was no legal basis to examine separately whether the measure protected domestic production.⁸⁴⁶ In this strict reading, the reference to “so as to afford protection to domestic production” in Article III:1 was declared to be only a general principle that informs the other paragraphs of Article III but does not require a separate assessment of a measure's protectionist purpose.⁸⁴⁷ Once again, what may be required for this argument to succeed is a willingness to defend domestic measures under Article III by invoking the absence of a protectionist purpose.

Regulatory purpose could also be relevant when assessing whether imported products are treated less favourably,⁸⁴⁸ particularly when the differential treatment is not de iure based on the origin of the products. In *EC–Biotech*, the Panel held that Argentina had not established as part of its complaint that the less favourable treatment was explicable by the foreign origin of its products rather than by the difference between the domestic and imported products for the purposes of regulation.⁸⁴⁹

(3) *De Facto Discrimination*

A final option for normative change of Article III is to clarify the standard for de facto discrimination. As discussed in Section I.A(3), the Appellate Body has yet to express its position on de facto discrimination. To protect Members' ability to regulate in response to a global problem, particularly when co-operative responses are lacking, the existence of de facto discrimination should be assessed on the basis of the asymmetric impact of the domestic measure on imported products as a group compared to domestic products as a group. It should thus not be a sufficient basis for a finding of de facto discrimination that there is an imported product that is not taxed similarly to a directly competitive and substitutable domestic product, taxed in excess of a like domestic product or regulated less favourably than a like domestic product.

⁸⁴⁶ *Japan–Alcoholic Beverages II (AB)*, p. 18; *EC–Bananas III*, para. 216.

⁸⁴⁷ *Japan–Alcoholic Beverages II (AB)*, p. 18, 24.

⁸⁴⁸ Pauwelyn, “Comment: The Unbearable Lightness of Likeness”, in Panizzon et al. (Eds.), *GATS and the Regulation of International Trade in Services* (2008), 364-367; Diebold, *supra* note 696, 83; Epps and Green, *supra* note 683, 73-74.

⁸⁴⁹ *EC–Biotech*, para. 7.2514.

C. *Balancing Members' Freedoms in the TBT Agreement*

Further obstacles to the legality of defensive mechanisms that restrict the ability of international law to function as a liberal system of states arise from the TBT Agreement. As in the case of Article III GATT, clarifying the definition of “like products” is a first option to help ensure a Member’s ability to regulate in response to transboundary problems when co-operative responses are lacking or ineffective. The current interpretation that non-product related PPMs are not covered by the TBT Agreement actually protects Members’ ability to regulate, because technical regulations or standards based on these PPMs will not be subject to the stricter “post-discriminatory” provisions of the TBT Agreement. Yet, the TBT Agreement is stricter for technical regulations and standards based on product characteristics or product-related PPMs, which are not allowed to create unnecessary obstacles to international trade.⁸⁵⁰ Article 2.2 contains an indicative list of “legitimate” objectives that trade restrictive measures can pursue. This list includes protection of the environment. This open list may seem positive from the perspective of the regulating Member. However, in case of a dispute the legitimacy is ultimately not assessed by the regulating Member, but in discussions at the TBT Committee established in accordance with Article 13 TBT Agreement or during consultations and dispute settlements under the WTO Dispute Settlement Understanding.⁸⁵¹ Moreover, the necessity of a technical regulation that is found to pursue a legitimate objective can be challenged. Given that the interpretation of “necessity” is not only important in the context of the TBT Agreement, but also in the context of Article XX GATT, a detailed argument on the application of the “necessity” test is developed in the next Section.

A second option for reinterpretation of the obligations under the TBT Agreement would be to include an assessment of the regulatory purpose of domestic measure in the standard of “less favourable treatment” of Article 2.1, in line with the WTO Panel’s assessment in *EC-Biotech* under Article III GATT.⁸⁵²

D. *The Exceptions in Articles XX and XXI GATT*

Reinterpretation of the limits on the legality of defensive mechanisms should focus on WTO Members’ obligations, discussed in Sections A to C. This would reduce the need to rely on the exceptions in the trade liberalization agreements to justify domestic regulation. However, there

⁸⁵⁰ *TBT Agreement*, Article 2.2.

⁸⁵¹ *Ibid.*, Article 14.

⁸⁵² See text accompanying footnotes 848-849.

will still be situations where the exceptions remain relevant, for example when a state's regulation is de iure or de facto discriminatory. A reinterpretation of the exceptions can further ensure WTO Members' regulatory autonomy in line with the requirements of a liberal system.

Sections I.D and I.E examined whether the general exceptions in Article XX and the security exception in Article XXI temper the drive towards market integration. Of these grounds for exception, not much can be changed through reinterpretation to Article XXI. This Article already provides a way of dealing with climate change through the UN Security Council or by invoking "essential security interests". However, the availability of this exception is limited by political constraints. It is unlikely that UN Security Council will declare climate change as a threat to international peace and security. Moreover, states rarely invoke their essential security interests as this exception has the potential to undermine the trading system significantly.

Of more importance are the general exceptions in Article XX. This Article leaves WTO Panels and the Appellate Body a wide scope of discretion to decide on the legality of a Member's trade restrictive measures to protect its domestic affairs against the negative impact of climate change triggered by other Members' policies when these measures have a restrictive impact on trade. The source of the discretion lies primarily in the necessity requirement that, as argued in Section I.D, has been read into the chapeau even when not required by the subparagraph of Article XX. Necessity is also an important aspect of the positive obligations of Members under the TBT Agreement, as discussed in the previous Section.

In the abstract, a condition of "necessity" is not unreasonable, but much depends on its precise interpretation. The focus here is not on a semantic analysis of the specific terms in the chapeau or in the subparagraphs. As the Appellate Body pointed out in its *Korea-Beef* decision there is "a range of degrees of necessity".⁸⁵³ Whether "necessity" requires that a measure restricting trade is "indispensable", is the "least or less trade restrictive alternative", is "proportionate" to its non-trade goal or is "reasonable", its application will always involve an element of discretion. The main question is how to exercise this discretion. Trade is intertwined with other policies that are important for sovereign states and their inhabitants. Depending on how the necessity test is applied, a WTO Member's ability to adopt regulation or taxation that has an indirect impact on imports into its territory might be restricted. It is argued that the interpretation of "necessity" needs to allow Members to protect their negative freedom in increasing interdependence so as to ensure a balance between Members' positive and negative freedom that is compatible with a

⁸⁵³ *Korea-Beef (AB)*, para. 161.

liberal system of sovereign states. The idea of locality should allow the Member that is at risk of the negative impact of climate change to decide whether to regulate imports to avoid this impact. Locality also implies that it should be up to each individual Member to decide on the appropriate level of protection to protect its domestic affairs against the negative impact of other Members' climate change policies transferred through trade.

As discussed in Section I.D, the Appellate Body has repeatedly stated that the regulating Member can decide the appropriate level of protection it seeks through domestic regulation.⁸⁵⁴ Yet, this concession is difficult to reconcile with the weighing and balancing exercise also advanced by the Appellate Body to determine the necessity of measures that are not indispensable.⁸⁵⁵ A weighing and balancing test allows the Panel and the Appellate Body to decide, first, whether the measure is indispensable, and if not, whether the domestic regulation contributes to its goal, whether the interests pursued by the measure are important and whether these factors outweigh the restrictive impact on trade. As soon as a weighing and balancing by the Panel or the Appellate Body is required, the regulating Member is no longer free to determine the appropriate level of protection.⁸⁵⁶ If it is indeed up to the regulating Member to decide on the appropriate level of regulation, any less trade restrictive alternative should achieve the same level of protection as the domestic measure and should not just be almost as good as the contested domestic measure.⁸⁵⁷

A reinterpretation of Article XX should remove the contradiction between the statement that Members are allowed to determine their appropriate level of protection and the weighing and balancing of domestic regulation that is not indispensable. Members' ability to decide which level of protection is appropriate for their individual situation should receive priority. Moreover, what should be weighed and balanced is not the protection of the non-trade value against the trade impact, but rather the higher administrative and enforcement costs of an alternative measure against the trade costs of the actual measure.⁸⁵⁸ This decision entails a more flexible and deferential approach towards the regulating Member, which is particularly appropriate when the Member is acting in response to a global problem for which there is no co-operative response yet.

⁸⁵⁴ *Ibid.*, para. 180; *EC-Asbestos (AB)*, para. 168; *Brazil-Retreaded Tyres (AB)*, para. 140.

⁸⁵⁵ Regan, *supra* note 767, 348; Du, *supra* note 771, 1096.

⁸⁵⁶ Regan, *supra* note 767, 359.

⁸⁵⁷ *Ibid.*, 359.

⁸⁵⁸ *Ibid.*, 349.

These changes to the interpretation of Article XX's exceptions would ensure that states' negative freedom is protected not only against external interference with their trading opportunities, but also against external interference with their ability to regulate to protect their domestic affairs against the negative impact of other Members' policies. Therefore, these changes are consistent with the need to protect Members' decisional sovereignty. In accordance with the idea of locality, the reinterpretation would also recognize that the ability to regulate is more important for state sovereignty than the ability to export.

Nevertheless, the interpretation of "necessity" should not make the exceptions that rely on it self-judging. Therefore, reasonableness and good neighbourliness complement locality. The use of an exception should remain within reasonable bounds. When assessing the necessity of a trade restriction, an evaluation is needed of whether it would be unreasonably costly for a Member to employ a less trade restrictive defensive mechanism. Moreover, good neighbourliness would require that a Member take care not to harm its trading partners. This requirement can lead to an evaluation of whether a Member has been willing to negotiate with its trading partners on the standards that they apply or whether it is willing to consider the equivalence of the regulation of its trading partners.

IV. CONCLUSION

This Chapter has discussed how trade liberalization agreements impose limits on the legality of defensive mechanisms that can be used to protect states' domestic affairs against the negative impact of climate change when global responses are lacking. The reason behind this is a strong focus on market integration and insufficient guarantees against "unfair trade" when exporting states do not have an appropriate regulatory framework in place to respond to international problems. The focus on market integration translates into wide ranging obligations to remove barriers to trade, including non-discriminatory ones. The legality of trade barriers depends almost entirely on the availability of exceptions, which are subject to a requirement of necessity.

The Chapter has argued that the focus needs to shift back from the exceptions to the obligations. The obligations to liberalize trade need to be contained by narrowing their scope. The thesis suggests in particular reinterpreting the non-discrimination obligation, through a narrower approach to "likeness" and by taking into account regulatory intent to determine whether discrimination has occurred.

The reinterpretation of "likeness" should be achieved by accepting PPMs as relevant to distinguish between products in the context of transboundary problems. This option removes

part of the obstacle imposed by the rejection of an “aims and effects” test. If a distinction based on PPMs applied to all products sold within a territory regardless of their origin is accepted, it is no longer necessary to argue that the measure has no protectionist purpose but is inspired by other concerns such as the protection of the environment. It should, however, be acknowledged that the acceptance of the product/process distinction is limited to the context of international problems, that is to say to problems that are not within the scope of a state’s domestic affairs. Not every PPM-based distinction should be allowed, as PPMs are frequently misused for protectionist reasons. For example, a state should not be able to single out its domestic products for preferential treatment on the basis that its building code requirements or social security allowances are higher than those that apply in other states, unless it can rely on an exception.

CHAPTER 8. DIRECT LIMITS ON THE EXERCISE OF MONETARY SOVEREIGNTY

This Chapter turns to macro-financial stability, the second area of increasing interdependence studied in this thesis. States' actions in relation to their monetary management policies, i.e. their monetary policies, their credit creation limits, their exchange rate policies and the management of their official reserves, can negatively affect other states' decisional sovereignty. For example, lax credit creation regulation in state A can cause financial instability in state B where consumers of financial services originating from state A live. Or, an undervaluation of state A's currency in terms of state B's currency can modify the competitive relationship between their economies.

This Chapter argues that international law contains some direct limits on a state's monetary sovereignty that apply when the exercise of that sovereignty has a negative impact on other states. Direct limits can also be found in informal sources of international financial law such as the Basel Accords that harmonize specific aspects of financial market regulation. These are thus relevant as an, albeit soft, limit on credit creation regulation. However, many of the central concepts in these formal and informal direct limits are vague, reducing their practical relevance in restricting how states exercise their monetary management policies, and resulting in broad protection of states' positive freedom.

I. MONETARY MANAGEMENT POLICIES UNDER THE IMF ARTICLES OF AGREEMENT

The IMF Articles of Agreement not only set up the International Monetary Fund, but also contain rules of conduct for the exercise of states' monetary management policies. Articles IV (obligations regarding exchange arrangements), VII (known as the "scarce currency clause")⁸⁵⁹ and VIII (general obligations) constitute a basic code of conduct for international monetary relations.

The most important of these is Article IV, the first paragraph of which stipulates the following:

Recognizing that the essential purpose of the international monetary system is to provide a framework that facilitates the exchange of goods, services, and capital among countries, and that sustains sound economic growth, and that a principal objective is the continuing development of orderly underlying conditions that are necessary for financial and economic stability, each member undertakes to collaborate with the Fund and other members to assure orderly exchange arrangements and to promote a stable system of exchange rates. In particular, each member shall:

⁸⁵⁹ This clause enables the IMF to declare a currency scarce. As a result, Members can impose temporary limitations on exchange operations in the scarce currency. It has however never been invoked, see Pattanaik, "Global Imbalances, Tanking Dollar, and the IMF's Surveillance over Exchange Rate Policies", 27 *Cato Journal* 299 (2007), 321-322.

(i) endeavor to direct its economic and financial policies toward the objective of fostering orderly economic growth with reasonable price stability, with due regard to its circumstances;

(ii) seek to promote stability by fostering orderly underlying economic and financial conditions and a monetary system that does not tend to produce erratic disruptions;

(iii) avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members; and

(iv) follow exchange policies compatible with the undertakings under this Section.

Article IV was substantially rewritten with the entry into force of the Second Amendment to the IMF Articles of Agreement⁸⁶⁰ in 1978. This amendment legalized the de facto freedom to determine exchange rates that had arisen following US President Nixon's decision of 15 August 1971 to abandon the gold-dollar two-tier system of convertibility,⁸⁶¹ and the failure by 1973 of attempts to save the "par value" system that required governments to intervene in currency markets if this was needed to maintain the relative value of their currency.⁸⁶² The new version of Article IV represents a radical departure from the strictures of the "par value" system as it involves a return towards discretion for states in their economic policies, and particularly their exchange rate policies.⁸⁶³ The changes made by the Second Amendment have therefore been critiqued from the start as creating an international monetary "non-system".⁸⁶⁴

The IMF oversees compliance with the obligations of Article IV through its bilateral surveillance.⁸⁶⁵ Bilateral surveillance is mandatory for all IMF Members, including those that are not borrowing.⁸⁶⁶ The IMF's current policies regarding bilateral surveillance are set out in the

⁸⁶⁰ IMF Board of Governors Resolution No. 31-4, adopted 30 April 1976, entered into force on 1 April 1978. On the process of the amendment, see Lowenfeld, *supra* note 169, 631-633.

⁸⁶¹ In this system, the exchange rate of every currency was fixed relative to the US dollar and the US Treasury would buy and sell gold from and to other monetary authorities at a fixed price, see Lastra, *supra* note 380, 356; Lowenfeld, *supra* note 169, 622-623.

⁸⁶² Treves, *supra* note 380, 114; Proctor, "USA v China and the Revaluation of the Renminbi: Exchange Rate Pegs and International Law", 17 *European Business Law Review* 1333 (2006), 1337; Lowenfeld, *supra* note 169, 625-627.

⁸⁶³ Bossone, *IMF Surveillance: A Case Study on IMF Governance-IEO Background Paper* (May 2008), at <http://www.ieo-imf.org/eval/complete/pdf/05212008/BP08_10.pdf>, 9.

⁸⁶⁴ See references in Masson, "The IMF: Victim of Its Own Success or Institutional Failure?", 62 *International Journal* 889 (2007), 905; Lowenfeld, *supra* note 169, 634.

⁸⁶⁵ *IMF Articles of Agreement*, art. IV(3)(b).

⁸⁶⁶ Lastra, *supra* note 380, 398-399.

2007 Decision on Bilateral Surveillance over Members' Policies ("2007 Surveillance Decision").⁸⁶⁷

The 2007 Surveillance Decision replaced the 1977 Decision on Surveillance over Exchange Rate Policies. The change was prompted by the considerable changes in the global economy, particularly as a result of increased capital mobility that provides not only an alternative source of financing but also an added factor of potential instability.⁸⁶⁸ The background to the new decision was an increased focus on the impact of exchange rate policies on other states.⁸⁶⁹ A specific matter of concern was the Chinese Yuan's exchange rate, which is pegged to the US dollar.⁸⁷⁰ Unsurprisingly, Chinese officials protested heavily against the 2007 Surveillance Decision.⁸⁷¹ However, given the distribution of voting power on the IMF Executive Board,⁸⁷² China was unable to block adoption of the decision.

The main novelty compared to the 1977 Decision is the centrality given to the notion of "external stability".⁸⁷³ "External stability" is defined as "a balance-of-payments position that does not, and is not likely to, give rise to disruptive exchange rate movements."⁸⁷⁴ A state's balance-of-payments systematically records the economic transactions between its residents and non-residents during a specific period of time⁸⁷⁵ on the current account or on the capital and

⁸⁶⁷ International Monetary Fund, *Bilateral Surveillance over Members' Policies–2007 Decision* (15 June 2007), at <[http://www.imf.org/external/pubs/ft/sd/index.asp?decision=13919-\(07/51\)](http://www.imf.org/external/pubs/ft/sd/index.asp?decision=13919-(07/51))> ["2007 Surveillance Decision"]. The legal authority for the adoption of this decision can be found in *IMF Articles of Agreement*, art. IV(3)(b). The current surveillance priorities can be found in International Monetary Fund, *IMF Executive Board Revises Surveillance Priorities for 2008-2011–Press Release No. 09/336* (29 September 2009), at <<http://www.imf.org/external/np/sec/pr/2009/pr09336.htm>>.

⁸⁶⁸ Mussa, *IMF Surveillance over China's Exchange Rate Policy* (19 October 2007), at <www.iie.com/publications/papers/mussa1007.pdf>, 36; Bossone, *supra* note 863, 7.

⁸⁶⁹ Independent Evaluation Office of the International Monetary Fund, *IMF Performance in the Run-up to the Financial Economic Crisis: IMF Surveillance in 2004-07* (10 January 2011), at <http://www.ieo-imf.org/eval/complete/pdf/01102011/IEO_full_report_crisis.pdf>, 25.

⁸⁷⁰ "Is the IMF Obsolete? A Symposium of Views", 21 *The International Economy* 9 (2007), 12.

⁸⁷¹ Ling and Tan, *China Criticizes IMF Decision on Exchange-Rate Surveillance* (3 July 2007), at <<http://www.twinside.org.sg/title2/finance/twninfofinance070701.htm>>; People's Bank of China, *IMF Adopted the Decision on Bilateral Surveillance over Member's Policies with China's Reservation* (20 June 2007), at <http://www.pbc.gov.cn/publish/english/955/2021/20213/20213_.html>.

⁸⁷² International Monetary Fund, *IMF Members' Quotas and Voting Power, and IMF Board of Governors*, at <<http://www.imf.org/external/np/sec/memdir/members.htm>> ["IMF Voting Power"].

⁸⁷³ 2007 Surveillance Decision, *supra* note 867, para. 4; International Monetary Fund, *Review of the 1977 Decision on Surveillance over Exchange Rate Policies: Preliminary Considerations* (28 June 2006), at <<http://www.imf.org/external/np/pp/eng/2006/pc.pdf>>, 3; Mussa, *IMF Surveillance over China's Exchange Rate Policy*, *supra* note 868, 19.

⁸⁷⁴ 2007 Surveillance Decision, *supra* note 867, para. 4.

⁸⁷⁵ Acocella, *Economic Policy in the Age of Globalisation* (2005), 80.

financial account.⁸⁷⁶ A balance-of-payments position is consistent with external stability if the member's "net external asset position is evolving in a manner consistent with the economy's structure and fundamentals" and there are no risks of "abrupt shifts in capital flows."⁸⁷⁷ The 2007 Surveillance Decision identifies both large and prolonged current account deficits and surpluses as a source of instability.⁸⁷⁸

IMF Members' obligations under Article IV(1) extend not just to the exchange arrangements themselves, but also to the underlying economic and financial policies that can affect the exchange rate. The 2007 Surveillance Decision confirms that the IMF's surveillance powers cover all domestic policies that can affect external stability.⁸⁷⁹

In its bilateral surveillance, the Fund will focus on those policies of members that can significantly influence present or prospective external stability. [...] Accordingly, exchange rate policies will always be the subject of the Fund's bilateral surveillance with respect to each member, as will monetary, fiscal, and financial sector policies (both their macroeconomic aspects and macroeconomically relevant structural aspects). Other policies will be examined in the context of surveillance only to the extent that they significantly influence present or prospective external stability.

Hence, the monetary management policies at the centre of this case study fall within the scope of IMF surveillance and are potentially limited by the obligations of the IMF Articles of Agreement. However, as Sections A and B explain, only a Member's exchange rate policies are directly limited and even these limits are of a soft nature. Other domestic policies are subject to even softer obligations.⁸⁸⁰ Section C then argues that there are practical and political obstacles to the effectiveness of the existing limits. The result is a prioritization of the protection of positive freedom to exercise monetary sovereignty through monetary management policies over the protection of other states' negative freedom against the adverse impact of these policies.

⁸⁷⁶ International Monetary Fund, *Balance of Payments Manual*, 5th ed. (1993), 38. According to this manual, the current account pertains to goods and services, income, and current transfers, whereas the capital and financial account pertains to (i) capital transfers and acquisition or disposal of nonproduced, nonfinancial assets and (ii) financial assets and liabilities. This thesis refers to the capital and financial account as the capital account.

⁸⁷⁷ International Monetary Fund, *2007 Surveillance Decision Companion Paper Excerpts: Material Explicitly Endorsed by the Executive Board* (21 June 2007), at <<http://www.imf.org/external/np/pp/2007/eng/ndexc.pdf>>, paras 3-4.

⁸⁷⁸ International Monetary Fund, *The 2007 Surveillance Decision: Revised Operational Guidance* (22 June 2009), at <<http://www.imf.org/external/np/pp/eng/2008/080408.pdf>> ["*Revised Operational Guidance*"], 9, Q2.

⁸⁷⁹ 2007 Surveillance Decision, *supra* note 867, para. 5.

⁸⁸⁰ Leckow, "The IMF and Crisis Prevention—the Legal Framework for Surveillance", 17 *Kansas Journal of Law and Public Policy* 285 (2007-2008), 288.

A. *Direct Limits on the Choice of Exchange Rate Policies*

Since an exchange rate expresses the price of one currency in terms of another currency,⁸⁸¹ every exchange rate inherently links two states. This inherent link suggests that limits on the choice of exchange rate policies are sensible, given that the ability to claim sovereignty over something that automatically affects another state is a “logical absurdity”.⁸⁸² Moreover, because foreign currency is required for trade in goods, services and assets, the level of the exchange rate affects virtually every aspect of a state’s economy. Given the large US current account deficit, mirrored by the Chinese current account surplus, the issue of exchange rate determination has been the most prominent international monetary issue of the past decade.⁸⁸³

As a result of the Second Amendment to the IMF Articles of Agreement,⁸⁸⁴ only three limits on Members’ exchange rate policies now remain. First, Article IV(2)(b) bars Members from fixing their currency to the value of gold. Second, Article VIII(3) prohibits the use of discriminatory or multiple currency practices,⁸⁸⁵ except when authorized or approved by the Fund. Finally, Article IV(1)(iii) prohibits Members from manipulating their exchange rate.⁸⁸⁶

Principle A of the 2007 Surveillance Decision repeats verbatim Article IV(1)(iii)’s obligation to avoid exchange rate manipulation.⁸⁸⁷ Legal literature recognizes this obligation as an obligation of conduct.⁸⁸⁸ The Annex to the 2007 Surveillance Decision stipulates further conditions defining exchange rate manipulation. First, the Member must have adopted policies that are not only targeted at, but also affect, the exchange rate level, regardless of whether this effect is to move the exchange rate or to keep it constant.⁸⁸⁹ Second, the Member must be doing this either to prevent balance-of-payments adjustment or to gain an unfair competitive advantage over other

⁸⁸¹ See text accompanying footnote 172.

⁸⁸² Mussa, *supra* note 868, 8.

⁸⁸³ For a good description see Staiger and Sykes, “‘Currency Manipulation’ and World Trade” (13 June 2008), *SSRN eLibrary*, at <<http://ssrn.com/abstract=1151942>>, 2.

⁸⁸⁴ See text accompanying footnotes 860 to 864.

⁸⁸⁵ Discriminatory or multiple exchange rates exist when states apply different exchange rates depending on the state they are trading with or depending on the type of transaction (e.g. inflow or outflow).

⁸⁸⁶ *IMF Articles of Agreement*, art. IV(1)(iii). The definition of “exchange rate manipulation” is discussed in the following paragraphs.

⁸⁸⁷ 2007 Surveillance Decision, *supra* note 867, para. 14.

⁸⁸⁸ Proctor, *supra* note 862, 1339; Mercurio and Leung, “Is China a ‘Currency Manipulator’?: The Legitimacy of China’s Exchange Regime under the Current International Legal Framework”, 43 *International Lawyer* 1257 (2009), 1276.

⁸⁸⁹ 2007 Surveillance Decision, *supra* note 867, Annex, para. 2(a).

Members.⁸⁹⁰ The second condition requires a double purpose: first, that the Member is pursuing a fundamentally misaligned undervalued exchange rate; and, second, that the Member's purpose is to increase net exports through this undervalued exchange rate.⁸⁹¹ This requires the IMF to make a judgment call about the intentions of a sovereign government, which is both difficult and politically sensitive.⁸⁹² As Section C discusses, even if the IMF were able to establish exchange rate manipulation, its enforcement powers, particularly against stronger Members, are limited.

In addition to the limits that expressly address exchange rate policies, the 2007 Surveillance Decision also gives an indication of how the generally worded provisions of Article IV(1) apply in the context of exchange rate policies. Principles B to D of the 2007 Surveillance Decision declare that⁸⁹³

B. A member should intervene in the exchange market if necessary to counter disorderly conditions, which may be characterized inter alia by disruptive short-term movements in the exchange rate of its currency.

C. Members should take into account in their intervention policies the interests of other members, including those of the countries in whose currencies they intervene.

D. A member should avoid exchange rate policies that result in external instability.

The scope of Principle D goes beyond the obligation to avoid exchange rate manipulation, as it applies to *all* exchange rate policies having an effect on external stability, regardless of their purpose.⁸⁹⁴ However, in contrast with Principle A, Principles B to D are only recommendations.⁸⁹⁵ As far as intervention in the exchange markets covered by Principles B and C is concerned, the 2007 Surveillance Decision further indicates that "protracted large-scale intervention in one direction" will attract IMF scrutiny.⁸⁹⁶ The same will occur for "fundamental exchange rate misalignment".⁸⁹⁷

⁸⁹⁰ *Ibid.*, Annex, para. 2(b).

⁸⁹¹ *Ibid.*

⁸⁹² Staiger and Sykes, "'Currency Manipulation' and World Trade", 9 *World Trade Review* 583 (2010), 592; Fudge, "Walter Mitty and the Dragon: An Analysis of the Possibility for WTO or IMF Action against China's Manipulation of the Yuan", 45 *Journal of World Trade* 349 (2011), 366-369.

⁸⁹³ 2007 Surveillance Decision, *supra* note 867, para. 14, principles B-D.

⁸⁹⁴ International Monetary Fund, External Relations Department, *IMF Executive Board Adopts New Decision on Bilateral Surveillance Over Members' Policies* (21 June 2007), at <<http://www.imf.org/external/np/sec/pn/2007/pn0769.htm>>, background.

⁸⁹⁵ 2007 Surveillance Decision, *supra* note 867, para. 14.

⁸⁹⁶ *Ibid.*, para. 15(i).

⁸⁹⁷ *Ibid.*, para. 15(v).

Overall, there are few direct limits on Members' exchange rate policies. The Second Amendment has reconfirmed the central position of monetary sovereignty in the IMF Articles of Agreement. The 2007 Surveillance Decision mentions explicitly that non-compliance with Principles A to D governing Members' exchange rate policies does not amount to a breach of Article IV(1).⁸⁹⁸ Moreover, in practice, the complexity of determining an exchange rate's "fair value" combined with a Member's entitlement to the benefit of any reasonable doubt regarding the purpose of its policies⁸⁹⁹ has led the IMF's Executive Board to defer to a Member's policy choices.⁹⁰⁰ The IMF has indicated that it expects non-observance of Principle D to be very rare, due to the uncertainties about the causal link between exchange rate policies and macro-economic developments.⁹⁰¹ When it comes to Members' exchange rate policies, international law thus in effect prioritizes Members' positive freedom to set these policies, even if the exercise of this freedom leads to interference with other Members' negative freedom.

B. Direct Limits on Other Monetary Management Policies

Article IV(1) and the 2007 Surveillance Decision cover not only a Member's exchange rate policies, but also its monetary policy, its credit creation limits and the policy managing its official reserves. Subsections (i) and (ii) of Article IV(1), quoted above, focus on the promotion of domestic stability.⁹⁰² They are however only "best effort obligations" given that the operative verbs are "endeavour" and "seek".⁹⁰³ The 2007 Surveillance Decision lists a range of developments related to a Member's other monetary management policies that will attract the IMF's attention during the surveillance process:⁹⁰⁴

(ii) official or quasi-official borrowing that either is unsustainable or brings unduly high liquidity risks, or excessive and prolonged official or quasi-official accumulation of foreign assets, for balance of payments purposes;

(iii) (a) the introduction, substantial intensification, or prolonged maintenance, for balance of payments purposes, of restrictions on, or incentives for, current transaction or payments, or

⁸⁹⁸ *Ibid.*, para. 14.

⁸⁹⁹ *Ibid.*, Annex, para. 3; Mercurio and Leung, *supra* note 888, 1279.

⁹⁰⁰ Revised Operational Guidance, *supra* note 884, 2, paras 2-3.

⁹⁰¹ *Ibid.*, 3, para. 8.

⁹⁰² Companion Paper, *supra* note 228, para. 37.

⁹⁰³ *Ibid.*, para. 12; Gianviti, "The International Monetary Fund and External Debt", 215 *Recueil des Cours* 205 (1989), 267-268; Proctor, *supra* note 862, 1338-1339; Mercurio and Leung, *supra* note 888, 1282.

⁹⁰⁴ 2007 Surveillance Decision, *supra* note 867, para. 15.

(b) the introduction or substantial modification for balance of payments purposes of restrictions on, or incentives for, the inflow or outflow of capital;

(iv) the pursuit, for balance of payments purposes, of monetary and other financial policies that provide abnormal encouragement or discouragement to capital flows;

[...]

(vi) large and prolonged current account deficits or surpluses; and

(vii) large external sector vulnerabilities, including liquidity risks, arising from private capital flows.

However, no further legal consequences are attached to these indicators, thus leaving Members a wide freedom to act in the conduct of their other monetary management policies.

A 2011 Report by the Independent Evaluation Office to the IMF pointed out that the IMF's performance on surveillance in the run up to the Global Financial Crisis was inconsistent. The IMF focused primarily on the risk of a disorderly unwinding of global imbalances for the exchange rate of the US dollar and paid insufficient attention to financial sector issues, particularly in financial centres of systemic importance.⁹⁰⁵

Together with the World Bank, the IMF has had a special programme in place since the Asian Financial Crisis of the late 1990s to provide technical assistance to Members regarding financial sector policies. The Financial Sector Assessment Program (FSAP) is primarily a diagnostic tool to prevent financial instability by assessing the strengths and weaknesses of a Member's financial system.⁹⁰⁶ It also assesses observance of various international standards and codes.⁹⁰⁷ The FSAP has only had a limited reach over Members' financial sector policies,⁹⁰⁸ as some Members of strategic importance for international financial stability, such as the US,⁹⁰⁹ chose not to participate in an assessment of their financial sector in the years preceding the Global Financial Crisis.⁹¹⁰ To remedy this, the IMF's Executive Board decided in September 2010, with respect to 25 Members with systemically important financial sectors, to integrate the FSAP every five years

⁹⁰⁵ Independent Evaluation Office of the International Monetary Fund, *supra* note 869, 5, 11-20.

⁹⁰⁶ Gottselig and Gulde-Wolf, "The International Monetary Fund's Work on Financial Stability", 4 *Current Developments in Monetary and Financial Law* 55 (2004), 57-59; Singh, "The IMF and World Bank in Financial Sector Reform and Compliance", in Shan et al. (Eds.), *Redefining Sovereignty in International Economic Law* (2008), 347-348.

⁹⁰⁷ Gottselig and Gulde-Wolf, *supra* note 906, 62.

⁹⁰⁸ World Bank Independent Evaluation Group, *supra* note 134.

⁹⁰⁹ Independent Evaluation Office of the International Monetary Fund, *supra* note 869, 13.

⁹¹⁰ Singh, *supra* note 906, 359.

in their annual Article IV surveillance.⁹¹¹ This move extends the IMF's bilateral surveillance to Members' credit creation policies. It is, however, too soon to tell what the impact of participation in the FSAP will be on a Member's credit creation policies.

C. Limits on the Effectiveness of the Existing Direct Limits

The centrality of "external stability" in the 2007 Surveillance Decision is recognition of the fact that monetary management policies can have external effects on other Members. This is a step in the right direction towards ensuring that international law functions as a liberal system in increasing interdependence.

However, the approach of the IMF Articles of Agreement and the 2007 Surveillance Decision is to prioritize protection of Members' positive freedom in decisions on monetary management policies over the protection of their negative freedom against the negative impact of other Members' monetary management policies. While the obligation to avoid exchange rate manipulation is an obligation of conduct, the other "limits" are only hortatory. Moreover, even if a breach of Article IV(1) could be established, the IMF lacks the power to change Members' actions.⁹¹² The only sanction available under the Articles of Agreement is an exclusion from lending, followed by a suspension of voting rights and, failing that, a compulsory withdrawal from membership.⁹¹³ The final two steps require a majority of, respectively, 70% and 85% of voting power on the IMF Board of Governors.⁹¹⁴ Politically, this may be very difficult to achieve, particularly against important Members such as the US, which holds 16.78% of voting power.⁹¹⁵ Ineligibility to borrow funds may be an effective sanction against Members that rely on IMF loans to fund shortfalls on their balance-of-payments,⁹¹⁶ but is a toothless measure in relation to Members that do not require IMF funding and are often important creditors to the IMF.⁹¹⁷

⁹¹¹ International Monetary Fund, *IMF Expanding Surveillance to Require Mandatory Financial Stability Assessments of Countries with Systemically Important Financial Sectors* (27 September 2010), at <<http://www.imf.org/external/np/sec/pr/2010/pr10357.htm>>.

⁹¹² Howse, "Sovereignty, Lost and Found", in Shan et al. (Eds.), *Redefining Sovereignty in International Economic Law* (2008), 69; Baltensperger and Cottier, *supra* note 561, 935; Fudge, *supra* note 892, 372.

⁹¹³ *IMF Articles of Agreement*, art. XXVI(2).

⁹¹⁴ *Ibid.*

⁹¹⁵ IMF Voting Power, *supra* note 872; Herrmann, "Don Yuan: China's 'Selfish' Exchange Rate Policy and International Economic Law", in Herrmann and Terhechte (Eds.), *European Yearbook of International Economic Law 2010* (2010), 45.

⁹¹⁶ Pattanaik, *supra* note 859, 318, 322.

⁹¹⁷ Mattoo and Subramanian, *Currency Undervaluation and Sovereign Wealth Funds: A New Role for the World Trade Organization* (January 2008), at <www.petersoninstitute.org/publications/wp/wp08-2.pdf>, 7; Staiger and Sykes,

Due to the deference given to Members' sovereignty,⁹¹⁸ any changes in Members' policies will depend on the IMF's ability to persuade the Member into changing.⁹¹⁹ The degree of the IMF's persuasive power depends on many factors such as whether the Member is a borrower or a creditor, political considerations within the Executive Board, and the technical and communications skills of the IMF staff participating in the surveillance mission.⁹²⁰ If the IMF fails to raise awareness that risks are building up, it is unlikely that Members will change their policies. This is particularly problematic in the IMF's interaction with advanced economies that can be of systemic importance to the global economy. A 2009 report by the Independent Evaluation Office points out that advanced economies are not interested in the IMF's analysis of spillovers that one Member's policies may create for other states, unless they are on the receiving end of such spillovers.⁹²¹ According to the same report, effective surveillance over large emerging economies is undermined by the distrust these economies' authorities have of the IMF, which they see as acting "predominantly in the interests of major shareholders".⁹²²

In addition to the deference given to Members in the exercise of their monetary sovereignty, substantive problems with IMF surveillance further weakens the effectiveness of direct limits. A 2011 report of the Independent Evaluation Office pointed to several such problems in the years prior to the Global Financial Crisis.⁹²³ First, given the stronger obligations regarding exchange rate policies in the IMF Articles of Agreement, exchange rate misalignment has often been the focus in surveillance exercises. Given the sensitivity of an exchange rate, as a close expression of state sovereignty,⁹²⁴ debates on the exchange rate have sometimes slowed down or overshadowed pertinent findings in relation to other monetary management policies.⁹²⁵ Second, analytical weaknesses, such as groupthink and gaps in knowledge on the link between the

supra note 883, 28; Bretton Woods Project, *IMF Mandate Needs Fundamental Rethink* (11 May 2010), at <<http://www.brettonwoodsproject.org/art-566307>>; Herrmann, *supra* note 915, 45.

⁹¹⁸ *IMF Articles of Agreement*, art. IV(3)(b); 2007 Surveillance Decision, *supra* note 867, paras 9 and 11.

⁹¹⁹ This is recognized by the 2007 Surveillance Decision, *supra* note 867, para. 8.

⁹²⁰ Watson, *IMF Surveillance in Europe: Progress in Refocusing. Report by an External Consultant* (2008), at <<http://www.imf.org/external/np/pp/eng/2008/090208c.pdf>>, 9.

⁹²¹ Independent Evaluation Office of the International Monetary Fund, *IMF Interactions with Member Countries* (25 November 2009), at <http://www.ieo-imf.org/eval/complete/pdf/01202010/IMC_Full_Text_Main_Report.pdf>, 13-14.

⁹²² *Ibid.*, 16. This lack of evenhandedness was also confirmed in Independent Evaluation Office of the International Monetary Fund, *supra* note 869, 25.

⁹²³ Independent Evaluation Office of the International Monetary Fund, *supra* note 869.

⁹²⁴ Baltensperger and Cottier, *supra* note 561, 912.

⁹²⁵ Independent Evaluation Office of the International Monetary Fund, *supra* note 869, 19-20.

financial sector and the broader macro-economy, combined with internal organisation and governance problems and political constraints, have limited the IMF's actions in its surveillance of the financial sector.⁹²⁶

II. MONETARY MANAGEMENT POLICIES IN THE WTO FRAMEWORK

Debates on monetary management policies pay increasing attention to the agreements concluded under the WTO umbrella as a source of limits on WTO Members' monetary management policies, and exchange rate valuations in particular.

The turn towards the WTO should not be surprising. There is after all a close link between trade and monetary management policies.⁹²⁷ This link applies to both commodity trade and trade in financial services. First, a stable monetary system promotes trade and long-term investment by providing certainty to traders and investors about future prices and profits whereas a volatile system only benefits speculators. Second, trade links can channel the effect of monetary management policies from one state to another when economic actors respond to the economic environment in various states. For example, exchange rate levels—by definition relative as they express the price of one currency in terms of another—directly affect the competitive position of producers worldwide, regardless of the quality of their product. In addition, an expansion of the money supply in a given economy implies that domestic consumers will have more money to spend. It is not unlikely that some of this will be spent on imported products, thereby increasing export opportunities for foreign producers.⁹²⁸ This link is also visible in the context of trade in financial services where a lenient monetary policy in one state can lead to carry trades with another state between which capital account flows have been liberalized. Third, changes in trade flows can affect the exchange rate. A sudden increase in demand for a state's exports drives up its exchange rate, which in turn can make its other domestic industries less competitive on global markets.⁹²⁹

Political and academic commentators also turn towards the WTO in the hope that its response to the potential negative impact of monetary management policies will be more effective than the IMF's. The main reason for this is institutional. Many WTO Members have permanent

⁹²⁶ *Ibid.*, 20-26.

⁹²⁷ Proctor, *supra* note 862, 1345.

⁹²⁸ Staiger and Sykes, *supra* note 883, 1.

⁹²⁹ This phenomenon is known as the "Dutch Disease", see Ebrahim-Zadeh, *Dutch Disease: Too Much Wealth Managed Unwisely* (March 2003), at <<http://www.imf.org/external/pubs/ft/fandd/2003/03/eBra.htm>>.

representatives in Geneva through which they can interact with other Members, directly or through the various committees within the WTO. Moreover, the WTO is equipped with a horizontal and binding dispute settlement system through which one Member can settle, and if necessary enforce, its disputes with another Member. In contrast, IMF Members are represented by their Governors who only meet once a year and are not permanently based in Washington DC. The IMF also lacks a mechanism to settle disputes between Members and has very little to offer in terms of sanctions, particularly against Members running a current account surplus. Furthermore, the IMF's governance structure still reflects the post-World War II power balance and is as a result dominated by the US and Europe, whereas the WTO is at least formally more equal.⁹³⁰

In light of the close link between trade and monetary management policies a crucial question is whether the WTO rules can be a source of direct limits on a state's monetary management policies.⁹³¹ In relation to trade in goods, a number of rules could potentially provide a direct limit on the conduct of monetary management policies. Four potential direct limits will be discussed below: Article XV:4 GATT, Article XII:3(a) GATT, the nullification or impairment provision of Article XXIII GATT and the SCM Agreement. It is argued here that none of these potential direct limits restricts WTO Members' monetary management policies.

A first potential direct limit on monetary management policies can be found in Article XV GATT, arguably "the most obscure provision in the GATT".⁹³² Article XV:4 recognizes the link between trade and exchange policies and stipulates that

Contracting Parties shall not, by exchange action, frustrate the intent of the provisions of this Agreement, nor, by trade action, the intent of the provisions of the Articles of Agreement of the International Monetary Fund.

For current purposes, the limits on "exchange action" are the most relevant. The meaning of "exchange action" is debated in legal literature, as the term is not used in the IMF Articles of Agreement or anywhere else in the GATT. In the absence of any case law, the meaning of Article XV:4 is unclear.⁹³³ Some authors restrict its meaning to the liberalization of payments for

⁹³⁰ Mattoo and Subramanian, *supra* note 917, 7-8.

⁹³¹ Staiger and Sykes, *supra* note 892, 593-594.

⁹³² Bhala, *supra* note 812, 1169.

⁹³³ Proctor and Mann, *supra* note 382, 570; Staiger and Sykes, *supra* note 883, 29.

current transactions⁹³⁴ and multiple exchange rates,⁹³⁵ whereas others define it more broadly to include manipulative currency practices.⁹³⁶

No information can be gleaned from the Ad Note to this Article which only clarifies that

[t]he word “frustrate” is intended to indicate [...] that infringements of the letter of any Article of this Agreement by exchange action shall not be regarded as a violation of that Article if, in practice, there is no appreciable departure from the intent of the Article. [...]

The definition of “frustrate” in the Ad Note creates a high threshold. Thus, even if “exchange action” is defined broadly, it will have to be established that the exchange action violates the intent of a GATT provision and that the departure from this intent is “appreciable”. This raises important questions that have not yet been answered in GATT case law about the precise intent of the GATT, and whether an action that complies with the letter of GATT can nevertheless violate the intent.⁹³⁷

It is theoretically possible to reflect on the precise “intent” of the GATT and to reinterpret “exchange action” or of “frustrate”. This thesis would argue that this exercise should take into account the interstitial norms discussed in Chapter 4. However, these clarifications may have limited utility in practice, because even if these legal hurdles could be cleared, it will be very difficult to qualify and quantify the relationship between exchange rates and trade. Macroeconomic theory suggests that a depreciation of the exchange rate will improve the trade balance, which is part of the current account, if as a result of the depreciation exports increase and imports decrease sufficiently to offset the increased price of imports. This condition is known in macroeconomic literature as the “Marshall-Lerner condition”.⁹³⁸ The adjustment will not be immediate. At first, the trade balance will deteriorate as the price of imports increases and that of exports lowers while their volumes remain unchanged. Once import volumes shrink and export volumes grow in response to the price signals and once the “Marshall-Lerner

⁹³⁴ Denters, *Manipulation of Exchange Rates in International Law: The Chinese Yuan* (November 2003), at <<http://www.asil.org/insigh118.cfm>>. However, a later publication, co-authored by Denters, seems to include exchange rate policies to manipulate the exchange rate under “exchange action” Ciobănașu and Denters, “Manipulation of the Chinese Yuan—May WTO Members Respond?”, 9 *Griffin’s View on International and Comparative Law* 55 (2008), 11-13. “Current transactions” are the payments that reflect to imports and exports of goods and services. As discussed in Alexander et al., *supra* note 132, 85-86, the *IMF Articles of Agreement*, art. XXX(d)(2) and (3) define “current transactions” broader than economists would usually do by including payments that reflect interests on loans, net income from investments, loan amortization and depreciation of direct investments.

⁹³⁵ Herrmann, *supra* note 915, 46.

⁹³⁶ Proctor, *supra* note 862, 1348.

⁹³⁷ Bhala, *supra* note 812, 1172.

⁹³⁸ Blanchard, *supra* note 172, 240.

condition” is satisfied, the trade balance will improve.⁹³⁹ However, the reality is not as simple as this theory suggests. A detailed economic analysis by Staiger and Sykes has shown that the conclusion that exchange rate misalignment undermines WTO commitments is not always warranted under standard trade models. They argue that the qualitative and quantitative effects of exchange rate misalignment on trade depend on a range of other factors such as the flexibility of the prices of traded goods and services and whether pricing occurs in the currency of the producer, the consumer or in US dollar if this is not the currency of either the producer or the consumer.⁹⁴⁰ Depending on these other factors, exchange rate manipulation will sometimes have effects on trade, but they will be very difficult to establish.

Given these obstacles, meeting the threshold of an “appreciable departure from the intent of the Article” is likely to be difficult in practice.⁹⁴¹ This requirement protects WTO Members against a trade challenge of their exchange rate policies or even of other macro-economic policies that have an effect on the level of the exchange rate. However, the complex assessment required under this already high threshold limits the ability of WTO Members that are affected by other Members’ actions to rely on Article XV:4 in protection of their negative freedom.

A second GATT provision that could provide a limit on a Member’s monetary management policies is Article XII:3(a) which holds that

Contracting Parties undertake, in carrying out their domestic policies, to pay due regard to the need for maintaining or restoring equilibrium in their balance of payments on a sound and lasting basis and to the desirability of avoiding an uneconomic employment of productive resources. They recognize that, in order to achieve these ends, it is desirable so far as possible to adopt measures which expand rather than contract international trade.

This Article is rarely invoked by legal commentators⁹⁴² or within the WTO. A possible explanation could be that the need for equilibrium in the balance-of-payments is not considered as pressing anymore since the collapse of the “par value” system of exchange rates. Mainstream economic thinking expects balance-of-payments problems to be addressed through exchange rates, either through market mechanisms for freely floating exchange rates or through a change

⁹³⁹ This dynamic is referred to as the “J-curve”, see *Ibid.*, 244; Bhala, *supra* note 812, 1000.

⁹⁴⁰ Staiger and Sykes, *supra* note 892, 605. A more elaborate and technical analysis supporting their argument can be found in Staiger and Sykes, *supra* note 883, 4-25.

⁹⁴¹ Staiger and Sykes, *supra* note 892, 606, 608.

⁹⁴² A lone exception, focusing however on employment, is Charnovitz, “The (Neglected) Employment Dimension of the World Trade Organization” in Leary and Warner (Eds.) *Social Issues, Globalisation and International Institutions: Labour Rights and the EU, ILO, OECD, and WTO* (2005), 124-155.

in the peg for fixed exchange rates.⁹⁴³ Moreover, Article XII:3(a) is only an undertaking “to pay due regard” to the specific ends of balance-of-payments equilibrium and economic employment of resources. It is “more exhortative than mandatory”.⁹⁴⁴ Therefore, it does not contain a particularly strong obligation of result regarding the exercise of a Member’s monetary management policies.

Third, Article XXIII:1(b) GATT prohibits Members from nullifying or impairing the benefits accruing to other Members under the GATT, even when no specific obligation is violated.⁹⁴⁵ In case of nullification or impairment, the affected Member can expect to receive “satisfactory adjustment” from the affecting Member, or failing that, may be authorized to suspend the application of concessions or other obligations under the GATT towards the affecting Member.⁹⁴⁶ The requirement of compensation can provide a limit on Members’ monetary management policies if another Member can establish that these policies, despite being compatible with the GATT, nullify or impair benefits accruing to it.

Given the Article XXIII:1(b)’s potentially far-reaching nature in reducing Members’ regulatory autonomy beyond what is prohibited by the GATT, the WTO Panel has expressed that it should only be an exceptional remedy.⁹⁴⁷ The Panel identified three requirements that a successful non-violation nullification or impairment claim needs to meet:⁹⁴⁸

(1) application of a measure by a WTO Member; (2) a benefit accruing under the relevant agreement; and (3) nullification or impairment of the benefit as the result of the application of the measure.

The Panel admitted that the third requirement, which is one of causality, may be factually complex.⁹⁴⁹ Non-violation nullification or impairment claims based on Article XXIII:1(b) are rare⁹⁵⁰ and have only seldom been successful, typically in the context of subsidies that

⁹⁴³ Jackson, *supra* note 811, 242-243; Matsushita et al., *supra* note 695, 463, 465; Van den Bossche, *supra* note 491, 714.

⁹⁴⁴ Bhala, *supra* note 812, 1011.

⁹⁴⁵ GATT, art. XXIII:1(b).

⁹⁴⁶ GATT, art. XXIII:2.

⁹⁴⁷ *Japan–Film*, para. 10.37.

⁹⁴⁸ *Ibid.*, para. 10.41.

⁹⁴⁹ *Ibid.*, para. 10.83.

⁹⁵⁰ Bhala, *supra* note 812, 1152.

undermine tariff reduction commitments.⁹⁵¹ It is highly unlikely that Article XXIII:1(b) could successfully be applied to deal with the indirect trade consequences of macro-economic policies.⁹⁵²

Fourth, the SCM Agreement prohibits subsidies and permits affected WTO Members to respond through countervailing duties. In economic terms, an undervalued exchange rate has the same effect as an export subsidy.⁹⁵³ A specific question in the context of macro-financial stability is whether the SCM Agreement prohibits non-fiscal⁹⁵⁴ support in the form of an undervalued exchange rate allegedly caused by exchange rate manipulation, and as a consequence allows any affected WTO Members to impose countervailing duties.⁹⁵⁵ Some authors reject the possibility that the effects of exchange rate manipulation justify countervailing duties under the SCM Agreement,⁹⁵⁶ whereas others agree that applying the SCM Agreement to exchange rate manipulation will be difficult, but do not exclude it completely.⁹⁵⁷

As discussed above,⁹⁵⁸ for a subsidy to exist in accordance with the SCM Agreement there must be 1) a financial contribution or any form of income or price support, by which a 2) benefit is conferred 3) specific to an enterprise or industry or group thereof.⁹⁵⁹ Even if exchange rate manipulation were seen as a financial contribution by the government, whether this leads to a benefit to *specific* enterprises or undertakings is a different matter. In principle, the exchange rate applies across an economy and is not determined for exporters individually as such a discriminatory practice would be contrary to the obligations under the IMF Articles of Agreement.⁹⁶⁰ One way around this requirement of specificity is Article 2.3 that deems subsidies

⁹⁵¹ Staiger and Sykes, *supra* note 892, 612.

⁹⁵² *Ibid.*, 612.

⁹⁵³ Mattoo and Subramanian, *supra* note 917, 5.

⁹⁵⁴ Rodrik, "How to Save Globalization from Its Cheerleaders", 1 *Journal of International Trade and Diplomacy* 1 (2007), 21.

⁹⁵⁵ Baltensperger and Cottier, *supra* note 561, 936.

⁹⁵⁶ Staiger and Sykes, *supra* note 883, 31-33; Mercurio and Leung, *supra* note 888, 1294-1297.

⁹⁵⁷ Benitah, *China's Fixed Exchange Rate for the Yuan: Could the United State Challenge It in the WTO as a Subsidy? (Corrected Version)* (October 2003), at <<http://www.asil.org/insigh117.cfm>>; Caryl, "Is China's Currency Regime a Countervailable Subsidy? A Legal Analysis under the World Trade Organization's SCM Agreement", 45 *Journal of World Trade* 187 (2011), 217.

⁹⁵⁸ See Chapter 7, Section II.

⁹⁵⁹ *SCM Agreement*, art. 1 and 2.

⁹⁶⁰ Multiple or discriminatory exchange practices, explained in footnote 891, are prohibited by the *IMF Articles of Agreement*, art. VIII(3).

listed in Article 3 to be specific. Of relevance in this context is the prohibition in Article 3.1(a) on “subsidies contingent, in law or in fact, whether solely or as one of several other conditions upon export performance [...]”.

An undervalued exchange rate cannot be brought within this category of subsidies that are *de iure* or *de facto* contingent upon export performance. First, assuming that a Member does not operate multiple exchange rates that would give exporters a better exchange rate if they export more of their production, an undervalued exchange rate is not *de iure* contingent upon export performance. Second, there is no *de facto* contingency upon export performance either. A footnote to Article 3.1(a) specifies that a subsidy is *de facto* contingent upon export performance⁹⁶¹

when the facts demonstrate that the granting of a subsidy, without having been made legally contingent upon export performance, is in fact tied to actual or anticipated exportation or export earnings. The mere fact that a subsidy is granted to enterprises which export shall not for that reason alone be considered to be an export subsidy within the meaning of this provision.

In *US–FSC*, the WTO Panel argued that contingency upon export performance can be seen when a domestic measure provides for differential treatment when domestic production is exported compared to when it is sold domestically.⁹⁶² Even if we assume *arguendo*, first, that an undervalued exchange rate meets the requirements of a financial contribution and a benefit and, second, that an undervalued exchange rate creates a competitive advantage for exports, the difficulty is that an undervalued exchange rate is available *regardless of exportation*. If domestic producers do not export, an undervalued exchange rate still puts them in a better position than their foreign competitors whose imports onto the domestic market will be more expensive relative to the domestic production. The existence of a subsidy is thus not tied to the actual or anticipated exportation of the goods or export earnings. In line with the clarification in the footnote to Article 3.1(a), the fact that some of the alleged beneficiaries export is not sufficient to conclude that the undervalued exchange rate is an export subsidy.

The WTO Panel also held in *US–FSC* that export contingency requires that⁹⁶³

the existence and amount of the subsidy depends upon the existence of income arising from the exportation of [...] goods or the provision of services relating to the exportation of such goods.

⁹⁶¹ *SCM Agreement*, art. 3.1(a), footnote 4.

⁹⁶² *US–FSC 21.5 (EC)*, para. 8.72.

⁹⁶³ *US–FSC (Panel)*, para. 7.108.

In the situation of an undervalued exchange rate, the existence and amount of the “subsidy” does not depend upon the existence of income from exportation. It is not the case that exporter will receive more subsidies if more is exported rather than kept for the domestic market.

An abstract numerical example can illustrate this. Assume that a Chinese factory’s production can achieve US\$24 and that the exchange rate with the US dollar is 8 Yuan for 1 US dollar, which arguably is undervalued and should instead be 6 Yuan for 1 US dollar. If the Chinese factory exports its total production, it will achieve 192 Yuan ($\$24 \times 8 \text{ Yuan}/\$$) at the undervalued exchange rate. Under the different exchange rate it would achieve 144 Yuan ($\$24 \times 6 \text{ Yuan}/\$$). Thus, the undervalued exchange rate results in an “advantage” of 48 Yuan for the Chinese manufacturer. Applying the same calculations, but assuming that the manufacturer only exports half of its production, leads to an “advantage” of only 24 Yuan. While it may seem that the manufacturer receives a larger advantage when exporting more, the proportion thereof compared to the total exports remains the same: 25%. Despite exports in the first situation being twice those in the second situation, the relative amount of the advantage has not doubled. Compare this situation to one in which the Chinese government promises exporters a 1% subsidy for every unit exported. If exporters decide to export everything, they achieve the Yuan equivalent of \$24.24 ($\$24 + 1\% \text{ of } \24). If, however, they decide to only export half of their production, they only achieve the Yuan equivalent of \$24.12 ($\$12 \text{ for the production sold domestically} + \$12 \text{ for the exports} + 1\% \text{ of } \12). Thus, when export volumes double, the proportion of the subsidy in the total earnings also doubles: from just under 0.5% to just under 1%.

For these reasons, the alleged subsidy arising out of an undervalued exchange rate is not de facto contingent upon export performance under Article 3(1)(a). As a result, it cannot be deemed specific under Article 2(3). This means that the SCM Agreement does not provide a direct limit on WTO Members’ positive freedom to determine their exchange rate, even if such a limit would be helpful to ensure protection of another Member’s negative freedom in increasing interdependence.

Given that an extension of the definition of an export subsidy to incorporate undervalued exchange rates goes against the explicit terms of the SCM Agreement, reinterpretation of the existing norms cannot achieve such a change. Instead, subjecting WTO Members to the SCM Agreement in the conduct of their exchange rate policies requires a formal amendment of the SCM Agreement, which is a difficult and cumbersome procedure. In addition, even if there is a legal basis to qualify exchange rate policies as a prohibited subsidy, practical problems arise regarding the calculation of benefits as the basis of countervailing duties.

So far the analysis of direct limits on monetary management policies in the WTO framework has focused on trade in goods. In relation to trade in financial services, the GATS and both FTAs studied include no restrictions on monetary management policies equivalent to the provisions relating to trade in goods. The Annex on Financial Services excludes “activities conducted by a central bank or monetary authority or by any other public entity in pursuit of monetary or exchange rate policies” from the definition of services.⁹⁶⁴ Thus, WTO Members do not need to liberalize these activities. To the extent that monetary management policies affect trade in services they will, however, have to respect the requirements of GATS⁹⁶⁵ and the FTAs. For example, a multiple exchange rate practice that grants domestic financial institutions a more favourable exchange rate when they borrow offshore than the one granted to foreign financial institutions that want to convert funds into the domestic currency would be contrary to the national treatment obligation in GATS. The EU–Korea FTA contains a similar exception for the activities of a central bank or monetary authority.⁹⁶⁶ In contrast, the US–Korea FTA contains an exception for “non-discriminatory measures of general application taken by any public entity in the pursuit of monetary and related credit policies or exchange rate policies”.⁹⁶⁷ This emphasis on measures rather than on activities results in a broader exception than under the GATS and the EU–Korea FTA, because it is not just an affirmation that certain public services do not need to be liberalized, but also that the measures are exempted from the FTA’s obligations even if they restrict trade. This exception is however subject to two conditions. First, the measures have to be non-discriminatory. Second, compliance with the provisions on payments and transfers, studied in more detail below,⁹⁶⁸ is still required.⁹⁶⁹

It should be noted that the direct limits discussed in this Chapter are not the only links drawn in the GATT, the GATS and the FTAs between trade and monetary management policies. These agreements also determine the legality of restrictions on trade, used by states as defensive mechanisms against their trading partners’ monetary management policies. This link between trade, particularly in financial services, and monetary management policies is discussed in Chapter 9.

⁹⁶⁴ *Annex on Financial Services*, para. 1(b)(i) *jo.* GATS, art. I:2(b).

⁹⁶⁵ De Meester, “The Global Financial Crisis and Government Support for Banks: What Role for the GATS?”, 13 *Journal of International Economic Law* 27 (2010), 36.

⁹⁶⁶ *EU–Korea FTA*, art. 7.44(2).

⁹⁶⁷ *US–Korea FTA*, art. 13.10(2).

⁹⁶⁸ See Chapter 9, Section II.C.

⁹⁶⁹ *US–Korea FTA*, art. 13.10(2).

III. CREDIT CREATION POLICIES IN INTERNATIONAL FINANCIAL LAW

In addition to the limits stemming from IMF and WTO membership, international financial rules affect states' credit creation policies. Originally, banks and financial institutions were regulated and supervised by the state in whose territory they were located and for the activities within that territory.⁹⁷⁰ However, this was insufficient to ensure proper regulation and supervision of internationally active banks. In the aftermath of a high profile banking collapse in 1974, the central bank governors of the G-10 members⁹⁷¹ created a special committee based at the Bank for International Settlements.⁹⁷² This Committee is now known as the Basel Committee on Banking Supervision ("Basel Committee").⁹⁷³

A first product of this Committee was the Basel Concordat that allocated responsibilities for internationally active banks between home and host state supervisors.⁹⁷⁴ The Basel Concordat was later supplemented with minimum standards for supervision⁹⁷⁵ and core principles for effective banking supervision.⁹⁷⁶ In essence, the home state of a bank or banking group is entrusted with the supervision of global operations ("consolidated supervision") whereas the host country is responsible for supervision of subsidiaries active within its territory.⁹⁷⁷

⁹⁷⁰ Lowenfeld, *supra* note 169, 811-812.

⁹⁷¹ The G-10 is a group of ten industrialized states, also known as the Paris Club, who in the 1960s agreed to provide funds to the IMF. These states are Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, the United Kingdom, and the United States. Later, Switzerland also agreed to lend money to the IMF. See "Group of Ten", in Law and Smullen (Eds.), *A Dictionary of Finance and Banking* (2008) and International Monetary Fund, *A Guide To Committees, Groups, And Clubs* (23 March 2011), at <<http://www.imf.org/external/np/exr/facts/groups.htm#G10>>.

⁹⁷² Lowenfeld, *supra* note 169, 812. The Bank for International Settlements was established in 1930 to facilitate co-operation between central banks and financial regulators, see Tarullo, *Banking on Basel: The Future of International Financial Regulation* (2008), 4.

⁹⁷³ Its current members are the central bank governors and the head of the bank supervisor, if this task is not entrusted upon the central bank, of Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. See Bank for International Settlements, *About the Basel Committee*, at <<http://www.bis.org/bcbs/index.htm>>.

⁹⁷⁴ Basel Committee on Banking Supervision, *Report to the Governors on the Supervision of Banks' Foreign Establishments* (26 September 1975), at <<http://www.bis.org/publ/bcbs00a.htm>>. This document was revised in 1983, see Basel Committee on Banking Supervision, *Principles for the Supervision of Banks' Foreign Establishments* (May 1983), at <<http://www.bis.org/publ/bcbsc312.htm>> ["*Basel Concordat*"].

⁹⁷⁵ Basel Committee on Banking Supervision, *Minimum Standards for the Supervision of International Banking Groups and their Cross-Border Establishments* (July 1992), at <<http://www.bis.org/publ/bcbsc314.htm>> ["*Minimum Standards Supervision*"].

⁹⁷⁶ Basel Committee on Banking Supervision, *Core Principles for Effective Banking Supervision* (October 2006), at <<http://www.bis.org/publ/bcbs129.htm>>.

⁹⁷⁷ Minimum Standards Supervision, *supra* note 981; Basel Committee on Banking Supervision, *High-Level Principles for the Cross-Border Implementation of the New Accord* (August 2003), 5, at <<http://www.bis.org/publ/bcbs100.htm>> ["*High-Level Principles Implementation New Accord*"]; Alexander et al., *supra* note 132, 47-48.

In addition to the allocation of regulatory and supervisory responsibilities, the Basel Committee also worked on harmonized credit creation limits. Chapter 1 identified two types of credit creation limits:⁹⁷⁸ reserve ratios and capital adequacy ratios. No international instruments govern the level at which reserve ratios are set. The main source of capital adequacy ratios are the Basel Accords concluded within the Basel Committee. The 1988 Basel Accord, now commonly known as Basel I, harmonized minimum capital adequacy ratios for internationally active banks.⁹⁷⁹ Before Basel I, national financial regulators were often reluctant to regulate capital adequacy ratios out of a fear that their domestic banks would become less competitive than branches of foreign banks that were subject to lower capital adequacy requirements in their home state and therefore had lower costs than domestic banks of the host state.⁹⁸⁰ Basel I was meant to overcome this classic collective action problem,⁹⁸¹ by aiming to level the playing field for internationally active financial institutions through harmonized standards for capital adequacy requirements.⁹⁸² However, Basel I's capital requirements provided an incentive for traditional banks to step into the shadow banking system through the creation of off-balance sheet vehicles where they could warehouse riskier assets in an effort to circumvent the minimum capital requirements.⁹⁸³ The Basel Committee developed a new framework, Basel II, in 2004,⁹⁸⁴ but not all states fully implemented it.⁹⁸⁵ Moreover, it also contained significant shortcomings. The transition to Basel II allegedly created incentives for banks to focus on mortgage origination and distribution because it reduced the risk weighting of mortgages and thereby fuelled the asset price bubble.⁹⁸⁶ Furthermore, Basel II was pro-cyclical,⁹⁸⁷ which means that it follows and confirms the economic cycle. The leverage that is permitted by the minimum

⁹⁷⁸ See Chapter 1, Section III.A(2).

⁹⁷⁹ Basel Committee on Banking Supervision, *International Convergence of Capital Measurement and Capital Standards* (July 1988, updated to April 1988), at <<http://www.bis.org/publ/bcbsc111.pdf>> ["*Basel Accord*"].

⁹⁸⁰ Singer, *supra* note 170, 41-42.

⁹⁸¹ Tarullo, *supra* note 972, 45-46, 51-52; Kreitner, "The Jurisprudence of Global Money", 11 *Theoretical Inquiries in Law* 177 (2010), 199.

⁹⁸² Kapstein, *Governing the Global Economy: International Finance and the State* (1994), 104; Singer, *supra* note 170, 53.

⁹⁸³ Mizen, *supra* note 157, 560-561; Tarullo, *supra* note 972, 81.

⁹⁸⁴ Basel Committee on Banking Supervision, *International Convergence of Capital Measurement and Capital Standards: A Revised Framework (Comprehensive Version)* (June 2006), at <<http://www.bis.org/publ/bcbs128.htm>> ["*Basel II*"].

⁹⁸⁵ The major G-20 financial centres have committed to adopting it by 2011, see G-20 Leaders, *supra* note 241, 8 with implementation aimed for the end of 2012 and G-20, "Toronto Summit", *supra* note 243, 16, para. 18.

⁹⁸⁶ Blundell-Wignall and Atkinson, *supra* note 181.

⁹⁸⁷ *Ibid.*, 74; International Monetary Fund, *supra* note 152, 4.

capital requirements drives asset prices and banks' balance sheets up during an economic boom, but depresses prices and balance sheets even further during an economic downturn.⁹⁸⁸ In September 2010, the Basel Committee decided to increase the minimum standards to address these shortcomings (Basel III).⁹⁸⁹ This revised framework will be implemented gradually from 2013 onwards.⁹⁹⁰

One idea behind the Basel Accords was to establish a regulatory floor to protect states against a loss of competitiveness when they impose stricter regulations than other states. In addition, a floor should protect states against financial instability imported through foreign banks' branches or subsidiaries. Harmonized capital adequacy requirements are, however, insufficient to level the playing field between banks in different jurisdictions, given that these requirements are only one regulatory factor determining competitiveness.⁹⁹¹

The focus of the analysis below is not on the precise substantive requirements of the harmonized standards as this is not necessary to answer the thesis' central question. Instead, the question addressed is whether the Basel Accords directly limit states' credit creation policies that can adversely affect other states. Strictly speaking, the Accords are only gentlemen's agreements between the central banks and financial regulators making up the Basel Committee.⁹⁹² Nevertheless, more than 100 states worldwide adopted the standards due to pressure from the IMF and the World Bank, from the Basel Committee members on their trading partners in free trade agreements⁹⁹³ and from financial markets.⁹⁹⁴ Thus, while not constituting formal international obligations such as those flowing from the IMF Articles of Agreement, GATT or GATS, the Basel Accords' minimum requirement for states' capital adequacy ratios can

⁹⁸⁸ Gowan, *supra* note 233, 10-12.

⁹⁸⁹ Caruana, "Basel III: Towards a Safer Financial System", *3rd Santander International Banking Conference* (Madrid, 15 September 2010), at <<http://www.bis.org/speeches/sp100921.htm>>, 4; Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (December 2010), at <<http://www.bis.org/publ/bcbs189.pdf>> ["Basel III"]; Scott, *supra* note 554, 766-773.

⁹⁹⁰ Basel III, *supra* note 989, paras 165-167.

⁹⁹¹ Acharya, "Is the International Convergence of Capital Adequacy Regulation Desirable?", *58 Journal of Finance* 2745 (2003), 2746; Scott, *An Overview of International Finance: Law and Regulation* (18 December 2005) at <<http://www.law.harvard.edu/programs/about/pifs/research/4scott.pdf>>, 38-39; Tarullo, *supra* note 972, 76.

⁹⁹² See footnote 973 for a list of Members.

⁹⁹³ Bismuth, "Financial Sector Regulation and Financial Services Liberalization at the Crossroads: The Relevance of International Financial Standards in WTO Law", *44 Journal of World Trade* 489 (2010), 490.

⁹⁹⁴ Brummer, "How International Financial Law Works (and How It Doesn't)", *99 Georgetown Law Journal* 257 (2011), 286-288; Alexander et al., *supra* note 132, 36, 41; Singer, *supra* note 170, 62; Tarullo, *supra* note 972, 65; Kreitner, *supra* note 981, 200.

constrain states' decisions regarding their credit creation policies. Nevertheless, states retain considerable freedom to set the capital adequacy ratios within their territories, even if these have a negative impact on other states, due to a lack of harmonization of what constitutes "capital" or "assets".

The basic approach of the Basel Accords is to set a minimum ratio between capital and risk-weighted assets. The approach to capital adequacy ratios can be schematized as follows:

$$\frac{\text{Capital}}{\text{Risk-Weighted Assets}} = \frac{\text{Tier 1 Capital} + \text{Tier 2 Capital}}{\text{Balance Sheet Items} + \text{Off-Balance Sheet Items}}$$

Overall, the capital adequacy ratio needs to be 8%.⁹⁹⁵ This means that capital must amount to 8% of the assets. As simple as that may sound, this involves a number of difficult questions as to what capital is.⁹⁹⁶ The definition of "capital" in the Basel Accords leaves considerable freedom to states to determine what they consider capital. The Basel Accords make a basic distinction between two tiers of capital. In Basel I and II, tier 1 is the core capital, which includes equity capital and disclosed reserves.⁹⁹⁷ This is a definition of "capital" that Basel Committee members could agree on.⁹⁹⁸ In tier 2, Basel I and II include other components that not all states might consider as capital, such as undisclosed reserves instruments.⁹⁹⁹ In addition, Basel II makes provision for a Tier 3 at the discretion of the national authorities.¹⁰⁰⁰ The division of capital in up to three tiers allows states to determine the precise capital adequacy ratios for banks in their jurisdiction. In practice, standards have been very different in terms of the requirements of which assets qualified as capital.¹⁰⁰¹ Basel III aims to reduce this freedom by harmonizing the definition of tier 2 capital and by providing for the phasing out of tier 3 capital.¹⁰⁰²

⁹⁹⁵ Basel Accord, *supra* note 979, para. 44; Basel II, *supra* note 984, para. 40; Basel III, *supra* note 989, para. 50.

⁹⁹⁶ Obtaining a full picture of the capital adequacy ratio also involves questions about how the risk of each type of asset should be weighted. However, these are not directly relevant for this thesis. Thus, the issue of the involvement of private credit rating agencies, such as Standard & Poor's, in rating assets and the use of these ratings for risk weighting in capital adequacy ratios is outside the scope of the current discussion which is limited to the question whether international law limits states' ability to regulate against macro-financial instability triggered by other states' monetary management policies.

⁹⁹⁷ Basel Accord, *supra* note 979, para. 12; Basel II, *supra* note 984, para. 49(i).

⁹⁹⁸ Basel Accord, *supra* note 979, para. 12; Lowenfeld, *supra* note 169, 825.

⁹⁹⁹ Basel Accord, *supra* note 979, para. 15; Basel II, *supra* note 984, para. 49(iv).

¹⁰⁰⁰ Basel II, *supra* note 984, para. 49(xiii).

¹⁰⁰¹ Merrouche and Nier, *supra* note 150, 16.

¹⁰⁰² Basel III, *supra* note 989, para. 9.

In addition to the lack of harmonization, no legal sanctions apply in case of non-implementation of these international limits on credit creation policies. The only pressures to implement the limits on credit creation are political and economic, imposed through the surveillance or conditionality of lending by international financial institutions, through reputational costs in interactions with other regulators and through market pressure.¹⁰⁰³ Host states could require subsidiaries of foreign banks to comply with their higher capital adequacy ratios, as recognized in the allocation of jurisdiction agreed under the Basel Concordat and related documents.¹⁰⁰⁴ This is an example of existing international principles that apply the idea of locality to enable regulation by the state in whose jurisdiction the negative effects can be felt. This ability to regulate can lead to pressure by internationally active financial institutions on the regulators of their home state to ratchet up the level of their regulation in order to protect market access abroad.¹⁰⁰⁵ In practice, however, the general trend is towards regulation and supervision by the home state rather than by the host state.¹⁰⁰⁶ This trend gives states considerable freedom in setting capital adequacy requirements for internationally active financial institutions, without having to take into account the potential impact on other states in which the financial institutions are active or in which their counterparties of any commercial transactions are located.

IV. CONCLUSION

Apart from some limits on exchange rate policies in the IMF context and limits on credit creation policies under the Basel Accords, monetary management policies are subject to few direct limits in international law. It is no surprise that monetary affairs have been labelled “one of the last and most solid bastions of national sovereignty”.¹⁰⁰⁷ Given the continued importance of states for economic and fiscal policies, there are good reasons to keep monetary management policies organized along state lines too.¹⁰⁰⁸ However, given the increasing economic integration between states, there are also good reasons to at least protect other states and their inhabitants against the negative impact of a state’s monetary management policies. The next Chapter analyses the extent to which international law limits the legality of defensive mechanisms.

¹⁰⁰³ Brummer, *supra* note 994, 284-288.

¹⁰⁰⁴ High-Level Principles Implementation New Accord, *supra* note 977, Principle 3.

¹⁰⁰⁵ See text accompanying footnotes 553-554 for a specific example.

¹⁰⁰⁶ Commission of Experts, *supra* note 222, 84.

¹⁰⁰⁷ Baltensperger and Cottier, *supra* note 561, 912.

¹⁰⁰⁸ *Ibid.*, 917.

**CHAPTER 9. LIMITS ON THE LEGALITY OF DEFENSIVE MECHANISMS IN RESPONSE TO
MONETARY MANAGEMENT POLICIES**

As in the case of protecting states' domestic affairs against the negative impact of other states' climate change mitigation policies, protection of states' domestic affairs against the negative impact of other states' monetary management policies, i.e. their monetary policy, their credit creation limits, their exchange rate policies or the management of their official foreign currency reserves, does not only depend on the existence of enforceable direct limits on the acting states. States affected negatively by other states' monetary management policies could consider three types of trade restrictions to protect their domestic affairs. First, states may want to impose quantitative or qualitative restrictions on trade in financial services. These could include limits on the number of foreign financial service suppliers, on the kind of financial services and products that foreign financial service suppliers can offer or on the size of financial institutions active within its territory. Second, states could consider restricting incoming or outgoing payments and transfers on the current or capital accounts of its balance-of-payments. Finally, states could consider regulating service suppliers and services supplied in their territory through, e.g., capital adequacy requirements or requirements as to the suitability of management and directors.

Restrictions on trade in financial services, on service suppliers, or on payments and transfers related to trade in goods or services could assist states in protecting their domestic affairs against the negative impact of macro-financial instability triggered by other states' monetary management policies in two ways. First, trade restrictions work on restricting trade's capacity as a mechanism through which negative impacts spread from one state to another in increasing interdependence. For example, restrictions on foreign ownership of financial service providers can protect the stability of a state's financial institutions against situations in which financial instability in the home state of a parent company forces the subsidiary or branch to sell assets or restrict credit to free up capital for the parent company. Second, restrictions on opportunities to export financial services may put pressure on the home states of the financial service providers to change their monetary management policies to ensure that these policies do not pose a risk to macro-financial stability in other states. For example, if a state's credit creation policies encourage high risk financial products, such as credit default swaps,¹⁰⁰⁹ it may have to accept

¹⁰⁰⁹ A credit default swap or CDS is a contract in which one party sells "protection" to another party against the default in another investment, such as a bond, in exchange for a yearly fee, see Financial Times Lexicon, *Credit Default Swaps CDS*, at <<http://lexicon.ft.com/Term?term=credit-default-swaps--CDS>>. This looks like an insurance contract, but the buyer is not necessarily the owner of the investment against which default the "insurance" is bought.

that other states respond with restrictions on transboundary transactions in these products to protect macro-financial stability.

The central question for this Chapter is whether states can legally employ defensive mechanisms to protect their domestic affairs against threats to macro-financial stability triggered by other states' monetary management policies. To avoid overlaps with the trade in goods analysis in the climate change study, this Chapter will focus on the provisions of the GATS and on the financial services related provisions in the two FTAs rather than on the provisions related to trade in goods. As mentioned in the Introduction, and as will become clear through the analysis in this Chapter, the FTAs are important in the context of macro-financial instability, as both push the envelope of financial services liberalization further than GATS. The general trend visible in both GATS and the FTAs studied with respect to financial services trade liberalization is towards increased trade liberalization and light-handed regulation of financial markets rather than towards allowing restrictions on trade in financial services, even if those would help to promote macro-financial stability. The preference is for ensuring exporting opportunities for financial service providers rather than for ensuring macro-financial stability, domestically and globally. This trend restricts the legality of defensive mechanisms available to states affected by the negative impact of other states' monetary management policies.

Section I provides an overview of the scope and structure of the GATS and the FTAs to guide the analysis in later Sections. Section II discusses how the push towards "de-nationalization" and integration of financial markets limits states' ability to restrict trade in financial services and to restrict payments and transfers. Section III discusses how the push towards deregulation limits states' ability to impose non-discriminatory quantitative and qualitative restrictions on trade in financial services. Section IV analyses the available exceptions. In terms of the argument developed in this thesis, this focus on de-nationalization and deregulation in the GATS and the FTAs restricts states in the exercise of their positive freedom, because they are limited in how they can exercise their sovereignty when this exercise has an impact on financial services trade. However, the restriction can result in inadequate protection of these states' domestic affairs against the negative impact of another state's monetary management policies which in turn expands the latter's positive freedom regarding its monetary management policies. To the extent that they are available, exceptions in trade liberalization agreements can restore the negative freedom of states affected by the impact of another state's monetary management

Therefore, a CDS can be used to speculate on the default of an asset. If the asset defaults, the original investment of the fees paid can be returned many times over in the form of the compensation received.

policies. However, the existing exceptions are not sufficient and an imbalance exists between the positive freedom of a state to set its monetary management policies and the negative freedom of other states to be free from the negative impact of these monetary management policies.

I. THE SCOPE AND STRUCTURE OF OBLIGATIONS UNDER THE GATS AND THE FTAS' FINANCIAL SERVICES PROVISIONS

To understand the impact of GATS and the FTAs on regulatory autonomy in relation to financial services, this Section starts with a general overview of their scope and structure. Article I:1 GATS stipulates that “this Agreement applies to measures by Members affecting trade in services”. Two central components of this definition can be identified: an institutional one, expressed by “measures by Members”, and a substantive one, expressed by “affecting trade in services”.¹⁰¹⁰ Articles I and XXVIII GATS provide definitions of the various terms that make up each component. Each of these components and their constituent terms are defined broadly either in the GATS itself or in the relevant jurisprudence, resulting in a very broad coverage of GATS overall.¹⁰¹¹

Institutionally, the GATS applies to “measures by Members”. This includes all measures taken by “central, regional or local governments and authorities and non-governmental bodies in the exercise of powers delegated by central, regional or local governments or authorities”.¹⁰¹² Moreover, any type of measure “whether in the form of a law, regulation, rule, procedure, decision, administrative action, or any other form”¹⁰¹³ comes within the scope of the GATS. In *EC–Bananas III*, the WTO Panel held that¹⁰¹⁴

in principle, no measures are excluded *a priori* from the scope of the GATS as defined by its provisions. The scope of the GATS encompasses any measure of a Member to the extent it affects the supply of a service regardless of whether such measure directly governs the supply of a service or whether it regulates other matters but nevertheless affects trade in services.

Substantively, the GATS applies to “measures affecting trade in services”, which include¹⁰¹⁵

¹⁰¹⁰ Krajewski, *National Regulation and Trade Liberalization in Services: The Legal Impact of the General Agreement on Trade in Services (GATS) on National Regulatory Autonomy* (2003), 65.

¹⁰¹¹ *Ibid.*, 73-74.

¹⁰¹² GATS, art. I:3(a).

¹⁰¹³ GATS, art. XXVIII(a).

¹⁰¹⁴ *EC–Bananas III (Ecuador)*, para. 7.285.

¹⁰¹⁵ GATS, art. XXVIII(c).

measures in respect of (i) the purchase, payment or use of a service; (ii) the access to and use of, in connection with the supply of a service, services which are required by those Members to be offered to the public generally; (iii) the presence, including commercial presence of a Member for the supply of a service in the territory of another Member.

This list is not considered exhaustive.¹⁰¹⁶ The substantive scope of GATS expressed by “measures affecting trade in services” is much broader than this list suggests, as indicated by the definitions of “services”, “trade in services” and “affecting” elsewhere in the GATS and in GATS jurisprudence.

First, the GATS provides a very broad, and tautological, definition of “services” as including “any service in any sector except services supplied in the exercise of governmental authority”.¹⁰¹⁷ In the specific context of trade in financial services, the GATS’ Annex on Financial Services defines “financial services” broadly as “any service of a financial nature offered by a financial service supplier of a Member” and including “all insurance and insurance-related services, and all banking and other financial services (excluding insurance)”.¹⁰¹⁸ The Annex then lists a range of financial services included in the definition. This list incorporates potentially speculative financial products that have turned out to be instrumental in the current financial crisis, such as over-the counter derivatives and securities.¹⁰¹⁹ The Annex also defines “financial service supplier” broadly to include those who wish to supply a financial service.¹⁰²⁰

Second, trade in services is defined in the GATS as the supply of a service in either of four modes:¹⁰²¹

- Mode 1: cross-border supply, from the territory of one Member into the territory of another;
- Mode 2: consumption abroad by a consumer from one Member in the territory of another;
- Mode 3: commercial presence of a service supplier from one Member in the territory of another;¹⁰²²

¹⁰¹⁶ Krajewski, *supra* note 1010, 65.

¹⁰¹⁷ GATS, art. I:3(b). For a discussion about the difficulties in defining “service”, see Zacharias, “Article I GATS–Scope and Definition”, in Wolfrum et al. (Eds.), *WTO–Trade in Services* (2008), 38-44.

¹⁰¹⁸ *Annex on Financial Services*, para. 5(a).

¹⁰¹⁹ *Ibid.*, para. 5(a)(x).

¹⁰²⁰ *Ibid.*, para. 5(b).

¹⁰²¹ GATS, art. I:2.

¹⁰²² “Commercial presence” is defined in GATS, art. XXVIII(d).

- Mode 4: presence of a natural person of one Member in the territory of another.¹⁰²³

Finally, the Appellate Body stated in *EC-Bananas III* that “[t]he ordinary meaning of the word ‘affecting’ implies a measure that has ‘an effect on’, which indicates a broad scope of application” and that this broad scope was also the intention of the GATS’ drafters.¹⁰²⁴

The objective of the GATS is to achieve progressive liberalization of trade in services.¹⁰²⁵ WTO Members’ obligations under GATS go directly to the heart of their regulatory autonomy,¹⁰²⁶ because barriers to trade in services arise solely from domestic regulation rather than from tariffs and non-tariff barriers, such as quantitative restrictions and discriminatory domestic regulation, as in the case of trade in goods under GATT.¹⁰²⁷ The following paragraphs give a brief overview of the main obligations under GATS. Sections II to IV discuss in more detail the balance currently struck in GATS between Members’ liberalization commitments and their regulatory autonomy to address whether the GATS limits the legality of defensive mechanisms that can be used to protect Members’ domestic affairs against the negative impact of other Members’ monetary management policies.

To achieve its objective of progressive liberalization, GATS stipulates a range of “general obligations” and “specific commitments” that Members can adopt. The distinction between the two lies in the ability of Members to control the scope of their liberalization commitments.

All Members are bound by the general obligations, listed in Part II of GATS. Of relevance for the discussion on the scope of regulatory autonomy to employ defensive mechanisms so as to protect a Member’s domestic affairs against the negative impact of another Member’s monetary management policies are Article VI on domestic regulation, Article XI on payments and transfers, Article XII on balance-of-payments restrictions, Article XIV on general exceptions, Article XIVbis

¹⁰²³ “Natural person of another Member” is defined in *GATS*, art. XXVIII(k).

¹⁰²⁴ *EC-Bananas III (AB)*, para. 220.

¹⁰²⁵ *GATS*, preamble and Part IV; Kelsey, *Serving Whose Interests? The Political Economy of Trade in Services Agreements* (2008), 28.

¹⁰²⁶ *Ibid.*, 4; Wouters and Coppens, “GATS and Domestic Regulation: Balancing the Right to Regulate and Trade Liberalization”, in Alexander and Andenas (Eds.), *The World Trade Organization and Trade in Services* (2008), 207-208.

¹⁰²⁷ Verhoosel, *National Treatment and WTO Dispute Settlement: Adjudicating the Boundaries of Regulatory Autonomy* (2002), 14-15; Diebold, *supra* note 696, 18-21.

on the security exception and the “prudential carve-out” in paragraph 2(a) of the Annex on Financial Services.¹⁰²⁸ Each of these provisions is discussed further in Sections II to IV.

The specific commitments only apply to the extent that they are negotiated between WTO Members and listed in each Member’s Schedule of Commitments, which is considered an integral part of the GATS.¹⁰²⁹ A Member’s Schedule lists the service sectors in which it agrees to liberalize trade, the modes of supply that are liberalized as well as the conditions to which this liberalization is subject.¹⁰³⁰ This approach is known as the positive list approach because the Schedule lists which services are liberalized and, if liberalized, to what extent. Once a Member has made specific commitments, it is subject to obligations of market access (Article XVI) and national treatment (Article XVII) in Part III of GATS. Sections II.A and III discuss how these provisions can limit the legality of defensive mechanisms employed by Members that have accepted specific commitments.

Although in principle Members cannot individually tailor their obligations under Part II of GATS, their Schedules can limit a number of obligations under Part II. For example, Article VI subjects Members’ domestic regulation to a range of procedural¹⁰³¹ and substantive¹⁰³² requirements, but only in sectors where specific commitments are undertaken.¹⁰³³ Section III.B will discuss how the substantive requirements limit Members’ ability to regulate services through non-discriminatory licensing and qualification requirements and technical standards. Another example relevant in the context of this thesis is Article XI, requiring Members not to restrict payments and transfers in relation to their specific commitments.

The precise impact of GATS on a Member’s regulatory autonomy thus depends largely on its Schedule. When negotiating original GATS commitments, Members could choose to liberalize only a few, if any, financial service sectors in an effort to protect their economy against future

¹⁰²⁸ The general obligations of the GATS also include a “most favoured nation” (MFN)-obligation that bans Members from discriminating between services or service suppliers from different trading partners. However, the focus in this thesis is on the legality of domestic regulation of foreign services or service suppliers when a Member wants to impose higher standards than the Member from where the services or service suppliers originate. The MFN obligation is not relevant to address this question, because it does not rely on a comparison of the domestic regulation of the importing Member with that of the exporting Member.

¹⁰²⁹ *GATS*, art. XX:3.

¹⁰³⁰ *GATS*, art. XX:1.

¹⁰³¹ *GATS*, art. VI:1-3.

¹⁰³² *GATS*, art. VI:4-5.

¹⁰³³ *GATS*, art. VI:1.

macro-financial instability triggered by other Members' monetary management policies.¹⁰³⁴ The negotiations on trade in financial services, which were extended beyond the end of the Uruguay Round,¹⁰³⁵ placed Members under intense pressure to make extensive commitments. That pressure has continued subsequently, both during the so-far inconclusive Doha Round and for newly acceding countries. Indeed, studies of GATS' impact on financial services trade liberalization reveal that many developing states have made significant new commitments when negotiating accession to the WTO,¹⁰³⁶ often going beyond those made by existing WTO Members.¹⁰³⁷

The general tendency of the provisions on the liberalization of trade in services towards further integration of financial markets, rather than towards allowing restrictions, was reflected in the initiative of a group of mainly developed WTO Members during the Uruguay round to develop an additional Understanding on Commitments in Financial Services (hereafter "Understanding") that invited Members to make additional commitments with respect to financial services that go beyond market access and national treatment.¹⁰³⁸ This is adopted voluntarily on the basis of Article XVIII GATS. The Understanding is not in itself part of GATS.¹⁰³⁹ Only if, and to the extent that, Members integrate it into their Schedules will the Understanding become legally binding for them.¹⁰⁴⁰

¹⁰³⁴ No liberalization will be indicated in the schedule as "unbound" whereas full liberalization will be indicated as "none", see Hoekman, "The General Agreement on Trade in Services: Doomed to Fail? Does It Matter?", 8 *Journal of Industry, Competition and Trade* 295 (2008), 302.

¹⁰³⁵ For a discussion of the history of the negotiations on financial services, see Sauvé and Gillespie, "Financial Services and the GATS 2000 Round", *Brookings-Wharton Papers on Financial Services* (2000), 428-430; Key, "Financial Services", in Macrory et al. (Eds.), *The World Trade Organization: Legal, Economic and Political Analysis* (2005), 958-962.

¹⁰³⁶ Fink and Molinuevo, *supra* note 137, 647; Adlung, *supra* note 135, 6.

¹⁰³⁷ Jara and Dominguez, *supra* note 136, 115.

¹⁰³⁸ *Understanding on Commitments in Financial Services*, LT/UR/U/1, 15 April 1994 ["*Understanding on Financial Services*"]; von Bogdandy and Windsor, "Understanding on Commitments in Financial Services", in Wolfrum et al. (Eds.), *WTO-Trade in Services* (2008), 650.

¹⁰³⁹ Leroux, "Trade in Financial Services under the World Trade Organization", 36 *Journal of World Trade* 413 (2002), 432; Raghavan, *Financial Services, the WTO and Initiatives for Global Financial Reform* (2009), at <<http://www.tradeobservatory.org/library.cfm?refID=106932>>, 22-24.

¹⁰⁴⁰ Leroux, *supra* note 1039, 433; von Bogdandy and Windsor, *supra* note 1038, 650. As part of the Doha Round negotiations, developed WTO Members have argued to extend the Understanding's approach to all Members, see e.g. Council for Trade in Services Special Session, *Communication from the United States*, S/CSS/W/27 (18 December 2000), para. 14; Council for Trade in Services Special Session, *Communication from the European Communities and their Member States*, S/CSS/W/39 (22 December 2000), para. 12; Council for Trade in Services Special Session, *Communication from Switzerland*, S/CSS/W/71 (4 May 2001), para. 12.

The Understanding provides a template for the liberalization and deregulation of financial services trade. Of particular importance for the current analysis are the commitments to permit: the consumption of banking and non-insurance financial services abroad;¹⁰⁴¹ the establishment of a commercial presence by financial service suppliers of another Member;¹⁰⁴² and, once these foreign financial service suppliers are established, the offer of any new financial service.¹⁰⁴³ A new financial service is defined as¹⁰⁴⁴

a service of a financial nature, including services related to existing and new products or the manner in which a product is delivered, that is not supplied by any financial service supplier in the territory of a particular Member but which is supplied in the territory of another Member.

Thus, the Understanding clears the way for innovative financial products, developed in one Member, to be supplied in other Members through a foreign investment. As the recent episode of financial instability has shown, innovative products can increase the risk of financial instability if the investment risks related to the innovative product are incorrectly understood and priced.

The Understanding also provides a standstill clause, limiting “any conditions, limitations and qualifications to the commitments [...] to existing non-conforming measures.”¹⁰⁴⁵ In other words, if Members wish to schedule restrictions on trade, their existing regulations at domestic level are the bottom line. Leroux gives the example of a Member that allows for 51 per cent foreign participation in domestic banks.¹⁰⁴⁶ The standstill clause bars this Member from making a specific GATS commitment not to restrict foreign participation to 49 per cent, as this would bind the Member at a level of liberalization lower than that it had already put in place regardless of GATS. The standstill clause limits Members’ ability to create a “regulatory cushion” in their Schedule by accepting commitments that do not go as far as already existing regulation, which would allow them to dial back effective liberalization at a later stage without violating their obligations under GATS.¹⁰⁴⁷

¹⁰⁴¹ Understanding on Financial Services, *supra* note 1038, B(4)(c).

¹⁰⁴² *Ibid.*, B(5).

¹⁰⁴³ *Ibid.*, B(7)

¹⁰⁴⁴ *Ibid.*, D(3).

¹⁰⁴⁵ *Ibid.*, A.

¹⁰⁴⁶ Leroux, *supra* note 1039, 433.

¹⁰⁴⁷ von Bogdandy and Windsor, *supra* note 1038, 653.

As mentioned, the goal of GATS is progressively to liberalize trade in services through successive rounds of negotiations that aim to further reduce or eliminate any adverse effects of domestic measures on trade in services.¹⁰⁴⁸ So far, however, offers for further reductions of barriers to trade in financial services have been limited.¹⁰⁴⁹ In response to the slow progress in the Doha Round of negotiations, Members have turned towards bilateral and multilateral FTAs that include provisions relating to the liberalization of trade in services. The US–Korea FTA and the EU–Korea FTA studied in this thesis are examples of such agreements.

In many aspects, the obligations in relation to trade in financial services imposed by the FTAs are similar to the obligations under the GATS.¹⁰⁵⁰ However, there are also important differences. The following paragraphs give a brief comparison of the two FTAs studied with the GATS.

Of the two FTAs studied, the US–Korea FTA differs the most from the GATS both in terms of structure and substance as it includes a chapter on the cross-border trade in services, a specific chapter on financial services and a chapter on investment. The existence of three chapters raises questions about how they relate to each other.

The chapter on financial services applies to measures relating to the supply of financial services through an adaptation of the four modes.¹⁰⁵¹ Article 13.1(2) US–Korea FTA specifies that the only provisions from the chapter on the cross-border trade in services that apply to financial services are the provisions on denial of benefits and on payments and transfers to the extent of the obligations to liberalize cross-border trade in financial services under Article 13.5.¹⁰⁵² The relationship between the financial services and the investment chapters is more complex. Article 11.2(3) exempts measures covered by the financial services chapter from the investment chapter.¹⁰⁵³ Nevertheless, the financial services chapter incorporates some provisions of the

¹⁰⁴⁸ GATS, art. XIX:1.

¹⁰⁴⁹ Council for Trade in Services Special Session, *Negotiations on Trade in Services–Report by the Chairman, Ambassador Fernando de Mateo, to the Trade Negotiations Committee*, TN/S/36 (21 April 2011), paras 30-32 [*CTS Chairman’s Report April 2011*].

¹⁰⁵⁰ For example, the EU–Korea FTA adopts the same definition as GATS for “measures” (art. 7.2(a)), “members” (art. 7.2(b)), “services” (art. 7.4(3)(b)) and “financial services” (art. 7.37(2)). The US–Korea FTA does not define “service” nor “adopted or maintained by a party”. The US–Korea FTA’s definition of “measures” is less tautological than in GATS and the EU–Korea FTA but refers to “any law, regulation, procedure, requirement, or practice”, see *US–Korea FTA*, art. 1.4.

¹⁰⁵¹ Modes 1 and 2 are covered by *US–Korea FTA*, art. 13.1(1)(c) *jo.* art. 13.20. Mode 3 is covered by *Ibid.*, art. 13.1(1)(a) and (b) *jo.* art. 13.20. A version of Mode 4 restricted to senior management and board of directors can be found in *Ibid.*, art. 13.8.

¹⁰⁵² *Ibid.*, art. 13.1(2)(c).

¹⁰⁵³ *Ibid.*, art. 11.2(3).

investment chapter.¹⁰⁵⁴ One of these provisions is the prohibition on direct or indirect expropriation in Article 11.6, which can have a significant impact on the legality of defensive mechanisms, as will be touched upon briefly in Section II.B. The obligations to accord “fair and equitable treatment” and “full protection of security” to foreign investors¹⁰⁵⁵ are, however, not incorporated in the financial services chapter. Article 13.20 also excludes some financial instruments from its scope, which are included instead in the investment chapter. These instruments are loans granted, or debt instruments owned, by financial institutions unless they are also granted to or issued by a financial institution and treated as part of that financial institution’s regulatory capital by its home state.¹⁰⁵⁶ Thus, if a US financial institution wants to supply a loan cross-border to a Korean national or a Korean company that is not a financial institution, the provision of this loan would fall under the investment chapter rather than under the financial services chapter.

An important consequence of the inclusion of investment in the US–Korea FTA is that it opens up Parties’ domestic regulation to investor-state dispute settlement, provided for in Section B of the investment chapter. Dispute settlement is also available for investment under the financial services chapter to the extent that this chapter incorporates the provisions of the investment chapter.¹⁰⁵⁷ As pointed out by Van Aaken and Kurtz, private investors in an investor-state dispute are often more willing than other states in a state-state dispute to challenge domestic measures aiming at protecting financial stability because there are no political considerations to provide a restraint.¹⁰⁵⁸ This inclusion of investor-state dispute settlement thus exposes states to a higher risk of legal challenges to exercises of their regulatory autonomy compared to when there is no such system. This higher risk of challenge can have a chilling effect on states’ willingness to regulate.¹⁰⁵⁹

In contrast to the US–Korea FTA, the EU–Korea FTA does not contain a comprehensive chapter on investment that includes investor protections and investor-state enforcement.¹⁰⁶⁰ This is

¹⁰⁵⁴ *Ibid.*, art. 13.1(2)(a) and (b).

¹⁰⁵⁵ *Ibid.*, art. 11.5.

¹⁰⁵⁶ *Ibid.*, art. 13.20.

¹⁰⁵⁷ *Ibid.*, art. 13.1(2)(b).

¹⁰⁵⁸ van Aaken and Kurtz, “Prudence or Discrimination? Emergency Measures, the Global Financial Crisis and International Economic Law”, 12 *Journal of International Economic Law* 859 (2009), 860-861.

¹⁰⁵⁹ Anderson, *Policy Handcuffs in the Financial Crisis* (9 February 2009), at <http://www.ips-dc.org/reports/policy_handcuffs_in_the_financial_crisis>, 14.

¹⁰⁶⁰ *EU–Korea FTA*, art. 7.10, footnote 11.

because it was negotiated before the entry into force of the Lisbon Treaty that granted the EU exclusive competence over foreign direct investment.¹⁰⁶¹ The EU–Korea FTA also does not have a specific chapter on financial services, but includes the obligations regarding the regulatory framework for financial services in its chapter on trade in services, establishment and e-commerce.¹⁰⁶² Within this chapter, the EU–Korea FTA does not follow the same distinction as the GATS between the four modes of supply of services. Instead, it merges modes 1 and 2 in its definition of cross-border supply of services.¹⁰⁶³ It further contains provisions relating to the establishment of foreign investors¹⁰⁶⁴ and relating to the temporary presence of natural persons for business.¹⁰⁶⁵ These final two categories do not fully overlap with modes 3 and 4 under GATS. The establishment category is broader than GATS mode 3 as it includes establishment that is not limited to trade in services, whereas the temporary presence category is narrower than GATS mode 4 as it only applies to five groups of natural persons.¹⁰⁶⁶

The US–Korea FTA also differs from the GATS and its EU counterpart in that it does not apply to measures “affecting” trade in services, but measures “relating to” the financial institutions, investors and cross-border trade in financial services.¹⁰⁶⁷ In WTO law, “relating to” is interpreted broadly.¹⁰⁶⁸ If this interpretation were followed in the US–Korea FTA, a wide scope of application of the obligations under the chapter on financial services would result.

¹⁰⁶¹ Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007 (2007) *Official Journal* C 306/1, see Kelsey, *Legal Analysis of Services and Investment in the CARIFORUM-EC EPA: Lessons for Other Developing Countries* (July 2010), at <http://www.southcentre.org/index.php?option=com_docman&task=doc_download&gid=1860&Itemid=182&lang=en>, 49. The precise transitional arrangements relating to existing BITs between EU Members and third states are still subject to debate. In its first reading of the proposed regulation on this topic, the European Parliament reduced the European Commission’s proposed power to review existing BITs, see *Position of the European Parliament adopted at first reading on 10 May 2011 with a view to the adoption of Regulation (EU) No .. /2011 of the European Parliament and of the Council establishing transitional arrangements for bilateral investment agreements between Member States and third countries*, at <<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P7-TA-2011-0206+0+DOC+XML+V0//EN&language=EN#BKMD-121>>.

¹⁰⁶² *EU–Korea FTA*, Chapter 7.

¹⁰⁶³ *Ibid.*, art. 7.4(3)(a).

¹⁰⁶⁴ *Ibid.*, Chapter 7, Section C. Article 7.9(a) defines establishment as “(i) the constitution, acquisition or maintenance of a juridical person; or (ii) the creation or maintenance of a branch or representative, office within the territory of a Party for the purpose of performing an economic activity.”

¹⁰⁶⁵ *Ibid.*, Chapter 7, Section D. Article 7.17 limits the applicability of the temporary presence provisions to “measures of Parties concerning the entry into, and temporary stay in, their territories of key personnel, graduate trainees, business services sellers, contractual service suppliers and independent professionals.”

¹⁰⁶⁶ See, in the context of the CARIFORUM-EC EPA, Kelsey, *supra* note 1061, 24.

¹⁰⁶⁷ *US–Korea FTA*, art. 13.1(1).

¹⁰⁶⁸ See for example the interpretation of “relating to” in Article XX(g) GATT, discussed in Chapter 7, Section I.D.

Substantively, an important difference between the US–Korea FTA, on the one hand, and the GATS and the EU–Korea FTA, on the other hand, is a different approach to the scheduling of commitments for market access and national treatment of services, with flow-on effects for current and capital account transactions and domestic regulation. The GATS adopt a positive list approach.¹⁰⁶⁹ Under this approach, a Member’s Schedule lists the service sectors and the modes of supply in which it agrees to liberalize trade as well as the conditions to which this liberalization is subject. Services, sectors or modes of supply that a Member has not listed in its Schedule are not subject to market access and national treatment liberalization commitments. The EU–Korea FTA follows that approach.¹⁰⁷⁰ In contrast, the US–Korea FTA adopts a negative list approach, meaning that a Party needs to list non-conforming measures explicitly in the Annexes of Non-Conforming Measures.¹⁰⁷¹ Any trade-restricting measures not mentioned in the enacting Party’s Annex have to comply with the relevant rules in the FTA.

Precisely what to list in a Schedule thus becomes a very important decision. This is particularly so for agreements that take a negative list approach as a negative list schedule needs to anticipate any domestic measure with trade restricting effects that may be needed in the future to protect a state’s domestic affairs. This is near impossible given the endless creativity of financial markets in developing new financial products and services. Moreover, as Section II.B argues, the Understanding on Financial Services and both FTAs studied restrict states’ ability to regulate new financial services introduced in other states.

Other substantive differences between the GATS and the FTAs regarding the specific obligations to which their ability to regulate financial services trade is subject are discussed in the analysis below. As will be argued, the GATS and the FTAs impose a range of obligations on states’ ability to regulate that serve to “de-nationalize” financial markets,¹⁰⁷² by requiring states to grant market access to foreign services and service suppliers, and by requiring them to liberalize their current and capital account. While the thesis does not take a position on the desirability of financial globalization, globalization can be problematic if not combined with appropriate regulation. Regulation of states’ monetary management policies is sorely lacking at the global level, as discussed in Chapter 8. As Sections III and IV discuss, the GATS and the FTAs only worsen this lack of regulation by imposing limits on domestic regulation that are not sufficiently

¹⁰⁶⁹ *GATS*, art. XX:1.

¹⁰⁷⁰ *EU–Korea FTA*, art. 7.13.

¹⁰⁷¹ *US–Korea FTA*, art. 13.9.

¹⁰⁷² Raghavan, *supra* note 1039, 35.

compensated by the available exceptions and thus do not ensure the balance between states' positive and negative freedom that is necessary to ensure a liberal system of sovereign states. As a result of de-nationalization and deregulation, the GATS' and the FTAs' financial services provisions potentially have a very wide impact on states' ability to enact domestic measures in response to the negative impacts experienced as a result of other states' monetary management policies, unless an exception is available.

II. THE PUSH TOWARDS FINANCIAL "DE-NATIONALIZATION"

When exposed to the threat of or actual macro-financial instability triggered by other states' policies, the affected state could consider using restrictions on foreign service suppliers, on foreign services or on the transboundary movements of funds as defensive mechanisms against these inflows and outflows of "hot money". For example, when state A increases the money supply in its domestic economy through lax credit creation policies or expansive monetary policies (i.e. a low interest rate), investors from state A seeking a better return on their investments will be tempted to move their funds to state B where a higher interest rate applies. These inflows of funds increase the demand for state B's currency, leading to an appreciation of its exchange rate. This appreciation can negatively affect the competitiveness of state B's exports on the global markets. Moreover, the inflow of funds can lead to an unsustainable inflation of asset prices in state B. Another reason why State B may want to avoid "hot money" inflows is that these foreign investors typically only invest for the short term and have no particular commitment to its economy. When the interest rate differential between state A and state B reduces or when state C offers an even higher interest rate than state B, funds are withdrawn from state B. This withdrawal leads to a depreciation of state B's exchange rate. Although this depreciation can undo the negative impact of the appreciation on the competitiveness of state B's exporters, the depreciation will make it more difficult for state B or private borrowers to repay any foreign currency loans that they have taken out while their currency's exchange rate was high. If the capital inflows were sustaining increases in asset prices, the stop in these inflows may bring the asset price rises to a standstill. Moreover, if state B's banks have to sell assets to ensure that they have sufficient liquid assets available to meet the demands of their investors, the sudden outflows of funds can cause the prices of these assets to drop and threaten not only the liquidity, but also the solvency, of state B's banks.

The push in the GATS and the FTAs towards reducing the relevance of territorial borders for financial markets and the resulting creation of global financial markets has led to restrictions on the legality of defensive mechanisms.

A. *Limits on Discriminatory Measures*

To regulate the supply of financial services in its territory, a state could enact measures that restrict the offer of retail deposit accounts to domestic banks to ensure that it can exercise consolidated supervision over the banks that offer basic financial services to private individuals. A state could also consider restricting the remote supply of financial services to financial service providers that are physically present within its territory. Further, a state could require that personal loans be offered by banks and not by other financial institutions, such as finance companies, which are not subject to the same prudential regulation and supervision as banks. The measures do not necessarily have to be prohibitions on the supply of a service, but could also subject foreign financial service providers to specific reporting obligations or different reserve requirements. As the following paragraphs illustrate, the legality of each of these examples as a defensive mechanism against the negative impact of other states' monetary management policies depends on the interpretation of the national treatment obligation in the GATS and the FTAs studied.

Article XVII GATS binds WTO Members to accord to services and service suppliers of other Members, in the sectors listed in their Schedule and subject to the conditions and qualifications listed therein, treatment that is no less favourable than that accorded to their own like services and service suppliers.¹⁰⁷³ This national treatment obligation, which applies very broadly to “all measures affecting the supply of services”,¹⁰⁷⁴ points to GATS' goal of avoiding protection of domestic service suppliers or services at the expense of foreign ones.¹⁰⁷⁵

The EU–Korea FTA contains the same national treatment provision as GATS in its section on establishment.¹⁰⁷⁶ There is, however, an important difference in the national treatment provision in its section on the cross-border supply of services.¹⁰⁷⁷ This provision requires the parties to list specifically any conditions on and qualifications to the national treatment obligation in all sectors where market access commitments have been accepted. This amounts to

¹⁰⁷³ GATS, art. XVII:1. In accordance with Article XX:2 GATS, any conditions and qualifications that are inconsistent with the national treatment obligation of Article XVII and the market access obligations of Article XVI will be inscribed in the column relating to Article XVI. Therefore, to understand a state's national treatment commitments, the market access column has to be studied.

¹⁰⁷⁴ GATS, art. XVII:1; Krajewski and Engelke, “Article XVII GATS”, in Wolfrum et al. (Eds.), *WTO–Trade in Services* (2008), 398-399.

¹⁰⁷⁵ Diebold, *supra* note 696, 20. The Understanding on Financial Services, *supra* note 1038, B(3) and C stipulate specific national treatment obligations that states can schedule in relation to financial services.

¹⁰⁷⁶ *EU–Korea FTA*, art. 7.12 (establishment).

¹⁰⁷⁷ *Ibid.*, art. 7.6.

a negative list in practice, because unless states have listed exceptions to the national treatment obligation, they will be obliged not to discriminate in all sectors for which they have accepted market access obligations.¹⁰⁷⁸

The US–Korea FTA national treatment provision applicable to financial services is worded differently, because of the negative list approach taken in this FTA. It provides that treatment “no less favourable” than that accorded to a Party’s own investors, financial institutions or financial service suppliers “in like circumstances” shall be accorded to investors, financial institutions or financial service suppliers from the other Party.¹⁰⁷⁹

This brief overview of the relevant provisions reveals that, as in the context of trade in goods, there are two important components to the national treatment obligation in the context of trade in services: “likeness” and “less favourable treatment”.

The determination of “likeness” is even more elusive in the context of trade in services than it is in the context of trade in goods.¹⁰⁸⁰ Of the four criteria that are traditionally used to determine likeness of goods—physical characteristics, tariff classification, end uses and consumer preferences¹⁰⁸¹—only the final two are useful to determine the likeness of services. Physical characteristics cannot be used as a criterion for likeness in the context of trade in services due to the intangible nature of services.¹⁰⁸² Given that services do not physically cross a border, tariffs are not an obstacle to their trade. Moreover, there is no standard classification for services as there is for the tariff classification of goods.¹⁰⁸³ The WTO Secretariat has classified services based on the UN Central Product Classification (CPC),¹⁰⁸⁴ but this classification is not considered sufficient to make a positive finding of “likeness”.¹⁰⁸⁵

¹⁰⁷⁸ Kelsey, *supra* note 1061, 49.

¹⁰⁷⁹ *US–Korea FTA*, art. 13.2.

¹⁰⁸⁰ Working Party on GATS Rules, *Subsidies and Trade in Services: Note by the Secretariat*, S/WPGR/W/9 (6 March 1996), para. 9.

¹⁰⁸¹ Working Party on Border Tax Adjustments, *supra* note 697, para. 18; *Japan–Alcoholic Beverages II (AB)*, p. 21.

¹⁰⁸² Krajewski, *supra* note 1010, 101.

¹⁰⁸³ *Ibid.*, 99.

¹⁰⁸⁴ WTO Secretariat, *Services Sectoral Classification List*, MTN.GNS/W/120 (10 July 1991).

¹⁰⁸⁵ Krajewski, *supra* note 1010, 101-102; Cossy, “Some Thoughts on the Concept of ‘Likeness’ in the GATS”, in Panizzon et al. (Eds.), *GATS and the Regulation of International Trade in Services* (2008), 334.

Furthermore, services and service suppliers are inherently more diverse than goods.¹⁰⁸⁶ The question becomes to what extent these differences make services and service suppliers unlike for the purpose of applying the national treatment obligation. Three questions are particularly relevant: 1) does the mode of supply of a service affect likeness?; 2) do the methods or means of supply affect likeness?; 3) do the characteristics of the service suppliers affect likeness? To this date, there is no WTO jurisprudence that directly addresses the precise interpretation of “likeness” in the context of trade in services.¹⁰⁸⁷

The relevance of the first question can be seen in the situation when a state restricts the supply of a financial service to financial service providers that are incorporated within its territory (mode 3) and excludes the ability of natural persons (mode 4) to offer a service that is otherwise the same. The question then becomes whether the foreign mode 4 suppliers are only “like” the domestic natural person suppliers or whether they are also “like” the domestic incorporated suppliers. If cross-modal likeness is accepted, the legality of states’ defensive mechanisms is limited, because it will have to treat a broader range of foreign services and services suppliers no less favourably than their domestic counterparts.

The second question regarding the methods or means of supply refer to how a service is provided to the consumer. In the context of financial services trade, this question arises when a state wishes to make a distinction between savings accounts offered by internet-only banks¹⁰⁸⁸ and savings accounts offered by “brick and mortar” banks. Are both types of accounts seen as a like service or does the remote supply of the online accounts make them “unlike”? Krajewski and Engelke argue that services supplied through different methods or means should in general be considered unlike, because of the absence of a full competitive relationship between them.¹⁰⁸⁹ However, that would mean that if there is a competitive relationship between two services, despite the differences in the methods or means of supply, states could not treat foreign services less favourably than domestic services. This interpretation of the national treatment obligation restricts the legality of defensive mechanisms.

Tying into this question of likeness across different methods of supply is the question whether the characteristics of the service supplier affect the likeness of the service. This question is

¹⁰⁸⁶ Cossy, *supra* note 1085, 327.

¹⁰⁸⁷ Diebold, *supra* note 696, 120.

¹⁰⁸⁸ An example in the New Zealand context is RaboDirect.

¹⁰⁸⁹ Krajewski and Engelke, *supra* note 1074, 403-404.

similar to the question of the product/process distinction in the context of trade in goods. However, unlike the trade in goods context, the characteristics of a service are often difficult to distinguish from the characteristics of the service supplier or the methods of supply.¹⁰⁹⁰ Moreover, the GATS and EU–Korea FTA’s reference to “like services and service suppliers” indicates that there is no equivalent to the product/process distinction in the context of trade in services.¹⁰⁹¹ Therefore, the method through which a service is supplied should be allowed to determine whether a service is like, and thus be able to constitute a ground for differential treatment.

The reference to “like services and service suppliers” in the GATS and the EU–Korea FTA creates a further complication for the determination of “likeness”. “Like services and service suppliers” is open to different interpretations depending on whether the reference to “services and service suppliers” is seen as a cumulative requirement.¹⁰⁹² For example, if a defensive mechanism involves stricter prudential requirements that can only be met by banks and not by non-bank financial institutions that offer the same service as the banks, can another state argue that the national treatment obligation is violated with respect to its non-bank financial institutions compared to the regulating state’s banks? Each of these interpretations has a different impact on the legality of a state’s defensive mechanisms in response to other states’ monetary management policies.

A first interpretation would be to argue that the national treatment obligation does not apply given the differences between service suppliers, even if they offer the same service. Under this approach, the national treatment obligation only applies if the foreign service supplier is “like” the domestic service supplier *and* the service provided by the foreign service provider is “like” the service provided by the domestic service supplier.¹⁰⁹³

A second interpretation results in a similar outcome, but would only require likeness of either the service or the service supplier, depending on whether the domestic measure relates to the service or the service supplier. Thus, if the measure applies to banks, it only needs to be verified

¹⁰⁹⁰ *Ibid.*, 406; Trachtman and Nicolaidis, *supra* note 839, 293; Diebold, *supra* note 696, 203, 345.

¹⁰⁹¹ Krajewski and Engelke, *supra* note 1074, 406; Pauwelyn, *supra* note 848, 359.

¹⁰⁹² Krajewski and Engelke, *supra* note 1074, 408-409.

¹⁰⁹³ *Ibid.*, 408; Diebold, *supra* note 696, 205.

whether the measure does not treat foreign banks less favourably than domestic banks even if foreign non-bank financial institutions offer the same service as domestic banks.¹⁰⁹⁴

A third interpretation would be to argue that given the likeness of the service, foreign and domestic suppliers cannot be treated differently even though they are unlike, i.e. one is a bank and the other is not. Under this approach, both service provider and service need to be unlike to exclude application of the national treatment obligation.¹⁰⁹⁵ If one of them is “like” its domestic counterpart, the national treatment obligation applies.

Although there is no specific GATS case law specifically analysing “likeness”, WTO Panels seem to have chosen the third interpretation by asserting that “to the extent that entities provide these like services, they are like service suppliers.”¹⁰⁹⁶ Therefore, states’ ability to regulate service suppliers is restricted.¹⁰⁹⁷ The third interpretation prioritizes trade liberalization over regulatory autonomy as it expands the scope of the national treatment obligation.¹⁰⁹⁸ As a result, WTO Members’ positive freedom to adopt the monetary management policies they see fit prevails over the negative freedom of other Members.

As a final point regarding “likeness”, it needs to be borne in mind that the US–Korea FTA’s national treatment obligation does not apply to “like services and service suppliers” but to investors, financial institutions and financial service suppliers “in like circumstances”. This different formulation, which is taken from NAFTA, allows for a wide range of circumstances—including the “aims and effects” of a regulatory measure—to be taken into account to determine likeness.¹⁰⁹⁹ Inclusion of the aims and effects allows for a narrower group of services and service suppliers that cannot be discriminated against. Thus, the different formulation of the national treatment obligation under the US–Korea FTA can result in fewer limits on the legality of defensive mechanisms than in the context of the GATS or the EU–Korea FTA.

¹⁰⁹⁴ Krajewski and Engelke, *supra* note 1074, 409; Diebold, *supra* note 696, 210.

¹⁰⁹⁵ Krajewski and Engelke, *supra* note 1074, 408.

¹⁰⁹⁶ *EC–Bananas III (Ecuador)*, para. 7.322; *Canada–Autos*, para. 10.248; Krajewski and Engelke, *supra* note 1074, 408–409; Diebold, *supra* note 696, 188–195.

¹⁰⁹⁷ Diebold, *supra* note 696, 198.

¹⁰⁹⁸ Krajewski and Engelke, *supra* note 1074, 409; Diebold, *supra* note 696, 204.

¹⁰⁹⁹ Trujillo, “Mission Possible: Reciprocal Deference between Domestic Regulatory Structures and the WTO”, 40 *Cornell International Law Journal* 201 (2007), 241–244, 248; Cossy, *supra* note 1085, 340; Diebold, *supra* note 696, 121, 146–153.

As mentioned, “likeness” is only one aspect of the national treatment obligation. The treatment of foreign services and service suppliers compared to their domestic counterparts also needs to be less favourable to amount to a violation of the national treatment obligation. Treatment is less favourable if it, through formally identical or formally different treatment, modifies competitive conditions in favour of domestic services or service suppliers compared to like services or service suppliers of other members.¹¹⁰⁰ The national treatment provision thus extends to de iure and de facto discrimination.¹¹⁰¹ Some of the examples given at the start of this Section, such as the restriction of retail deposit accounts to domestic banks or the additional reporting requirements for foreign financial service providers compared to their domestic counterparts, are clearly de iure discriminatory.

To determine the limits on the legality of states’ defensive mechanisms, the prohibition on de facto discrimination is crucial, because this prohibition has the potential to reach deeply into states’ regulatory autonomy. A footnote to Article XVII GATS specifies that

[s]pecific commitments assumed under this Article shall not be construed to require any Member to compensate for any inherent competitive disadvantages which result from the foreign character of the relevant services or service suppliers.

As in the context of trade in goods, discussed in Chapter 7, there is no jurisprudence on whether de facto discrimination should be interpreted as requiring a diagonal or an asymmetric impact test. Many authors have expressed a clear preference for the latter.¹¹⁰² Given that the standard for de facto discrimination is arguably the most important question in relation to the scope of the national treatment test,¹¹⁰³ the lack of clarity raises questions about the legality of states’ defensive mechanisms in response to other states’ monetary management policies.

B. *Limits on Restrictions of New Financial Services with a Foreign Element*

An important contributor to the Global Financial Crisis was the creation of various financial innovations, such as asset-backed securities and credit default swaps,¹¹⁰⁴ that were poorly understood by investors, regulators and credit rating agencies. Many of these products

¹¹⁰⁰ GATS, art. XVII:3.

¹¹⁰¹ Diebold, *supra* note 696, 123.

¹¹⁰² See sources quoted in *Ibid.*, 44, footnote 35.

¹¹⁰³ Pauwelyn, *supra* note 848, 359.

¹¹⁰⁴ Blundell-Wignall and Atkinson, *supra* note 181. A “credit default swap” is explained in footnote 1009. “Asset-backed securities” are securities that use the payments generated by other assets, e.g. mortgage repayments, as collateral, see Financial Times Lexicon, *Asset-Backed Securities*, at <http://lexicon.ft.com/Term?term=asset_backed-securities>.

originated in the US, but were supplied cross-border to foreign investors. Given this experience, states may want to be cautious before allowing novel financial services and products to be supplied in their markets. Their ability to regulate or even restrict the supply of new financial services through one of the four modes of supply can, however, be restricted by their obligations under GATS or an FTA.

Under GATS, Members that have scheduled financial services in accordance with the approach of the Understanding are required to allow financial service suppliers of another Member that are already established within their territory to offer any new financial service.¹¹⁰⁵ A “new financial service” is defined as¹¹⁰⁶

a service of a financial nature, including services related to existing and new products or the manner in which a product is delivered, that is not supplied by any financial service supplier in the territory of a particular Member but which is supplied in the territory of another Member.

Thus, if Member A incorporates the Understanding in its Schedule, it has to accept that service suppliers established within its territory offer a new financial service that is already being offered in any other WTO Member. Given that the Understanding requires the full liberalization of the supply of financial services in mode 3, Member A will have to allow foreign suppliers under mode 3 to offer any service that is already offered in any other Member, which is not necessarily limited to the home state of the financial service supplier. This will be so even if Member A, the home state Member and the Member in which the financial service is already supplied have a very different regulatory framework and the new financial service is not suited for Member A’s regulatory framework.

The FTAs both adopt a mixed approach to the introduction of new financial services. Like the Understanding, the EU–Korea FTA only applies to financial service suppliers already established within the regulating Party’s territory when they want to offer the new financial service.¹¹⁰⁷ In contrast, the US–Korea FTA goes beyond GATS by extending the obligation to allow new financial services to include the cross-border supply of the financial service or product. Both FTAs are “GATS minus” because the obligation to allow new financial services only applies if

¹¹⁰⁵ Understanding on Financial Services, *supra* note 1038, B(7).

¹¹⁰⁶ *Ibid.*, D(3).

¹¹⁰⁷ *EU–Korea FTA*, art. 7.42.

supply of the new financial service would be permitted to a Party's own financial institutions in like circumstances without the need for additional legislative action.¹¹⁰⁸

In the US–Korea FTA, a Party's ability to introduce regulation once regulators have become aware of the existence of a new financial service is hampered by the incorporation of the expropriation and compensation provision and the investor-state dispute settlement of the investment chapter in the chapter on financial services.¹¹⁰⁹ The regulation of new financial services could constitute an "indirect expropriation" if the regulatory measures affect the investor's enjoyment of the investment regardless of whether the ownership of the investment is transferred from the investor to the state.¹¹¹⁰ Any measure that substantially reduces the value of the investment to the investor could be considered an expropriation, regardless of its purpose.¹¹¹¹

To soften the potentially broad impact of the expropriation provisions on regulatory autonomy, many states now include interpretive annexes in their BITs and FTAs to clarify the scope of these provisions.¹¹¹² In the same vein, an Interpretive Annex to Chapter 11 has been included in the US–Korea FTA. The Annex clarifies that the determination of whether a Party's regulation relating to new financial services constitutes an indirect expropriation depends on a case-by-case analysis of the relevant facts.¹¹¹³ Moreover, the Annex mitigates the prohibition on expropriation by recognizing that, except in rare circumstances, non-discriminatory measures designed and applied to protect legitimate public welfare objectives do not constitute an indirect expropriation.¹¹¹⁴ Although the list of legitimate welfare objectives is not exhaustive,¹¹¹⁵ it is

¹¹⁰⁸ *US–Korea FTA*, art. 13.6; *EU–Korea FTA*, art. 7.42.

¹¹⁰⁹ *US–Korea FTA*, art. 13.1(2)(a) and (b) *jo.* art. 11.6.

¹¹¹⁰ Lowenfeld, *supra* note 169, 563.

¹¹¹¹ Dolzer and Schreuer, *Principles of International Investment Law* (2008), 93; Reinisch, "Expropriation", in Muchlinski et al. (Eds.), *The Oxford Handbook of International Investment Law* (2008), 432-433.

¹¹¹² Vandeveld, "A Brief History of International Investment Agreements", 12 *U.C. Davis Journal of International Law and Policy* 157 (2005), 187-188; Spears, "The Quest for Policy Space in a New Generation of International Investment Agreements", 13 *Journal of International Economic Law* 1037 (2010), 1051.

¹¹¹³ *US–Korea FTA*, Annex 11-B, para. 3(a).

¹¹¹⁴ *Ibid.*, para. 3(b).

¹¹¹⁵ *Ibid.*, footnote 19.

unclear whether it includes prudential regulation of new financial services or whether these measures need to pass under the prudential carve-out discussed below.¹¹¹⁶

If a regulation were found to be an indirect expropriation, it triggers an obligation to pay the investor “prompt, adequate, and effective compensation” equivalent to the “fair market value of the expropriated investment immediately before the expropriation took place”.¹¹¹⁷ While a prohibition on expropriation does not bar states from exercising their regulatory autonomy, the risk of being exposed to an arbitral procedure initiated by an investor and the obligation to pay prompt, adequate and effective compensation can be prohibitive for host states and stymie regulation of new financial services.

C. *Current and Capital Account Liberalization*

The push towards “de-nationalization” is further visible in various obligations to liberalize current transactions and certain capital transactions. Capital account liberalization was an important goal of the US and the EC during the GATS negotiations.¹¹¹⁸

Footnote 8, appended to Article XVI:1 GATS, specifies, firstly, that market access commitments relating to the cross-border supply of a service (mode 1) imply a commitment to allowing free cross-border capital flows if this is an essential part of the service and, secondly, that commitments relating to mode 3 (commercial presence) require capital transfers relating to such presence to be allowed into the territory.¹¹¹⁹ Article XI:2 GATS similarly holds that a Member cannot “impose restrictions on any capital transactions inconsistently with its specific commitment regarding such transactions”. These obligations regarding capital account liberalization come on top of the requirement to liberalize current transactions with respect to specific commitments.¹¹²⁰

In the Doha Round of multilateral trade negotiations in the WTO, Korea has commented that cross-border transactions that are not related to large-scale capital movement should not be

¹¹¹⁶ See Chapter 9, Section IV.D.

¹¹¹⁷ *US-Korea FTA*, art. 11.6(1)(c) and 11.6(2)(b).

¹¹¹⁸ Raghavan, *supra* note 1039, 38.

¹¹¹⁹ The footnote is silent about capital *outflows* under mode 3. This suggests that they need not be liberalized. Delimatsis and Molinuevo, “Article XVI GATS”, in Wolfrum et al. (Eds.), *WTO-Trade in Services* (2003), 373.

¹¹²⁰ *GATS*, art. XI:1.

liberalized.¹¹²¹ Nevertheless, Korea's FTAs with the US and the EU go much further than the GATS in liberalizing both current and capital flows.

The EU–Korea FTA provides for unrestricted current account payments and transfers.¹¹²² Unlike the requirement under Article XI:1 GATS, this obligation is not subject to the Parties' specific commitments. Capital transfers are also subject to broad liberalization obligations. The Parties cannot restrict transfers of capital relating to investments and other transactions liberalized in accordance with the chapter on trade in services, establishment and e-commerce, or relating to the liquidation and repatriation of invested capital and of profit.¹¹²³ In addition, investors can also freely move capital related to other transactions such as financial loans and credits or capital participation in a legal person.¹¹²⁴ Finally, the EU–Korea FTA subjects existing restrictions on capital transfers to a standstill clause, meaning that a Party cannot tighten existing restrictions nor introduce new restrictions.¹¹²⁵

The US–Korea FTA imposes an obligation to allow all transfers relating to an investment or to the cross-border supply of financial services, which, as discussed above, includes the obligation to allow new financial services.¹¹²⁶ All transfers have to be allowed in a freely usable currency at the market rate of exchange prevailing at the time of transfer.¹¹²⁷ A breach of these transfer provisions in relation to investment, but not those in relation to the cross-border supply of financial services,¹¹²⁸ can trigger investor-state dispute settlement.¹¹²⁹

The GATS and the FTAs thus impose broad obligations on states to liberalize payments and transfers relating to current and capital transactions within their territory. These obligations limit states' freedom to impose capital controls on inflows of hot money, even if actions are needed to protect their domestic affairs against the negative impact of other states' monetary management policies.

¹¹²¹ *Communication from the Republic of Korea*, S/CSS/W/86 (2001), para. 14.

¹¹²² *EU–Korea FTA*, art. 8.1.

¹¹²³ *Ibid.*, art. 8.2(1).

¹¹²⁴ *Ibid.*, art. 8.2(2).

¹¹²⁵ *Ibid.*, art. 8.2(3).

¹¹²⁶ *US–Korea FTA*, art. 11.7(1), 13.1(2)(a) *jo.* art. 11(7)(1), 13.1(2)(b) *jo.* art. 12.10.

¹¹²⁷ *Ibid.*, art. 11.7(2), art. 12.10(2).

¹¹²⁸ *Ibid.*, art. 13.1(2)(c) *jo.* art. 12.10 and footnote 2 to Chapter 12.

¹¹²⁹ *Ibid.*, art. 13.1(2).

III. THE PUSH TOWARDS DEREGULATION

In addition to restrictions on services or service suppliers of a foreign origin or restrictions on payments and transfers, a state affected by the negative impact of other states' monetary management policies on its macro-financial stability could opt to regulate all services or service suppliers within its territory, regardless of their origin. This Section argues that trade liberalization agreements, despite provisions aiming to ensure domestic regulatory autonomy, limit states' ability to impose quantitative restrictions or non-discriminatory qualitative measures on service suppliers or imported services.

A. *Limits on Non-Discriminatory Quantitative Restrictions*

Article XVI GATS and the similarly worded corresponding Articles in both FTAs¹¹³⁰ prohibit five types of quantitative measures that can restrict market access such as limitations on the number of service suppliers, service operations or natural persons that can be employed, on the value of service transactions or assets, or on the maximum foreign capital participation.¹¹³¹ These prohibitions apply whenever states have made specific commitments under GATS or the EU–Korea FTA or unless states have excluded a specific sector or measure from this obligation under the US–Korea FTA.

Financial service providers who want to stand out in a crowded marketplace will often seek to increase the yield on their investments to attract potential investors. A higher yield does not always result from better investment skills of the financial service providers, but can also be a reward for higher risks they have taken on. Excessive competition between financial service providers can encourage higher risk activities.¹¹³² States may therefore want to impose maximum restrictions on the number of financial service providers to reduce excessive competition. However, Article XVI:2(a) restricts their ability to introduce limits on the maximum number of financial service providers. The legality of such measures as defensive mechanisms thus depends on the availability of an exception, which is the topic of Section IV.

Since *US–Gambling*, it has been clear that the scope of Article XVI is wider than its wording suggests. In this case, a non-discriminatory ban imposed by the US on remote gambling was seen as a “zero quota” because it had the effect of limiting imports of remote gambling services to a

¹¹³⁰ *US–Korea FTA*, art. 12.4, for financial services supplied by investments that are not covered investments in a financial institution, and art. 13.4, for financial institutions. *EU–Korea FTA*, art. 7.5(2) and 7.11(2).

¹¹³¹ *GATS*, art. XVI:2(a)-(d) and (f).

¹¹³² Kelsey, *supra* note 1061, 85.

maximum of zero whereas the US had made a full market access commitment. The ban was equated to a quantitative restriction prohibited by Article XVI:2(a) and (c) rather than treated as a qualitative restriction.¹¹³³ This conclusion was reached despite the recognition that only the market access restrictions specifically listed in Article XVI:2 are prohibited if market access commitments are undertaken and despite this list not including limits based on how a service is supplied.¹¹³⁴

Under this jurisprudence, qualitative measures in a sector for which specific commitments have been accepted are surreptitiously turned into quantitative measures. This is because any qualitative threshold implies that services or service suppliers that fall below the threshold are excluded from the market and thus subject to a “zero quota”.¹¹³⁵ Equating a qualitative threshold with a quantitative restriction leaves very little in terms of Members’ domestic regulatory autonomy and shows a preference for liberalized trade.¹¹³⁶ This preference was confirmed as much by the WTO Panel when it held that while Members had a right to regulate under Article VI, “this sovereignty ends whenever rights of other Members under the GATS are impaired”.¹¹³⁷

As a result, various measures that Members have considered in response to the Global Financial Crisis would come within the scope of Article XVI if Members have made commitments to grant market access to financial service providers. In a recent communication to the Committee on Trade in Services, Barbados invoked the examples of bans on the use of hedge funds or on the use of credit default swaps, unless the purchaser of the swap also owns the underlying debt.¹¹³⁸

B. Limits on Non-Discriminatory Qualitative Measures

A further push towards deregulation in trade liberalization agreements arises from the various limits on non-discriminatory qualitative measures. A first restriction is included in Article XVI:2(e) GATS which prohibits “measures which restrict or require specific types of legal entity

¹¹³³ *US–Gambling (Panel)*, paras 6.330 and 6.355; *US–Gambling (AB)*, paras 238 and 251.

¹¹³⁴ *US–Gambling (Panel)*, paras 6.298 and 6.318; King and Kalupahana, “Choosing between Liberalization and Regulatory Autonomy under GATS: Implications of U.S.-Gambling for Trade in Cross Border E-Services”, 40 *Vanderbilt Journal of Transnational Law* 1189 (2007), 1240.

¹¹³⁵ Pauwelyn, “Rien Ne Va Plus? Distinguishing Domestic Regulation from Market Access in GATT and GATS”, 4 *World Trade Review* 131 (2005), 166.

¹¹³⁶ Regan, “A Gambling Paradox: Why an Origin-Neutral ‘Zero-Quota’ Is Not a Quota under GATS Article XVI”, 41 *Journal of World Trade* 1297 (2007), 1315.

¹¹³⁷ *US–Gambling (Panel)*, para. 6.316.

¹¹³⁸ Committee on Trade in Financial Services, *Communication from Barbados: Unintended Consequences of Remedial Measures Taken to Correct the Global Financial Crisis: Possible Implications for WTO Compliance*, JOB/SERV/38 (18 February 2011), paras 5 and 9. “Credit Default Swaps” are defined in footnote 1009.

or joint venture through which a service supplier may supply a service”.¹¹³⁹ Unless a Member has included a reservation in its Schedule, this provision bans it from imposing a specific legal form on financial institutions active within its territory. If a Member has adopted the Understanding in its Schedule, it will be bound to allow financial service suppliers of another Member to access its market through a branch rather than through a subsidiary due to the commercial presence commitments in the Understanding.¹¹⁴⁰ Moreover, if the Member wishes to limit this commitment, it is bound by the Understanding’s standstill obligation.¹¹⁴¹

Thus, domestic legislation that obliges foreign financial service providers to operate through subsidiaries rather than branches would be contrary to the market access obligations to which Members have committed themselves.¹¹⁴² The difference between branches and subsidiaries is crucial, because under the rules allocating the responsibility to regulate and supervise internationally active banks,¹¹⁴³ host states typically can only regulate and supervise subsidiaries and not branches of foreign financial institutions, which instead fall within the jurisdiction of the parent company’s home state.¹¹⁴⁴

A second restriction is Article VI GATS which complements the provisions on market access and national treatment by preventing unnecessary barriers to trade in services.¹¹⁴⁵ These barriers can be of a procedural or of a substantive nature. Of relevance here is the impact of Article VI on substantive requirements regarding services and service suppliers.

Article VI:4 provides for the development by the Council for Trade in Services of necessary disciplines for domestic measures relating to “qualification requirements and procedures, technical standards and licensing requirements” (“QTL-requirements”) to ensure that these requirements are

¹¹³⁹ GATS, art. XVI:2(e); *US–Korea FTA*, art. 13.4(b); *EU–Korea FTA*, art. 7.11(e).

¹¹⁴⁰ Understanding on Financial Services, *supra* note 1038, B(5). Commercial presence includes the creation of a branch rather than a subsidiary, see GATS, art. XXVIII:d(ii).

¹¹⁴¹ Understanding on Financial Services, *supra* note 1038, A.

¹¹⁴² Delimatsis and Sauvé, “Financial Services Trade after the Crisis: Policy and Legal Conjectures”, 13 *Journal of International Economic Law* 837 (2010), 841-842; Committee on Trade in Financial Services, *supra* note 1138, 3, para. 12.

¹¹⁴³ See Chapter 8, Section III.

¹¹⁴⁴ Delimatsis and Sauvé, *supra* note 1142, 841-842; Kelsey, *supra* note 1061, 85.

¹¹⁴⁵ Mattoo and Sauvé, “Domestic Regulation and Trade in Services: Key Issues”, in Sauvé and Mattoo (Eds.), *Domestic Regulation and Service Trade Liberalization* (2003), 3; Krajewski, “Article VI GATS”, in Wolfrum et al. (Eds.), *WTO–Trade in Services* (2008), 167-168; Wouters and Coppens, *supra* note 1026, 216.

(a) based on objective and transparent criteria [...]; (b) not more burdensome than necessary to ensure the quality of the service; (c) in the case of licensing procedures, not in themselves a restriction on the supply of the service.

Examples of such measures in the context of financial services trade could be capital adequacy ratios, reserve ratios, or minimum qualifications of board members of financial institutions.

Disciplines regarding these measures have not been developed yet in the context of financial services trade.¹¹⁴⁶ In the absence of disciplines developed by the Council for Trade in Services and to ensure that Members' domestic measures relating to QTL-requirements in sectors where they have undertaken specific commitments do not nullify or impair these commitments, Article VI:5 applies provisionally.

Of the substantive obligations imposed, the obligation to ensure that the requirements in the domestic measures are "not more burdensome than necessary to ensure the quality of the service" is directly relevant to determine Members' freedom to employ defensive mechanisms against the negative impact of other Members' monetary management policies.¹¹⁴⁷ As argued by Trachtman, this obligation is potentially very restrictive of Members' regulatory autonomy.¹¹⁴⁸ It can raise debates in various contexts¹¹⁴⁹ on whether a domestic measure is necessary for the quality of the service or whether it serves other goals that are not necessarily related to quality considerations, such as ensuring financial stability in the domestic economy. To determine whether a trade restrictive domestic measure is necessary, international standards will be considered, but only if developed by international organisations "whose membership is open to the relevant bodies of at least all the Members of the WTO."¹¹⁵⁰ Given that membership in the Basel Committee is limited, the Basel Accords are not an acceptable source of such international standards.¹¹⁵¹

The restriction on regulatory autonomy in Article VI:5 is compensated for by the fact that it would be up to a complaining Member to provide evidence that the measure is more

¹¹⁴⁶ Delimatsis and Sauvé, *supra* note 1142, 852-853. The latest state of play can be found in CTS Chairman's Report April 2011, *supra* note 1049, Annex I.

¹¹⁴⁷ GATS, art. VI:5(a)(i) *jo.* art. VI:4(b).

¹¹⁴⁸ Trachtman, "Lessons for the GATS from Existing WTO Rules on Domestic Regulation", in Sauvé and Mattoo (Eds.), *Domestic Regulation and Services Trade Liberalization* (2003), 68.

¹¹⁴⁹ The various fora for normative change, discussed in Chapter 4, are all possible contexts in which the debate about the necessity of a state's regulatory actions can take place.

¹¹⁵⁰ GATS, art. VI:5(b) and footnote 3.

¹¹⁵¹ See footnote 973 for a list of current members.

burdensome than necessary to ensure the quality of the service, as the necessity test is part of a positive obligation rather than an exception.¹¹⁵² Moreover, the complainant would have to establish that the measure “could not reasonably have been expected [...] at the time the specific commitments [...] were made”.¹¹⁵³ Proving this may be very onerous for the complaining Member.¹¹⁵⁴ The obstacles facing complainants indirectly protect Members’ freedom to impose QTL-requirements, at least until disciplines have been developed.

Limits on non-discriminatory qualitative measures also exist in the FTAs. At the start of the EU–Korea FTA’s chapter trade in services, establishment and electronic commerce, the Parties recognize in general terms the right to regulate and to introduce new regulation to meet legitimate policy objectives, on the condition that this right is exercised consistently with the provisions of the chapter on trade in services.¹¹⁵⁵ What constitute “legitimate” objectives is not specified,¹¹⁵⁶ leaving considerable scope for interpretation that can be shaped by ideological commitments prioritizing free trade over the protection of other values that Parties hold dear.

This general right to regulate is further developed in Article 7.23 EU–Korea FTA. The impact of this Article on the legality of defensive mechanisms is different from the impact of Article VI GATS. First, the obligation is cast in softer terms, as Parties only “endeavour to ensure” their domestic regulation is based on the FTA’s requirements.¹¹⁵⁷ Second, the right to regulate and to impose new regulation to meet public policy objectives is explicitly recognized. These two elements suggest a broader ability for host states to regulate as they see fit. However, there are also factors that limit this ability. First, the obligation is not restricted to sectors in which specific commitments have been accepted. Second, while the FTA does not require that the measures be no more burdensome than necessary, it requires that the QTL-requirements not constitute unnecessary barriers to trade in services between the Parties. Finally, the FTA also

¹¹⁵² Krajewski, *supra* note 1145, 187.

¹¹⁵³ GATS, art. VI:5(a)(ii).

¹¹⁵⁴ Matsushita et al., *supra* note 695, 629.

¹¹⁵⁵ EU–Korea FTA, art. 7.1(4).

¹¹⁵⁶ “Legitimate objectives” are not defined in the GATS either. However, the Accountancy Disciplines developed under Article VI GATS refer to legitimate objectives, see Council on Trade in Services, *Disciplines on Domestic Regulation in the Accountancy Sector*, S/L/64 (14 December 1998), para. 2. Although this list is not exhaustive, it points to a narrow range of objectives and still exposes states to the risk that the Appellate Body disagrees with the legitimacy of its objectives.

¹¹⁵⁷ EU–Korea FTA, art. 7.23(3).

specifies that Parties shall implement and apply a list of internationally agreed standards, such as the Basel Accords, for regulation and supervision in the financial services sector.¹¹⁵⁸

The US–Korea FTA imposes disciplines on domestic regulation in its Chapter on the cross-border supply of services.¹¹⁵⁹ But, this provision is not listed in the provisions of that Chapter incorporated in the Chapter on financial services.¹¹⁶⁰ Yet, the domestic regulation provision applies to a subset of financial services, namely those supplied by an investment that qualifies as a “covered investment” in the investment chapter¹¹⁶¹ unless that investment is in a financial institution.¹¹⁶² The text of this domestic regulation provision is almost identical to the one in the EU–Korea FTA, with the exception that the right to introduce new regulations is limited to “national policy objectives” rather than “public policy objectives”. The term “national” could be seen as indicating that it is up to the regulating Party itself to determine the policy objective without external interference or a need to justify that the objective is indeed one of “public” policy.

The ability to regulate financial services under the US–Korea FTA is further affected by the incorporation of the provision on expropriation and compensation that is part of the FTA’s investment chapter into the chapter on financial services.¹¹⁶³ If a Party’s regulation is considered as an action equivalent to expropriation,¹¹⁶⁴ the exercise of its right to regulate can trigger a claim for compensation by a foreign investor of the other Party.¹¹⁶⁵ The Interpretive Annex on Expropriation¹¹⁶⁶ stipulates that a relevant criterion to assess whether a specific regulatory action is an indirect expropriation is “the extent to which the government action interferes with distinct, reasonable investment-backed expectations”.¹¹⁶⁷ The introduction of new regulation in a less heavily regulated sector is less likely to be reasonable than in a heavily regulated

¹¹⁵⁸ *Ibid.*, art. 7.24.

¹¹⁵⁹ *US–Korea FTA*, art. 12.7.

¹¹⁶⁰ *Ibid.*, art. 13.1(2).

¹¹⁶¹ *Ibid.*, art. 1.4 and 11.28.

¹¹⁶² *Ibid.*, art. 12.1(4)(a).

¹¹⁶³ *Ibid.*, art. 13.1(2)(a).

¹¹⁶⁴ As defined in *Ibid.*, Annex 11-B, para. 3.

¹¹⁶⁵ *Ibid.*, art. 11.6(c). Chapter 11’s investor-state dispute settlement mechanism applies to financial services by virtue of art. 13.1(2)(b).

¹¹⁶⁶ *Ibid.*, Annex 11-B. See also text accompanying footnotes 1112-1114.

¹¹⁶⁷ *Ibid.*, Annex 11-B, para. 3(a)(ii)

sector.¹¹⁶⁸ Given the general tendency towards deregulation of financial services, it is conceivable that the introduction of new regulation would be seen as interference with reasonable investment-backed expectations, and could thus be qualified as an indirect expropriation.¹¹⁶⁹ Some regulation may, however, be covered by the exemption in the Annex for non-discriminatory regulation enacted to protect legitimate public welfare objectives, of which a non-exhaustive list is included.¹¹⁷⁰ In the context of monetary management policies, the inclusion of real estate price stabilization is recognized as a relevant public welfare objective. This could cover measures such as increased loan-to-value ratios for real estate investments.

In all three trade liberalization agreements, the main problem is the chilling effect of the possibility of a legal challenge to domestic regulation. Regulation can expose a state to complaints by other states, or by foreign investors under the US–Korea FTA, that their freedom to trade is negatively affected.¹¹⁷¹ This is so even if the state wishes to regulate to protect its domestic affairs against the negative impact of other states’ monetary management policies. The end result is an imbalance between one state’s freedom from external interference in its trading opportunities and another state’s freedom from external interference in its macro-financial stability. Seen from the perspective of states’ positive freedom, there is an imbalance between one state’s freedom to determine its monetary management policies, even if these have a negative impact on other states’ macro-financial stability, and another state’s freedom to regulate the supply of financial services within its domestic market.

IV. THE EXCEPTIONS IN GATS AND THE FTAS

The interim conclusion that can be reached on the basis of Sections II and III’s analysis of the limits in trade liberalization agreements on states’ ability to regulate trade in financial services is that states often have to accept restrictions on their negative freedom to protect other states’ exporting opportunities. This Section examines the various exceptions that are available under the trade liberalization agreements to evaluate whether they compensate for the imbalance between states’ freedoms. Five exceptions will be discussed. These can be grouped in two types. The first, discussed in Sections A to D, are defined by the situations in which they are available,

¹¹⁶⁸ *Ibid.*, Annex 11-B, para. 3(a)(ii), footnote 18.

¹¹⁶⁹ Kelsey, “How the Trans-Pacific Partnership Agreement Could Heighten Financial Instability and Foreclose Governments’ Regulatory Space”, *New Zealand Yearbook of International Law* (Forthcoming).

¹¹⁷⁰ *US–Korea FTA*, Annex 11-B, para. 3(b) and footnote 19.

¹¹⁷¹ Such claims can also arise between Korea and individual EU Member States if they have concluded a bilateral investment treaty. The rights under these agreements are not limited by the FTA, see *EU–Korea FTA*, art. 7.15.

for example, to protect public order or to protect against balance-of-payments problems. The second, discussed in Section E, are exceptions that apply to a specific obligation only, namely that to liberalize payments and transfers.

A. *The General Exceptions*

Like the GATT, the GATS includes a list of “general exceptions”. Article XIV GATS mirrors the two-tier structure of Article XX GATT with a chapeau and a list of situations for which an exception is available. The Appellate Body in *US–Gambling* considered that the case law relating to the Article XX GATT is relevant in interpreting Article XIV GATS.¹¹⁷²

General exceptions are also available in the FTAs studied. Article 7.50 EU–Korea FTA includes exceptions on the obligations on trade in services that are worded similarly to those in the GATS. Article 23.1(2) US–Korea FTA declares that Article XIV GATS is incorporated *mutatis mutandis*, but only for specific chapters. The list of specific chapters does not include the chapter on financial services, but includes the general chapter on the cross border supply of services. Therefore, when a state wants to impose restrictions on trade in financial services to protect macro-financial stability against the negative impact of another states’ monetary management policies, the exception can only be invoked as a justification for the breach of the provisions of the chapter on cross border supply of services that apply to financial services.¹¹⁷³ Given the similarities between the GATS and the FTAs, the discussion below will focus on Article XIV GATS.

Of particular relevance in the context of trade restrictions that aim to protect a state’s domestic affairs against transboundary macro-financial instability are subparagraphs (a) and (c) of Article XIV. Article XIV(c) provides for an exception for measures that are

necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement including those relating to

(i) the prevention of deceptive and fraudulent practices or to deal with the effects of a default on services contracts;

[...]

A Member can only impose trade restrictions under this subparagraph if the laws or regulations with which compliance is sought are not themselves inconsistent with GATS obligations. Trade

¹¹⁷² *US–Gambling (AB)*, para. 291, confirming *US–Gambling (Panel)*, para. 6.448.

¹¹⁷³ *US–Korea FTA*, art. 12.1(4)(a) and 13.1.2(c).

restrictions imposed to ensure compliance with quantitative restrictions or non-discriminatory “zero quota” can thus not be justified.

Article XIV(a) provides an exception for measures “necessary to protect public morals or to maintain public order”. A footnote clarifies that “the public order exception may be invoked only where a genuine and sufficiently serious threat is posed to one of the fundamental interests of society”. Although the concept of “public order” has been part of the GATT since 1947, it was only interpreted for the first time in *US–Gambling*.¹¹⁷⁴ The Panel held that¹¹⁷⁵

“public order” refers to the preservation of the fundamental interests of a society, as reflected in public policy and law. These fundamental interests can relate, *inter alia*, to standards of law, security and morality.

The WTO Panel confirmed that “Members [...] have the right to determine the level of protection that they consider appropriate” under Article XIV(a), as they have under Article XX GATT.¹¹⁷⁶ It added that¹¹⁷⁷

Members should be given some scope to define and apply for themselves the concepts of “public morals” and “public order” in their respective territories, according to their own systems and scales of values.

The Panel’s interpretation of “public morals” and “public order” was left intact on appeal¹¹⁷⁸ and later confirmed in the *China–Audiovisual* case.¹¹⁷⁹ Diebold criticizes this interpretation for allowing too much scope for a unilateral definition of “public morals”.¹¹⁸⁰ He argues that in Article XX GATT cases such as *EC–Asbestos* or *Korea–Beef*, Members were only free to determine the appropriate level of protection for a specific non-trade value. However, Members were not free to decide whether the value could justify a violation of a trade obligation as this was pre-determined by the subparagraphs of Article XX. The interpretation of “health” or “exhaustible natural resources” in Article XX is subject to challenge before WTO Panels and the Appellate Body. Thus, the Panel’s decision in *US–Gambling* to allow Members to determine not only the

¹¹⁷⁴ Wu, “Free Trade and the Protection of Public Morals: An Analysis of the Newly Emerging Public Morals Clause Doctrine”, 33 *Yale Journal of International Law* 215 (2008), 219-225.

¹¹⁷⁵ *US–Gambling (Panel)*, para. 6.467.

¹¹⁷⁶ *Ibid.*, para. 6.461.

¹¹⁷⁷ *Ibid.*, para. 6.461.

¹¹⁷⁸ *US–Gambling (AB)*, paras 296-299.

¹¹⁷⁹ *China–Audiovisual (Panel)*, para. 7.759. The Appellate Body accepted this qualification, *China–Audiovisual (AB)*, para. 243.

¹¹⁸⁰ Diebold, “The Morals and Order Exceptions in WTO Law: Balancing the Toothless Tiger and the Undermining Mole”, 11 *Journal of International Economic Law* 43 (2008), 52-53.

appropriate level of protection, but also whether a particular value falls within the scope of the concept of “public order”, gives Members considerably more freedom than the affirmation of Members’ right to determine the appropriate level of protection in the context of Article XX.

Nevertheless, the Panel in *US–Gambling* did not give the US carte blanche in the determination of “public morals” and “public order”, but referred to the practice of other Members regarding restrictions on gambling activities.¹¹⁸¹ Marwell argues that this comparative approach constitutes a limit on Members’ ability to define public morals unilaterally.¹¹⁸²

A broad interpretation of the public order exception makes it easier for Members to argue that macro-financial instability is a genuine and sufficiently serious threat to the preservation of the fundamental interests of society. The social unrest following recent instances of macro-financial instability in Iceland and Greece are examples of how macro-financial instability can pose a threat to the maintenance of public order in a society.

However, establishing that the trade restrictions are a means towards the end of reducing macro-financial instability is only the first step in the first tier of the exception in Article XIV(a) GATS. Trade restrictive measures can only be provisionally justified if *necessary* to protect against a genuine and sufficiently serious threat to a fundamental interest of society. In *US–Gambling*, the Panel and the Appellate Body applied the weighing and balancing test developed in the context of Article XX GATT.¹¹⁸³ However, these decisions also confirm Members’ “right to achieve its desired level of protection with respect to the objective pursued”. As with respect to Article XX, the Appellate Body’s analysis of the necessity requirement can be faulted for its internal inconsistency because the weighing and balancing test is incompatible with the right to determine the appropriate level of protection. Although Members allegedly have the power to determine the appropriate level of protection for a specific value, the necessity requirement exposes them to a review of their policies by the WTO bodies. In contrast, Members whose monetary management policies trigger the trade response are not subject to a review of the necessity of those policies even though they have a negative impact abroad.

Finally, even if Members succeed in establishing that their measures fall within a subparagraph of Article XIV GATS, they still have to show that these measures are applied consistently with the

¹¹⁸¹ *US–Gambling (Panel)*, para. 6.473.

¹¹⁸² Marwell, “Trade and Morality: The WTO Public Morals Exception after *Gambling*”, 81 *N.Y.U. Law Review* 802 (2006), 817-819.

¹¹⁸³ *US–Gambling (Panel)*, para. 6.477; *US–Gambling (AB)*, paras 305-308.

chapeau which, like the chapeau under Article XX GATT,¹¹⁸⁴ requires that the restriction not be an arbitrary or unjustifiable discriminatory, or a disguised restriction on trade in services.

B. *The Security Exception*

Like the GATT, the GATS provides for an exception when trade liberalization commitments interfere with security-related concerns. Of relevance in the context of macro-financial instability are the exceptions for, first, actions pursuing obligations under the UN Charter,¹¹⁸⁵ and, second, measures a Member considers “necessary for the protection of its essential security interests [...] taken in time of [...] emergency in international relations”.¹¹⁸⁶

Regarding the first ground for exception, arguments can be found in the literature that the UN Security Council should be able to use its Chapter VII powers to respond to acute situations of economic instability.¹¹⁸⁷ However, the Security Council has not yet done so in response to macro-financial instability. Both FTAs studied also include an exception for measures that execute a Party’s international obligations to maintain peace and security.¹¹⁸⁸ Unlike the GATS, neither of the FTAs requires that these obligations have to be found under the UN Charter.

Regarding the second ground for exception, the GATS is limited to situations of emergency “in international relations”.¹¹⁸⁹ It is unclear whether macro-financial instability limited to the territory of one Member, even if triggered by another Member’s policies, can be qualified as “international”. Given that its GATT counterpart has rarely been invoked in practice, it is unlikely that Members will often try to rely on Article XIVbis:1(b)(iii) GATS. The same can be said with respect to the similarly worded exception in the EU–Korea FTA.¹¹⁹⁰

As pointed out in the context of climate change,¹¹⁹¹ the exception for “essential security interests” in Article 23.2(b) US–Korea FTA is broader than the exceptions in the GATS and the EU–Korea FTA. First, it does not include a reference to “international relations”. Second, a footnote

¹¹⁸⁴ See Chapter 7, Section I.D.

¹¹⁸⁵ *GATS*, Article XIVbis:1(c).

¹¹⁸⁶ *Ibid.*, Article XIVbis:1(b)(iii).

¹¹⁸⁷ Boon, “Coining a New Jurisdiction: The Security Council as Economic Peacekeeper”, 41 *Vanderbilt Journal of Transnational Law* 991 (2008), 1026.

¹¹⁸⁸ *US–Korea FTA*, art. 23.2(b); *EU–Korea FTA*, art. 15.9(c).

¹¹⁸⁹ *GATS*, Article XIVbis:1(b)(iii).

¹¹⁹⁰ *EU–Korea FTA*, art. 15.9(b)(iii).

¹¹⁹¹ See Chapter 7, Section I.E.

specifies that if this exception is invoked in an arbitral proceeding, “the tribunal or panel hearing the matter shall find that the exception applies”,¹¹⁹² leaving no doubt about the self-judging nature of this exception.

The exception for the protection of essential security interests in the US–Korea FTA could arguably include the need to avoid economic problems due to macro-financial instability. In this respect, a parallel can be drawn with various cases before the International Centre for Settlement of Investment Disputes (ICSID) in relation to the emergency exception of Article XI of the US–Argentina BIT.¹¹⁹³ These cases did not examine the legality of trade restrictions, but rather the legality of domestic measures that had an effect on foreign investors within the territory of the regulating state. Therefore, the underlying question is different from the question in this thesis, which is whether states can use trade restrictions against actors outside their territory when the state of origin does not regulate adequately. However, the cases do provide guidance as to the interpretation of “essential security interests” in a globalized economy.¹¹⁹⁴ The ICSID tribunals have recognized that economic concerns can fall within the scope of “essential security interests”.¹¹⁹⁵ However, their opinions have diverged on the question whether the economic concerns invoked by Argentina were serious enough to justify an exception to its treaty obligations.¹¹⁹⁶ In light of the footnote to the “essential security interests” exception in the US–Korea FTA, an arbitral tribunal examining a Party’s trade restrictive measure would however not be allowed to examine the availability of the exception. Thus, the essential security exception could serve as a trump card under this particular FTA to justify the legality of defensive mechanisms adopted to protect domestic affairs against the negative impact of the other Party’s monetary management policies.

¹¹⁹² *US–Korea FTA*, art. 23.2(b), footnote 2.

¹¹⁹³ *US–Argentina BIT*, Article XI.

¹¹⁹⁴ These cases also discussed whether the domestic measures could qualify as “necessary” and thus preclude any wrongfulness under the ILC Articles on State Responsibility. This question, however, deals with the secondary rules on state liability rather than with the question, central here, whether a domestic measure aimed at protecting an essential security interest constitutes a breach of primary rules of international law. For a discussion of the difference between the primary and secondary rules in the Argentinian investment decisions, see Kurtz, *ICSID Annulment Committee Rules on the Relationship between Customary and Treaty Exceptions on Necessity in Situations of Financial Crises* (20 December 2007), at <<http://www.asil.org/insights/2007/12/insights071220.html>>; Bjorklund, “Emergency Exceptions: State of Necessity and *Force Majeure*”, in Muchlinski et al. (Eds.), *The Oxford Handbook of International Investment Law* (2008), 494-495.

¹¹⁹⁵ *LG&E (Liability)*, para. 238; Bjorklund, *supra* note 1194, 493-494.

¹¹⁹⁶ *Ibid.*, 481; Lowenfeld, *supra* note 169, 580-581.

C. *The Balance-of-Payments Exceptions*

The balance-of-payments consists of a current account and a capital and financial account.¹¹⁹⁷ The balance-of-payments is closely related to the exchange rate, which has an impact on the movement of goods and capital. A higher exchange rate will make a state's goods more expensive on the global market, thereby lowering its exports while at the same time making imports cheaper.¹¹⁹⁸ A lower exchange rate will lead to the opposite result. Macro-financial instability can follow from an imbalance in either account. For example, a sudden in- or outflow of capital can destabilize an economy when the inflow of money leads to imprudent lending which is later recalled, as happened in Thailand in the 1990s.¹¹⁹⁹ Instability can also follow when imports continuously exceed exports, leaving a deficit on the current account that needs to be compensated by a capital account surplus, i.e. an inflow of capital that outweighs the outflow of capital. When capital inflows dry up, the state in question will need to export more to reduce the underlying imbalance on the current account.

The GATT and GATS allow trade restrictive measures to safeguard the balance-of-payments.¹²⁰⁰ The measures can affect trade in goods, trade in services where specific commitments have been undertaken, as well as payments and transfers for current or capital transactions relating to liberalized services. Despite the text of Articles XII and XVIII:9 GATT, Members are not limited to quantitative restrictions when restricting trade in goods.¹²⁰¹ The 1994 Understanding on Balance-of-Payments Provisions even expresses a preference for price-based measures, such as import surcharges or import deposit requirements, over quantitative restrictions.¹²⁰² This preference for price-based measures does not apply in the context of trade in services.¹²⁰³ This is not surprising given that price-based measures are applied at the border whereas services, unlike goods, do not physically cross borders.

¹¹⁹⁷ See text accompanying footnotes 875-876.

¹¹⁹⁸ Acocella, *supra* note 875, 240.

¹¹⁹⁹ Thomas, "Balance-of-Payments Crises in the Developing World: Balancing Trade, Finance and Development in the New Economic Order", 15 *American University International Law Review* 1249 (2000), 1252-1253.

¹²⁰⁰ GATT, art. XII and XVIII:9; GATS, art. XI and XII.

¹²⁰¹ Van den Bossche, *supra* note 491, 715.

¹²⁰² *Understanding on the Balance-of-Payments Provisions of the General Agreement on Tariffs and Trade 1994*, at <http://www.wto.org/english/docs_e/legal_e/09-bops.pdf>, paras 2-3.

¹²⁰³ Grote, "Article XII GATS", in Wolfrum et al. (Eds.), *WTO-Trade in Services* (2008), 265.

Of the two FTAs studied, only the EU–Korea FTA contains a balance-of-payments exception. Under the US–Korea FTA, restrictions on trade in services or on payments and transfers can thus not be justified as a measure to resolve balance-of-payments problems. This reduces the Parties’ regulatory autonomy to adopt trade restrictive measures. Unlike the exception in GATS, the balance-of-payments exception in the EU–Korea FTA only mentions the possibility of imposing restrictions “with regard to trade in goods, services and establishment”.¹²⁰⁴ In the absence of an explicit reference to payments and transfers, which are discussed in a specific chapter of the EU–Korea FTA, it is questionable whether the balance-of-payments exception is available to justify restrictions on payments and transfers, or whether such restrictions would be seen as “with regard to” trade in goods, service and establishment.

The GATT, GATS and EU–Korea FTA subject the availability of the balance-of-payments exception to a number of procedural and substantive conditions. Procedurally, under GATT and GATS, Members need to notify the General Council of the WTO and consult the Committee on Balance-of-Payments Restrictions.¹²⁰⁵ In addition, WTO panels and the Appellate Body can exercise jurisdiction over trade restrictions for balance-of-payment purposes. This became clear when a Panel and the Appellate Body rejected India’s argument that the General Council and the Committee on Balance-of-Payments Restrictions had exclusive competence over the challenge by the US against the legality of India’s quantitative restrictions under the balance-of-payments exception.¹²⁰⁶ Under the EU–Korea FTA, the other Party needs to be notified of the balance-of-payments restriction and the Trade Committee, which is charged with ensuring the proper operation of the FTA,¹²⁰⁷ is to be consulted.¹²⁰⁸ All the agreements leave the determination of the factual and statistical findings about the underlying economic situation to the IMF.¹²⁰⁹

Substantively, the trade restrictions imposed may not discriminate based on the state of origin of goods or services, cannot exceed what is necessary to solve the balance-of-payments problem, and have to be temporary.¹²¹⁰ Moreover, the GATT and GATS require that Members using the

¹²⁰⁴ *EU–Korea FTA*, art. 15.8(1)

¹²⁰⁵ *GATT*, art. XII:4 and XVIII:12; *GATS*, art. XII:5. The procedures under GATS are the same as the one developed under GATT, see *GATS*, art. XII:5, footnote 4. These procedures can be found in Understanding on the Balance-of-Payments Provisions of the General Agreement on Tariffs and Trade 1994, *supra* note 1202, paras 5-13.

¹²⁰⁶ *India–QR (Panel)*, paras 5.113-5.114; *India–QR (AB)*, para. 109.

¹²⁰⁷ *EU–Korea FTA*, art. 15.1.

¹²⁰⁸ *Ibid.*, art. 15.8(3)-(4).

¹²⁰⁹ *GATT*, art. XV:2; *GATS*, art. XII:5(e); *EU–Korea FTA*, art. 15.8(4).

¹²¹⁰ *GATT*, art. XII:2, XI:4, XVIII:9 and XVII:11; *GATS*, art. XII:2(a),(d) and (e).

balance-of-payments exception to justify trade restrictions avoid unnecessary damage to other Members' commercial, economic and financial interests.¹²¹¹ The EU–Korea FTA provides that the measures have to be in accordance with the conditions established in the WTO Agreement and consistent with the IMF Articles of Agreement.¹²¹² Since the IMF Articles of Agreement prohibit restrictions on current transactions without the approval of the IMF,¹²¹³ a Party to the EU–Korea FTA wanting to impose restrictions on current transactions will require the IMF's prior approval.

At first sight, the balance-of-payments exceptions allow states to restrict trade in goods and in services on which specific commitments have been undertaken in response to threats to macro-financial instability that are triggered by other states' monetary management policies and transferred through trade. Moreover, both Article XII and XVIII:11 GATT contain a proviso allowing Members to rely on restrictions on trade in goods to resolve balance-of-payments problems rather than having to change other domestic policies, such as monetary policy or exchange rate policy, if a change of these policies would make restrictions on trade in goods redundant.¹²¹⁴

In practice, however, the availability of the balance-of-payments exceptions is undermined by the requirement that the restrictions not exceed those necessary to deal with the balance-of-payments problems and that unnecessary damage to the commercial, economic and financial interests of other states be avoided. While this may sound reasonable on its face, necessity may be very difficult to establish,¹²¹⁵ particularly given the prevailing belief that balance-of-payments problems should be adjusted through exchange rate depreciation or devaluation, rather than through trade restrictions.¹²¹⁶ This belief is particularly clear in the EU–Korea FTA in which the parties have agreed to “endeavour to avoid” restrictive measures for balance-of-payments reasons.¹²¹⁷ This requirement can be seen as reducing trade restrictions to a final wall of defence against balance-of-payments problems, reducing Parties' freedom of choice regarding the most

¹²¹¹ *GATT*, art. XII:3(c) and XVIII:10; *GATS*, art. XII:2(c).

¹²¹² *EU–Korea FTA*, art. 15.8(2), 2nd sentence.

¹²¹³ *IMF Articles of Agreement*, art. VIII(2).

¹²¹⁴ *GATT*, art. XII:3(d) and XVIII:11.

¹²¹⁵ Gallagher, *Policy Space to Prevent and Mitigate Financial Crises in Trade and Investment Agreements* (May 2010), at <<http://www.ase.tufts.edu/gdae/Pubs/rp/KGCapControlsG-24.pdf>>, 8.

¹²¹⁶ Jackson, *supra* note 811, 242–243; Matsushita et al., *supra* note 695, 463, 465; Van den Bossche, *supra* note 491, 714.

¹²¹⁷ *EU–Korea FTA*, art. 15.8(2), 1st sentence.

appropriate domestic response even if those trade restrictions are otherwise compatible with the requirements of the balance-of-payments exception.

This concern with protecting trading interests and the resulting preference for depreciation or devaluation to address balance-of-payments problems can have devastating consequences when the state facing balance-of-payments difficulties has large foreign currency debts. As a result of the depreciation or devaluation, the value of these foreign currency debts expressed in the domestic currency will increase significantly, making them very difficult to service. Thomas attributes the negative attitude towards trade restrictions to a belief that balance-of-payments problems are due to policy mistakes by the affected states and that the adoption of trade liberalization policies will solve these mistakes.¹²¹⁸ Yet, in increasing interdependence, financial instability does not necessarily stem from misguided domestic policies. This is particularly so for smaller economies that cannot rely on a sizable domestic financial market for all their funding needs.¹²¹⁹ Cross-border capital flows and financial institutions increase the likelihood of financial contagion,¹²²⁰ because it will be easier for financial institutions to build up exposure to foreign markets and also easier for them to withdraw funds if disaster strikes.¹²²¹ Sometimes the withdrawal is out of proportion to the economic fundamentals in the states from which the capital is withdrawn, but simply a reaction to financial problems in other economies.¹²²² An overly restrictive interpretation of the balance-of-payments exceptions thus limits states' ability to protect their domestic affairs against the negative impact of other states' actions by restricting the trade that channels the negative impact.

The GATT and the GATS recognize that the specific circumstances of developing Members and economies in transition may necessitate trade restrictions.¹²²³ For example, in the context of financial services, an expansive monetary policy in a developed state can trigger "carry trades"¹²²⁴ towards a developing state that, to fight inflation, has a higher interest rate than the developed state. The increased demand for the developing state's currency that results from the

¹²¹⁸ Thomas, *supra* note 1199, 1275.

¹²¹⁹ Ishii and Habermeier, *Capital Account Liberalization and Financial Sector Stability* (2002), 13.

¹²²⁰ Crockett, "Progress Towards Greater International Financial Stability", in Vines and Gilbert (Eds.), *The IMF and Its Critics* (2004), 44-45.

¹²²¹ Finger and Schuknecht, *supra* note 177, 19.

¹²²² Crockett, *supra* note 1220, 45.

¹²²³ The GATT provides a special article, see *GATT*, art. XVIII:9. In contrast, GATS makes special mention of the situation of Members "in the process of economic development or economic transition, in *GATS*, art. XII:1, 2nd sentence.

¹²²⁴ See text accompanying footnotes 212-214.

carry trade will lead to an appreciation of that currency. As with any state that relies on exports to drive its growth, the appreciation will increase the relative price of its products on the global markets and can thus undermine its export-driven growth model. Therefore, the state may want to restrict transfers or the cross-border supply of financial services to avoid the appreciation.

However, whether a dispute settlement panel will accept the application of trade restrictions by a developing Member is another matter. In *India-Quantitative Restrictions*, the Appellate Body upheld the view of the Panel that since the IMF had stated that India could manage its external situation in the short-term through macro-economic policies rather than through trade restrictions, and given that India had used macro-economic policies before, trade restrictions could be removed without the need to change India's development policy.¹²²⁵ Thus, the Appellate Body has made clear that when a Member needs to defend its currency, it can be obliged to use macro-economic responses rather than trade restrictions.¹²²⁶ The WTO Panel and the Appellate Body followed the IMF's opinion that balance-of-payments problems should in the first place be addressed through a change in macro-economic policies.¹²²⁷ As Section V will argue, recent changes in the IMF's position on trade restrictions and capital controls in particular, prompted by the experiences of the Global Financial Crisis, may trigger a change in this approach and provide some leniency towards Members relying on the balance-of-payments exception to defend their domestic affairs using trade restrictions.

D. The "Prudential Carve-Out"

Paragraph 2(a) of the GATS' Annex on Financial Services incorporates a provision on domestic regulation, generally known as the "prudential carve-out":¹²²⁸

Notwithstanding any other provisions of the Agreement, a Member shall not be prevented from taking measures for prudential reasons, including for the protection of investors, depositors, policy holders or persons to whom a fiduciary duty is owed by a financial service supplier, or to ensure the integrity and stability of the financial system. Where such measures do not conform with the provisions of the Agreement, they shall not be used as a means of avoiding the Member's commitments or obligations under the Agreement.

¹²²⁵ *India-QR (AB)*, paras 125-130.

¹²²⁶ Bhala, *Trade, Development, and Social Justice* (2003), 271.

¹²²⁷ Matsushita et al., *supra* note 695, 465.

¹²²⁸ *Annex on Financial Services*, para. 2(a). The appropriateness of labelling this provision a "carve-out" is debated by some because it arguably does not exclude the application of GATS obligations to prudential measures, see Tucker, *PMD: "Strictly Business" Interpretations of a WTO Rule* (29 April 2011), at <<http://citizen.typepad.com/eyesontrade/2011/04/reflections-on-meaning-of-prudential-language-in-the-wto.html>>.

The US–Korea FTA contains a similarly worded prudential carve-out.¹²²⁹ The EU–Korea FTA allows parties to adopt or maintain measures for the same reasons, but requires that the measures “shall not be more burdensome than necessary to achieve their aim.”¹²³⁰ This significantly restricts the ability of Korea or one of the EU Member States’ to impose prudential measures, as only those that are least restrictive of trade in financial services will be lawful.

The prudential carve-out in the agreements studied provides the possibility of restrictions on trade in services to protect states’ domestic affairs against a transboundary negative impact on macro-financial stability. However, uncertainties regarding the prudential carve-out’s scope of application hamper its utility for the justification of defensive mechanisms. As a result, it is unclear how the prudential carve-out affects the delicate balance between states’ positive and negative freedom. Moreover, states may decide not to rely on the prudential carve-out to restrict trade in financial services because of uncertainty about the availability of the exception.

A first area of uncertainty relates to the meaning of “prudential”. Which goals must a domestic measure pursue if it is to benefit from the prudential carve-out, and when can a measure be considered to be pursuing these goals?¹²³¹ According to the text of the prudential carve-out, a prudential objective includes protecting investors, depositors, policyholders or persons to whom a fiduciary duty is owed, as well as ensuring the integrity and stability of the financial system. The FTAs both add footnotes indicating that “prudential reasons” include the “maintenance of the safety, soundness, integrity or financial responsibility of individual financial institutions or cross-border financial service suppliers”.¹²³² Like the GATS prudential carve-out, the FTAs also refer to the integrity and stability of the financial system as a basis for prudential measures.

The references to the “integrity and stability of the financial system” suggest that a distinction between “systemic” and “prudential” regulation¹²³³ is not appropriate for defining the reach of the prudential carve-out. In any event, this distinction is artificial because it is conceptually and

¹²²⁹ *US–Korea FTA*, art. 13.10(1).

¹²³⁰ *EU–Korea FTA*, art. 7.38.

¹²³¹ Alexander et al., *supra* note 132, 108; Delimatsis and Sauvé, *supra* note 1142, 849.

¹²³² *US–Korea FTA*, art. 13.10, footnote 5. *EU–Korea FTA*, art. 7.38, footnote 37 differs in its reference to “individual financial service suppliers” rather than to “individual financial institutions or cross-border financial service suppliers” and in the operative verb “may include” compared to “includes”.

¹²³³ As for example made by Yokoi-Arai, *supra* note 132, 631.

practically difficult to distinguish the stability of an individual financial institution from the stability of the financial system.¹²³⁴

The term “including” in the prudential carve-out suggests that the list of prudential reasons is indicative only,¹²³⁵ which raises the question how wide the provision’s reach is. Pertinent questions that, in the absence of WTO jurisprudence, have not yet been answered are, for example, whether prudential measures can be preventive (*ex ante*) measures or whether they are only protective (*ex post facto*) measures to remedy financial instability once it occurs,¹²³⁶ and whether the prudential objective has to be the main objective of the measures or whether it can be incidental.¹²³⁷

Some authors have suggested testing domestic standards against those developed by the Basel Committee on Banking Supervision or the International Organization of Securities Commissions.¹²³⁸ This is also the position taken by Switzerland in its financial services proposal in the Doha Round.¹²³⁹ However, no text requires domestic prudential regulation to follow international standards.

A second element of uncertainty surrounding the prudential carve-out arises out of the second sentence, which is repeated in both FTAs.¹²⁴⁰ This sentence stipulates that

where [measures taken for prudential reasons] do not conform with the provisions of the Agreement, they shall not be used as a means of avoiding the Member’s commitments or obligations under the Agreement.

The main issue is whether this sentence implies that a WTO Member wishing to regulate for prudential reasons has to respect the GATS provisions defining the right to regulate—i.e. Article VI on domestic regulation, Article XVI on market access, Article XVII on national treatment, subject to the general exceptions in Article XIV—or whether the prudential carve-out provides

¹²³⁴ Panourgias, *Banking Regulation and World Trade Law: GATS, EU and ‘Prudential’ Institution-Building* (2006), 12-13.

¹²³⁵ Council for Trade in Services and Committee on Trade in Financial Services, *supra* note 496, para. 29.

¹²³⁶ De Meester, *supra* note 965, 57.

¹²³⁷ Panourgias, *supra* note 1234, 70-71 gives the example of exclusions of foreign branches from the domestic payment and settlement system to ensure the efficiency of this system.

¹²³⁸ Kaufmann and Weber, “Reconciling Liberalized Trade in Financial Services and Domestic Regulation”, in Alexander and Andenas (Eds.), *The World Trade Organization and Trade in Services* (2008), 424; von Bogdandy and Windsor, “Annex on Financial Services”, in Wolfrum et al. (Eds.), *WTO–Trade in Services* (2008), 634.

¹²³⁹ Council for Trade in Services Special Session, Communication from Switzerland, *supra* note 1040, para. 19.

¹²⁴⁰ *US–Korea FTA*, art. 13.10(1); *EU–Korea FTA*, art. 7.38(2).

an exception from these rules as well.¹²⁴¹ In the absence of jurisprudence on the prudential carve-out, there is no official indication on the interpretation of the ambiguous anti-avoidance provision in the second sentence. Different interpretations are advanced in the literature.

The argument that the anti-avoidance provision requires domestic prudential regulation to comply with Articles VI, XVI and XVII or, in case of non-compliance with Article XIV, is advanced by pro-GATS authors as well as GATS critics. Some pro-GATS authors assert that prudential measures need to be necessary and proportionate,¹²⁴² even though no such requirement is expressly included in the prudential carve-out.¹²⁴³ Their argument is justified by the need to avoid an otherwise “overly broad discretion for national regulators to introduce measures of a discriminatory nature.”¹²⁴⁴ Of course, this broad discretion may be exactly what the WTO Members may have wanted.¹²⁴⁵ Some GATS critics also argue that prudential measures need to comply with the other obligations under the GATS when labelling the second sentence as a “self-cancelling loophole” that takes away what the first sentence has given.¹²⁴⁶

Both positions are problematic because they result in the redundancy of the prudential carve-out. If a prudential measure could only be justified if it meets the requirements of the general exception in Article XIV, there would be no need for a prudential carve-out. Given that the

¹²⁴¹ Arner, *Financial Stability, Economic Growth, and the Role of Law* (2007), 275; Kaufmann and Weber, *supra* note 1238, 424-425; Wang, “The Prudential Carve-Out”, in Alexander and Andenas (Eds.), *The World Trade Organization and Trade in Services* (2008), 603.

¹²⁴² Kaufmann and Weber, *supra* note 1238, 426. Gkoutzinis, “International Trade in Banking Services and the Role of the WTO: Discussing the Legal Framework and Policy Objectives of the General Agreement on Trade in Services and the Current State of Play in the Doha Round of Trade Negotiations”, 39 *International Lawyer* 877 (2005), 903 argues that discrimination between foreign and domestic banks cannot be justified under the prudential carve-out. He then suggests necessity and proportionality as a method to “adjust domestic regulations to the needs of international trade.”

¹²⁴³ As recognized in Kaufmann and Weber, *supra* note 1238, 423.

¹²⁴⁴ *Ibid.*, 423, 426.

¹²⁴⁵ von Bogdandy and Windsor, *supra* note 1238, 635-636.

¹²⁴⁶ Tucker and Wallach, *No Meaningful Safeguards for Prudential Measures in World Trade Organization’s Financial Service Deregulation Agreements* (September 2009), at <<http://www.citizen.org/documents/PrudentialMeasuresReportFINAL.pdf>>, 3, 5. In more recent blog posts, Public Citizen’s approach to the anti-avoidance provision has shifted. In Tucker, *supra* note 1228, the anti-avoidance provision is seen as requiring compliance with the market access and national treatment obligations of Articles XVI and XVII, but not with the provision on non-discriminatory regulation in Article VI. A postscript in Tucker, *Postscript on PMD* (6 May 2011), at <<http://citizen.typepad.com/eyesontrade/2011/05/postscript-on-pmd.html>> argues that the anti-avoidance provision requires compliance with Article XVI but is silent on whether it requires compliance with Article XVII. In a comment on Lester, *Todd Tucker on Prudential Measures* (1 May 2011), at <<http://worldtradelaw.typepad.com/ielpblog/2011/05/todd-tucker-on-prudential-measures.html>>, Tucker accepts that “the anti-abuse theory could be in theory applied to claimed violations of Article XVII.” Another contribution questioning whether the anti-avoidance provision provides an exception to the market access provision is Seuffert and Kelsey, “The TPPA and Financial Sector Deregulation”, in Kelsey (Ed.) *No Ordinary Deal: Unmasking the Trans-Pacific Partnership Free Trade Agreement* (2010), 244.

prudential carve-out exists, alternative interpretations of the anti-avoidance provision that do not bring about redundancy need to be looked into. In the context of GATT, the Appellate Body stated that¹²⁴⁷

interpretation must give meaning and effect to all the terms of a treaty. An interpreter is not free to adopt a reading that would result in reducing whole clauses or paragraphs of a treaty to redundancy or inutility.

An alternative interpretation of the anti-avoidance provision put forward in the literature is as a limit to avoid an abuse of the right to regulate under the carve-out.¹²⁴⁸ This interpretation has the advantage that it does not reintroduce the general GATS' limits on domestic regulation through the back door. Thus, the prudential carve-out should not be subject to a requirement of necessity,¹²⁴⁹ as the WTO Secretariat recently argued in a background note on financial services.¹²⁵⁰ Instead, the second sentence is a good faith obligation that plays a role similar to the chapeaux of Articles XX GATT and XIV GATS.¹²⁵¹ The similarity with the chapeaux does not mean that good faith can only be established through evidence that the measure is “a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail, or a disguised restriction on trade in services.” A test advanced in the literature is whether there is a “reasonable relationship” between the domestic measure and the prudential objective.¹²⁵² In other words, a Member may have to convince other Members or, eventually, a dispute panel that its measure is linked to the prudential objective. A question raised in literature is how the prudential carve-out should deal with trade restrictions that are both prudential and non-prudential.¹²⁵³ It is argued here that this will depend on whether the relationship between the

¹²⁴⁷ *US–Reformulated Gasoline (AB)*, p. 23.

¹²⁴⁸ Leroux, *supra* note 1039, 430-431; Key, *supra* note 1035, 964; von Bogdandy and Windsor, *supra* note 1238, 635. Tucker, “*That’s All They’ve Got?: What the Latest WTO Secretariat Paper on Financial Crisis Does and Does Not Say About GATS Disciplines on Financial Regulation*” (15 March 2010), at <<http://www.citizen.org/documents/That%27sAllTheyGot.pdf>>, 6 argues that there is “no textual basis for thinking that the second sentence of the prudential measures provision is intended only to ‘avoid abuse’.” However, his argument overlooks that there is even less of a textual basis to argue that prudential measures should comply with the other GATS articles, as he argues in Tucker and Wallach, *supra* note 1246, 3. As argued above, such argument goes against the text of the GATS, because it would make the prudential carve-out redundant.

¹²⁴⁹ Alexander, “The GATS and Financial Services: Liberalisation and Regulation in Global Financial Markets”, in Alexander and Andenas (Eds.), *The World Trade Organization and Trade in Services* (2008), 587; Yokoi-Arai, *supra* note 132, 640.

¹²⁵⁰ Council for Trade in Services and Committee on Trade in Financial Services, *supra* note 496, para. 31.

¹²⁵¹ von Bogdandy and Windsor, *supra* note 1238, 635; van Aaken and Kurtz, *supra* note 1058, 876; De Meester, *supra* note 965, 59; Delimatsis and Sauvé, *supra* note 1142, 850; Lester, *Global Trade Watch on the Prudential Carve-Out* (28 May 2010), at <<http://worldtradelaw.typepad.com/ielpblog/2010/05/global-trade-watch-on-the-prudential-carve-out.html>>.

¹²⁵² De Meester, *supra* note 965, 61; Delimatsis and Sauvé, *supra* note 1142, 850.

¹²⁵³ Kelsey, *supra* note 1169.

measure and the prudential objective is reasonable. If the prudential objective is only added to give a non-prudential trade restriction the veneer of legality, the reasonableness test would arguably not be met.

This alternative interpretation is more loyal to the text of Paragraph 2(a) of the Annex on Financial Services, because it does not result in the redundancy of the prudential carve-out, while at the same time giving effect to the anti-avoidance provision in which the reference to “used” can be seen as implying a state’s intention behind the allegedly prudential measure.¹²⁵⁴ Moreover, this alternative interpretation ensures a better protection for Members’ negative freedom against other Members’ monetary management policies by not undermining the legality of defensive mechanisms that the former can use. For example if a Member’s trading partner has lax prudential regulation, allowing the Member to impose additional regulation on, or in extreme cases restrict, financial services and service suppliers from that trading partner allows for a better protection of their domestic affairs. Admittedly, this can be seen as a limit on the trading partner’s right to determine the desired level of prudential regulation. However, nothing stops the latter from setting prudential regulation within its territory. Moreover, it would create the incentives to develop a sound regulatory framework that are currently lacking in WTO law.¹²⁵⁵

Ultimately, the interpretation of the anti-avoidance provision and of the precise standard of good faith, if the alternative interpretation is chosen, will need to be made by the relevant tribunal called upon to interpret the provision. So far, this opportunity has not yet arisen. Should a dispute arise in which the anti-avoidance provision is interpreted more strictly than as a good faith obligation, for example by reading a requirement of necessity and proportionality into the provision, Members’ ability to enact prudential measures will narrow as the limits on the legality of the defensive mechanisms increase.

E. Only Limited Exceptions on Current and Capital Account Liberalization

The exceptions discussed in Sections A to D all apply to a broad range of obligations under GATS or the FTAs. In addition, exceptions exist to specific obligations, such as those to liberalize the current and capital accounts of the balance-of-payments discussed above.¹²⁵⁶

¹²⁵⁴ *Ibid.*

¹²⁵⁵ Cottier and Krajewski, “What Role for Non-Discrimination and Prudential Standards in International Financial Law?”, 13 *Journal of International Economic Law* 817 (2010), 829.

¹²⁵⁶ See Section II.C.

The following paragraphs discuss the specific exceptions that are relevant for the current question whether states can use restrictions on current and capital transfers to protect their domestic affairs against the threat of macro-financial instability triggered by other states' monetary management policies. It will be described how these specific exceptions are subject to strict conditions that limit their availability in practice. These strict conditions make it difficult to correct the imbalance between states' freedom to trade in financial services and their trading partners' freedom from external interference.

An Annex to the US–Korea FTA conditionally allows Korea to impose temporary restrictions on transfers pursuant to Article 6 of its Foreign Exchange Transactions Act.¹²⁵⁷ This Act provides a legal basis for temporary restrictions on payments and capital transactions if inevitable following, inter alia, grave and sudden changes in domestic or foreign economic conditions.¹²⁵⁸ While the US–Korea FTA's exception could provide Korea with some leeway to employ defensive mechanisms in protection of its domestic affairs against inflows of hot money, this exception is not available for restrictions on current transactions, unless imposed by the IMF or co-ordinated with the US, nor for payments and transfers related to foreign direct investment.

Either Party to the US–Korea FTA may also limit transfers by a financial institution or a cross-border financial service supplier “to, or for the benefit of an affiliate of or person related to such institution or suppliers” through measures that relate to the “maintenance of the safety, soundness, integrity, or financial responsibility of financial institutions or cross-border financial service suppliers”.¹²⁵⁹ This exception would allow a party to limit transfers between affiliated institutions or cross-border financial service suppliers, but only to ensure the “safety, soundness, integrity, or financial responsibility” of these actors rather than to ensure macro-financial stability. Parties can also limit transfers through legislation on the “issuing, trading, or dealing in securities, futures, options or derivatives”.¹²⁶⁰ These exceptions provide some scope for restrictions, including on current transactions, but only for a subset of transactions.

¹²⁵⁷ *US–Korea FTA*, Annex 11-G.

¹²⁵⁸ An English translation can be found on UN Public Administration Network, *Foreign Exchange Transactions Act (Republic of Korea)* (16 September 1998), at <<http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan011482.pdf>>.

¹²⁵⁹ *US–Korea FTA*, art. 13.10(3).

¹²⁶⁰ *Ibid.*, art. 11.7(4)(b).

The EU–Korea FTA provides more protection to a Party wishing to restrict payments and transfers to ensure macro-financial stability. Article 8.3 provides for two exceptions that are relevant when a Party seeks to restrict capital flows in order to ensure macro-financial stability.

The first is the exception for measures that are “necessary to protect public security and public morals or to maintain public order”.¹²⁶¹ Presumably, “public order” is understood in the same way as in the similarly worded exception provision of Article 7.50 with respect to trade in services, which bears a footnote taken literally from Article XIV(a) GATS stating that “the public order exception may be invoked only where a genuine and sufficiently serious threat is posed to one of the fundamental interests of society.” As discussed in Section A, macro-financial instability can pose a serious threat to a fundamental interest of society.

The second exception allows for restrictions on transfers if¹²⁶²

necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Chapter including those relating to [...] (ii) measures adopted or maintained to ensure the integrity and stability of a Party’s financial system.

Thus, restrictions on transfers are permitted if a Party can argue that the restrictions are needed to enforce measures that ensure the integrity and stability of the financial system, and that these restrictions are not in themselves contrary to obligations under the FTA. An example of these could be restrictions imposed during bankruptcy proceedings of financial service suppliers to prevent the repatriation of funds.

Regardless of the precise interpretation of the justification for each of these exceptions, they are both subject to a requirement of necessity. In addition, Article 8.3 EU–Korea FTA has a chapeau, similar to Articles XX GATT and XIV GATS, requiring that the “measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail, or a disguised restriction on capital movements.” These conditions restrict the availability of restrictions and expose the restricting Party to a challenge to its measures’ necessity.

Of more help for a Party to the EU–Korea FTA that wants to restrict capital movements to ensure macro-financial stability are the safeguard measures in Article 8.4. Under this Article, capital movements can be restricted in exceptional circumstances where payments and capital

¹²⁶¹ *EU–Korea FTA*, art. 8.3(a).

¹²⁶² *Ibid.*, art. 8.3(b)(ii).

movements “cause or threaten to cause serious difficulties for the operation of monetary policy or exchange rate policy”. A first footnote to this Article specifies that this includes, but is not limited to, serious balance-of-payments or external financial difficulties. The measures need to be notified to the Trade Committee established under the FTA,¹²⁶³ and can only be imposed for a period of six months, with some further extensions possible. Moreover, the safeguard measures cannot apply to foreign direct investments.¹²⁶⁴ Finally, the safeguard measures have to be strictly necessary, which is defined similarly to the conditions imposed by Annex 11-G of the US–Korea FTA on the permitted restrictions under Article 6 of Korea’s Foreign Exchange Transactions Act.¹²⁶⁵ The main obstacle for the application of these measures by a Party that wants to restrict capital flows to ensure macro-financial stability is that the measures should “avoid unnecessary damage to the commercial, economic or financial interests of the other Party”.¹²⁶⁶

No provision is made for such safeguard measures in the US–Korea FTA. While an exception is provided for “non-discriminatory measures of general application taken by any public entity in pursuit of monetary and related credit policies or exchange rate policies”, this provision explicitly excludes obligations to liberalize payments and transfers.¹²⁶⁷

The exceptions discussed here are not the only exceptions to the obligations not to restrict payments and transfers related to specific commitments. Another example, irrelevant for the purpose of this thesis, is Article XI:2 GATS. This Article allows restrictions on capital transactions, even inconsistently with specific commitments, at the request of the IMF. The IMF will request such restrictions when it wants to ensure that the resources it provides will not simply sustain an outflow of capital.¹²⁶⁸ In addition, Members are not precluded from attempting to justify restrictions on transfers and payments under one of the exceptions discussed in A to D, although this may be difficult under the current interpretations of these exceptions.

¹²⁶³ *Ibid.*, art. 8.4(2).

¹²⁶⁴ *Ibid.*, art. 8.4(1), footnote 1.

¹²⁶⁵ See text accompanying footnote 1257.

¹²⁶⁶ *EU–Korea FTA*, art. 8.4(1), footnote 2.

¹²⁶⁷ *US–Korea FTA*, art. 13.10(2).

¹²⁶⁸ *IMF Articles of Agreement*, art. VI(1).

V. MODIFICATIONS TO LIMITS ON THE LEGALITY OF DEFENSIVE MECHANISMS

The previous Sections have outlined potentially considerable problems with the legality of defensive mechanisms used by a state affected by another state's monetary management policies. As with the GATT, the obligations imposed on states by GATS are almost seamlessly conceptualised as rights of other WTO Members. This is visible in *US-Gambling*, in which the Panel held that "sovereignty ends whenever the rights of other Members under the GATS are impaired",¹²⁶⁹ arguably creating the impression that there is a right to trade, even though such a right is not expressed in the GATS itself. Unlike with the GATT, WTO Members and FTA Parties retain some control over the scope of their liberalization commitments through the negotiations of their Schedules of Commitments, in case of a positive list approach, or of the Annexes of Non-Conforming Measures, in case of a negative list approach. In these negotiations, states will need to be cautious and preserve their ability to regulate to protect macro-financial stability, even in situations that may be difficult to anticipate. Requirements to extend market access to new financial services, as seen in the Understanding, or the use of a negative list approach to scheduling, as employed in the US-Korea FTA, can significantly hamper states' ability to restrict trade in an effort to protect their domestic affairs against the negative impact of other states' monetary management policies transferred through trade in financial services.

Once liberalization commitments have been undertaken, the obligations to liberalize trade in services in the GATS and the FTAs have a more significant impact on states' regulatory autonomy than the obligations under the GATT. For example, Article XVI GATS excludes specific non-discriminatory measures, such as restrictions on legal form, in areas where Members have undertaken market access commitments, unless exceptions have been scheduled. The Understanding on Financial Services likewise binds Members that have adopted it in their Schedule to a standstill obligation as well as to a variety of other obligations, including the obligation to permit any new financial service by foreign financial service suppliers established within its territory. Some domestic measures that Members have introduced in response to the Global Financial Crisis, such as bans on naked short selling,¹²⁷⁰ could be contrary to their

¹²⁶⁹ *US-Gambling (Panel)*, para. 6.316.

¹²⁷⁰ "Short selling" or "shorting" occurs when traders sell shares they do not own, but have borrowed from the shares' owners. Once sold, traders will have to purchase the same amount of shares and return them to the original owner. Traders stand to profit if they can purchase the shares at a price lower than what they sold them for. "Naked short selling" occurs when traders sell shares for future delivery, but have no prior arrangement to borrow the shares. At the time of delivery of the shares to the purchaser, traders will have to purchase the shares in the market. Once again, traders will profit if the share price has fallen by the time of the agreed delivery. See Financial Times Lexicon, *Naked Short Selling*, at <<http://lexicon.ft.com/Term?term=naked-short-selling>>.

obligations under the Understanding,¹²⁷¹ unless Members have made a reservation that would allow them to introduce such bans.

This difference between the obligations in the context of trade in goods and those in the context of trade in services is due to the fact that neo-liberal ideas are more strongly embedded in the GATS and in the FTAs' provisions on services than in the GATT. A historical explanation is that the GATS developed in the 1980s and 1990s when neo-liberalism dominated the economic policy agenda.¹²⁷² The negotiations on both FTAs predate the onset of the Global Financial Crisis that challenged traditional neo-liberal ideas. An important element of the neo-liberal agenda is to free the economy from state interference through liberalization, privatization and deregulation.¹²⁷³

The wide reach of the obligations regarding trade in services is not sufficiently counterbalanced by the available exceptions, which are often subject to necessity requirements. Necessity may be an appealing standard to distinguish legitimate domestic regulation from protectionism, but the application of a necessity test requires an interpretation of the "reasonable" availability of less trade restrictive alternative measures. As argued in the context of climate change mitigation,¹²⁷⁴ this assessment of reasonable availability is inherently subjective, despite assertions by the Appellate Body to the contrary.¹²⁷⁵ The ultimate decision on the reasonable availability of alternatives may be made not by the regulating state, but by the competent adjudicating body under the applicable trade liberalization agreement. In contrast, the necessity of the actions that trigger the negative impact is not subject to international scrutiny.

To obtain a better balance between states' positive and negative freedom in relation to states' monetary management policies and the impact thereof on other states, a range of modifications of the existing limits on the legality of defensive mechanisms are conceivable. To begin, it would be desirable for the protection of states' domestic affairs if the obligations that limit the legality of defensive mechanisms were tempered or if international disciplines on monetary management policies were developed to limit the negative impact thereof on other states.

¹²⁷¹ Committee on Trade in Financial Services, *supra* note 1138, 1.

¹²⁷² Public Citizen, *Memo to Senate Finance Committee on Conflict between Financial Regulation and WTO Rules* (21 May 2010), at <http://www.citizen.org/documents/Memo_to_Senate_Finance_on_GATS_Regulation.pdf>, 2.

¹²⁷³ Harvey, *A Brief History of Neoliberalism* (2005), 2.

¹²⁷⁴ See Chapter 7, Section I.D.

¹²⁷⁵ *US–Gambling (AB)*, para. 304.

However, as discussed,¹²⁷⁶ formal amendments to these agreements are very difficult to achieve. The imbalance between states' positive and negative freedom is itself an obstacle to the development or amendment of international agreements, because states will have to surrender broad positive freedom that is the default position in contemporary international law.

Instead, this thesis argues for a more dialectical process of change through the reinterpretation of existing rules and principles governing the exercise of state sovereignty. Reinterpretation cannot be inconsistent with the text of the trade liberalization agreements or of commitments undertaken by WTO Members. However, despite the stronger embeddedness of neo-liberalism in the text of agreements liberalizing trade in services, many of the provisions in such agreements are open to alternative interpretations. This creates room for the interstitial norms of locality, reasonableness and good neighbourliness,¹²⁷⁷ to guide the interpretation of market access and national treatment obligations, as well as the exceptions that together determine the scope of decisional sovereignty in trade-related areas, and thus steer international law back towards a more liberal system of states.

A first obstacle to domestic regulation in trade liberalization agreements that can be changed through re-interpretation is the "zero quota" jurisprudence of the Appellate Body in *US-Gambling*. As argued in Section III.A, the Appellate Body's decision that a non-discriminatory prohibition on remote gambling is a quantitative restriction prohibited under Article XVI:2 GATS affects any measure that restricts the supply of a service to the domestic market, even if based on non-discriminatory qualitative criteria, such as minimum requirements regarding the identity of the supplier or regarding how the service is supplied to consumers.

Scholars concerned about the regulatory autonomy of states under GATS have criticized the consideration of qualitative measures under the market access provisions of Article XVI, rather than under the national treatment obligation of Article XVII and the domestic regulation obligation of Article VI. Some have criticized the Appellate Body for turning qualitative measures into quantitative ones due to the quantitative effects on the supply of a service that falls below the qualitative threshold.¹²⁷⁸ Another critique is that the Appellate Body incorrectly accepted

¹²⁷⁶ See Chapter 4, Section II.A.

¹²⁷⁷ See Chapter 4, Section III.

¹²⁷⁸ Pauwelyn, *supra* note 1135, 166; Ortino, "Treaty Interpretation and the WTO Appellate Body Report in *US-Gambling: A Critique*", 9 *Journal of International Economic Law* 117 (2006), 141.

that a “zero quota” is a quota in the technical sense.¹²⁷⁹ Regan argues that, technically, a quota conditions market access for a specific service or service supplier upon the number of services or service suppliers that have already been granted market access. A “zero quota” misses this numerical conditionality; the only conditionality that applies under a “zero quota” is qualitative, in that the service or the service supplier will need to meet certain qualitative criteria to be allowed in the regulating state’s territory.¹²⁸⁰ In the context of macro-financial stability, a qualitative measure that would regulate hedge funds that offer investment services would qualify as a “zero quota”, because it would restrict the market access of hedge funds offering investment services that fall below the regulatory threshold.

A further critique of the Appellate Body’s decision relates to its conclusion that all measures equivalent to “zero quota” come within the reach of Article XVI:2,¹²⁸¹ because the 1993 Scheduling Guidelines mention that “nationality requirements for suppliers of services (equivalent to zero quota)” need to be scheduled as limitations on market access commitments.¹²⁸² The Appellate Body’s conclusion is questionable. First, the Appellate Body overlooks other passages in the 1993 Scheduling Guidelines that state in clear terms that the criteria of Article XVI:2(a)-(d) “do not apply to the quality of the service supplied, or to the ability of the supplier to supply the service (i.e. technical standards or qualification of the supplier)”.¹²⁸³ Second, even if market access restrictions based on nationality could be considered as “zero quota” (and thus fall within the rubric of market access disciplines), it is a significant step to conclude from this that origin-neutral restrictions are also covered by Article XVI:2(a).¹²⁸⁴ The main problem with nationality requirements is that they make it impossible for anyone of a different nationality to access the market, which contradicts the principle of non-discrimination that is central to trade liberalization agreements. Nationality requirements indirectly limit the size of the market to the domestic service suppliers, because they exclude all foreign service suppliers. In contrast, an origin-neutral qualitative restriction does not cap the

¹²⁷⁹ Regan, *supra* note 1136, 1302-1303.

¹²⁸⁰ *Ibid.*, 1306, 1312.

¹²⁸¹ *US–Gambling (AB)*, para. 237.

¹²⁸² Group of Negotiations on Services, *Scheduling of Initial Commitments in Trade in Services*, MTN.GNS/W/164 (3 September 1993), para. 6(a) [“1993 Scheduling Guidelines”]. The new version repeats this: Council for Trade in Services, *Guidelines for the Scheduling of Specific Commitments under the General Agreement on Trade in Services (GATS)*, S/L/92 (28 March 2001), para. 12(a).

¹²⁸³ 1993 Scheduling Guidelines, *supra* note 1282, para. 4; Ortino, *supra* note 1278, 144.

¹²⁸⁴ Regan, *supra* note 1136, 1313.

size of the market. As long as the qualitative minimum criteria for the supply of a service are met, the services can be offered regardless of the size of the market.

Thus, the term “quota” in Article XVI should be given its proper interpretation, i.e. one in which market access is conditional upon the number of competitors, of foreign or domestic origin, that have already been given access to the market. Prohibitions on the supply of a sub-standard service or by a unqualified service supplier should not fall under Article XVI, but should be assessed under Article XVII when discriminatory or under Article VI when origin-neutral. This result is consistent with the three interstitial norms. First, it is consistent with the idea of locality because it would allow Members to decide which services or service suppliers they consider too objectionable to be offered or to be present within their territory, without violating their trade liberalization commitments. Second, it is consistent with good neighbourliness and reasonableness. Qualitative trade restrictions would still be subject to the requirements of Articles VI and XVII, and, if contrary to either of these articles, to the requirements of the exceptions. At the same time, Members that avoid a negative impact on other Members when conducting their monetary management policies will be rewarded with trading opportunities because their services or service suppliers will pass muster in the importing jurisdiction.

A second obstacle to the legality of defensive mechanisms relates to the national treatment obligation in Article XVII GATS. As discussed in Section II.A, the current scope of the national treatment obligation is broad due to a willingness to consider service suppliers as “like” as soon as they supply the same service. A return to the text of Article XVII is advocated here, which refers to “services and service suppliers”. Thus, if different types of service suppliers supply a similar service, e.g. a personal loan offered by a bank and by a finance company that is not subject to the same prudential requirements as a bank, states should be able to regulate the service suppliers differently without violating the national treatment obligation. As the example shows, requiring likeness of both the service and the service supplier before the national treatment obligation applies is particularly important when the service suppliers in question are subject to regulatory supervision as is often the case in the financial services industry.

In addition to “likeness”, the application of the national treatment obligation depends crucially on the standard chosen to determine *de facto* discrimination.¹²⁸⁵ To ensure that Members are able to exercise their decisional sovereignty, *de facto* discrimination should be established based

¹²⁸⁵ Pauwelyn, *supra* note 848, 359.

on the asymmetric impact on imported services rather than based on a diagonal test.¹²⁸⁶ Given that a diagonal test finds de facto discrimination as soon as there is a foreign service or service supplier that is treated less favourably than a domestic service or service supplier, Members will be found to be de facto discriminating unless they have the lowest level of regulation of all their trading partners. Although technically Members retain the power to regulate in line with the idea of locality, the diagonal test implies that the most deregulated trading partner sets the ceiling for domestic regulation in other Members even if the regulation has a negative impact on other Members and is thus contrary to considerations of good neighbourliness. The asymmetric impact test in contrast allows states to regulate while at the same time ensuring that the domestic regulation does not have a disproportionate impact on foreign services and service suppliers. Such an impact is incompatible with requirements of reasonableness and good neighbourliness, because it enables Members to engage in protectionist behaviour under the guise of regulation.

A third avenue for reinterpretation of the GATS obligations and exceptions lies, as with the reinterpretation of the GATT, in the appropriate interpretation of “necessity”. Necessity is an element of positive obligations, such as Article VI:5, and of the exceptions discussed in Section IV. These provisions have a direct impact on the scope of Members’ regulatory autonomy under GATS when aiming to protect their domestic affairs against macro-financial instability triggered by other Members’ monetary management policies.

As discussed in Section IV.A, the Appellate Body’s *US-Gambling* decision interprets “necessity” in Article XIV using the “weighing and balancing” test developed in the context of Article XX GATT while at the same time confirming a WTO Member’s “right to achieve its desired level of protection with respect to the objective pursued”.¹²⁸⁷ The weighing and balancing test and the right to determine the appropriate level of protection are however incompatible. If the Appellate Body ultimately has the power to overrule the chosen balance between the protected value and the restriction on trade, it is not up to the Members to define their appropriate level of protection. This interpretation of “necessity” is thus incompatible with the idea of locality.

An option suggested by Regan to correct this inconsistency is not to focus on balancing the trade costs with the measure’s underlying goal, but rather with the additional costs of a less trade restrictive alternative for the regulating Member: will it be more costly for Members to grant

¹²⁸⁶ See Chapter 7, Section I.A(3) for an analysis of both tests.

¹²⁸⁷ *US-Gambling (AB)*, paras 305-308.

foreign service providers better access to their markets or is a less trade restrictive measure more costly?¹²⁸⁸ Consider the example of a domestic measure that requires all financial service suppliers to be set up as a separate legal person with a specified level of own capital. This requirement restricts the ability of foreign financial service suppliers to offer these services cross-border or through a branch and is in violation of Article XVI GATS if the Member has scheduled commitments relating to financial services. The justification given is that it ensures separate assets in case of a bankruptcy procedure if the financial service supplier fails. Under Regan's proposed test, the additional costs of transnational litigation in a cross-border bankruptcy would have to be compared with the costs of the domestic measure under scrutiny, assuming that the less trade restrictive alternative offers comparable protection for the values sought. Another example arises when a Member wants to stem capital inflows and chooses to do so through administrative measures, such as an obligation to "park" a portion of the inflows on an account with the central bank, rather than through price-based measures such as taxes on inflows.¹²⁸⁹ If the Member can argue that it has a well-functioning administrative infrastructure in place at the Central Bank, but not within its tax administration, the extra costs of setting up the fiscal administration should be weighed against the costs of using the existing infrastructure at the Central Bank. An important advantage of this test proposed by Regan is that its application of "necessity" is compatible with the interstitial norms. By allowing Members to decide on the appropriate level of protection of a certain value, locality is respected. However, reasonableness and good neighbourliness are still ensured by the remaining limits on Members' domestic regulation resulting from the comparison of the measure's costs for the regulating Member and the costs for trade.

Finally, neo-liberal ideology poses an obstacle to the availability of exceptions that can justify the legality of defensive mechanisms in response to other states' monetary management policies. As argued,¹²⁹⁰ the neo-liberal agenda of deregulation and liberalization has influenced the balance-of-payments exception by a strong preference for exchange rate measures rather than for trade restrictions to address balance-of-payments problems. Neo-liberalism has also influenced how

¹²⁸⁸ Regan, *supra* note 767, 349-350.

¹²⁸⁹ This example is inspired by Ostry et al., "Managing Capital Inflows: What Tools to Use?" (5 April 2011) *IMF Staff Discussion Note SDN/11/06*, at <<http://www.imf.org/external/pubs/ft/sdn/2011/sdn1106.pdf>>, 29.

¹²⁹⁰ See Section IV.C.

“prudential” is interpreted in the prudential carve-out and particularly whether this term covers capital controls.¹²⁹¹

The Global Financial Crisis has cast doubts over the dominance of neo-liberal ideology.¹²⁹² For example, research shows that states with closed capital accounts have fared better than open economies since the start of the crisis.¹²⁹³ A December 2010 Working Paper by two IMF Staff Members provided empirical evidence that capital inflows compressed the spread between long and short-term interest rates which created incentives for financial institutions to take riskier “leverage” strategies in the search for yield.¹²⁹⁴ The Working Paper also identified supervision and regulation as “a key means to prevent crises” that played an important role in reducing the build up of imbalance in financial systems.¹²⁹⁵

The waning influence of neo-liberal ideology is further demonstrated by the willingness to discuss the validity of capital controls adopted to avert a financial crisis or to mitigate its impact. As the IMF’s General Counsel pointed out, the pendulum has swung back to regulation of capital movements rather than their liberalization.¹²⁹⁶ A steady stream of IMF documents on the topic of capital controls illustrates this momentum shift. An IMF Staff Position Note of early 2010 recognizes that “following the crisis, policymakers are again reconsidering the view that unfettered capital flows are a fundamentally benign phenomenon”.¹²⁹⁷ The note concluded that controls on capital inflows could in certain situations be justified to deal with temporary surges

¹²⁹¹ Support for the argument that capital controls are not prudential can be found in statements of the US Trade Representative and the US Under Secretary of Treasury for International Affairs quoted in Gallagher, *Reforming United States Trade and Investment Treaties for Financial Stability: The Case of Capital Controls* (April 2011), at <http://www.iisd.org/pdf/2011/iisd_itn_april_2011_en.pdf>, 10 and in Kaufmann and Weber, *supra* note 1238, 424. In contrast, Christ and Panizzon, “Article XI GATS”, in Wolfrum et al. (Eds.), *WTO–Trade in Services* (2008), 246, 254 argue that the prudential carve-out is available as an exception to Article XI GATS.

¹²⁹² Delimatsis and Sauvé, *supra* note 1142, 840.

¹²⁹³ Dadush and Eidelman, *supra* note 220.

¹²⁹⁴ Merrouche and Nier, *supra* note 150, 9, 17. Investors such as financial institutions are leveraged if they borrow funds to invest. As the following stylized example explains, leverage has a multiplier effect, making it a risky strategy. Investors with a capital of 5 could buy one asset that costs 5. However, they could also take out an additional loan of 20 and buy five of these assets, for a total value of 25. If the value of each asset increases by 1, the total value of the investment will be 30. Through leverage, investors have achieved a 100% return on their investment, and their capital increases from 5 to 10. If they had not borrowed anything, they would only have achieved a 20% return on their investment, because their capital would only have grown from 5 to 6. However, if the value of each asset were to slip by 1, the total value of the assets would be 20. Investors that have borrowed to purchase four additional assets will need all of this to repay their loan and will have lost their entire starting capital. A non-leveraged investor would still have a capital of 4 left.

¹²⁹⁵ *Ibid.*, 9, 18.

¹²⁹⁶ Hagan, “Enhancing the IMF’s Regulatory Authority”, 13 *Journal of International Economic Law* 955 (2010), 967.

¹²⁹⁷ Ostry et al., “Capital Inflows: The Role of Controls” (19 February 2010) *IMF Staff Position Note SPN/10/04*, at <<http://www.imf.org/external/pubs/ft/spn/2010/spn1004.pdf>>, 4.

in inflows.¹²⁹⁸ In April 2011, the IMF released a document for discussion by the IMF Board at its 2011 Spring Meeting¹²⁹⁹ and a Staff Discussion Note.¹³⁰⁰ These documents recognize that capital inflows may need to be controlled, but suggest that macro-economic and prudential policies should be exhausted first.¹³⁰¹ While these documents are not binding IMF decisions, they suggest a shift in thinking on the validity and necessity of capital controls.¹³⁰² This willingness to think less dogmatically about capital controls is a significant shift compared to just over a decade ago when the IMF sought to expand its role by examining a possible amendment to the IMF Articles of Agreement that would have restricted IMF Members' ability to impose capital controls, unless they had the prior approval of the IMF.¹³⁰³

These improved understandings of the dynamics influencing macro-financial stability and the willingness to consider capital controls are important to guide the process of normative change advanced in this thesis. The first possible outcome is a broader scope for the balance-of-payments exception in GATS. In line with the idea of locality, Members would be allowed to decide for themselves whether to rely on capital controls or on other policies, such as exchange rate adjustment, to address a balance-of-payments problem. Once again, reasonableness and good neighbourliness act as a counterweight to locality by requiring that the use of capital controls is reasonable and does not unduly harm other Members. Thus, Members would not be allowed to use capital controls when they use these to off-load the adjustment costs of policy mistakes on trading partners. In the assessment of reasonableness and good neighbourliness,

¹²⁹⁸ *Ibid.*, 5.

¹²⁹⁹ International Monetary Fund, *Recent Experiences in Managing Capital Inflows–Cross-Cutting Themes and Possible Policy Framework* (5 April 2011), at <<http://www.imf.org/external/np/pp/eng/2011/021411a.pdf>>. See also International Monetary Fund, *Recent Experiences in Managing Capital Inflows–Cross-Cutting Themes and Possible Policy Framework–Supplementary Information* (5 April 2011), at <<http://www.imf.org/external/np/pp/eng/2011/031111.pdf>>.

¹³⁰⁰ Ostry et al., *supra* note 1289.

¹³⁰¹ International Monetary Fund, “Recent Experiences in Managing Capital Inflows–Cross-Cutting Themes and Possible Policy Framework”, *supra* note 1299, 39-48; Ostry et al., *supra* note 1289, 9.

¹³⁰² For an overview of the changing beliefs of IMF staff about capital controls see Chwieroth, *Capital Ideas: The IMF and the Rise of Financial Liberalization* (2010). At its 2011 Spring Meeting, the IMF Members urged the IMF to continue its work on capital flows, see International Monetary Fund, *Communiqué of the Twenty-Third Meeting of the International Monetary and Financial Committee of the Board of Governors of the International Monetary Fund* (16 April 2011), at <<http://www.imf.org/external/np/cm/2011/041611.htm>>.

¹³⁰³ The arguments are explained in International Monetary Fund *Annual Report of the Executive Board for the Financial Year Ended April 30, 1997*, at <<http://www.imf.org/external/pubs/ft/ar/97/pdf/file04.pdf>>, 38-39. In the end, the Asian Financial Crisis questioned the wisdom of capital account liberalization and the amendment never materialized, see Williams, “Policy Perspectives on the Use of Capital Controls in Emerging Market Nations: Lessons from the Asian Financial Crisis and a Look at the International Legal Regime”, 70 *Fordham Law Review* 561 (2001), 562; Fischer, *IMF Essays from a Time of Crisis: The International Financial System, Stabilization, and Development* (2004), 115; Alexander et al., *supra* note 132, 94-95.

the specific characteristics of the Member imposing the capital controls need to be considered. For example, a developing Member should be given more flexibility than a developed Member to impose capital controls. This was recognized by the G-20 at its Seoul Meeting, where it was agreed that¹³⁰⁴

in circumstances where countries are facing undue burden of adjustment, policy responses in emerging market economies with adequate reserves and increasingly overvalued flexible exchange rates may also include carefully designed macro-prudential measures.

This excerpt is taken from a paragraph entitled “monetary and exchange rate policies” and the reference to “carefully designed macro-prudential measures” is seen as “code for capital controls”.¹³⁰⁵ Admittedly, both FTAs studied limit the availability of the balance-of-payments exception, although they contain other exceptions, such as the prudential carve-out that could be reinterpreted to facilitate capital controls.

A second possible outcome of the change in attitude towards capital controls would be clarity in the interpretation of the prudential carve-out, particularly of the measures qualifying as “prudential”. As argued by Panourgias, “prudential” is a “dynamic and evolutionary” concept.¹³⁰⁶ In the context of the prudential carve-out in NAFTA, Trachtman argues that the term “for prudential reasons”, which is also used in the Annex on Financial Services and the two FTAs studied here, can be given a “post-financial crisis evolutionary interpretation” according to which it could include capital controls.¹³⁰⁷

A readiness to consider capital controls as legitimate for “prudential reasons” can be seen in both the IMF and the WTO. The 2010 IMF Staff Position Note explicitly mentions that “for both macroeconomic and prudential reasons [...] there may be circumstances in which capital controls are a legitimate component of the policy response to surges in capital inflows”.¹³⁰⁸ A reinterpretation of the prudential carve-out does not necessarily have to be limited to permitting capital controls. Pascal Lamy, the WTO Director-General, has stated that the GATS’

¹³⁰⁴ G-20, *The Seoul Summit Document* (12 November 2010), at <http://media.seoulsummit.kr/contents/dlobo/E2_Seoul_Summit_Document.pdf>, para. 6; International Centre for Trade and Sustainable Development, *supra* note 216.

¹³⁰⁵ Richardson, *Factbox-Outcome of the Seoul G20 Summit* (12 November 2010), at <<http://www.reuters.com/article/2010/11/12/g20-outcomes-idUSN0911933720101112>>.

¹³⁰⁶ Panourgias, *supra* note 1234, 17.

¹³⁰⁷ Trachtman, *Applicability of the NAFTA “Prudential Carveout” to Capital Controls* (20 January 2011), at <<http://worldtradelaw.typepad.com/ielpblog/2011/01/applicability-of-the-nafta-prudential-carveout-to-capital-controls.html>>.

¹³⁰⁸ Ostry et al., *supra* note 1297, 15.

prudential carve-out is not restricted to specific measures, as long as the chosen measures have a prudential objective.¹³⁰⁹ Likewise, the WTO Secretariat confirmed in a recent background note on financial services that “any measure adopted for prudential reasons is covered *a priori*”, even if contrary to the MFN-obligation or specific commitments on financial services.¹³¹⁰ This was a change in position compared to 1998 when the WTO Secretariat argued that domestic measures, such as a restriction on the number of banks, may have prudential connotations, but do not therefore qualify as prudential under the prudential carve-out if protection of investors or of the stability of the financial system was not the direct and primary objective.¹³¹¹ Neither the WTO Director-General nor the Secretariat can issue binding rulings on the meaning of the prudential carve-out, but their positions are nevertheless influential. Ultimately, the issue will need to be decided by WTO Members or the Dispute Settlement Body.

A broader interpretation of “prudential” cannot, however, change the fact that the EU–Korea FTA incorporates a necessity requirement in its prudential carve-out. As argued before, a necessity requirement can have a chilling effect on domestic regulation. An approach to necessity in line with the interstitial norms, as argued in this Section, could provide more leeway for a Party to legally employ defensive mechanisms against the negative impact of the other Party’s monetary management policies.

The anti-avoidance provision of the prudential carve-out should, as argued above,¹³¹² be interpreted as an obligation of good faith that requires the existence of a reasonable relationship between a domestic measure and its prudential objective. It is argued that the requirement of a reasonable relationship can accommodate situations in which prudential objectives combine with non-prudential objectives. After all, this is exactly the challenge that the prudential carve-out, as an exception to the GATS or FTA commitments, should be dealing with. When determining the reasonableness of the relationship, attention should be paid to the tail risks related to prudential regulation and to the imbalance between the short-term benefits of

¹³⁰⁹ Trade Policy Review Body, *Report to the TPRB from the Director-General on the Financial and Economic Crisis and Trade-Related Developments*, WT/TPR/OV/W/2 (15 July 2009), para. 54.

¹³¹⁰ Council for Trade in Services and Committee on Trade in Financial Services, *supra* note 496, paras 28-29.

¹³¹¹ Council for Trade in Services, *supra* note 496, para. 44.

¹³¹² See Section IV.D.

liberalized trade and the long-term risks for financial stability, which as recently pointed out to the G-20, “may lead to a strong bias in favour of inaction.”¹³¹³

¹³¹³ Financial Stability Board et al., *Macroprudential Policy Tools and Frameworks: Update to G20 Finance Ministers and Central Bank Governors* (14 February 2011), at <www.bis.org/publ/othp13.pdf>, 11.

CONCLUSION: TOWARDS A LIBERAL SYSTEM OF STATES THROUGH REINTERPRETATION

Since its inception, international law has had to deal with problems of interdependence between sovereign states. Traditionally, liberal principles provided the foundation for various rules and principles to protect states' freedoms in the exercise of their sovereignty so as to ensure states' co-existence and facilitate their co-operation in response to transboundary problems. To better understand the meaning of "freedom" this thesis relies on Berlin's distinction between positive and negative freedom. Of these two conceptions of freedom, negative freedom is considered more important, because protecting states' negative freedom can achieve the same goals as protecting states' positive freedom while at the same time avoiding the latter's excesses. Therefore, what should be protected first and foremost in a liberal system of sovereign states is states' freedom from external interference rather than their freedom to act. Protection of states' negative freedom is particularly important when no international agreement exists to deal with a problem of interdependence or when existing international agreements are inadequate.

More frequent interactions between states and their citizens have increased interdependence between states by elevating issues, such as environmental or economic policies, that were previously within states' domestic affairs to issues of international concern. In light of this evolution, this thesis examined whether the "liberal" system of international law can continue to perform its function of ensuring co-existence and co-operation in increasing interdependence. It has been argued that international law fails to do so. As illustrated through both case studies, the current interpretation of rules and principles governing the exercise of state sovereignty in both general and specialized international law focuses on the protection of states' positive freedom and pays insufficient attention to the protection of states' negative freedom.

In general international law, the protection of states' positive freedom is the combined result of: first, a broad interpretation of the PCIJ's *Lotus* judgment and of the principles allocating jurisdiction; and, second, an interpretation of the limits on the exercise of state sovereignty that is too restrictive to be applied in complex situations of increasing interdependence. The restrictive interpretations of harm and of causation were identified as being of particular importance.

The analysis of specialized international law in each case study has revealed that the deeper integration of domestic economies accelerated by trade liberalization agreements has been lopsided. The focus has been on increasing trade volumes and not on creating a regulatory framework that is appropriate to the increasingly global character of markets. States that are

negatively affected by a lack of regulation by their trading partners will face limits on their ability to enact unilateral regulation that includes imported goods and services, when this regulation potentially has a restrictive impact on trade. However, there is no obligation to abstain from domestic policies, or to regulate the actions of private actors, that affect other states' non-trade interests. The lopsided nature of the global market in favour of trade, and against regulation that limits trade, creates obstacles to the development of international agreements in relation to global problems. In the absence of unilateral regulation by affected states, states that fail to regulate to protect non-trade interests will not have any incentive to participate in agreements in which they voluntarily limit the exercise of their sovereignty.

The balance struck between states' positive and negative freedom in general and specialized international law arguably results from different understandings of the meaning of "freedom" as a central concept of liberal theories and from insufficient attention to the tension between competing freedoms. When interactions between states were fewer and interdependence was not as complex as it is now, protecting positive freedom was sufficient, as states were not easily exposed to the negative impact of other states' actions or omissions. However, in increasing interdependence, the paths of negative freedom and positive freedom diverge: one state's exercise of its positive freedom can affect another state's negative freedom. It is only in situations of increasing interdependence that the need arises for an accurate distinction between the different conceptions of freedom.

To ensure that international law continues to support a liberal system of states in increasing interdependence, the existing imbalance between states' positive and negative freedom needs addressing. Ideally, states would consent to international agreements in which they accept limits on the exercise of their sovereignty. However, both case studies illustrate that such international agreements are difficult to achieve. Indeed, this thesis argues that the very imbalance that these international agreements should resolve is an obstacle towards the conclusion of these agreements in a system based on consent. The imbalance in favour of protecting states' positive freedom rather than their negative freedom allows states to impose some of the costs of their actions on other states. This unhinges the exercise of weighing up an action's costs and benefits, and results in states adopting actions that are beneficial from their domestic perspective but detrimental from an international perspective. For example, states may not want to engage in costly GHG emission reductions because they are not vulnerable to the negative impact of climate change and therefore will not reap the benefits of their emission reductions.

Addressing the imbalance may create a situation in which co-operation is stimulated, because improved availability of conditional limits and defensive mechanisms would allow action to

protect domestic affairs by states' whose negative freedom is affected by another state's exercise of its positive freedom. For example, affected states could claim damages or impose trade restrictions. Any of these reactions will have an impact on the state whose exercise of positive freedom caused the negative impact. As a result, the dynamic between both states changes. Where before the acting state could act without having to take into account the costs its actions or omissions impose on other states, addressing the imbalance will create incentives to take at least some of these costs into account. The increased costs for the acting state may very well outweigh the benefits derived from its original actions or omissions.

Given the difficulties agreeing on new rules governing the exercise of state sovereignty, this thesis suggests addressing the imbalance between states' positive and negative freedom through a reinterpretation of existing rules and principles. Often, these rules and principles are open to a range of interpretations, not all of which result in the same imbalance between positive and negative freedom. Reinterpretation can take place through a wide range of formal and informal processes in which not only states participate, but also international institutions and non-state actors. Realistically, large developed states may have to drive some of these processes given their power to set the agenda of international institutions and their greater resources available to fund international dispute settlement. It is not improbable that powerful states will drive this process of change, as collisions of sovereignty are not restricted to traditional North-South lines. Thus, the process of normative change does not rely on small or developing states to carry the burden.

This thesis, however, focuses more on the substantive drivers of the process of normative change, rather than on the processes themselves. A better balance between states' positive and negative freedom should be achieved through the use of interstitial norms in the interpretation of primary rules and principles governing the exercise of state sovereignty. The interstitial norms identified as useful to achieve a rebalancing of states' freedoms in line with the requirements of a liberal system are locality, reasonableness and good neighbourliness. Locality and good neighbourliness work together to ensure that states are allowed to act to protect their domestic affairs against negative external impacts, and that they are restricted when their actions or omissions can have a negative impact on other states, including when these actions are taken to protect domestic affairs. The addition of reasonableness to the mix is necessary because it is inevitable in situations of increasing interdependence that states are affected by the actions or omissions of other states. Reasonableness provides a criterion to identify whether an action or omission leads to negative impacts that need to be tolerated by the affected state. Reasonableness cannot be determined in the abstract, but only on a case-by-case basis. While

this may not be ideal from the perspective of legal certainty, this is necessary in the complex and continuously changing reality of increasing interdependence. The determination of reasonableness depends on bigger picture questions about the desired international society and on which policies are seen to best further this society. Many of these determinations, especially in the trade liberalization context, are currently influenced by neo-liberal economics. We need to recognize that economists do not have all the answers and that certain important conclusions derive from hypotheses, such as the rational market hypothesis, that have been discredited by recent events. A better understanding of economic dynamics and a more critical approach towards the inherent limits and transitory nature of dominant economic models are possibly of even greater importance than changes to the law.¹³¹⁴

A first target for reinterpretation discussed in this thesis are the rules and principles governing the exercise of state sovereignty in increasing interdependence. This involved firstly a reinterpretation of the Lotus judgment to accept inherent limits on sovereignty to ensure that states' actions do not undermine the co-existence of states that is central to international law. Further limits on state sovereignty should be derived from a broader approach to the no harm/due diligence principle, basing causality on the contribution of an act or omission to the overall negative impact and expanding the precautionary approach to non-environmental issues.

Given that trade liberalization agreements significantly limit the legality of defensive mechanisms, and given that their provisions are far less clear than they are often presented to be,¹³¹⁵ reinterpretations of obligations and their exceptions in trade liberalization agreements are also proposed in this thesis. The pressure that these agreements put on the construction of a liberal system of states in international law is not limited to the two case studies, but also exists in other areas that were previously considered to be within states' domestic affairs, such as labour legislation and taxation. Reinterpretation of limits on the legality of defensive mechanisms therefore has the potential to change the balance between states' positive and negative freedom in all areas in which there is a link between trade and another societal value, and is thus not limited by the fragmentation of international law.

The ability of affected states to enact defensive mechanisms unilaterally when transboundary problems affect their domestic affairs does not imply that states' compliance with their trading

¹³¹⁴ Seuffert and Kelsey, *supra* note 1246, 236.

¹³¹⁵ Picciotto, "The WTO's Appellate Body: Legal Formalism as a Legitimation of Global Governance", 18 *Governance* 477 (2005), 478.

obligations becomes self-judging. Trade adjudicators would still supervise compliance. However, the obligations would be less onerous than they currently are. Instead, they would be focused on the core obligation of non-discrimination and on objective evaluations of the necessity of any exceptions based on the costs involved for the regulating state of applying a less trade restrictive measure rather than on the inherently subjective evaluations of the appropriate balance between the need to protect free trade and the need to protect other important social values.

Trade restrictions may very well rise because of this reinterpretation. However, from the broader perspective of protecting states' decisional sovereignty in increasing interdependence this is not a major concern. It allows states to regulate, which is important when there is no international regulation or when international regulation is ineffective. Pressing issues such as climate change mitigation and macro-financial instability show that more co-operation is needed between states than just co-operation to liberalize trade. States' interdependence extends beyond economic integration through trade liberalization to a range of global problems of which many have worsened because of trade liberalization. Allowing importing states more freedom to restrict imports based on their contribution to global problems such as climate change mitigation or macro-financial instability may slow down economic integration of states, but the ability to regulate may well lead to more durable globalization.¹³¹⁶

It is important to note that rebalancing only remedies the cracks in the foundations of the current system of international law. Importantly, it does not create specific rules on how to handle global problems such as climate change mitigation and macro-financial instability. Instead, it provides a way of "illuminating" the full extent of states' interdependence, not just interdependence to ensure liberalized trade, but also the interdependence to regulate in trade-related areas. The existence of trade liberalization agreements shows states are able to agree on international obligations, if the conditions are right.¹³¹⁷ What is needed is the creation of the right conditions and incentives for co-operation between states in trade-related areas, taking into account the added dimension of trade liberalization agreements in increasing interdependence between states. Exposing states and economic actors within these states to reduced trading opportunities when their actions or omissions have a negative impact on other states, may create the incentives towards co-operation on a transboundary problem as it will force them to internalize the costs of their actions or omissions. Whether or not co-operation will follow and what shape it will take is ultimately up to states. The primary role of

¹³¹⁶ Rodrik, *supra* note 306.

¹³¹⁷ On these conditions, see Barrett, *supra* note 42.

reinterpretation is to address these imbalances rather than providing an independent solution for the problems caused by insufficient regulation to mitigate climate change or to ensure macro-financial stability. Nevertheless, the rebalancing proposed in this thesis will enable the international legal system to provide a fertile ground for co-operative initiatives, even if these initiatives ultimately reduce states' importance. As Henkin wrote, "the state system is a human creation and a human development; it ought to be continually examined, occasionally calibrated, and sometimes changed, the better to serve human purposes."¹³¹⁸

¹³¹⁸ Henkin, *supra* note 18, 25.

BIBLIOGRAPHY

International Documents

- Ad Hoc Working Group on Long-term Cooperative Action under the Convention, *Compilation of information on nationally appropriate mitigation actions to be implemented by Parties not included in Annex I to the Convention*, FCCC/AWGLCA/2011/INF.1.
- Asia-Pacific Partnership on Clean Development and Climate, *APP Fact Sheet*, at <http://www.asiapacificpartnership.org/pdf/translated_versions/Fact_Sheet_English.pdf>.
- Bank for International Settlements, *About the Basel Committee*, at <<http://www.bis.org/bcbs/index.htm>>.
- Barker, Terry et al., "Mitigation from a Cross-Sectoral Perspective", in B. Metz et al. (Eds.), *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2007).
- Basel Committee on Banking Supervision, *Report to the Governors on the Supervision of Banks' Foreign Establishments* (26 September 1975), at <<http://www.bis.org/publ/bcbs00a.htm>>.
- Basel Committee on Banking Supervision, *Principles for the Supervision of Banks' Foreign Establishments* (May 1983), at <<http://www.bis.org/publ/bcbsc312.htm>>.
- Basel Committee on Banking Supervision, *International Convergence of Capital Measurement and Capital Standards* (July 1988, updated to April 1998), at <<http://www.bis.org/publ/bcbsc111.pdf>>.
- Basel Committee on Banking Supervision, *Minimum Standards for the Supervision of International Banking Groups and their Cross-Border Establishments* (July 1992), at <<http://www.bis.org/publ/bcbsc314.htm>>.
- Basel Committee on Banking Supervision, *High-Level Principles for the Cross-Border Implementation of the New Accord* (August 2003), at <<http://www.bis.org/publ/bcbs100.htm>>.
- Basel Committee on Banking Supervision, *International Convergence of Capital Measurement and Capital Standards: A Revised Framework (Comprehensive Version)* (June 2006), at <<http://www.bis.org/publ/bcbs128.htm>>.
- Basel Committee on Banking Supervision, *Core Principles for Effective Banking Supervision* (October 2006), at <<http://www.bis.org/publ/bcbs129.htm>>.
- Basel Committee on Banking Supervision, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (December 2010), at <<http://www.bis.org/publ/bcbs189.pdf>>.
- Bossone, Biagio, *IMF Surveillance: A Case Study on IMF Governance—IEO Background Paper* (May 2008), at <http://www.ieo-imf.org/eval/complete/pdf/05212008/BP08_10.pdf>.
- Brazil, *Letter Including Nationally Appropriate Mitigation Actions* (29 January 2010), at <http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/brazilcp_haccord_app2.pdf>.
- China, *Letter Including Autonomous Domestic Mitigation Actions* (28 January 2010), at <http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/chinacp_haccord.pdf>.

- Commission of Experts, *Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System* (21 September 2009), at <http://www.un.org/ga/econcrisissummit/docs/FinalReport_CoE.pdf>.
- Committee on Trade in Financial Services, *Communication from Barbados: Unintended Consequences of Remedial Measures Taken to Correct the Global Financial Crisis: Possible Implications for WTO Compliance*, JOB/SERV/38 (18 February 2011).
- Council for Trade in Services, *Financial Services: Background Note by the Secretariat*, S/C/W/72 (2 December 1998).
- Council on Trade in Services, *Disciplines on Domestic Regulation in the Accountancy Sector*, S/L/64 (14 December 1998).
- Council for Trade in Services, *Guidelines for the Scheduling of Specific Commitments under the General Agreement on Trade in Services (GATS)*, S/L/92 (28 March 2001).
- Council for Trade in Services and Committee on Trade in Financial Services, *Financial Services: Background Note by the Secretariat*, S/C/W/312, S/FIN/W/73 (3 February 2010).
- Council for Trade in Services Special Session, *Communication from the European Communities and their Member States*, S/CSS/W/39 (22 December 2000).
- Council for Trade in Services Special Session, *Communication from the United States*, S/CSS/W/27 (18 December 2000).
- Council for Trade in Services Special Session, *Communication from Switzerland*, S/CSS/W/71 (4 May 2001).
- Council for Trade in Services Special Session, *Negotiations on Trade in Services—Report by the Chairman, Ambassador Fernando de Mateo, to the Trade Negotiations Committee*, TN/S/36 (21 April 2011).
- The Honourable Stéphane Dion, *The Montreal Action Plan* (10 December 2005), at <http://unfccc.int/files/meetings/cop_11/application/pdf/cop11_dion_closing_speech.pdf>
- Financial Stability Board et al., *Macroprudential Policy Tools and Frameworks: Update to G20 Finance Ministers and Central Bank Governors* (14 February 2011), at <www.bis.org/publ/othp13.pdf>.
- Financial Stability Forum, *Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience* (2008).
- G-20, *The Group of Twenty: A History* (2008), at <http://www.g20.org/Documents/history_report_dm1.pdf>.
- G-20, *Washington Declaration of the Summit on Financial Markets and the World Economy* (15 November 2008), at <http://www.g20.org/Documents/g20_summit_declaration.pdf>.
- G-20, *The Global Plan for Recovery and Reform* (2 April 2009) at <<http://www.g20.org/Documents/final-communique.pdf>>.
- G-20, *Leaders' Statement: The Pittsburgh Summit* (24-25 September 2009), at <http://www.g20.org/Documents/pittsburgh_summit_leaders_statement_250909.pdf>.
- G-20, *The G-20 Toronto Summit Declaration* (26-27 June 2010), at <www.g20.org/Documents/g20_declaration_en.pdf>.
- G-20, *The G20 Seoul Summit Leaders' Declaration* (12 November 2010), at <http://www.g20.org/Documents2010/11/seoulsummit_declaration.pdf>.

- G-20, *The Seoul Summit Document* (12 November 2010), at http://media.seoulsummit.kr/contents/dlobo/E2._Seoul_Summit_Document.pdf.
- G-20, *Meeting of Finance Ministers and Central Bank Governors. Communiqué–Washington DC* (14-15 April 2011), at <http://www.g20.org/Documents2011/04/G20%20Washington%2014-15%20April%202011%20-%20final%20communiqué.pdf>.
- G-8, *G8 Hokkaido Toyako Summit Leaders Declaration* (8 July 2008), at http://www.mofa.go.jp/policy/economy/summit/2008/doc/doc080714_en.html.
- G-8, *Responsible Leadership for a Sustainable Future* (8 July 2009) at <http://www.g8.utoronto.ca/summit/2009laquila/2009-declaration.pdf>.
- G-8, *G8 Muskoka Declaration: Recovery and New Beginnings* (25-26 June 2010) at <http://www.g8.utoronto.ca/summit/2010muskoka/communiqué.pdf>.
- Gupta, Sujata et al., “Policies, Instruments and Co-Operative Arrangements”, in B. Metz et al. (Eds.), *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2007).
- High-level Meeting on International Aviation and Climate Change, *Information Paper–Report of the Group on International Aviation and Climate Change* (7-9 October 2009) HLM-ENV/09-WP/4, at http://www.icao.int/Highlevel2009/Docs/HLMENV_WP004_en.pdf.
- High-level Meeting on International Aviation and Climate Change, *Minutes of the 13th and 14th Meeting of the 187th Session of the ICAO Council* (7-9 October 2009) HLM-ENV/09-IP/2, at http://www.icao.int/Highlevel2009/Docs/HLMENV_IP002_en.pdf.
- Independent Evaluation Office of the International Monetary Fund, *IMF Performance in the Run-up to the Financial Economic Crisis: IMF Surveillance in 2004-07* (10 January 2011), at http://www.ieo-imf.org/eval/complete/pdf/01102011/IEO_full_report_crisis.pdf.
- Independent Evaluation Office of the International Monetary Fund, *IMF Interactions with Member Countries* (25 November 2009), at http://www.ieo-imf.org/eval/complete/pdf/01202010/IMC_Full_Text_Main_Report.pdf.
- India, *Letter Including India’s Domestic Mitigation Actions* (30 January 2010), at http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/indiacc_haccord.pdf.
- Intergovernmental Panel on Climate Change, “Appendix I: Glossary”, in B. Metz et al. (Eds.), *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2007).
- Intergovernmental Panel on Climate Change, *16 Years of Scientific Assessment in Support of the Climate Convention* (December 2004), at <http://www.ipcc.ch/pdf/10th-anniversary/anniversary-brochure.pdf>.
- Intergovernmental Panel on Climate Change, “Summary for Policymakers”, in S. Solomon et al. (Eds.), *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2007).
- Intergovernmental Panel on Climate Change, “Summary for Policymakers”, in B. Metz et al. (Eds.), *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth*

- Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2007).
- International Civil Aviation Organization Assembly, “A36-22: Consolidated Statement of Continuing ICAO Policies and Practices Related to Environmental Protection” in *Assembly Resolutions in Force (as of 28 September 2007)*, at <http://www.icao.int/icaonet/dcs/9902/9902_en.pdf>.
- International Civil Aviation Organization Assembly, *Resolution A37-19: Consolidated Statement of Continuing ICAO Policies and Practices Related to Environmental Protection–Climate Change* (2010), at <http://www.icao.int/icao/en/env2010/A37_Res19_en.pdf>.
- International Law Commission, *Preliminary Report on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law*, by Mr. Robert Q. Quentin-Baxter, *Special Rapporteur*, UN Doc A/CN.4/334 and Add.1 & Corr.1 and Add.2 (1980).
- International Law Commission, *Second report on international liability for injurious consequences arising out of acts not prohibited by international law*, by Mr. Robert Q. Quentin-Baxter, *Special Rapporteur*, UN Doc A/CN.4/346 and Add.1 & 2 (1981).
- International Law Commission, *Third report on international liability for injurious consequences arising out of acts not prohibited by international law*, by Mr. Robert Q. Quentin-Baxter, *Special Rapporteur*, UN Doc A/CN.4/360 and Corr.1 (1982).
- International Law Commission, *Fourth Report on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law*, by Mr. Robert Q. Quentin-Baxter, UN Doc A/CN.4/373 (1983).
- International Law Commission, *Fifth Report on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law*, by Mr. Robert Q. Quentin-Baxter, UN Doc A/CN.4/383 and Corr.1 (French only) and Add.1 (1984).
- International Law Commission, *Second report on international liability for injurious consequences arising out of acts not prohibited by international law*, by Mr. Julio Barboza, *Special Rapporteur*, UN Doc A/CN.4/402 and Corr.1, Corr.2 (S only) to 4 (1986).
- International Law Commission, *Eleventh report on international liability for injurious consequences arising out of acts not prohibited by international law*, by Mr. Julio Barboza, *Special Rapporteur*, UN Doc A/CN.4/468 (1995).
- International Law Commission, *Draft Articles on Prevention of Transboundary Harm from Hazardous Activities with Commentaries*, UN Doc A/56/10, 144-170 (2001).
- International Law Commission, *Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities with Commentaries*, UN Doc A/61/10, 101-182 (2006).
- International Law Commission, *Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law. Report of the Study Group of the International Law Commission. Finalized by Martti Koskenniemi*, UN Doc A/CN.4/L.682 (2006).
- International Maritime Organization, *IMO Circs on GHG Issues* (28 August 2009), at <http://www.imo.org/Environment/mainframe.asp?topic_id=1831>.
- International Maritime Organization, *Marine Environment Protection Committee (MEPC) 61st Session: 27 September to 1 October 2010* (1 October 2010), at <<http://www.imo.org/MediaCentre/MeetingSummaries/MEPC/Pages/MEPC-61st-Session.aspx>>.

- International Monetary Fund, *Balance of Payments Manual*, 5th ed. (International Monetary Fund, 1993).
- International Monetary Fund, *Review of the 1977 Decision on Surveillance over Exchange Rate Policies: Preliminary Considerations* (28 June 2006), at <<http://www.imf.org/external/np/pp/eng/2006/pc.pdf>>.
- International Monetary Fund, *Review of the 1977 Decision—Proposal for a New Decision Companion Paper* (22 May 2007), at <<http://www.imf.org/external/np/pp/2007/eng/nd.pdf>>.
- International Monetary Fund, *Bilateral Surveillance over Members' Policies—2007 Decision* (15 June 2007), at <<http://www.imf.org/external/pubs/ft/sd/index.asp?decision=13919-07/51>>.
- International Monetary Fund, *2007 Surveillance Decision Companion Paper Excerpts: Material Explicitly Endorsed by the Executive Board* (21 June 2007), at <<http://www.imf.org/external/np/pp/2007/eng/ndexc.pdf>>.
- International Monetary Fund, *IMF Executive Board Adopts New Decision on Bilateral Surveillance Over Members' Policies* (21 June 2007), at <<http://www.imf.org/external/np/sec/pn/2007/pn0769.htm>>.
- International Monetary Fund, *Review of the Fund's Financing Role in Member Countries* (28 August 2008), at <<http://www.imf.org/external/pp/longres.aspx?id=4287>>.
- International Monetary Fund, "The Acting Chairman's Summing up—2008 Triennial Surveillance Review—Overview Paper, Executive Board Meeting 08/84, September 26, 2008" 33 *Selected Decisions and Selected Documents of the International Monetary Fund*.
- International Monetary Fund, *Global Financial Stability Report—October 2008* (2008).
- International Monetary Fund, *Lessons of the Financial Crisis for Future Regulation of Financial Institutions and Markets and for Liquidity Management* (4 February 2009), at <<http://www.imf.org/external/np/pp/eng/2009/020409.pdf>>.
- International Monetary Fund, *Initial Lessons of the Crisis* (6 February 2009), at <<http://www.imf.org/external/np/pp/eng/2009/020609.pdf>>.
- International Monetary Fund, *Lessons of the Global Crisis for Macroeconomic Policy* (19 February 2009), at <<http://www.imf.org/external/np/pp/eng/2009/021909.pdf>>.
- International Monetary Fund, *The 2007 Surveillance Decision: Revised Operational Guidance* (22 June 2009), at <<http://www.imf.org/external/np/pp/eng/2008/080408.pdf>>.
- International Monetary Fund, *IMF Executive Board Revises Surveillance Priorities for 2008-2011—Press Release No. 09/336* (29 September 2009), at <<http://www.imf.org/external/np/sec/pr/2009/pr09336.htm>>.
- International Monetary Fund, *IMF Expanding Surveillance to Require Mandatory Financial Stability Assessments of Countries with Systemically Important Financial Sectors* (27 September 2010), at <<http://www.imf.org/external/np/sec/pr/2010/pr10357.htm>>.
- International Monetary Fund, *A Guide To Committees, Groups, And Clubs* (23 March 2011), at <<http://www.imf.org/external/np/exr/facts/groups.htm#G10>>.
- International Monetary Fund, *Recent Experiences in Managing Capital Inflows—Cross-Cutting Themes and Possible Policy Framework* (5 April 2011), at <<http://www.imf.org/external/np/pp/eng/2011/021411a.pdf>>.

- International Monetary Fund, *Recent Experiences in Managing Capital Inflows–Cross-Cutting Themes and Possible Policy Framework–Supplementary Information* (5 April 2011), at <<http://www.imf.org/external/np/pp/eng/2011/031111.pdf>>.
- International Monetary Fund, *Communiqué of the Twenty-Third Meeting of the International Monetary and Financial Committee of the Board of Governors of the International Monetary Fund* (16 April 2011), at <<http://www.imf.org/external/np/cm/2011/041611.htm>>.
- International Monetary Fund, *IMF Members' Quotas and Voting Power, and IMF Board of Governors* (19 June 2011), at <<http://www.imf.org/external/np/sec/memdir/members.htm>>.
- Group of Negotiations on Services, *Scheduling of Initial Commitments in Trade in Services*, MTN.GNS/W/164 (3 September 1993).
- Klein, Richard J.T. et al., "Inter-Relationships between Adaptation and Mitigation", in M.L. Parry et al. (Eds.), *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2007).
- Kyoto Protocol CMP, *Consideration of commitments for subsequent periods for Parties included in Annex I to the Convention under Article 3, paragraph 9, of the Kyoto Protocol*, Decision 1/CMP.1, FCCC/KP/CMP/2005/8/Add.1.
- Kyoto Protocol CMP, *Principles, nature and scope of the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol*, Decision 2/CMP.1, FCCC/KP/CMP/2005/8/Add.1
- Kyoto Protocol CMP, *Modalities, rules and guidelines for emissions trading under Article 17 of the Kyoto Protocol*, Decision 11/CMP.1, FCCC/KP/CMP/2005/8/Add.2.
- Kyoto Protocol CMP, *Procedures and mechanisms relating to compliance under the Kyoto Protocol*, Decision 27/CMP.1, FCCC/KP/CMP/2005/8/Add.3.
- Kyoto Protocol CMP, *Proposal from Belarus to amend Annex B to the Kyoto Protocol*, Decision 10/CMP.2, FCCC/KP/CMP/2006/10/Add.1.
- Kyoto Protocol CMP, *Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol*, Decision 1/CMP.5, FCCC/KP/CMP/2009/21/Add.1.
- Kyoto Protocol CMP, *The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its fifteenth session*, Decision 1/CMP.6, FCCC/KP/CMP/2010/12/Add.1.
- Merrouche, Ouarda and Nier, Erland, "What Caused the Global Financial Crisis? — Evidence on the Drivers of Financial Imbalances 1999-2007" (December 2010), *IMF Working Paper WP/10/265*, at <<http://www.imf.org/external/pubs/ft/wp/2010/wp10265.pdf>>.
- Metz, B. et al. (Eds.), *IPCC Special Report on Carbon Dioxide Capture and Storage* (Cambridge University Press, 2005).
- OECD, *Processes and Production Methods (PPMs): Conceptual Framework and Considerations on Use of PPM-Based Trade Measures*, OCDE/GC(97)137 (1997).
- Ostry, Jonathan D. et al., "Capital Inflows: The Role of Controls" (19 February 2010) *IMF Staff Position Note SPN/10/04*, at <<http://www.imf.org/external/pubs/ft/spn/2010/spn1004.pdf>>.

- Ostry, Jonathan D. et al., "Managing Capital Inflows: What Tools to Use?" (5 April 2011) *IMF Staff Discussion Note SDN/11/06*, at <http://www.imf.org/external/pubs/ft/sdn/2011/sdn1106.pdf>.
- South Africa, *Letter Including Nationally Appropriate Mitigation Actions* (29 January 2010), at http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/southafricanaccord_app2.pdf.
- Tamiotti, Ludivine et al., *Trade and Climate Change: A Report by the United Nations Environment Programme and the World Trade Organization* (2009), at http://www.wto.org/english/res_e/booksp_e/trade_climate_change_e.pdf.
- Tenth Conference of the Contracting Parties to the Convention on Wetlands, *Resolution 24 on Climate Change and Wetlands* (28 October–4 November 2008), at http://www.ramsar.org/pdf/res/key_res_x_24_e.pdf.
- Tenth Conference of the Contracting Parties to the Convention on Wetlands, *Resolution 25 on Wetlands and "biofuels"* (28 October–4 November 2008), at http://www.ramsar.org/pdf/res/key_res_x_25_e.pdf.
- Tenth Conference of the Contracting Parties to the Convention on Biodiversity, *Biodiversity and Climate Change* (2 November 2010), at <http://www.cbd.int/decision/cop/?id=12299>.
- Trade Policy Review Body, *Report to the TPRB from the Director-General on the Financial and Economic Crisis and Trade-Related Developments*, WT/TPR/OV/W/2 (15 July 2009).
- Understanding on the Balance-of-Payments Provisions of the General Agreement on Tariffs and Trade 1994*, at http://www.wto.org/english/docs_e/legal_e/09-bops.pdf.
- Understanding on Commitments in Financial Services*, LT/UR/U/1, 15 April 1994.
- UN Conference on Environment and Development, *Rio Declaration on Environment and Development*, UN Doc A/CONF.151/26 (Vol. I), 14 June 1992.
- UN Conference on the Human Environment, *Stockholm Declaration of the United Nations Conference on the Human Environment*, UN Doc A/CONF.48/14/REV.1, 16 June 1972.
- UN Conference on Trade and Development, *Trade and Development Report 2005*, (2005).
- UN Conference on Trade and Development, *Trade and Development Report 2006*, (2006).
- UN Conference on Trade and Development, *Trade and Development Report 2007*, (2007).
- UN Conference on Trade and Development, *Trade and Development Report 2008*, (2008).
- UN Conference on Trade and Development, *Trade and Development Report 2009*, (2009).
- UN Environment Programme, *Synthesis Report. Sudan. Post-Conflict Environmental Assessment*, (2007).
- UN Environment Programme, *The Emissions Gap Report: Are the Copenhagen Accord Pledges Sufficient to Limit Global Warming to 2°C or 1.5°C?* (November 2010), at http://www.unep.org/publications/ebooks/emissionsgapreport/pdfs/The_EMISSIONS_GAP_REPORT.pdf.
- UNFCCC COP, *The Berlin Mandate: Review of the adequacy of Article 4, paragraph 2(a) and (b), of the Convention, including proposals related to a protocol and decisions on follow-up*, Decision 1/CP.1, FCCC/CP/1995/7/Add.1, 4-6.
- UNFCCC COP, *The Bonn Agreements on the Implementation of the Buenos Aires Plan of Action*, Decision 5/CP.6, FCCC/CP/2001/5, 36-49.
- UNFCCC COP, *Procedures and mechanisms relating to compliance under the Kyoto Protocol*, Decision 24/CP.7, FCCC/CP/2001/13/Add.3.

- UNFCCC COP, *Dialogue on Long-term Cooperative Action to Address Climate Change by Enhancing Implementation of the Convention*, Decision 1/CP.11, FCCC/CP/2005/5/Add.1.
- UNFCCC COP, *Bali Action Plan*, Decision 1/CP.13, FCCC/CP/2007/6/Add.1, 3-7.
- UNFCCC COP, *Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention*, Decision 1/CP.15, FCCC/CP/2009/11/Add.1, 3.
- UNFCCC COP, *Copenhagen Accord*, Decision 2/CP.15, FCCC/CP/2009/11/Add/1, 4-9.
- UNFCCC COP, *Amendment to Annex I to the Convention*, Decision 3/CP.15, FCCC/CP/2009/11/Add.1, 10.
- UNFCCC COP, *The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention*, Decision 1/CP.16, FCCC/CP/2010/7/Add.1, 2.
- UNFCCC SBI, *National greenhouse gas inventory data for the period 1990-2008*, FCCC/SBI/2010/18.
- UNFCCC SBI, *Compilation of economy-wide emission reduction targets to be implemented by Parties included in Annex I to the Convention*, FCCC/SB/2011/INF.1.
- UNFCCC, *Amendment to Annex B of the Kyoto Protocol*, at <http://unfccc.int/kyoto_protocol/amendment_to_annex_b/items/4082.php>.
- UNFCCC, *Appendix I–Quantified Economy-Wide Emissions Targets for 2020*, at <<http://unfccc.int/home/items/5264.php>>.
- UNFCCC, *Appendix II–Nationally Appropriate Mitigation Actions of Developing Country Parties*, at <<http://unfccc.int/home/items/5265.php>>.
- UNFCCC, *Copenhagen Accord* (12 August 2010), at <<http://unfccc.int/home/items/5262.php>>.
- UNFCCC, *Glossary of Climate Change Acronyms*, at <http://unfccc.int/essential_background/glossary/items/3666.php>.
- UNFCCC, *Kyoto Protocol Status of Ratification* (October 2010), at <http://unfccc.int/files/kyoto_protocol/status_of_ratification/application/pdf/kp_ratification.pdf>.
- UNFCCC, *Status of Ratification of the Convention*, at <http://unfccc.int/essential_background/convention/status_of_ratification/items/2631.php>.
- UN General Assembly, *Declaration on the Granting of Independence to Colonial Countries and Peoples*, GA Res. 1514, UN GAOR, 15th sess, 947th plen mtg (1960).
- UN General Assembly, *Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations*, GA Res. 2625, UN GAOR, 25th sess, 1883rd plen mtg (1970).
- UN General Assembly, *Protection of Global Climate for Present and Future Generations of Mankind*, GA Res. 43/53, UN Doc A/RES/43/53 (1988).
- UN Security Council, *Letter dated 5 April 2007 from the Permanent Representative of the United Kingdom of Great Britain and Northern Ireland to the United Nations addressed to the President of the Security Council (S/2007/186)*, UN Doc S/PV.5663 (2007).
- Working Party on Border Tax Adjustments, *Border Tax Adjustments*, L/3464 BISD 18S/97 (2 December 1970).
- Working Party on GATS Rules, *Subsidies and Trade in Services: Note by the Secretariat*, S/WPGR/W/9 (6 March 1996).

World Bank Independent Evaluation Group, *World Bank Assistance to the Financial Sector: A Synthesis of IEG Evaluations* (2006), at [http://lnweb90.worldbank.org/oed/oeddoelib.nsf/DocUNIDViewForJavaSearch/55901055A53BCDE085257172007AF978/\\$file/financial_sector_synthesis.pdf](http://lnweb90.worldbank.org/oed/oeddoelib.nsf/DocUNIDViewForJavaSearch/55901055A53BCDE085257172007AF978/$file/financial_sector_synthesis.pdf).

World Bank, *2009 World Development Indicators* (2009), at <http://go.worldbank.org/U0FSM7AQ40>.

World Bank, *International Trade and Climate Change* (2008).

World Meteorological Organization, *Twenty Questions and Answers About the Ozone Layer: 2006 Update* (2006), at http://ozone.unep.org/Assessment_Panels/SAP/Scientific_Assessment_2006/Twenty_Questions.pdf.

WTO, *Ministerial Declaration adopted on 14 November 2001*, WT/MIN(01)/DEC/1 (2001).

WTO Secretariat, *Services Sectoral Classification List*, MTN.GNS/W/120 (10 July 1991).

Official Documents of States and the European Community/European Union

Directive 94/19/EC of the European Parliament and of the Council of 30 May 1994 on Deposit-Guarantee Schemes, (1994) *Official Journal* L 135/5.

Foreign Exchange Transactions Act (Republic of Korea) (16 December 1998), at <http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan011482.pdf>.

Council Decision (EC) No 2002/358 of 25 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder (2002) *Official Journal* L 130/1.

People's Bank of China, *IMF Adopted the Decision on Bilateral Surveillance over Member's Policies with China's Reservation* (20 June 2007), at http://www.pbc.gov.cn/publish/english/955/2021/20213/20213_.html.

European Community and European Civil Aviation Conference, *MEMO/07/391–Written statement of reservation on behalf of the member states of the European Community (EC) and the other states members of the European Civil Aviation (ECAC) [made at the 36th Assembly of the International Civil Aviation Organization in Montreal, 18-28 September 2007]* at <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/07/391&format=PDF&aged=1&language=EN&guiLanguage=fr>

The Landsbanki Freezing Order 2008, Statutory Instrument 2008 No. 2668 (UK).

Directive 2008/101/EC of the European Parliament and of the Council of 19 November 2008 amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community, (2009) *Official Journal* L 8/3.

Federal Reserve Board (US), *Monetary Policy: Open Market Operations* (26 January 2010), at <http://www.federalreserve.gov/fomc/fundsrate.htm>.

Reference for a Preliminary Ruling from High Court of Justice Queen's Bench Division (Administrative Court) (United Kingdom) made on 22 July 2010 — The Air Transport Association of America, American Airlines, Inc., Continental Airlines, Inc., United Airlines,

Inc. v The Secretary of State for Energy and Climate Change, Case C-366/10, (2010) *Official Journal C* 260/9.

European Commission DG Trade, *EU-Korea FTA: A Quick Reading Guide* (October 2010) at <<http://trade.ec.europa.eu/doclib/html/145203.htm>>.

Position of the European Parliament adopted at first reading on 10 May 2011 with a view to the adoption of Regulation (EU) No .. /2011 of the European Parliament and of the Council establishing transitional arrangements for bilateral investment agreements between Member States and third countries, at <<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P7-TA-2011-0206+0+DOC+XML+V0//EN&language=EN#BKMD-121>>

European Environment Agency, *Annual European Union Greenhouse Gas Inventory 1990–2009 and Inventory Report 2011* (27 May 2011), at <<http://www.eea.europa.eu/publications/european-union-greenhouse-gas-inventory-2011/greenhouse-gas-inventory>>.

Central Intelligence Agency, *The World Factbook*, at <<https://www.cia.gov/library/publications/the-world-factbook/index.html>>

Books, Contributions to Edited Books and Journal Articles

“Is the IMF Obsolete? A Symposion of Views”, 21 *The International Economy* 9 (2007).

Abi-Saab, Georges, “Some Thoughts on the Principle of Non-Intervention”, in Eric Suy and Karel Wellens (Eds.), *International Law: Theory and Practice* (Martinus Nijhoff Publishers, 1998).

Abi-Saab, Georges, “Whither the International Community?”, 9 *European Journal of International Law* 248 (1998).

Acharya, Viral V., “Is the International Convergence of Capital Adequacy Regulation Desirable?”, 58 *Journal of Finance* 2745 (2003).

Acocella, Nicola, *Economic Policy in the Age of Globalisation* (Cambridge University Press, 2005).

Adlung, Rudolf, “Services Liberalization from a WTO/GATS Perspective: In Search of Volunteers”, *World Trade Organization–Economic Research and Statistics Division Staff Working Paper* (2009).

Afilalo, Ari and Patterson, Dennis, “Statecraft, Trade and the Order of States”, 6 *Chicago Journal of International Law* 725 (2006).

Aggarwal, Vinod K. and Dupont, Cédric, “Collaboration and Co-Ordination in the Global Political Economy”, in John Ravenhill (Ed.) *Global Political Economy* (Oxford University Press, 2008).

Agius, Maria, “Dying a Thousand Deaths: Recurring Emergencies and Exceptional Measures in International Law”, 2 *Göttingen Journal of International Law* 219 (2010).

Ago, Roberto, “Pluralism and the Origins of the International Community”, 3 *Italian Yearbook of International Law* 3 (1977).

Akehurst, Michael Barton, “Jurisdiction in International Law”, 46 *British Yearbook of International Law* 145 (1972-1973).

Alexander, Kern et al., *Global Governance of Financial Systems: The International Regulation of Systemic Risk* (Oxford University Press, 2006).

- Alexander, Kern, "The GATS and Financial Services: Liberalisation and Regulation in Global Financial Markets", in Kern Alexander and Mads Andenas (Eds.), *The World Trade Organization and Trade in Services* (Martinus Nijhoff Publishers, 2008).
- Alexander, Kern, "Global Financial Standard Setting, the G10 Committees, and International Economic Law", 34 *Brooklyn Journal of International Law* 861 (2009).
- Alexandroff, Alan S. and Sharma, Rajeev, "The National Security Provision–GATT Article XXI", in Patrick F. J. Macrory et al. (Eds.), *The World Trade Organization: Legal, Economic and Political Analysis* (Springer, 2005).
- Allen, Myles, "Liability for Climate Change", 421 *Nature* 891 (2003).
- Allen, William A. and Wood, Geoffrey, "Defining and Achieving Financial Stability", 2 *Journal of Financial Stability* 152 (2006).
- Alter, Karen J., "Resolving or Exacerbating Disputes? The WTO's New Dispute Resolution System", 79 *International Affairs* 783 (2003).
- Altman, Andrew and Wellman, Christopher Heath, *A Liberal Theory of International Justice* (Oxford University Press, 2009).
- Alvarez, José E., "Multilateralism and Its Discontents", 11 *European Journal of International Law* 393 (2000).
- Alvarez, José E., "Do Liberal States Behave Better? A Critique of Slaughter's Liberal Theory", 12 *European Journal of International Law* 183 (2001).
- Andenas, Mads and Zleptnig, Stefan, "The Rule of Law and Proportionality in WTO Law", in Wenhua Shan et al. (Eds.), *Redefining Sovereignty in International Economic Law* (Hart Publishing, 2008).
- Andrews, David M., "Monetary Power and Monetary Statecraft", in David M. Andrews (Ed.) *International Monetary Power* (Cornell University Press, 2006).
- Angel, Roger, "Feasibility of Cooling the Earth with a Cloud of Small Spacecraft near the Inner Lagrange Point (L1)", 103 *Proceedings of the National Academy of Sciences* 17184 (2006).
- Anghie, Antony, "Rethinking Sovereignty in International Law", 5 *Annual Review of Law and Social Science* 291 (2009).
- Ansari, M.H., "Some Reflections on the Concepts of Intervention, Domestic Jurisdiction and International Obligation", 35 *Indian Journal of International Law* 197 (1995).
- Appleton, Arthur E., "GATT Article XX's Chapeau: A Disguised 'Necessary' Test?: The WTO Appellate Body's Ruling in United States–Standards for Reformulated and Conventional Gasoline", 6 *Review of European Community and International Environmental Law* 131 (1997).
- Appleton, Arthur E., "Private Climate Change Standards and Labelling Schemes under the WTO Agreement on Technical Barriers to Trade", in Thomas Cottier et al. (Eds.), *International Trade Regulation and the Mitigation of Climate Change* (Cambridge University Press, 2009).
- Arangio-Ruiz, Gaetano, "Le Domaine Réservé–L'Organisation Internationale et Le Rapport entre Droit International et Droit Interne", 225 *Recueil des Cours* 9 (1990).
- Arner, Douglas W. and Buckley, Ross P., "Redesigning the Architecture of the Global Financial System", 11 *Melbourne Journal of International Law* 1 (2010).
- Arner, Douglas W., *Financial Stability, Economic Growth, and the Role of Law* (Cambridge University Press, 2007).

- Auffhammer, Maximilian and Carson, Richard T., "Forecasting the Path of China's CO 2 Emissions Using Province-Level Information", 55 *Journal of Environmental Economics and Management* 229 (2008).
- Bagwell, Kyle et al., "It's a Question of Market Access", 96 *American Journal of International Law* 56 (2002).
- Baltensperger, Ernst and Cottier, Thomas, "The Role of International Law in Monetary Affairs", 13 *Journal of International Economic Law* 911 (2010).
- Barnidge Jr., Robert P., "The Due Diligence Principle under International Law", 8 *International Community Law Review* 81 (2006).
- Barrett, Scott, "Political Economy of the Kyoto Protocol", 14 *Oxford Review of Economic Policy* 20 (1998).
- Barrett, Scott, *Environment and Statecraft: The Strategy of Environmental Treaty-Making* (Oxford University Press, 2003).
- Barrett, Scott, "An Economic Theory of International Environmental Law", in Daniel Bodansky et al. (Eds.), *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007).
- Barrett, Scott, *Why Cooperate?: The Incentive to Supply Global Public Goods* (Oxford University Press, 2007).
- Barrett, Scott, "The Incredible Economics of Geoengineering", 39 *Environmental and Resource Economics* 45 (2008).
- Bartholomeusz, Lance, "The Amicus Curiae before International Courts and Tribunals", 5 *Non-State Actors and International Law* 209 (2005).
- Barton, Phillip, "State Responsibility and Climate Change: Could Canada Be Liable to Small Island States?", 11 *Dalhousie Journal of Legal Studies* 65 (2002).
- Baumol, William J. and Blinder, Alan S., *Macroeconomics: Principles and Policy*, 10th ed. (Thomson/South-Western, 2007).
- Beaulac, Stéphane, "The Westphalian Legal Orthodoxy—Myth or Reality?", 2 *Journal of the History of International Law* 148 (2000).
- Beckett, Jason A., "Behind Relative Normativity: Rules and Process as Prerequisites of Law", 12 *European Journal of International Law* 627 (2001).
- Bederman, David J., *The Spirit of International Law* (University of Georgia Press, 2002).
- Berger, Allen N. et al., *The Oxford Handbook of Banking* (Oxford University Press, 2010).
- Berlin, Isaiah, *Liberty: Incorporating 'Four Essays on Liberty'* (Oxford University Press, 2002).
- Bernasconi-Osterwalder, Nathalie, *Environment and Trade: A Guide to WTO Jurisprudence* (Earthscan, 2006).
- Bertram, Geoff, "Border Carbon Adjustments and Climate Change Policy", in Jane Kelsey (Ed.) *No Ordinary Deal: Unmasking the Trans-Pacific Partnership Free Trade Agreement* (Bridget Williams Books, 2010).
- Besson, Samatha, "Sovereignty in Conflict", in Colin Warbrick and Stephen Tierney (Eds.), *Towards an 'International Legal Community'? The Sovereignty of States and the Sovereignty of International Law* (British Institute of International and Comparative Law, 2006).
- Bhagwati, Jagdish and Mavroidis, Petros C., "Is Action against US Exports for Failure to Sign Kyoto Protocol WTO-Legal?", 6 *World Trade Review* 299 (2007).

- Bhala, Raj, "The Precedent Setters: *De Facto Stare Decisis* in WTO Adjudication (*Part Two of a Trilogy*)", 9 *Journal of Transnational Law and Policy* 1 (1999).
- Bhala, Raj, *Trade, Development, and Social Justice* (Carolina Academic Press, 2003).
- Bhala, Raj, *Modern GATT Law: A Treatise on the General Agreement on Tariffs and Trade* (Sweet & Maxwell, 2005).
- Bhuiyan, Sharif, *National Law in WTO Law: Effectiveness and Good Governance in the World Trading System* (Cambridge University Press, 2007).
- Bianchi, Andrea, "Introduction: Relativizing the Subjects or Subjectivizing the Actors: Is That the Question?", in Andrea Bianchi (Ed.) *Non-State Actors and International Law* (Ashgate, 2009).
- Bini Smaghi, Lorenzo, "The Governance of the International Financial System", in Marc Uzan (Ed.) *The Future of the International Monetary System* (Edward Elgar, 2005).
- Birnie, Patricia W. and Boyle, Alan E., *International Law and the Environment*, 2nd ed. (Oxford University Press, 2002).
- Birnie, Patricia W. et al., *International Law and the Environment*, 3rd ed. (Oxford University Press, 2009).
- Bismuth, Régis, "Financial Sector Regulation and Financial Services Liberalization at the Crossroads: The Relevance of International Financial Standards in WTO Law", 44 *Journal of World Trade* 489 (2010).
- Bjorklund, Andrea K., "Emergency Exceptions: State of Necessity and *Force Majeure*", in Peter Muchlinski et al. (Eds.), *The Oxford Handbook of International Investment Law* (Oxford University Press, 2008).
- Blanchard, Olivier, *Macroeconomics*, (Prentice Hall, 1997).
- Bodansky, Daniel, "The United Nations Framework Convention on Climate Change: A Commentary", 18 *Yale Journal of International Law* 451 (1993).
- Bodansky, Daniel, "May We Engineer the Climate?", 33 *Climate Change* 309 (1996).
- Bodansky, Daniel, "What's So Bad About Unilateral Action to Protect the Environment?", 11 *European Journal of International Law* 339 (2000).
- Bodansky, Daniel, "International Law and the Design of a Climate Change Regime", in Urs Luterbacher and Detlef F. Sprinz (Eds.), *International Relations and Global Climate Change* (MIT Press, 2001).
- Bodansky, Daniel, "Climate Commitments: Assessing the Options", in Pew Center on Global Climate Change (Ed.) *Beyond Kyoto: Advancing the International Effort against Climate Change* (2003).
- Bodansky, Daniel, "The Copenhagen Climate Change Conference: A Postmortem", 104 *American Journal of International Law* 230 (2010).
- Boisson de Chazournes, Laurence, "Unilateralism and Environmental Protection: Issues of Perception and Reality of Issues", 11 *European Journal of International Law* 315 (2000).
- Bolin, Bert, *A History of the Science and Politics of Climate Change: The Role of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2007).
- Boon, Kristen E., "Coining a New Jurisdiction: The Security Council as Economic Peacekeeper", 41 *Vanderbilt Journal of Transnational Law* 991 (2008).

- Bothe, Michael, "The United Nations Framework Convention on Climate Change—an Unprecedented Multilevel Regulatory Challenge", 63 *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht* 239 (2003).
- Boughton, James M., *Silent Revolution: The International Monetary Fund, 1979-1989* (International Monetary Fund, 2001).
- Brack, Duncan et al., *International Trade and Climate Change Policies* (Earthscan, 2000).
- Brand, Ronald A., "The Role of International Law in the Twenty-First Century: External Sovereignty and International Law", 18 *Fordham International Law Journal* 1685 (1995).
- Breidenich, Clare et al., "Current Developments: The Kyoto Protocol to the United Nations Framework Convention on Climate Change", 92 *American Journal of International Law* 315 (1998).
- Brooks, Rosa Ehrenreich, "Failed States, or the State as Failure?", 72 *University of Chicago Law Review* 1159 (2005).
- Broude, Tomer, "Genetically Modified Rules: The Awkward Rule-Exception-Right Distinction in EC-Biotech", 6 *World Trade Review* 215 (2007).
- Brownlie, Ian, *State Responsibility* (Clarendon Press; Oxford University Press, 1983).
- Brownlie, Ian, *Principles of Public International Law*, 6th ed. (Oxford University Press, 2003).
- Brummer, Christopher J., "How International Financial Law Works (and How It Doesn't)", 99 *Georgetown Law Journal* 257 (2011).
- Brunnée, Jutta and Toope, Stephen J., *Legitimacy and Legality in International Law: An Interactional Account* (Cambridge University Press, 2010).
- Bryce, James T., "Controlling the Temperature: An Analysis of the Kyoto Protocol", 62 *Saskatchewan Law Review* 379 (1999).
- Buckley, Ross P., "The Role of the Rule of Law in the Regulation of Global Capital Flows", in Spencer Zifcak (Ed.) *Globalisation and the Rule of Law* (Routledge, 2005).
- Buckley, Ross P., *International Financial System: Policy and Regulation* (Kluwer Law International, 2008).
- Burda, Michael C. and Wyplosz, Charles, *Macroeconomics: A European Text*, 4th ed. (Oxford University Press, 2005).
- Busch, Andreas, *Banking Regulation and Globalization* (Oxford University Press, 2008).
- Byers, Michael, "Abuse of Rights: An Old Principle, A New Age", 47 *McGill Law Journal* 389 (2002).
- Cançado Trindade, A. A. , "The Domestic Jurisdiction of States in the Practice of the United Nations and Regional Organisations", 25 *International and Comparative Law Quarterly* (1976).
- Canova, Timothy A., "Banking and Financial Reform at the Crossroads of the Neoliberal Contagion", 14 *American University International Law Review* 1571 (1999).
- Cárdenas, Emilio J. and Fernanda Cañas, María, "The Limits of Self-Determination", in Wolfgang Danspeckgruber (Ed.) *The Self-Determination of Peoples: Community, Nation and State in an Interdependent World* (Lynne Rienner, 2002).
- Carlson, Jonathan C., "Reflections on a Problem of Climate Justice: Climate Change and the Rights of States in a Minimalist International Legal Order", 18 *Transnational Law and Contemporary Problems* 45 (2009).

- Carmody, Chios, "A Theory of WTO Law", 11 *Journal of International Economic Law* 527 (2008).
- Carrasco, Enrique R., "The Global Financial Crisis and the Financial Stability Forum: The Awakening and Transformation of an International Body", 19 *Transnational Law & Contemporary Problems* 101 (2010).
- Carreau, Dominique, *Souveraineté et Coopération Monétaire Internationale* (Editions Cujas, 1970).
- Carty, Anthony, *The Decay of International Law?: A Reappraisal of the Limits of Legal Imagination in International Affairs* (Manchester University Press, 1986).
- Caryl, Benjamin Blase, "Is China's Currency Regime a Countervailable Subsidy? A Legal Analysis under the World Trade Organization's SCM Agreement", 45 *Journal of World Trade* 187 (2011).
- Casanovas, Oriol, *Unity and Pluralism in Public International Law* (Martinus Nijhoff Publishers, 2001).
- Charnovitz, Steve, "Green Roots, Bad Pruning: GATT Rules and Their Application to Environmental Trade Measures", 7 *Tulane Environmental Law Journal* 299 (1994).
- Charnovitz, Steve, "The Law of Environmental "PPMs" in the WTO: Debunking the Myth of Illegality", 27 *Yale Journal of International Law* 59 (2002).
- Charnovitz, Steve, "The (Neglected) Employment Dimension of the World Trade Organization" in Virginia A. Leary & Daniel Warner (Eds.) *Social Issues, Globalisation and International Institutions: Labour Rights and the EU, ILO, OECD, and WTO* (Martinus Nijhoff Publishers, 2005).
- Charnovitz, Steve, "A New WTO Paradigm for Trade and the Environment", 11 *Singapore Year Book of International Law* 15 (2007).
- Charnovitz, Steve, "The WTO's Environmental Progress", 10 *Journal of International Economic Law* 685 (2007).
- Charnovitz, Steve, "Addressing Government Failure through International Financial Law", 13 *Journal of International Economic Law* 743 (2010).
- Charnovitz, Steve, "What Is International Economic Law?", 14 *Journal of International Economic Law* 3 (2011).
- Cheng, Bin, *General Principles of Law as Applied by International Courts and Tribunals* (Cambridge University Press, 1953).
- Choi, Won-Mog, *'Like Products' in International Trade Law: Towards a Consistent GATT/WTO Jurisprudence* (Oxford University Press, 2003).
- Christ, Benedict F. and Panizzon, Marion, "Article XI GATS", in Rüdiger Wolfrum et al. (Eds.), *WTO-Trade in Services* (Martinus Nijhoff Publishers, 2008).
- Christakis, Theodore, "The ICJ Advisory Opinion on Kosovo: Has International Law Something to Say About Secession?", 24 *Leiden Journal of International Law* 73 (2011).
- Chwieroth, Jeffrey M., *Capital Ideas: The IMF and the Rise of Financial Liberalization* (Princeton University Press, 2010).
- Ciobănașu, Ioana and Denters, Erik, "Manipulation of the Chinese Yuan-May WTO Members Respond?", 9 *Griffin's View on International and Comparative Law* 55 (2008).
- CNA Corporation, *National Security and the Threat of Climate Change* (2007).

- Cohen, Benjamin, "The New Geography of Money", in Emily Gilbert and Eric Helleiner (Eds.), *Nation-States and Money: The Past, Present and Future of National Currencies* (Routledge, 1999).
- Colares, Juscelino F., "A Theory of WTO Adjudication: From Empirical Analysis to Biased Rule Development", 42 *Vanderbilt Journal of Transnational Law* 383 (2009).
- Commission on Global Governance, *Our Global Neighbourhood: The Report of the Commission on Global Governance* (Oxford University Press, 1995).
- Condon, Bradley J., "GATT Article XX and Proximity-of-Interest: Determining the Subject Matter of Paragraphs B and G", 9 *UCLA Journal of International Law and Foreign Affairs* 137 (2004).
- Condon, Bradley J., "Climate Change and Unresolved Issues in WTO Law", 12 *Journal of International Economic Law* 895 (2009).
- Conforti, Benedetto, *The Law and Practice of the United Nations*, 3rd rev. ed. (Martinus Nijhoff, 2005).
- Conway, David, *Classical Liberalism: The Unvanquished Ideal* (Macmillan Press; St. Martin's Press, 1995).
- Cooke, John, "Alternative Approaches to Financial Services Liberalisation: The Role of Regional Trade Agreements", in Kern Alexander and Mads Andenas (Eds.), *The World Trade Organization and Trade in Services* (Martinus Nijhoff Publishers, 2008).
- Cooper, Richard N., "The Kyoto Protocol: A Flawed Concept", in John W. Maxwell and Rafael Reuveny (Eds.), *Trade and Environment: Theory and Policy in the Context of EU Enlargement and Economic Transition* (Edward Elgar Publishing, 2005).
- Cossy, Mireille, "Some Thoughts on the Concept of 'Likeness' in the GATS", in Marion Panizzon et al. (Eds.), *GATS and the Regulation of International Trade in Services* (Cambridge University Press, 2008).
- Cottier, Thomas and Krajewski, Markus, "What Role for Non-Discrimination and Prudential Standards in International Financial Law?", 13 *Journal of International Economic Law* 817 (2010).
- Cottier, Thomas, "Multilayered Governance, Pluralism, and Moral Conflict", 16 *Indiana Journal of Global Legal Studies* 647 (2009).
- Cottier, Thomas, "A Two-Tier Approach to WTO Decision Making", in Debra P. Steger (Ed.) *Redesigning the World Trade Organization for the Twenty-First Century* (Wilfrid Laurier University Press, 2010).
- Cowie, Jonathan, *Climate Change: Biological and Human Aspects* (Cambridge University Press, 2007).
- Crawford, James, *The International Law Commission's Articles on State Responsibility: Introduction, Text and Commentaries* (Cambridge University Press, 2002).
- Crawford, James, *The Creation of States in International Law*, 2nd ed. (Oxford University Press, 2006).
- Crockett, Andrew, "Progress Towards Greater International Financial Stability", in David Vines and Christopher L. Gilbert (Eds.), *The IMF and Its Critics* (Cambridge University Press, 2004).
- Crockett, Andrew, "Rebuilding the Financial Architecture", September 2009 *Finance & Development* 18 (2009).
- Crowder, George, "Pluralism, Liberalism and Distributive Justice", 46 *San Diego Law Review* 773 (2009).

- Crowder, George, *Liberalism and Value Pluralism* (Continuum, 2002).
- Crowder, George, *Isaiah Berlin: Liberty and Pluralism* (Polity, 2004).
- Crutzen, Paul, "Albedo Enhancement by Stratospheric Sulfur Injections: A Contribution to Resolve a Policy Dilemma?", 77 *Climatic Change* 211 (2006).
- Dam, Kenneth W., "The Subprime Crisis and Financial Regulation: International and Comparative Perspectives", 10 *Chicago Journal of International Law* 581 (2009-2010).
- D'Amato, Anthony, "Domestic Jurisdiction", in Rudolf Bernhardt (Ed.) *Encyclopedia of Public International Law*.
- Damrosch, Lori Fisler, "Politics across Borders: Nonintervention and Nonforcible Influence over Domestic Affairs", 83 *American Journal of International Law* 1 (1989).
- Danish, Kyle W., "International Relations Theory", in Daniel Bodansky et al. (Eds.), *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007).
- Davey, William J., "Has the WTO Dispute Settlement System Exceeded Its Authority? A Consideration of Deference Shown by the System to Member Government Decisions and Its Use of Issue-Avoidance Techniques", 4 *Journal of International Economic Law* 79 (2001).
- Davies, Arwel, "Interpreting the Chapeau of GATT Article XX in Light of the 'New' Approach in Brazil-Tyres", 43 *Journal of World Trade* 207 (2009).
- Davies, Howard, "Global Financial Regulation after the Credit Crisis", 1 *Global Policy* 185 (2010).
- De Graeve, F. et al., "Monetary Policy and Financial (In)Stability: An Integrated Micro-Macro Approach", 4 *Journal of Financial Stability* 205 (2008).
- De Meester, Bart, "The Global Financial Crisis and Government Support for Banks: What Role for the GATS?", 13 *Journal of International Economic Law* 27 (2010).
- de Sadeleer, Nicolas, *Environmental Principles: From Political Slogans to Legal Rules* (Oxford University Press, 2002).
- Delbruck, Jost, "Structural Changes in the International System and Its Legal Order: International Law in the Era of Globalization", 11 *Schweizerischen Zeitschrift für internationales und europäisches Recht* 1 (2001).
- Delimatsis, Panagiotis and Molinuevo, Martin, "Article XVI GATS", in Rüdiger Wolfrum et al. (Eds.), *WTO-Trade in Services* (Martinus Nijhoff Publishers, 2003).
- Delimatsis, Panagiotis and Sauvé, Pierre, "Financial Services Trade after the Crisis: Policy and Legal Conjectures", 13 *Journal of International Economic Law* 837 (2010).
- Delimatsis, Panagiotis, "Don't Gamble with GATS—the Interaction between Articles VI, XVI, XVII and XVIII GATS in the Light of the US-Gambling Case", 40 *Journal of World Trade* 1059 (2006).
- Delimatsis, Panagiotis, *International Trade in Services and Domestic Regulations: Necessity, Transparency, and Regulatory Diversity* (Oxford University Press, 2007).
- Delimatsis, Panagiotis, "Determining the Necessity of Domestic Regulations in Services: The Best Is Yet to Come", 19 *European Journal of International Law* 365 (2008).
- Delimatsis, Panagiotis, "Concluding the WTO Services Negotiations on Domestic Regulation—Hopes and Fears", 9 *World Trade Review* 643 (2010).
- Delonis, Robert P., "International Financial Standards and Codes: Mandatory Regulation without Representation", 36 *N.Y.U. Journal of International Law and Politics* (2004).

- Den Elzen, Michel and Höhne, Niklas, "Reductions of Greenhouse Gas Emissions in Annex I and Non-Annex I Countries for Meeting Concentration Stabilisation Targets", 91 *Climatic Change* 249 (2008).
- Den Elzen, Michel and Höhne, Niklas, "Sharing the Reduction Effort to Limit Global Warming to 2°C", 10 *Climate Policy* 247 (2010).
- Depledge, Joanna, "High Politics, High Theatrics in Bali", 38 *Environmental Policy and Law* 14 (2008).
- Depledge, Joanna, "Spring 2008 Climate Meetings: Bangkok and Bonn", 38 *Environmental Policy and Law* 194 (2008).
- Diebold, Nicolas F., "The Morals and Order Exceptions in WTO Law: Balancing the Toothless Tiger and the Undermining Mole", 11 *Journal of International Economic Law* 43 (2008).
- Diebold, Nicolas F., *Non-Discrimination in International Trade in Services: 'Likeness' in WTO/GATS*, (Cambridge University Press, 2010).
- Diehl, Paul F. et al., "The Dynamics of International Law: The Interaction of Normative and Operating Systems", 57 *International Organization* 43 (2003).
- Diehl, Paul F. and Ku, Charlotte, *The Dynamics of International Law* (Cambridge University Press, 2010).
- Dodd, Randall, "Consequences of Liberalizing Derivatives Markets", in José Antonio Ocampo and Joseph E. Stiglitz (Eds.), *Capital Market Liberalization and Development* (Oxford University Press, 2008).
- Doelle, Meinhard, "Climate Change and the WTO: Opportunities to Motivate State Action on Climate Change through the World Trade Organization", 13 *Review of European Community and International Environmental Law* 85 (2004).
- Doelle, Meinhard, *From Hot Air to Action?: Climate Change, Compliance and the Future of International Environmental Law* (Thomson/Carswell, 2005).
- Dolzer, Rudolf and Schreuer, Christoph, *Principles of International Investment Law* (Oxford University Press, 2008).
- Douma, Wybe Th. and Ratsiborinskaya, Daria, "The Russian Federation and the Kyoto Protocol", in Wybe Th. Douma et al. (Eds.), *The Kyoto Protocol and Beyond: Legal and Policy Challenges of Climate Change* (T.M.C. Asser Press, 2007).
- Doyle, Christopher, "Gimme Shelter: The 'Necessary' Element of GATT Article XX in the Context of the *China-Audiovisual Products Case*", 29 *Boston University International Law Journal* 143 (2011).
- Driesen, David M., "What Is Free Trade?: The Real Issue Lurking Behind the Trade and Environment Debate", 41 *Virginia Journal of International Law* 279 (2000-2001).
- Dröge, Susanne et al., "National Climate Change Policies and WTO Law: A Case Study of Germany's New Policies", 3 *World Trade Review* 161 (2004).
- Du, Michael Ming, "Autonomy in Setting Appropriate Level of Protection under the WTO Law: Rhetoric or Reality?", 13 *Journal of International Economic Law* 1077 (2010).
- Dunoff, Jeffrey L., "Levels of Environmental Governance", in Daniel Bodansky et al. (Eds.), *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007).
- Dupuy, Pierre-Marie, "International Law: Torn between Coexistence, Cooperation and Globalization. General Conclusions", 9 *European Journal of International Law* 278 (1998).

- Eatwell, John, "New Issues in International Financial Regulation", in Eilís Ferran and Charles A.E. Goodhart (Eds.), *Regulating Financial Services and Markets in the 21st Century* (Hart Publishing, 2001).
- Ehlermann, Claus-Dieter and Ehring, Lothar, "Decision-Making in the World Trade Organization", 8 *Journal of International Economic Law* 51 (2005).
- Ehring, Lothar, "De Facto Discrimination in World Trade Law. National and Most-Favoured-Nation Treatment—or Equal Treatment?", 36 *Journal of World Trade* 921 (2002).
- Eichengreen, Barry and Kenen, Peter B., "Managing the World Economy under the Bretton Woods System: An Overview", in Peter B. Kenen (Ed.) *Managing the World Economy: Fifty Years after Bretton Woods* (Institute for International Economics, 1994).
- Eichengreen, Barry J., *Globalizing Capital: A History of the International Monetary System*, 2nd ed. (Princeton University Press, 2008).
- Eiger, Ze'ev D. and Tanenbaum, James R., "Regulation of Financial Institutions, Financial Crises and Rescue Packages in Europe: The Iceland Case", in Eugenio A. Bruno (Ed.) *Global Financial Crisis: Navigating and Understanding the Legal and Regulatory Aspects* (Globe Law and Business, 2009).
- Elliot, Lorraine, "Sovereignty and the Global Politics of the Environment: Beyond Westphalia?", in Trudy Jacobsen et al. (Eds.), *Re-Envisioning Sovereignty: The End of Westphalia?* (Ashgate, 2008).
- Engle, Eric Allen, "The Transformation of the International Legal System: The Post-Westphalian Legal Order", 23 *Quinnipiac Law Review* (2004-2005).
- Epps, Tracey and Green, Andrew, *Reconciling Trade and Climate: How the WTO Can Help Address Climate Change*, (Edward Elgar, 2010).
- Esty, Daniel C., *Greening the GATT: Trade, Environment, and the Future* (Institute for International Economics, 1994).
- Esty, Daniel C., "Governing at the Trade-Environment Interface", in Gary P. Sampson (Ed.) *The WTO and Global Governance: Future Directions* (United Nations University Press, 2008).
- Evans, Alex, "From Bali to Copenhagen: Towards an Endgame?", 38 *Environmental Policy and Law* 25 (2008).
- Falk, Richard, "Self-Determination under International Law: The Coherence of Doctrine Versus the Incoherence of Experience", in Wolfgang Danspeckgruber (Ed.) *The Self-Determination of Peoples: Community, Nation and State in an Interdependent World* (Lynne Rienner, 2002).
- Fassbender, Bardo, "Sovereignty and Constitutionalism in International Law", in Neil Walker (Ed.) *Sovereignty in Transition* (Hart Publishing, 2003).
- Feess, Eberhard et al., "Environmental Liability under Uncertain Causation", 28 *European Journal of Law and Economics* 133 (2009).
- Fenwick, Charles G., "The Scope of Domestic Questions in International Law", 19 *American Journal of International Law* 143 (1925).
- Ferguson, Jeffrey A., "The Kyoto Protocol: The Battle over Global Warming Heats Up", 8 *Transnational Law and Policy* 293 (1998-99).
- Finger, K. Michael and Schuknecht, Ludger, *Trade, Finance and Financial Crises* (WTO, 1999).
- Fink, Carsten and Molinuevo, Martin, "East Asian Preferential Trade Agreements in Services: Liberalization Content and WTO Rules", 7 *World Trade Review* 641 (2008).

- Finnemore, Martha and Sikkink, Kathryn, "International Norm Dynamics and Political Change", 52 *International Organization* 887 (1998).
- Fischer, Stanley, "Capital-Account Liberalization and the Role of the IMF", in Stanley Fischer et al. (Eds.), *Should the IMF Pursue Capital-Account Convertibility* (International Finance Section, Dept. of Economics, Princeton University, 1998).
- Fischer, Stanley, *IMF Essays from a Time of Crisis: The International Financial System, Stabilization, and Development* (MIT Press, 2004).
- Fitzgerald, Brian F., "Trade-Based Constitutionalisms: The Framework for Universalizing Substantive International Law?", 5 *University of Miami Yearbook of International Law* 111 (1996-1997).
- Fitzmaurice, Malgosia, "International Responsibility and Liability", in Daniel Bodansky et al. (Eds.), *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007).
- Fleming, James Rodger, *Historical Perspectives on Climate Change* (Oxford University Press, 1998).
- Foster, Caroline E., "Articulating Self-Determination in the Draft Declaration on the Rights of Indigenous Peoples", 12 *European Journal of International Law* 141 (2001).
- Foster, Caroline, "The ILC Draft Principles of the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities: Privatizing Risk?", 14 *Review of European Community and International Environmental Law* 265 (2005).
- Foster, Caroline, "Compensation for Material and Moral Damage to Small Island States' Reputations and Economies Due to an Incident During the Shipment of Radioactive Material", 37 *Ocean Development & International Law* 55 (2006).
- Foster, Caroline, "Necessity and Precaution in International Law: Responding to Oblique Forms of Urgency", 23 *New Zealand Universities Law Review* 265 (2008).
- Foster, Caroline E., *Science and the Precautionary Principle in International Courts and Tribunals* (Cambridge University Press, 2011).
- Fowler, Michael and Bunck, Julie Marie, *Law, Power, and the Sovereign State: The Evolution and Application of the Concept of Sovereignty* (Pennsylvania State University Press, 1995).
- Fox, Sean, "Responding to Climate Change: The Case for Unilateral Trade Measures to Protect the Global Atmosphere", 84 *Georgetown Law Journal* 2499 (1996).
- Frankel, Jeffrey A., "You're Getting Warmer: The Most Feasible Path for Addressing Global Climate Change Does Run through Kyoto", in John W. Maxwell and Rafael Reuveny (Eds.), *Trade and Environment: Theory and Policy in the Context of EU Enlargement and Economic Transition* (Edward Elgar Publishing, 2005).
- Freeland, Steven, "The Kyoto Protocol: An Agreement without a Future?", 24 *UNSW Law Journal* 532 (2001).
- Freestone, David and Streck, Charlotte, *Legal Aspects of Implementing the Kyoto Protocol Mechanisms* (Oxford University Press, 2005).
- French, Duncan, "1997 Kyoto Protocol to the 1992 UN Framework Convention on Climate Change", 10 *Journal of Environmental Law* 227 (1998).
- French, Duncan A., "A Reappraisal of Sovereignty in the Light of Global Environmental Concerns", 21 *Legal Studies* 376 (2001).
- Frieden, Jeffrey A., "Exchange Rate Politics: Contemporary Lessons from American History", 1 *Review of International Political Economy* 81 (1994).

- Friedmann, Wolfgang Gaston, *The Changing Structure of International Law* (Columbia University Press, 1964).
- Fritz-Krockow, Bernhard and Ramlogan, Parmeshwar, *International Monetary Fund Handbook: Its Functions, Policies, and Operation* (International Monetary Fund, 2007).
- Fudge, Nathan, "Walter Mitty and the Dragon: An Analysis of the Possibility for WTO or IMF Action against China's Manipulation of the Yuan", 45 *Journal of World Trade* 349 (2011).
- Gadbaw, R. Michael, "Systemic Regulation of Global Trade and Finance: A Tale of Two Systems", 13 *Journal of International Economic Law* 551 (2010).
- Gaines, Sanford E., "Processes and Production Methods: How to Produce Sound Policy for Environmental PPM-Based Trade Measures?", 27 *Columbia Journal of Environmental Law* 383 (2002).
- Galipeau, Claude, *Isaiah Berlin's Liberalism* (Clarendon press, Oxford University Press, 1994).
- Galston, William A., *Liberal Pluralism: The Implications of Value Pluralism for Political Theory and Practice*, (Cambridge University Press, 2002).
- Gandolfo, Giancarlo, *Elements of International Economics* (Springer, 2004).
- Garcia, Frank J., "Humanizing the Financial Architecture of Globalization: A Tribute to the Work of Cynthia Lichtenstein", 25 *Boston College International and Comparative Law Review* 203 (2002).
- Gardner, Richard N., "The Bretton Woods-GATT System after Sixty-Five Years: A Balance Sheet of Success and Failure", 47 *Columbia Journal of Transnational Law* 31 (2008-2009).
- German Advisory Council on Global Change (WBGU), *Climate Change as a Security Risk* (Earthscan, 2008).
- Gianviti, François, "The International Monetary Fund and External Debt", 215 *Recueil des Cours* 205 (1989).
- Gianviti, François, "The IMF and the Liberalization of Capital Markets", 19 *Houston Journal of International Law* 773 (1997).
- Gianviti, François, "Current Legal Aspects of Monetary Sovereignty", 4 *Current Developments in Monetary and Financial Law* 3 (2004).
- Gillespie, Alexander, "International Environmental Law and Policy", in Klaus Bosselmann and David Grinlinton (Eds.), *Environmental Law for a Sustainable Society* (New Zealand Centre for Environmental Law, 2002).
- Gilmour, D. R., "The Meaning of "Intervene" within Article 2 (7) of the United Nations Charter. An Historical Perspective", 16 *International and Comparative Law Quarterly* 330 (1967).
- Gilpin, Robert and Gilpin, Jean M., *The Political Economy of International Relations* (Princeton University Press, 1987).
- Giref, Nicholas "Legal Aspects of Nuclear Testing", 23 *Bracton Law Journal* 25 (1991).
- Gkoutzinis, Apostolos, "International Trade in Banking Services and the Role of the WTO: Discussing the Legal Framework and Policy Objectives of the General Agreement on Trade in Services and the Current State of Play in the Doha Round of Trade Negotiations", 39 *International Lawyer* 877 (2005).
- Gkoutzinis, Apostolos, "How Far Is Basel from Geneva? International Regulatory Convergence and the Elimination of Barriers to International Financial Integration", in Kern Alexander and Mads Andenas (Eds.), *The World Trade Organization and Trade in Services* (Martinus Nijhoff Publishers, 2008).

- Glennon, Michael J., "How International Rules Die", 93 *Georgetown Law Journal* 939 (2004-2005).
- Gold, Joseph et al., *Legal and Institutional Aspects of the International Monetary System: Selected Essays* (International Monetary Fund, 1979).
- Gold, Joseph, *Legal Effects of Fluctuating Exchange Rates* (International Monetary Fund, 1990).
- Goodhart, Charles A. E. and Lastra, Rosa M., "Border Problems", 13 *Journal of International Economic Law* 705 (2010).
- Goodhart, C.A.E., "The Background to the 2007 Financial Crisis", 4 *International Economics and Economic Policy* 331 (2008).
- Gottselig, Glenn and Gulde-Wolf, Anne-Marie, "The International Monetary Fund's Work on Financial Stability", 4 *Current Developments in Monetary and Financial Law* 55 (2004).
- Gowan, Peter, "Crisis in the Heartland", 55 *New Left Review* 5 (2009).
- Grant, Thomas D., "Defining Statehood: The Montevideo Convention and Its Discontents", 37 *Columbia Journal of Transnational Law* 403 (1998-1999).
- Gray, John, *Liberalism* (Open University Press, 1986).
- Gray, John, *Isaiah Berlin* (Princeton University Press, 1996).
- Gray, John, *Two Faces of Liberalism* (New Press, 2000).
- Green, Andrew and Epps, Tracey, "The WTO, Science, and the Environment: Moving Towards Consistency", 10 *Journal of International Economic Law* 285 (2007).
- Green, Andrew and Epps, Tracey, "Is There a Role for Trade Measures in Addressing Climate Change?", 15 *U.C. Davis Journal of International Law and Policy* 1 (2008-2009).
- Green, Andrew, "Climate Change, Regulatory Policy and the WTO: How Constraining Are Trade Rules?", 8 *Journal of International Economic Law* 143 (2005).
- Green, Andrew, "Trade Rules and Climate Change Subsidies", 5 *World Trade Review* 377 (2006).
- Greenwood, Christopher, "The Advisory Opinion on Nuclear Weapons and the Contribution of the International Court to International Humanitarian Law", 37 *International Review of the Red Cross* 65 (1997).
- Greig, Don, "'International Community', 'Interdependence' and All That Rhetorical Correctness?", in Gerard Kreijen (Ed.) *State, Sovereignty, and International Governance* (Oxford University Press, 2002).
- Grosse Ruse-Khan, Henning, "'Gambling' with Sovereignty: Complying with International Obligations or Upholding National Autonomy", in Meredith Kolsky Lewis and Susy Frankel (Eds.), *International Economic Law and National Autonomy* (Cambridge University Press, 2010).
- Grote, Rainer and Marauhn, Thilo, *The Regulation of International Financial Markets: Perspectives for Reform* (Cambridge University Press, 2006).
- Grote, Rainer, "Article XII GATS", in Rüdiger Wolfrum et al. (Eds.), *WTO-Trade in Services* (Martinus Nijhoff Publishers, 2008).
- Grover, Velma I., "Introduction", in Velma I. Grover (Ed.) *Climate Change: Five Years after Kyoto* (Science Publishers, Inc., 2002).
- Grubb, Michael et al., *Kyoto Protocol: A Guide & Assessment* (Energy and Environmental Programme, 1999).

- Guttinger, Philippe, "Allocation of Responsibility for Harmful Consequences of Acts Not Prohibited by International Law", in James Crawford et al. (Eds.), *The Law of International Responsibility* (Oxford University Press, 2010).
- Hafner, Gerhard and Buffard, Isabelle, "Obligations of Prevention and the Precautionary Principle", in James Crawford et al. (Eds.), *The Law of International Responsibility* (Oxford University Press, 2010).
- Hagan, Sean, "Enhancing the IMF's Regulatory Authority", 13 *Journal of International Economic Law* 955 (2010).
- Hahn, Michael J., "Vital Interests and the Law of GATT: An Analysis of GATT's Security Exception", 12 *Michigan Journal of International Law* 558 (1990-1991).
- Haldane, Andrew G., "The Financial Stability Forum (FSF): Just Another Acronym?", in Eilís Ferran and Charles A.E. Goodhart (Eds.), *Regulating Financial Services and Markets in the 21st Century* (Hart Publishing, 2001).
- Handeyside, Hugh, "The *Lotus* Principle in ICJ Jurisprudence: Was the Ship Ever Afloat?", 29 *Michigan Journal of International Law* 71 (2007-2008).
- Handl, Gunther, "Transboundary Impacts", in Daniel Bodansky et al. (Eds.), *The Oxford Handbook on International Environmental Law* (Oxford University Press, 2007).
- Harding, Christopher and Lim, Chin L., "The Significance of Westphalia: An Archeology of the International Legal Order", in Christopher Harding and Chin L. Lim (Eds.), *Renegotiating Westphalia: Essays and Commentary on the European and Conceptual Foundations of Modern International Law* (Kluwer Law International, 1999).
- Harris, Paul G., "Climate Change and the Impotence of International Environmental Law: Seeking a Cosmopolitan Cure", 16 *Penn State Environmental Law Review* 323 (2008).
- Harvey, David, *A Brief History of Neoliberalism* (Oxford University Press, 2005).
- Hawkins, Slayde, "Skirting Protectionism: A GHG-Based Trade Restriction under the WTO", 20 *Georgetown International Environmental Law Review* 427 (2008).
- Hay, Colin, "Globalization's Impact on States", in John Ravenhill (Ed.) *Global Political Economy* (Oxford University Press, 2008).
- Hayman, P.A. and Williams, John, "Westphalian Sovereignty: Rights, Intervention, Meaning and Context", 20 *Global Society* 521 (2006).
- Head, John W., "Symposium: Local to Global: Rethinking Spheres after a World Financial Crisis: The Global Financial Crisis of 2008-2009 in Context—Reflections on International Legal and Institutional Failings, 'Fixes,' and Fundamentals", 23 *Pacific McGeorge Global Business & Development Law Journal* 43 (2010).
- Heathcote, Sarah, "Circumstances Precluding Wrongfulness in the ILC Articles on State Responsibility: Necessity", in James Crawford et al. (Eds.), *The Law of International Responsibility* (Oxford University Press, 2010).
- Heiskanen, Veijo, "The Regulatory Philosophy of International Trade Law", 38 *Journal of World Trade* 1 (2004).
- Helleiner, Eric, *States and the Reemergence of Global Finance: From Bretton Woods to the 1990s* (Cornell University Press, 1994).
- Helleiner, Eric, "Explaining the Globalization of Financial Markets: Bringing States Back In", 2 *Review of International Political Economy* 315 (1995).
- Hendricks, Darryll et al., "Systemic Risk and the Financial System", 13 *Federal Reserve Bank of New York Economic Policy Review* 65 (2007).

- Henkin, Louis, "The Mythology of Sovereignty", in R. St. J. MacDonald (Ed.) *Essays in Honour of Wang Tieya* (Martinus Nijhoff Publishers, 1993).
- Henkin, Louis, *International Law: Politics and Values* (Martinus Nijhoff Publishers, 1995).
- Henning, C. Randall, "The Exchange-Rate Weapon and Macroeconomic Conflict", in David M. Andrews (Ed.) *International Monetary Power* (Cornell University Press, 2006).
- Herrmann, Christoph, "Don Yuan: China's 'Selfish' Exchange Rate Policy and International Economic Law", in Christoph Herrmann and Jörg Philipp Terhechte (Eds.), *European Yearbook of International Economic Law 2010* (Springer-Verlag, 2010).
- Hertel, Michael, "Climate-Change-Related Trade Measures and Article XX: Defining Discrimination in Light of the Principle of Common but Differentiated Responsibilities", 45 *Journal of World Trade* 653 (2011).
- Higgins, Matthew and Klitgaard, Thomas, "Financial Globalization and the U.S. Current Account Deficit", 13 *Current Issues in Economics and Finance* 1 (2007).
- Hilf, Meinhard, "Power, Rules and Principles—Which Orientation for WTO/GATT Law?", 4 *Journal of International Economic Law* 111 (2001).
- Hindess, Barry, "Sovereignty as Indirect Rule", in Trudy Jacobsen et al. (Eds.), *Re-Envisioning Sovereignty: The End of Westphalia?* (Ashgate, 2008).
- Hirsch, Moshe, "Compliance with International Norms in the Age of Globalization: Two Theoretical Perspectives", in Eyal Benvenisti and Moshe Hirsch (Eds.), *The Impact of International Law on International Cooperation* (Cambridge University Press, 2004).
- Hobe, Stephan and Griebel, Jörn, "New Protectionism—How Binding Are International Economic Legal Obligations During a Global Economic Crisis?", 2 *Göttingen Journal of International Law* 423 (2010).
- Hoekman, Bernard, "The General Agreement on Trade in Services: Doomed to Fail? Does It Matter?", 8 *Journal of Industry, Competition and Trade* 295 (2008).
- Hoenig, Thomas M., "Maintaining Stability in a Changing Financial System: Some Lessons Relearned Again?", 93 *Federal Reserve Bank of Kansas City Economic Review* 5 (2008).
- Horn, Henrik and Mavroidis, Petros C., "Still Hazy after All These Years: The Interpretation of National Treatment in the GATT/WTO Case-Law on Tax Discrimination", 15 *European Journal of International Law* 39 (2004).
- Horn, Henrik and Mavroidis, Petros C., "The Permissible Reach of National Environmental Policies", 42 *Journal of World Trade* 1107 (2008).
- Hovden, Eivind and Keene, Edward, "Introduction", in Eivind Hovden and Edward Keene (Eds.), *The Globalization of Liberalism* (Palgrave, 2002).
- Howse, Robert and Regan, Donald H., "The Product/Process Distinction—an Illusory Basis for Disciplining 'Unilateralism' in Trade Policy", 11 *European Journal of International Law* 249 (2000).
- Howse, Robert, "From Politics to Technocracy—and Back Again: The Fate of the Multilateral Trading Regime", 96 *American Journal of International Law* 94 (2002).
- Howse, Robert, "The Most Dangerous Branch? WTO Appellate Body Jurisprudence on the Nature and Limits of the Judicial Power", in Thomas Cottier and Petros C. Mavroidis (Eds.), *The Role of the Judge in International Trade Regulation* (The University of Michigan Press, 2003).
- Howse, Robert, "Sovereignty, Lost and Found", in Wenhua Shan et al. (Eds.), *Redefining Sovereignty in International Economic Law* (Hart Publishing, 2008).

- Hudec, Robert E., "GATT/WTO Constraints on National Regulation: Requiem for an "Aims and Effects" Test", 32 *International Lawyer* 619 (1998).
- Hudec, Robert E., "The Product-Process Doctrine in GATT/WTO Jurisprudence", in Marco Bronckers and Reinhard Quick (Eds.), *New Directions in International Economic Law: Essays in Honour of John H. Jackson* (Kluwer Law International, 2000).
- Hudec, Robert E., "Science and 'Post-Discriminatory' WTO Law", 26 *Boston College International and Comparative Law Review* 185 (2003).
- Hudson, Wayne, "Fables of Sovereignty", in Trudy Jacobsen et al. (Eds.), *Re-Envisioning Sovereignty: The End of Westphalia?* (Ashgate, 2008).
- Hufbauer, Gary and Danxia Xie, Daniel, "Financial Stability and Monetary Policy: Need for International Surveillance", 13 *Journal of International Economic Law* 939 (2010).
- Hufbauer, Gary and Stephenson, Sherry, "Services Trade: Past Liberalization and Future Challenges", 10 *Journal of International Economic Law* 605 (2007).
- International Institute for Sustainable Development, "Summary of the Thirteenth Conference of Parties to the UN Framework Convention on Climate Change and Third Meeting of Parties to the Kyoto Protocol: 3-15 December 2007", 12 *Earth Negotiations Bulletin* (2007).
- International Institute for Sustainable Development, "Summary of the First Session of the Ad Hoc Working Group on Long-Term Cooperative Action and the Fifth Session of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol: 31 March - 4 April 2008", 12 *Earth Negotiations Bulletin* (2008).
- International Institute for Sustainable Development, "Summary of the Cancun Climate Change Conference: 29 November - 11 December 2010", 12 *Earth Negotiations Bulletin* (2010).
- Irwin, Gregor et al., "How Should the IMF View Capital Controls?", in David Vines and Christopher L. Gilbert (Eds.), *The IMF and Its Critics: Reform of Global Financial Architecture* (Cambridge University Press, 2004).
- Ishii, Shogo and Habermeier, Karl, *Capital Account Liberalization and Financial Sector Stability* (International Monetary Fund, 2002).
- Ismer, Roland and Neuhoff, Karsten, "Border Tax Adjustment: A Feasible Way to Support Stringent Emission Trading", 24 *European Journal of Law and Economics* 137 (2007).
- Jackson, John H., *The World Trading System: Law and Policy of International Economic Relations* 2nd ed. (MIT Press, 1997).
- Jackson, John H., "Sovereignty-Modern: A New Approach to an Outdated Concept", 97 *American Journal of International Law* 782 (2003).
- Jackson, John H., *Sovereignty, the WTO and Changing Fundamentals of International Law*, (Cambridge University Press, 2006).
- Jackson, Robert H., *Quasi-States: Sovereignty, International Relations, and the Third World* (Cambridge University Press, 1990).
- Jackson, Robert H., *Sovereignty: Evolution of an Idea* (Polity, 2007).
- Jackson, Robert, "Sovereignty in World Politics: A Glance at the Conceptual and Historical Landscape", 47 *Political Studies* 431 (1999).
- Jacobs, Rebecca Elizabeth, "Treading Deep Waters: Substantive Law Issues in Tuvalu's Threat to Sue the United States in the International Court of Justice", 14 *Pacific Rim Law & Policy Journal* 103 (2005).

- James, Harold, *International Monetary Cooperation since Bretton Woods* (Oxford University Press, 1996).
- Jamieson, Dale, "The Post-Kyoto Climate: A Gloomy Forecast", 10 *Georgetown International Environmental Law Review* 537 (2008).
- Jamnejad, Maziar and Wood, Michael, "The Principle of Non-Intervention", 22 *Leiden Journal of International Law* 345 (2009).
- Janis, Mark W., "Sovereignty and International Law: Hobbes and Grotius", in R. St. J. MacDonald (Ed.) *Essays in Honour of Wang Tieya* (Martinus Nijhoff Publishers, 1993).
- Jansen, Bernhard and Lugard, Maurits, "Some Considerations on Trade Barriers Erected for Non-Economic Reasons and WTO Obligations", 2 *Journal of International Economic Law* 530 (1999).
- Jansen, Bernhard, "The Limits of Unilateralism from a European Perspective", 11 *European Journal of International Law* 309 (2000).
- Janzen, Bernd G., "International Trade Law and the "Carbon Leakage" Problem: Are Unilateral U.S. Import Restrictions the Solution?", 8 *Sustainable Development Law and Policy* 22 (2008).
- Jara, Alejandro and Dominguez, M. del Carmen, "Liberalization of Trade in Services and Trade Negotiations", 40 *Journal of World Trade* 113 (2006).
- Jenkinson, Nigel et al., "Financial Innovation: What Have We Learnt?", 48 *Bank of England Quarterly Bulletin* 330 (2008).
- Jennings, R. Y., "The Limits of States Jurisdiction (1962)", *Collected Writings of Sir Robert Jennings* (1998).
- Jennings, Sir Robert, "Sovereignty and International Law", in Gerard Kreijen (Ed.) *State, Sovereignty, and International Governance* (Oxford University Press, 2002).
- Jessup, Philip C., "The Palmas Island Arbitration", 22 *American Journal of International Law* 735 (1928).
- Jones, Goronwy J., *The United Nations and the Domestic Jurisdiction of States : Interpretations and Applications of the Non-Intervention Principle* (University of Wales Press, 1979).
- Jones, Helen Hart, "Domestic Jurisdiction—from the Covenant to the Charter", 46 *Illinois Law Review* 219 (1951).
- Juss, Satvinder, "Nationality Law, Sovereignty, and the Doctrine of Exclusive Domestic Jurisdiction", 9 *Florida Journal of International Law* 219 (1994).
- Kahn, Paul W., "The Question of Sovereignty", 40 *Stanford Journal of International Law* 259 (2004).
- Kalderimis, Daniel, "Problems of WTO Harmonization and the Virtues of Shields over Swords", 13 *Minnesota Journal of Global Trade* 305 (2004).
- Kalderimis, Daniel, "IMF Conditionality as Investment Regulation: A Theoretical Analysis", 13 *Social and Legal Studies* 103 (2004).
- Kapstein, Ethan B., *Governing the Global Economy: International Finance and the State* (Harvard University Press, 1994).
- Kapterian, Gisele, "A Critique of the WTO Jurisprudence on 'Necessity'", 59 *International and Comparative Law Quarterly* 89 (2010).

- Kaufmann, Christine and Weber, Rolf H., "Reconciling Liberalized Trade in Financial Services and Domestic Regulation", in Kern Alexander and Mads Andenas (Eds.), *The World Trade Organization and Trade in Services* (Martinus Nijhoff Publishers, 2008).
- Kawser, Ahmed, "The Domestic Jurisdiction Clause in the United Nations Charter: A Historical View", 10 *Singapore Year Book of International Law* 175 (2006).
- Kegley Jr., Charles W. et al., "The Rise and Fall of the Nonintervention Norm: Some Correlates and Potential Consequences", 22 *The Fletcher Forum of World Affairs* 81 (1998).
- Keith, David W., "Geoengineering the Climate: History and Prospect", 25 *Annual Review of Energy and the Environment* 245 (2000).
- Kelsey, Jane, "The Denationalization of Money: Embedded Neo-Liberalism and the Risks of Implosion", 12 *Social and Legal Studies* 155 (2003).
- Kelsey, Jane, *Serving Whose Interests? The Political Economy of Trade in Services Agreements* (Routledge-Cavendish, 2008).
- Kelsey, Jane, "Trade in Services", in Jane Kelsey (Ed.) *No Ordinary Deal: Unmasking the Trans-Pacific Partnership Free Trade Agreement* (Bridget Williams Books, 2010).
- Kelsey, Jane, "How the Trans-Pacific Partnership Agreement Could Heighten Financial Instability and Foreclose Governments' Regulatory Space", *New Zealand Yearbook of International Law* (Forthcoming).
- Kennedy, Kevin, "GATT 1994", in Patrick F. J. Macrory et al. (Eds.), *The World Trade Organization: Legal, Economic and Political Analysis* (Springer, 2005).
- Keohane, Robert O. and Nye, Joseph S., *Power and Interdependence*, 3rd ed. (Longman, 2001).
- Key, Sydney J., "Financial Services", in Patrick F. J. Macrory et al. (Eds.), *The World Trade Organization: Legal, Economic and Political Analysis* (Springer, 2005).
- Khrushchev, Nikita S., "On Peaceful Coexistence", 38 *Foreign Affairs* 1 (1959).
- Kindleberger, Charles P. and Aliber, Robert Z., *Manias, Panics, and Crashes: A History of Financial Crises*, 5th ed. (John Wiley & Sons, 2005).
- King, Nancy J. and Kalupahana, Kishani, "Choosing between Liberalization and Regulatory Autonomy under GATS: Implications of U.S.-Gambling for Trade in Cross Border E-Services", 40 *Vanderbilt Journal of Transnational Law* 1189 (2007).
- Kingsbury, Benedict, "The Tuna-Dolphin Controversy, the World Trade Organization, and the Liberal Project to Reconceptualize International Law", 5 *Yearbook of International Environmental Law* 1 (1994).
- Kirshner, Jonathan, *Currency and Coercion. The Political Economy of International Monetary Power* (Princeton University Press, 1995).
- Kirshner, Jonathan, "Currency and Coercion in the Twenty-First Century", in David M. Andrews (Ed.) *International Monetary Power* (Cornell University Press, 2006).
- Kiss, Alexandre Charles and Shelton, Dinah, *International Environmental Law*, 2nd ed. (Transactional Publishers, 2000).
- Klabbers, Jan, "The Right to Be Taken Seriously: Self-Determination in International Law", 28 *Human Rights Quarterly* 186 (2006).
- Klintworth, Gary, *"The Right to Intervene" in the Domestic Affairs of States* (Strategic and Defence Studies Centre, Australian National University, 1991).
- Koebele, Michael, "Article I and Annex I TBT", in Rüdiger Wolfrum et al. (Eds.), *WTO-Technical Barriers and SPS Measures* (Koninklijke Brill, 2007).

- Kolo, Abba, "Investor Protection vs Host State Regulatory Autonomy During Economic Crisis: Treatment of Capital Transfers and Restrictions under Modern Investment Treaties", 8 *Journal of World Investment and Trade* 457 (2007).
- Kono, Masamichi et al., *Opening Markets in Financial Services and the Role of the GATS* (World Trade Organization, 1997).
- Koskenniemi, Martti, "Peaceful Settlement of Environmental Disputes", 60 *Nordic Journal of International Law* 73 (1991).
- Koskenniemi, Martti, "The Future of Statehood", 32 *Harvard International Law Journal* 397 (1991).
- Koskenniemi, Martti, *From Apology to Utopia: The Structure of International Legal Argument*, (Cambridge University Press, 2005).
- Koskenniemi, Martti, "What Use for Sovereignty Today?", 1 *Asian Journal of International Law* 61 (2011).
- Krajewski, Marcus and Engelke, Maika, "Article XVII GATS", in Rüdiger Wolfrum et al. (Eds.), *WTO-Trade in Services* (Martinus Nijhoff Publishers, 2008).
- Krajewski, Markus, *National Regulation and Trade Liberalization in Services: The Legal Impact of the General Agreement on Trade in Services (GATS) on National Regulatory Autonomy* (Kluwer Law International, 2003).
- Krajewski, Marcus, "Services Liberalization in Regional Trade Agreements: Lessons for GATS 'Unfinished Business'?", in Lorand Bartels and Federico Ortino (Eds.), *Regional Trade Agreements and the WTO Legal System* (Oxford University Press, 2006).
- Krajewski, Marcus, "Article VI GATS", in Rüdiger Wolfrum et al. (Eds.), *WTO-Trade in Services* (Martinus Nijhoff Publishers, 2008).
- Krasner, Stephen D., "Sovereignty and Intervention", in Gene Martin Lyons and Michael Mastanduno (Eds.), *Beyond Westphalia? State Sovereignty and International Intervention* (Johns Hopkins University Press, 1995).
- Krawiec, Daniel A., "Sempra Energy International v. The Argentine Republic: Reaffirming the Rights of Foreign Investors to the Protection of ICSID Arbitration", 15 *Law and Business Review of the Americas* 311 (2009).
- Kreitner, Roy, "The Jurisprudence of Global Money", 11 *Theoretical Inquiries in Law* 177 (2010).
- Kritsiotis, Dino, "Public International Law and Its Territorial Imperative", 30 *Michigan Journal of International Law* 547 (2009).
- Kysar, Douglas A., "Preferences for Processes: The Process/Product Distinction and the Regulation of Consumer Choice", 118 *Harvard Law Review* (2004).
- Lake, David A., "The State and International Relations", in Christian Reus-Smit and Duncan Snidal (Eds.), *The Oxford Handbook of International Relations* (Oxford University Press, 2008).
- Lastra, Rosa M. and Wood, Geoffrey, "The Crisis of 2007-09: Nature, Causes, and Reactions", 13 *Journal of International Economic Law* 531 (2010).
- Lastra, Rosa María, "The International Monetary Fund in Historical Perspective", 3 *Journal of International Economic Law* 507 (2000).
- Lastra, Rosa María, *Legal Foundations of International Monetary Stability*, (Oxford University Press, 2006).
- Lauterpacht, Eli, "Sovereignty-Myth or Reality?", 73 *International Affairs* 137 (1997).

- Leben, Charles, "The Changing Structure of International Law Revisited by Way of Introduction", 8 *European Journal of International Law* 399 (1997).
- Leckow, Ross, "The IMF and Crisis Prevention—the Legal Framework for Surveillance", 17 *Kansas Journal of Law and Public Policy* 285 (2007-2008).
- Leebron, David W., "The Boundaries of the WTO: Linkages", 96 *American Journal of International Law* 5 (2002).
- Lefeber, René, *Transboundary Environmental Interference and the Origin of State Liability* (Kluwer Law International, 1996).
- Leiteritz, Ralf J., "Explaining Organizational Outcomes: The International Monetary Fund and Capital Account Liberalization", 8 *Journal of International Relations and Development* 1 (2005).
- Lerner, Warren, "The Historical Origins of the Soviet Doctrine of Peaceful Coexistence", in Hans W. Baade (Ed.) *The Soviet Impact on International Law* (Oceana Publications, 1965).
- Leroux, Eric H., "Trade in Financial Services under the World Trade Organization", 36 *Journal of World Trade* 413 (2002).
- Leroux, Eric H., "Eleven Years of GATS Case Law: What Have We Learned?", 10 *Journal of International Economic Law* (2007).
- Lichtenstein, Cynthia Crawford, "International Jurisdiction over International Capital Flows and the Role of the IMF: Plus Ça Change...", in Mario Giovanoli (Ed.) *International Monetary Law. Issues for the New Millennium* (Oxford University Press, 2000).
- Linarelli, John, "The Economics of Sovereignty", in Christopher Harding and Chin L. Lim (Eds.), *Renegotiating Westphalia: Essays and Commentary on the European and Conceptual Foundations of Modern International Law* (Kluwer Law International, 1999).
- Lipson, Leon, "Peaceful Coexistence", in Hans W. Baade (Ed.) *The Soviet Impact on International Law* (Oceana Publications, 1965).
- Loughlin, Martin, "Ten Tenets of Sovereignty", in Neil Walker (Ed.) *Sovereignty in Transition* (Hart Publishing, 2003).
- Louka, Elli, *International Environmental Law: Fairness, Effectiveness, and World Order* (Cambridge University Press, 2006).
- Lovric, Daniel, *Deference to the Legislature in WTO Challenges to Legislation* (Kluwer Law International, 2010).
- Lowe, A. V., "The Problems of Extraterritorial Jurisdiction: Economic Sovereignty and the Search for a Solution", 34 *International and Comparative Law Quarterly* 724 (1985).
- Lowe, Vaughan, "The Politics of Law-Making: Are the Method and Character of Norm Creation Changing?", in Michael Byers (Ed.) *The Role of Law in International Politics* (Oxford University Press, 2000).
- Lowe, Vaughan, "Jurisdiction", in Malcolm D. Evans (Ed.) *International Law* (Oxford University Press, 2006).
- Lowe, Alan Vaughan, *International Law*, (Oxford University Press, 2007).
- Lowe, Vaughan, "Sovereignty and International Economic Law", in Wenhua Shan et al. (Eds.), *Redefining Sovereignty in International Economic Law* (Hart Publishing, 2008).
- Lowenfeld, Andreas F., "Review: Is There Law after Bretton Woods?", 50 *University of Chicago Law Review* 380 (1983).

- Lowenfeld, Andreas F., "The International Monetary System and the Erosion of Sovereignty: Essay in Honour of Cynthia Lichtenstein", 25 *Boston College International and Comparative Law Review* 257 (2002).
- Lowenfeld, Andreas F., *International Economic Law*, 2nd ed. (Oxford University Press, 2008).
- Lowenfeld, Andreas F., "Jurisdiction to Prescribe and the IMF", in Colin B. Picker et al. (Eds.), *International Economic Law: The State and Future of the Discipline* (Hart Publishing, 2008).
- Lowenstein, Roger, *When Genius Failed. The Rise and Fall of Long-Term Capital Management*, 1st ed. (Random House, 2000).
- Lydgate, Emily Barrett, "Consumer Preferences and the National Treatment Principle: Emerging Environmental Regulations Prompt a New Look at an Old Problem", 10 *World Trade Review* 165 (2011).
- Lyons, Gene Martin and Mastanduno, Michael, "Introduction: International Intervention, State Sovereignty, and the Future of International Society", in Gene Martin Lyons and Michael Mastanduno (Eds.), *Beyond Westphalia? State Sovereignty and International Intervention* (Johns Hopkins University Press, 1995).
- Lyons, Gene Martin and Mastanduno, Michael, "State Sovereignty and International Intervention: Reflections on the Present and Prospects for the Future", in Gene Martin Lyons and Michael Mastanduno (Eds.), *Beyond Westphalia? State Sovereignty and International Intervention* (1995).
- MacCormick, Neil, "Beyond the Sovereign State", 56 *Modern Law Review* 1 (1993).
- MacCormick, Neil, *Questioning Sovereignty: Law, State, and Nation in the European Commonwealth* (Oxford University Press, 1999).
- Magraw, Daniel Barstow, "Transboundary Harm: The International Law Commission's Study of 'International Liability'", 80 *American Journal of International Law* 305 (1986).
- Maier, Harold G., "Jurisdictional Rules in Customary International Law", in Karl M. Meessen (Ed.) *Extraterritorial Jurisdiction in Theory and Practice* (Kluwer Law International, 1996).
- Malanczuk, Peter and Akehurst, Michael Barton, *Akehurst's Modern Introduction to International Law*, 7th rev. ed. (Routledge, 1997).
- Mani, V. S., "The 1970 Declaration on Friendly Relations: A Case Study in Law Creation by the Un General Assembly", 18 *International Studies* 287 (1979).
- Mann, Frederick Alexander, "Money in Public International Law", 96 *Recueil des Cours* 1 (1959).
- Marauhn, Thilo, "Changing Role of the State", in Daniel Bodansky et al. (Eds.), *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007).
- Marceau, Gabrielle and Trachtman, Joel P., "The Technical Barriers to Trade Agreement, the Sanitary and Phytosanitary Measures Agreement, and the General Agreement on Tariffs and Trade: A Map of the World Trade Organization's Law of Domestic Regulation of Goods", 36 *Journal of World Trade* (2002).
- Marwell, Jeremy C., "Trade and Morality: The WTO Public Morals Exception after *Gambling*", 81 *N.Y.U. Law Review* 802 (2006).
- Mashayekhi, Mina and Tuerk, Elisabeth, "GATS Negotiations on Domestic Regulation: A Developing Country Perspective", in Kern Alexander and Mads Andenas (Eds.), *The World Trade Organization and Trade in Services* (Martinus Nijhoff Publishers, 2008).
- Masson, Paul R., "The IMF: Victim of Its Own Success or Institutional Failure?", 62 *International Journal* 889 (2007).

- Matsushita, Mitsuo et al., *The World Trade Organization: Law, Practice, and Policy*, 2nd ed. (Oxford University Press, 2006).
- Matthews, Barbara C., "Emerging Public International Banking Law? Lessons from the Law of the Sea Experience", 10 *Chicago Journal of International Law* 539 (2009-2010).
- Mattoo, Aaditya and Sauvé, Pierre, "Domestic Regulation and Trade in Services: Key Issues", in Pierre Sauvé and Aaditya Mattoo (Eds.), *Domestic Regulation and Service Trade Liberalization* (World Bank Publications, 2003).
- Mattoo, Aaditya and Subramanian, Arvind, "From Doha to the Next Bretton Woods", 88 *Foreign Affairs* 15 (2009).
- Mavroidis, Petros C., *Trade in Goods: The GATT and the Other Agreements Regulating Trade in Goods* (Oxford University Press, 2007).
- Mayall, James, "Sovereignty, Nationalism, and Self-Determination", 47 *Political Studies* 474 (1999).
- Mayer-Schonberger, Viktor, "Into the Heart of the State: Intervention through Constitution-Making", 8 *Temple International and Comparative Law Journal* 315 (1994).
- McCorquodale, Robert, "International Community and State Sovereignty: An Uneasy Symbiotic Relationship", in Colin Warbrick and Stephen Tierney (Eds.), *Towards an 'International Legal Community': The Sovereignty of States and the Sovereignty of International Law* (British Institute of International and Comparative Law, 2006).
- McDonald, Jan, "Domestic Regulation, International Standards, and Technical Barriers to Trade", 4 *World Trade Review* 249 (2005).
- McGee, Jeffrey and Taplin, Ros, "The Asia-Pacific Partnership and the United States' International Climate Change Policy", 19 *Colorado Journal of International Environmental Law and Policy* 179 (2008).
- McNamee, Daniel, "Climate Change, the Kyoto Protocol, and the World Trade Organization: Challenges and Conflicts", 6 *Sustainable Development Law and Policy* 41 (2005-2006).
- McRae, Donald M., "The Contribution of International Trade Law to the Development of International Law", 260 *Recueil des Cours* 99 (1996).
- McRae, Donald M., "From Sovereignty to Jurisdiction: The Implications for States of the WTO", in Mark Allen Buchanan (Ed.) *The Asia-Pacific Region and the Expanding Borders of the WTO* (Centre for Asia-Pacific Initiatives, University of Victoria, 1996).
- McRae, Donald M., "GATT Article XX and the WTO Appellate Body", in Marco Bronckers and Reinhard Quick (Eds.), *New Directions in International Economic Law* (Kluwer Law International, 2000).
- McRae, Donald, "Book Review: The Evolution of the Trade Regime: Politics, Law, and Economics of the GATT and the WTO", 104 *American Journal of International Law* 334 (2010).
- McWhinney, Edward, *Self-Determination of Peoples and Plural-Ethnic States in Contemporary International Law: Failed States, Nation-Building and the Alternative, Federal Option* (Martinus Nijhoff Publishers, 2007).
- Meilstrup, Per, "The Runaway Summit: The Background Story of the Danish Presidency of Cop15, the UN Climate Change Conference", *Danish Foreign Policy Yearbook* 113 (2010).
- Melkas, Eriika, "Sovereignty and Equity within the Framework of the Climate Regime", 11 *Review of European Community and International Environmental Law* 115 (2002).
- Melloni, Mattia, *The Principle of National Treatment in the GATT: A Survey of the Jurisprudence, Practice and Policy* (Bruylant, 2005).

- Mendlovitz, Saul and Datan, Merav, "Judge Weeramantry's Grotian Quest", 7 *Transnational Law and Contemporary Problems* 401 (1997).
- Mercurio, Bryan and Leung, Celine Sze Ning, "Is China a 'Currency Manipulator'?: The Legitimacy of China's Exchange Regime under the Current International Legal Framework", 43 *International Lawyer* 1257 (2009).
- Merrill, Thomas W., "Golden Rules for Transboundary Pollution", 46 *Duke Law Journal* 931 (1997).
- Michaelowa, Axel et al., "Issues and Options for the Post-2012 Climate Architecture—an Overview", 5 *International Environmental Agreements* 5 (2005).
- Michaelson, Jay, "Geoengineering: A Climate Change Manhattan Project", 17 *Stanford Environmental Law Journal* 73 (1990).
- Mill, John Stuart, *On Liberty and the Subjection of Women* (1859).
- Mitchell, Andrew D., *Legal Principles in WTO Disputes* (Cambridge University Press, 2008).
- Mitrovic, Tomislav, "Non-Intervention in the Internal Affairs of States", in Milan Sahovic (Ed.) *Principles of International Law Concerning Friendly Relations and Cooperation* (Dobbs Ferry, 1972).
- Mizen, Paul, "The Credit Crunch of 2007-2008: A Discussion of the Background, Market Reactions, and Policy Responses", 90 *Federal Reserve Bank of St. Louis Review* 531 (2008).
- Mohamed-Ahmed, Khalafalla El Rasheed, "International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law: A Tribute to the Late Professor Robert Quentin Quentin-Baxter", 17 *Victoria University of Wellington Law Review* 71 (1987).
- Molina, Mario et al., "Reducing Abrupt Climate Change Risk Using the Montreal Protocol and Other Regulatory Actions to Complement Cuts in Co2 Emissions", 106 *Proceedings of the National Academy of Sciences* 20616 (2009).
- Montjoie, Michel, "The Concept of Liability in the Absence of an Internationally Wrongful Act", in James Crawford et al. (Eds.), *The Law of International Responsibility* (Oxford University Press, 2010).
- Moosa, Imad A., *Exchange Rate Regimes: Fixed, Flexible or Something in Between* (Palgrave Macmillan, 2005).
- Mosler, Hermann, *The International Society as a Legal Community* (Sijthoff & Noordhoff, 1980).
- Muchlinski, Peter, *Multinational Enterprises and the Law*, 2nd ed. (Oxford University Press, 2007).
- Mundell, Robert A., "Monetary Unions and the Problem of Sovereignty", 579 *Annals of the American Academy of Political and Social Science* 123 (2002).
- Nadakavukaren Schefer, Krista, *Social Regulation in the WTO: Trade Policy and International Legal Development* (Edward Elgar, 2010).
- Nadkarni, Avadhoot, "World Trade Liberalisation: National Autonomy and Global Regulation", in Jonathan Michie and John Grieve Smith (Eds.), *Global Instability: The Political Economy of World Economic Governance* (Routledge, 1999).
- Nanda, Ved P. and Pring, George, *International Environmental Law for the 21st Century* (Transnational Publishers, 2003).

- Nanda, Ved P., "The Kyoto Protocol on Climate Change and the Challenges to Its Implementation: A Commentary", 10 *Colorado Journal of International Environmental Law and Policy* 319 (1999).
- Neal, Patrick, "The Path between Value Pluralism and Liberal Political Order: Questioning the Connection", 46 *San Diego Law Review* 859 (2009).
- Neumann, Jan and Türk, Elisabeth, "Necessity Revisited: Proportionality in World Trade Organization Law after *Korea-Beef*, *EC-Asbestos* and *EC-Sardines*", 37 *Journal of World Trade* 199 (2003).
- Nolte, Georg, "Article 2 (7)", in Bruno Simma (Ed.) *The Charter of the United Nations: A Commentary* (Oxford University Press, 2002).
- Oberthür, Sebastian and Ott, Hermann, *The Kyoto Protocol: International Climate Policy for the 21st Century* (Springer, 1999).
- Oberthür, Sebastian, "Linkages between the Montreal and Kyoto Protocols", 1 *International Environmental Agreements: Politics, Law and Economics* 357 (2001).
- Obstfeld, Maurice and Rogoff, Kenneth, "The Mirage of Fixed Exchange Rates", 9 *Journal of Economic Perspectives* 73 (1995).
- Ocampo, José Antonio et al., "Capital Market Liberalization and Development", in José Antonio Ocampo and Joseph E. Stiglitz (Eds.), *Capital Market Liberalization and Development* (Oxford University Press, 2008).
- Odell, John S., "Negotiating from Weakness in International Trade Relations", 44 *Journal of World Trade* 545 (2010).
- Ohshita, Stephanie B., "The Scientific and International Context for Climate Change Initiatives", 42 *University of San Francisco Law Review* 1 (2007).
- Oppenheim, L. and Roxburgh, Ronald F., *International Law: A Treatise*, 3rd ed. (Longmans, 1920).
- Orford, Anne, "Locating the International: Military and Monetary Interventions after the Cold War", 38 *Harvard International Law Journal* 443 (1997).
- Ortino, Federico and Ortino, Matteo, "Law of the Global Economy: In Need of a New Methodological Approach?", in Colin B. Picker et al. (Eds.), *International Economic Law: The State and Future of the Discipline* (Hart Publishing, 2008).
- Ortino, Federico, "Treaty Interpretation and the WTO Appellate Body Report in US-Gambling: A Critique", 9 *Journal of International Economic Law* 117 (2006).
- Osiander, Andreas, "Sovereignty, International Relations, and the Westphalian Myth", 55 *International Organization* 251 (2001).
- Ott, Hermann E. et al., "The Bali Roadmap: New Horizons for Global Climate Policy", 8 *Climate Policy* 91 (2008).
- Padoa-Schioppa, Tommaso and Saccomanni, Fabrizio, "Managing a Market-Led Global Financial System", in Peter B. Kenen (Ed.) *Managing the World Economy: Fifty Years after Bretton Woods* (Institute for International Economics, 1994).
- Panizzon, Marion et al., *GATS and the Regulation of International Trade in Services* (Cambridge University Press, 2008).
- Panizzon, Marion, *Good Faith in the Jurisprudence of the WTO the Protection of Legitimate Expectations, Good Faith Interpretation, and Fair Dispute Settlement* (Hart Publishing, 2006).

- Panourgias, Lazaros, *Banking Regulation and World Trade Law: GATS, EU and 'Prudential' Institution-Building* (Hart, 2006).
- Parker, Richard W., "The Use and Abuse of Trade Leverage to Protect the Global Commons: What We Can Learn from the Tuna-Dolphin Conflict", 12 *Georgetown International Environmental Law Review* 1 (1999).
- Parkinson, Martin and McKissack, Adam, "The IMF and the Challenge of Relevance in the International Financial Architecture", in Marc Uzan (Ed.) *The Future of the International Monetary System* (Edward Elgar, 2005).
- Parrish, Austen L., "Reclaiming International Law from Extraterritoriality", 93 *Minnesota Law Review* 815 (2008-2009).
- Parrish, Matthew, "On Necessity", 11 *Journal of World Investment and Trade* 169 (2010).
- Pattanaik, Sitikantha, "Global Imbalances, Tanking Dollar, and the IMF's Surveillance over Exchange Rate Policies", 27 *Cato Journal* 299 (2007).
- Paulus, Andreas, "International Adjudication", in Samatha Besson and John Tasioulas (Eds.), *The Philosophy of International Law* (Oxford University Press, 2010).
- Pauly, Louis W., "Monetary Statecraft in Follower States", in David M. Andrews (Ed.) *International Monetary Power* (Cornell University Press, 2006).
- Pauwelyn, Joost, "How to Win a World Trade Organization Dispute Based on Non-World Trade Organization Law? Questions of Jurisdiction and Merits", 37 *Journal of World Trade* 997 (2003).
- Pauwelyn, Joost, "Rien Ne Va Plus? Distinguishing Domestic Regulation from Market Access in GATT and GATS", 4 *World Trade Review* 131 (2005).
- Pauwelyn, Joost, "The Transformation of World Trade", 104 *Michigan Law Review* 1 (2005).
- Pauwelyn, Joost, "Comment: The Unbearable Lightness of Likeness", in Marion Panizzon et al. (Eds.), *GATS and the Regulation of International Trade in Services* (Cambridge University Press, 2008).
- Pauwelyn, Joost, *Optimal Protection of International Law: Navigating between European Absolutism and American Voluntarism* (Cambridge University Press, 2008).
- Pavel, Carmen, "Normative Conflict in International Law", 46 *San Diego Law Review* 883 (2009).
- Peay, Sarah A., "Joining the Asia-Pacific Partnership: The Environmentally Sound Decision?", 18 *Colorado Journal of International Environmental Law and Policy* 477 (2007).
- Pellet, Alain, "The Definition of Responsibility in International Law", in James Crawford et al. (Eds.), *The Law of International Responsibility* (Oxford University Press, 2010).
- Penny, Christopher, "Greening the Security Council: Climate Change as an Emerging 'Threat to International Peace and Security'", 7 *International Environmental Agreements: Politics, Law and Economics* 35 (2007).
- Perez, Antonio F., "On the Way to the Forum: The Reconstruction of Article 2 (7) and Rise of Federalism under the United Nations Charter", 31 *Texas International Law Journal* 353 (1996).
- Perrez, Franz Xaver, *Cooperative Sovereignty: From Independence to Interdependence in the Structure of International Environmental Law* (Kluwer Law International, 2000).
- Peters, Anne, "Compensatory Constitutionalism: The Function and Potential of Fundamental International Norms and Structures", 19 *Leiden Journal of International Law* 579 (2006).

- Peters, Anne, "Humanity as the A and Ω of Sovereignty", 20 *European Journal of International Law* 513 (2009).
- Peters, Anne, "Humanity as the A and Ω of Sovereignty: A Rejoinder to Emily Kidd White, Catherine E. Sweetser, Emma Dunlop and Amrita Kapur", 20 *European Journal of International Law* 569 (2009).
- Peters, Anne, "Does Kosovo Lie in the Lotus-Land of Freedom?", 24 *Leiden Journal of International Law* 95 (2011).
- Petersen, Malte, "The Legality of the EU's Stand-Alone Approach to the Climate Impact of Aviation: The Express Role Given to the ICAO by the Kyoto Protocol", 17 *Review of European Community and International Environmental Law* 196 (2008).
- Petersmann, Ernst-Ulrich, "From the Hobbesian International Law of Coexistence to Modern Integration Law: The WTO Dispute Settlement System", 1 *Journal of International Economic Law* 175 (1998).
- Petersmann, Ernst-Ulrich, "From State Sovereignty to the 'Sovereignty of Citizens' in the International Relations Law of the EU?", in Neil Walker (Ed.) *Sovereignty in Transition* (Hart Publishing, 2003).
- Petersmann, Ernst Ulrich, "De-Fragmentation of International Economic Law through Constitutional Interpretation and Adjudication with Due Respect for Reasonable Disagreement", 6 *Loyola International Law Review* 209 (2008).
- Petersmann, Ernst-Ulrich, "International Economic Law, 'Public Reason', and Multilevel Governance of Interdependent Public Goods", 14 *Journal of International Economic Law* 23 (2011).
- Philips, Eric, "Word Trade and the Environment: The CAFE Case", 17 *Michigan Journal of International Law* 827 (1996).
- Picciotto, Sol, "The WTO's Appellate Body: Legal Formalism as a Legitimation of Global Governance", 18 *Governance* 477 (2005).
- Pisani-Ferry, Jean and Santos, Indhira, "Reshaping the Global Economy", 46 *Finance & Development* 8 (2009).
- Plant, Raymond, *The Neo-Liberal State* (Oxford University Press, 2009).
- Polak, Jacques J., "The Articles of Agreement of the IMF and the Liberalization of Capital Movements", in Stanley Fischer et al. (Eds.), *Should the IMF Pursue Capital-Account Convertibility?* (International Finance Section, Dept. of Economics, Princeton University, 1998).
- Ponnambalam, Arjun, "U.S. Climate Change Legislation and the Use of GATT Article XX to Justify a 'Competitiveness Provision' in the Wake of Brazil-Tyres", 40 *Georgetown Journal of International Law* 261 (2008).
- Preuss, Lawrence, "Article 2, Paragraph 7 of the Charter of the United Nations and Matters of Domestic Jurisdiction", 74 *Recueil des Cours* 553 (1949).
- Preuss, Ulrich K., "Equality of States—Its Meaning in a Constitutionalized Global Order", 9 *Chicago Journal of International Law* 17 (2008).
- Proctor, Charles and Mann, F. A., *Mann on the Legal Aspect of Money*, 6th ed. (Oxford University Press, 2005).
- Proctor, Charles, "USA v China and the Revaluation of the Renminbi: Exchange Rate Pegs and International Law", 17 *European Business Law Review* 1333 (2006).

- Pulkowski, Dirk, "Structural Paradigms of International Law", in Tomer Broude and Yuval Shany (Eds.), *The Shifting Allocation of Authority in International Law: Considering Sovereignty, Supremacy and Subsidiarity. Essays in Honour of Professor Ruth Lapidoth* (Hart Publishing, 2008).
- Quentin-Baxter, Alison, "A Special Rapporteur in Search of His Topic: Professor Quentin-Baxter's Work on 'International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law'", 17 *Victoria University of Wellington Law Review* 17 (1987).
- Qin, Julia Ya, "Defining Nondiscrimination under the World Trade Organization", 23 *Boston University International Law Journal* 215 (2005).
- Qureshi, Asif H. and Ziegler, Andreas R., *International Economic Law*, 2nd ed. (Sweet & Maxwell, 2007).
- Qureshi, Asif H., *Interpreting WTO Agreements: Problems and Perspectives*, (Cambridge University Press, 2006).
- Raič, David, *Statehood and the Law of Self-Determination* (Kluwer Law International, 2002).
- Rajamani, Lavanya, "The Nature, Promise and Limits of Differential Treatment in the Climate Regime", 16 *Yearbook of International Environmental Law* 81 (2005).
- Rajamani, Lavanya, "From Berlin to Bali and Beyond: Killing Kyoto Softly?", 57 *International and Comparative Law Quarterly* (2008).
- Rajamani, Lavanya, "Addressing the 'Post-Kyoto' Stress Disorder: Reflections on the Emerging Legal Architecture of the Climate Regime", 58 *International and Comparative Law Quarterly* 803 (2009).
- Rajamani, Lavanya, "The Making and Unmaking of the Copenhagen Accord", 59 *International and Comparative Law Quarterly* 824 (2010).
- Rajamani, Lavanya, "The Cancun Climate Agreements: Reading the Text, Subtext and Tea Leaves", 60 *International and Comparative Law Quarterly* 499 (2011).
- Rajan, Mannaraswamighala Sreeranga, *United Nations and Domestic Jurisdiction* (Orient Longmans, 1958).
- Rajan, M. S., *The Expanding Jurisdiction of the United Nations* (N.M. Tripathi 1982).
- Ramanathan, Veerabhadran and Xu, Yangyang, "The Copenhagen Accord for Limiting Global Warming: Criteria, Constraints, and Available Avenues", 107 *Proceedings of the National Academy of Sciences* 8055 (2010).
- Raustiala, Kal, "Rethinking the Sovereignty Debate in International Economic Law", 6 *Journal of International Economic Law* 841 (2003).
- Raustiala, Kal, "Form and Substance in International Agreements", 99 *American Journal of International Law* 581 (2005).
- Ravenhill, John, *Global Political Economy*, 2nd ed. (Oxford University Press, 2008).
- Raworth, Philip Marc, *Trade in Services: Global Regulation and the Impact on Key Service Sectors* (Oceana Publications, Inc., 2004).
- Redmond, Trevor, "The Rules, and How They Were Broken: The Changing Face of State Sovereignty", 10 *Irish Student Law Review* 50 (2002).
- Regan, Donald H., "Regulatory Purpose and 'Like Products' in Article III:4 of the GATT (with Additional Remarks on Article III:2)", 36 *Journal of World Trade* 443 (2002).

- Regan, Donald H., "What Are Trade Agreements For?—Two Conflicting Stories Told by Economists, with a Lesson for Lawyers", 9 *Journal of International Economic Law* 951 (2006).
- Regan, Donald H., "A *Gambling* Paradox: Why an Origin-Neutral 'Zero-Quota' Is Not a Quota under GATS Article XVI", 41 *Journal of World Trade* 1297 (2007).
- Regan, Donald H., "The Meaning of 'Necessary' in GATT Article XX and GATS Article XIV: The Myth of Cost-Benefit Balancing", 6 *World Trade Review* 347 (2007).
- Regan, Donald H., "International Adjudication: A Response to Paulus - Courts, Customs, Treaties, Regimes and the WTO", in Samatha Besson and John Tasioulas (Eds.), *The Philosophy of International Law* (Oxford University Press, 2010).
- Reid, Emily, "Regulatory Autonomy in the EU and WTO: Defining and Defending Its Limits", 44 *Journal of World Trade* 877 (2010).
- Reinisch, August, "Expropriation", in Peter Muchlinski et al. (Eds.), *The Oxford Handbook of International Investment Law* (Oxford University Press, 2008).
- Reus-Smit, Christian, "The Strange Death of Liberal International Theory", 12 *European Journal of International Law* 573 (2001).
- Richardson, James L., "Contending Liberalisms: Past and Present", 3 *European Journal of International Relations* 5 (1997).
- Rigaux, François, "International Responsibility and the Principle of Causality", in Maurizio Ragazzi (Ed.) *International Responsibility Today: Essays in Memory of Oscar Schachter* (Martinus Nijhoff Publishers, 2005).
- Riphagen, W., "Some Reflections on 'Functional Sovereignty'", 6 *Netherlands Yearbook of International Law* 121 (1975).
- Rodi, Michael et al., "Implementing the Kyoto Protocol in a Multidimensional Legal System: Lessons from a Comparative Assessment", 16 *Yearbook of International Environmental Law* 3 (2005).
- Rodrik, Dani, "Governance of Economic Globalization", in Joseph S. Nye (Ed.) *Governance in a Globalizing World* (Brookings Institution Press, 2000).
- Rodrik, Dani, "How to Save Globalization from Its Cheerleaders", 1 *Journal of International Trade and Diplomacy* 1 (2007).
- Rosenau, James N., "The Concept of Intervention", 22 *Journal of International Affairs* 165 (1968).
- Rosenau, James N., "Intervention as a Scientific Concept", 13 *Journal of Conflict Resolution* 149 (1969).
- Rosenberg, Bill, "International Capital and Investment", in Jane Kelsey (Ed.) *No Ordinary Deal: Unmasking the Trans-Pacific Partnership Free Trade Agreement* (Bridget Williams Books, 2010).
- Rosenstock, Robert, "The Declaration of Principles of International Law Concerning Friendly Relations: A Survey", 65 *American Journal of International Law* 713 (1971).
- Rosenzweig, Cynthia et al., "Attributing Physical and Biological Impacts to Anthropogenic Climate Change", 453 *Nature* 353 (2008).
- Roth, Brad R., "The Enduring Significance of State Sovereignty", 56 *Florida Law Review* 1017 (2004).

- Roy, Martin et al., "Services Liberalization in the New Generation of Preferential Trade Agreements (PTAs): How Much Further Than the GATS?", 6 *World Trade Review* 155 (2007).
- Ryngaert, Cedric, *Jurisdiction in International Law* (Oxford University Press, 2008).
- Saccomanni, Fabrizio, *Managing International Financial Instability: National Tamers Versus Global Tigers* (Edward Elgar, 2008).
- Sampson, Gary P., "WTO and Climate Change: The Need for Policy Coherence", in W. Bradnee Chambers (Ed.) *Global Climate Governance: Inter-Linkages between the Kyoto Protocol and Other Multilateral Regimes* (United Nations University Press, 2001).
- Sandholtz, Wayne and Stiles, Kendall W., *International Norms and Cycles of Change* (Oxford University Press, 2009).
- Sandholtz, Wayne and Sweet, Alec Stone, "Law, Politics, and International Governance", in Christian Reus-Smit (Ed.) *Politics of International Law* (Cambridge University Press, 2004).
- Sandholtz, Wayne, "Dynamics of International Norm Change: Rules against Wartime Plunder", 14 *European Journal of International Relations* 101 (2008).
- Sandler, Todd, *Global Collective Action* (Cambridge University Press, 2004).
- Sands, Philippe et al., *Bowett's Law of International Institutions* (Sweet & Maxwell, 2001).
- Sands, Philippe, "'Unilateralism', Values, and International Law", 11 *European Journal of International Law* 291 (2000).
- Saner, Raymond and Guilherme, Ricardo, "The International Monetary Fund's Influence on Trade Policies of Low-Income Countries: A Valid Undertaking?", 41 *Journal of World Trade* 931 (2007).
- Sarooshi, Dan, "The Essentially Contested Nature of the Concept of Sovereignty: Implications for the Exercise by International Organizations of Delegated Powers of Government", 25 *Michigan Journal of International Law* 1107 (2003-2004).
- Sarooshi, Dan, "Sovereignty, Economic Autonomy, the United States, and the International Trading System: Representations of a Relationship", 15 *European Journal of International Law* 651 (2004).
- Sassen, Saskia, "Mortgage Capital and Its Particularities: A New Frontier for Global Finance", 62 *Journal of International Affairs* 187 (2008).
- Sauvé, Pierre and Gillespie, James, "Financial Services and the GATS 2000 Round", *Brookings-Wharton Papers on Financial Services* (2000).
- Schenck, Lisa, "Climate Change 'Crisis'—Struggling for Worldwide Collective Action", 19 *Colorado Journal of International Environmental Law and Policy* 319 (2008).
- Schermers, Henry G., "Different Aspects of Sovereignty", in Gerard Kreijen (Ed.) *State, Sovereignty, and International Governance* (Oxford University Press, 2002).
- Schipper, E. Lisa F., "Conceptual History of Adaptation in the UNFCCC Process", 15 *Review of European Community and International Environmental Law* 82 (2006).
- Schmukler, Sergio L., "The Benefits and Risks of Financial Globalization", in José Antonio Ocampo and Joseph E. Stiglitz (Eds.), *Capital Market Liberalization and Development* (Oxford University Press, 2008).

- Schneider, Benu, "Do Global Standards and Codes Prevent Financial Crises?", in José Antonio Ocampo and Joseph E. Stiglitz (Eds.), *Capital Market Liberalization and Development* (Oxford University Press, 2008).
- Schoenbaum, Thomas J., "International Trade and Protection of the Environment: The Continuing Search for Reconciliation", 91 *American Journal of International Law* 268 (1997).
- Schreuer, Christoph, "The Waning of the Sovereign State: Towards a New Paradigm for International Law?", 4 *European Journal of International Law* 447 (1993).
- Schrijver, Nico, *Sovereignty over Natural Resources: Balancing Rights and Duties* (Cambridge University Press, 1997).
- Schwartz, Anna J., "The Role of Monetary Policy in the Face of Crises", 27 *Cato Journal* 157 (2007).
- Scott, Hal S., *International Finance: Law and Regulation* (Sweet & Maxwell, 2004).
- Scott, Hal S., "Reducing Systemic Risk through the Reform of Capital Regulation", 13 *Journal of International Economic Law* 763 (2010).
- Scott, Karen N., "The Day after Tomorrow: Ocean CO₂ Sequestration and the Future of Climate Change", 18 *Georgetown International Environmental Law Review* 57 (2005-2006).
- Scott, Shirley V., "Is the Crisis of Climate Change a Crisis for International Law?", 14 *Australian International Law Journal* 31 (2007).
- Scott, Shirley V., "Climate Change and Peak Oil as Threats to International Peace and Security: Is It Time for the Security Council to Legislate?", 9 *Melbourne Journal of International Law* 495 (2008).
- Setser, Brad, "A Neo-Westphalian International Financial System?", 62 *Journal of International Affairs* 17 (2008).
- Seuffert, Nan and Kelsey, Jane, "The TPPA and Financial Sector Deregulation", in Jane Kelsey (Ed.) *No Ordinary Deal: Unmasking the Trans-Pacific Partnership Free Trade Agreement* (Bridget Williams Books, 2010).
- Shackley, Simon and Cough, Clair, "Conclusions and Recommendations", in Simon Shackley and Clair Cough (Eds.), *Carbon Capture and Its Storage: An Integrated Assessment* (Ashgate, 2006).
- Shaw, Malcolm N., *International Law*, 5th ed. (Cambridge University Press, 2003).
- Shaw, Malcolm N., *International Law*, 6th ed. (Cambridge University Press, 2008).
- Siegel, Deborah E., "Legal Aspects of the IMF/WTO Relationship: The Fund's Articles of Agreement and the WTO Agreements", 96 *American Journal of International Law* 561 (2002).
- Siegel, Deborah E., "Using Free Trade Agreements to Control Capital Account Restrictions: Summary of Remarks on the Relationship to the Mandate of the IMF", 10 *ILSA Journal of International and Comparative Law* 297 (2004).
- Simma, Bruno and Paulus, Andreas L., "The 'International Community': Facing the Challenge of Globalization", 9 *European Journal of International Law* 266 (1998).
- Simma, Bruno, *The Charter of the United Nations: A Commentary* (Oxford University Press, 2002).
- Simmons, Beth A., "The Legalization of International Monetary Affairs", 54 *International Organization* 573 (2000).

- Simpson, Gerry, "Imagined Consent: Democratic Liberalism in International Legal Theory", 15 *Australian Year Book of International Law* 103 (1994).
- Simpson, Gerry, "Two Liberalisms", 12 *European Journal of International Law* 537 (2001).
- Simpson, Gerry J., *Great Powers and Outlaw States: Unequal Sovereigns in the International Legal Order* (Cambridge University Press, 2004).
- Simpson, Gerry, "The Guises of Sovereignty", in Trudy Jacobsen et al. (Eds.), *Re-Envisioning Sovereignty: The End of Westphalia?* (Ashgate, 2008).
- Singer, David Andrew, *Regulating Capital: Setting Standards for the International Financial System* (Cornell University Press, 2007).
- Singh, Amit, "International Legal Aspects of Eco-Labeling in the Context of North-South Division on International Trade Rules", 48 *Indian Journal of International Law* 45 (2008).
- Singh, Dalvinder, "The IMF and World Bank in Financial Sector Reform and Compliance", in Wenhua Shan et al. (Eds.), *Redefining Sovereignty in International Economic Law* (Hart Publishing, 2008).
- Slaughter, Anne-Marie, "International Law in a World of Liberal States", 6 *European Journal of International Law* 503 (1995).
- Snidal, Duncan, "Coordination Versus Prisoners' Dilemma: Implications for International Cooperation and Regimes", 79 *The American Political Science Review* 923 (1985).
- Sobel, Andrew Carl, *Political Economy and Global Affairs* (CQ Press, 2006).
- Spears, Suzanne A., "The Quest for Policy Space in a New Generation of International Investment Agreements", 13 *Journal of International Economic Law* 1037 (2010).
- Spence, Chris et al., "Great Expectations: Understanding Bali and the Climate Change Negotiations Process", 17 *Review of European Community and International Environmental Law* 142 (2008).
- Spiermann, Ole, "Lotus and the Double Structure of International Legal Argument", in Laurence Boisson de Chazournes and Philippe Sands (Eds.), *International Law, the International Court of Justice and Nuclear Weapons* (Cambridge University Press, 1999).
- Stacy, Helen, "Relational Sovereignty", 55 *Stanford Law Review* 2029 (2003).
- Staiger, Robert W. and Sykes, Alan O., "'Currency Manipulation' and World Trade", 9 *World Trade Review* 583 (2010).
- Stallard, Hannah, "Turning up the Heat on Tuvalu: An Assessment of Potential Compensation for Climate Change Damage in Accordance with State Responsibility under International Law", 15 *Canterbury Law Review* 163 (2009).
- Stern, Sir Nicholas, *The Economics of Climate Change: The Stern Review* (Cambridge University Press, 2007).
- Stiglitz, Joseph E., *Making Globalization Work* (Allen Lane, 2006).
- Stiglitz, Joseph E., "Capital Market Liberalization, Globalization, and the IMF", in José Antonio Ocampo and Joseph E. Stiglitz (Eds.), *Capital Market Liberalization and Development* (Oxford University Press, 2008).
- Stokke, Olav Schramm, "Trade Measures, WTO and Climate Compliance", in Olav Schram Stokke et al. (Eds.), *Implementing the Climate Regime: International Compliance* (Earthscan, 2005).
- Stonecash, Robin Ellen, *Principles of Macroeconomics*, 4th ed. (Cengage Learning Australia, 2009).

- Strange, Susan, *Mad Money: When Markets Outgrow Governments* (University of Michigan Press, 1998).
- Strange, Susan, "Finance in Politics: An Epilogue to *Mad Money*, 1998", in Roger Tooze and Christopher May (Eds.), *Authority and Markets: Susan Strange's Writings on International Political Economy* (Palgrave, 2002).
- Strippel, Johannes, "Climate Change as a Security Issue", in Edward A. Page and Michael Redclift (Eds.), *Human Security and the Environment: International Comparisons* (Edward Elgar Publishing, 2002).
- Summers, James, *Peoples and International Law: How Nationalism and Self-Determination Shape a Contemporary Law of Nations* (Martinus Nijhoff Publishers, 2007).
- Sunstein, Cass R., "Social Norms and Social Roles", 96 *Columbia Law Review* 903 (1996).
- Sunstein, Cass R., "Montreal vs. Kyoto: A Tale of Two Protocols", 31 *Harvard Environmental Law Review* 1 (2007).
- Sweetser, Catherine E., "Humanity as the A and Ω of Sovereignty: Four Replies to Anne Peters", 20 *European Journal of International Law* 549 (2009).
- Sykes, Alan O., "Comparative Advantage and the Normative Economics of International Trade Policy", 1 *Journal of International Economic Law* 49 (1998).
- Sykes, Alan O., "Domestic Regulation, Sovereignty, and Scientific Evidence Requirements: A Pessimistic View", 3 *Chicago Journal of International Law* 353 (2002).
- Tamiotti, Ludivine, "Article 2 TBT", in Rüdiger Wolfrum et al. (Eds.), *WTO-Technical Barriers and SPS Measures* (Koninklijke Brill, 2007).
- Tanzi, Vito, "Global Imbalances and Fund Surveillance", 48 *Comparative Economic Studies* 391 (2006).
- Tarasofsky, Richard G., "Heating up International Trade Law: Challenges and Opportunities Posed by Efforts to Combat Climate Change", 1 *Carbon and Climate Law Review* 7 (2008).
- Tarullo, Daniel K., *Banking on Basel: The Future of International Financial Regulation* (Peterson Institute for International Economics, 2008).
- Taylor, Celia R., "A Modest Proposal: Statehood and Sovereignty in a Global Age", 18 *University of Pennsylvania Journal of International Economic Law* 745 (1997).
- Taylor, John B., *Getting Off Track: How Government Actions and Interventions Caused, Prolonged, and Worsened the Financial Crisis* (Hoover Institution Press, 2009).
- Teson, Fernando R., "The Kantian Theory of International Law", 92 *Columbia Law Review* 53 (1992).
- Thomas, Chantal, "Balance-of-Payments Crises in the Developing World: Balancing Trade, Finance and Development in the New Economic Order", 15 *American University International Law Review* 1249 (2000).
- Thomas, Chantal, "Globalization in Financial Services-What Role for GATS?", 21 *Annual Review of Banking Law* 323 (2002).
- Tietje, Christian and Lehmann, Matthias, "The Role and Prospects of International Law in Financial Regulation and Supervision", 13 *Journal of International Economic Law* 663 (2010).
- Tinbergen, Jan (Ed.) *Reshaping the International Order: A Report to the Club of Rome*, 1st Ed. (Dutton, 1976).

- Tol, Richard S. J. and Verheyen, Roda, "State Responsibility and Compensation for Climate Change Damages—a Legal and Economic Assessment", 32 *Energy Policy* 1109 (2004).
- Tomuschat, Christian, "Obligations Arising for States without or against Their Will", 241 *Recueil des Cours* 195 (1993).
- Torres, Hector R., "Reforming the International Monetary Fund Why Its Legitimacy Is at Stake", 10 *Journal of International Economic Law* 443 (2007).
- Trachtman, Joel P. and Nicolaïdis, Kalypso, "From Policed Regulation to Managed Recognition: Mapping the Boundary in GATS", in Joel P. Trachtman (Ed.) *The International Economic Law Revolution and the Right to Regulate* (Cameron May, 2006).
- Trachtman, Joel P., "Institutional Linkage: Transcending "Trade And ...", 96 *American Journal of International Law* 77 (2002).
- Trachtman, Joel P., "Lessons for the GATS from Existing WTO Rules on Domestic Regulation", in Pierre Sauvé and Aaditya Mattoo (Eds.), *Domestic Regulation and Services Trade Liberalization* (World Bank Publications, 2003).
- Trachtman, Joel P., "Regulatory Jurisdiction and the WTO", 10 *Journal of International Economic Law* 631 (2007).
- Trachtman, Joel P., "Regulatory Jurisdiction and the WTO", in William J. Davey and John Jackson (Eds.) *The Future of International Economic Law* (Oxford University Press, 2008).
- Tran, Christopher, "Using GATT, Art XX to Justify Climate Change Measure in Claims under the WTO Agreements", 27 *Environmental and Planning Law Journal* 346 (2010).
- Treves, Tullio, "Monetary Sovereignty Today", in Mario Giovanoli (Ed.) *International Monetary Law: Issues for the New Millenium* (Oxford University Press, 2000).
- Trujillo, Elizabeth, "Mission Possible: Reciprocal Deference between Domestic Regulatory Structures and the WTO", 40 *Cornell International Law Journal* 201 (2007).
- Tschanz, Pierre-Yves and Viñuales, Jorge E., "Compensation for Non-Expropriatory Breaches of International Investment Law: The Contribution of the Argentine Awards", 26 *Journal of International Arbitration* 729 (2009).
- Tunkin, Grigory I., "Co-Existence and International Law", 95 *Recueil des Cours* 5 (1958).
- Ukpabi, Ugochukwu Chima, "Juridical Substance or Myth over Balance-of-Payment: Developing Countries and the Role of the International Monetary Fund in the World Trade Organization", 26 *Michigan Journal of International Law* 701 (2005).
- Underhill, Geoffrey, "The Public Good Versus Private Interests and the Global Financial and Monetary System", in Daniel Drache (Ed.) *The Market or the Public Domain? Global Governance and the Asymmetry of Power* (Routledge, 2001).
- van Aaken, Anne and Kurtz, Jürgen, "Prudence or Discrimination? Emergency Measures, the Global Financial Crisis and International Economic Law", 12 *Journal of International Economic Law* 859 (2009).
- Van Damme, Isabelle, "Treaty Interpretation by the WTO Appellate Body", 21 *European Journal of International Law* 605 (2010).
- Van den Bossche, Peter et al., *Unilateral Measures Addressing Non-Trade Concerns: A Study on WTO Consistency, Relevance of Other International Agreements, Economic Effectiveness and Impact on Developing Countries of Measures Concerning Non-Product-Related Processes and Production Methods* (The Ministry of Foreign Affairs of The Netherlands, 2007).

- Van den Bossche, Peter, *The Law and Policy of the World Trade Organization: Text, Cases, and Materials*, 2nd ed. (Cambridge University Press, 2008).
- Van Wynen Thomas, Ann and Thomas Jr., A.J., *Non-Intervention: The Law and Its Import in the Americas* (Southern Methodist University Press, 1956).
- Vanden Brink, Ryan, "Competitiveness Border Adjustments in U.S. Climate Change Proposals Violate GATT: Suggestions to Utilize GATT's Environmental Exceptions", 21 *Colorado Journal of International Environmental Law and Policy* 85 (2010).
- Vandeveldt, Kenneth J., "A Brief History of International Investment Agreements", 12 *U.C. Davis Journal of International Law and Policy* 157 (2005).
- Velders, Guus J. M. et al., "The Importance of the Montreal Protocol in Protecting Climate", 104 *Proceedings of the National Academy of Sciences* 4814 (2007).
- Vereshchetin, V.S. and Mullerson, R.A., "International Law in an Interdependent World", 28 *Columbia Journal of Transnational Law* 291 (1990).
- Verheyen, Roda, *Climate Change Damage and International Law: Prevention Duties and State Responsibility* (Martinus Nijhoff Publishers, Brill, 2005).
- Verhoosel, Gaetan, *National Treatment and WTO Dispute Settlement: Adjudicating the Boundaries of Regulatory Autonomy* (Hart Publishing, 2002).
- VerLoren van Themaat, Pieter, *The Changing Structure of International Economic Law: A Contribution of Legal History, of Comparative Law, and of General Legal Theory to the Debate on a New International Economic Order* (Nijhoff; T.M.C. Asser Institute, 1981).
- Victor, David G., *The Collapse of the Kyoto Protocol and the Struggle to Slow Global Warming* (Princeton University Press, 2001).
- Victor, David G., "On the Regulation of Geoengineering", 24 *Oxford Review of Economic Policy* 322 (2008).
- Viju, Crina and Kerr, William A., "Protectionism and Global Recession: Has the Link Been Broken?", 45 *Journal of World Trade* 605 (2011).
- Vincent, R.J., *Nonintervention and International Order* (Princeton University Press, 1974).
- Voigt, Christina, "State Responsibility for Climate Change Damages", 77 *Nordic Journal of International Law* 1 (2008).
- Voigt, Christina, "WTO Law and International Emissions Trading: Is There Potential for Conflict?", 1 *Carbon and Climate Law Review* 54 (2008).
- von Bogdandy, Armin and Windsor, J., "Annex on Financial Services", in Rüdiger Wolfrum et al. (Eds.), *WTO-Trade in Services* (Martinus Nijhoff Publishers, 2008).
- von Bogdandy, Armin and Windsor, J., "Understanding on Commitments in Financial Services", in Rüdiger Wolfrum et al. (Eds.), *WTO-Trade in Services* (Martinus Nijhoff Publishers, 2008).
- Vranes, Erich, "The WTO and Regulatory Freedom: WTO Disciplines on Market Access, Non-Discrimination and Domestic Regulation Relating to Trade in Goods and Services", 12 *Journal of International Economic Law* 953 (2009).
- Vranes, Erich, *Trade and the Environment: Fundamental Issues in International Law, WTO Law, and Legal Theory* (Oxford University Press, 2009).
- Waldron, Jeremy, "Theoretical Foundations of Liberalism", 37 *The Philosophical Quarterly* 127 (1987).

- Wang, Wei, "The Prudential Carve-Out", in Kern Alexander and Mads Andenas (Eds.), *The World Trade Organization and Trade in Services* (Martinus Nijhoff Publishers, 2008).
- Wang, Jiangyu, "Financial Liberalization and Regulation in East Asia: Lessons from Financial Crises and the Chinese Experience of Controlled Liberalization", 41 *Journal of World Trade* 211 (2007).
- Warbrick, Colin, "The Principle of Sovereign Equality", in Colin Warbrick and Vaughan Lowe (Eds.), *The United Nations and the Principles of International Law - Essays in Memory of Michael Akehurst* (Routledge, 1994).
- Watanabe, Rie et al., "The Bali Roadmap for Global Climate Policy - New Horizons and Old Pitfalls", 5 *Journal of European Environmental and Planning Law* 139 (2008).
- Waters, Timothy William, "'The Momentous Gravity of the State of Things Now Obtaining': Annoying Westphalian Objections to the Idea of Global Governance", 16 *Indiana Journal of Global Legal Studies* 25 (2009).
- Watson, J. S., "Autointerpretation, Competence, and the Continuing Validity of Article 2(7) of the UN Charter", 71 *American Journal of International Law* 60 (1977).
- Watson, J. Shand, "State Consent and the Sources of International Obligation", 86 *ASIL Proceedings* 118 (1992).
- Weart, Spencer R., *The Discovery of Global Warming* (Harvard University Press, 2003).
- Weber, Rolf H. and Arner, Douglas W., "Toward a New Design for International Financial Regulation", 29 *University of Pennsylvania Journal of International Law* 391 (2007).
- Weber, Rolf H., "Multilayered Governance in International Financial Regulation and Supervision", 13 *Journal of International Economic Law* 683 (2010).
- Wehinger, Gert, "Lessons from the Financial Market Turmoil: Challenges Ahead for the Financial Industry and Policy Makers", 2008/2 *Financial Market Trends* (2008).
- Weil, Prosper, "'The Court Cannot Conclude Definitively...': *Non Liquet* Revisited", 36 *Columbia Journal of Transnational Law* 109 (1998).
- Weil, Prosper, "Towards Relative Normativity in International Law?", 77 *American Journal of International Law* 413 (1983).
- Weisbrot, Mark, "Ten Years After: The Lasting Impact of the Asian Financial Crisis", in Bhumika Muchhala (Ed.) *Ten Years After: Revisiting the Asian Financial Crisis* (Woodrow Wilson International Center for Scholars, 2007).
- Werner, Wouter G. and De Wilde, Jaap H., "The Endurance of Sovereignty", 7 *European Journal of International Relations* 283 (2001).
- Wiener, Jonathan B., "Precaution", in Daniel Bodansky et al. (Eds.), *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007).
- Wildhaber, Luzius, "Sovereignty and International Law", in R. St. J. Macdonald and Douglas M. Johnston (Eds.), *The Structure and Process of International Law: Essays in Legal Philosophy Doctrine and Theory* (Martinus Nijhoff 1986).
- Williams, Douglas et al., "Rethinking the Kyoto Protocol: Are There Legal Solutions to Global Warming and Climate Change?", 5 *Washington University Global Studies Law Review* 333 (2006).
- Williams, Duncan E., "Policy Perspectives on the Use of Capital Controls in Emerging Market Nations: Lessons from the Asian Financial Crisis and a Look at the International Legal Regime", 70 *Fordham Law Review* 561 (2001).

- Winfield, P.H., "The History of Intervention in International Law", 3 *British Yearbook of International Law* 130 (1922-1923).
- Wolf, Liana G.T., "Countervailing a Hidden Subsidy: The US Failure to Require Greenhouse Gas Emission Reductions", 19 *Georgetown International Environmental Law Review* 83 (2006).
- Wolfrum, Rüdiger, "Solidarity Amongst States: An Emerging Structural Principle of International Law", 49 *Indian Journal of International Law* 8 (2009).
- Wolfrum, Rüdiger et al., *WTO: Technical Barriers and SPS Measures* (Martinus Nijhoff Publishers, 2007).
- Wouters, Jan and Coppens, Dominic, "GATS and Domestic Regulation: Balancing the Right to Regulate and Trade Liberalization", in Kern Alexander and Mads Andenas (Eds.), *The World Trade Organization and Trade in Services* (Martinus Nijhoff Publishers, 2008).
- Wu, Mark, "Free Trade and the Protection of Public Morals: An Analysis of the Newly Emerging Public Morals Clause Doctrine", 33 *Yale Journal of International Law* 215 (2008).
- Xue, Hanqin, *Transboundary Damage in International Law* (Cambridge University Press, 2003).
- Yamin, Farhana and Depledge, Joanna, *The International Climate Change Regime: A Guide to Rules, Institutions and Procedures* (Cambridge University Press, 2004).
- Yamin, Farhana et al., "Perspectives on 'Dangerous Anthropogenic Interference'; or How to Operationalize Article 2 of the UN Framework Convention on Climate Change", in Hans Joachim Schellnhuber et al. (Eds.), *Avoiding Dangerous Climate Change* (Cambridge University Press, 2006).
- Yamin, Farhana, "The Kyoto Protocol: Origins, Assessment and Future Challenges", 7 *Review of European Community and International Environmental Law* 113 (1998).
- Yee, Sienho, *Towards an International Law of Co-Progressiveness* (Martinus Nijhoff Publishers, 2004).
- Yianni, Andrew and De Vera, Carlos, "The Return of Capital Controls?", 73 *Law and Contemporary Problems* 357 (2010).
- Yokoi-Arai, Mamiko, "GATS' Prudential Carve Out in Financial Services and Its Relation with Prudential Regulation", 57 *International and Comparative Law Quarterly* 613 (2008).
- Young, Oran R., "Intervention and International Systems", 22 *Journal of International Affairs* 177 (1968).
- Zacharias, Diana, "Article I GATS—Scope and Definition", in Rüdiger Wolfrum et al. (Eds.), *WTO—Trade in Services* (Martinus Nijhoff Publishers, 2008).
- Zarrilli, Simonetta, "Domestic Taxation of Energy Products and Multilateral Trade Rules: Is This a Case of Unlawful Discrimination?", 37 *Journal of World Trade* 359 (2003).
- Zhang, ZhongXiang and Assunção, Lucas, "Domestic Climate Policies and the WTO", 27 *World Economy* 359 (2004).

Electronic Articles, Websites and Blog Posts

- Anderson, Sarah, *Policy Handcuffs in the Financial Crisis* (9 February 2009), at <http://www.ips-dc.org/reports/policy_handcuffs_in_the_financial_crisis>.
- Barrett, Scott, *Rethinking Global Climate Change Governance* (15 October 2008), at <<http://www.economics-ejournal.org/economics/discussionpapers/2008-31>>.

- Benitah, Marc, *China's Fixed Exchange Rate for the Yuan: Could the United State Challenge It in the WTO as a Subsidy? (Corrected Version)* (October 2003), at <<http://www.asil.org/insigh117.cfm>>.
- Blanchard, Olivier, *Rewriting the Macroeconomists' Playbook in the Wake of the Crisis* (4 March 2011), at <<http://blog-imfdirect.imf.org/2011/03/04/2662/>>.
- Bodansky, Daniel, "A Tale of Two Architectures: The Once and Future U.N. Climate Change Regime" (1 March 2011), *SSRN eLibrary*, at <<http://ssrn.com/paper=1773865>>.
- Bretton Woods Project, *IMF Mandate Needs Fundamental Rethink* (11 May 2010), at <<http://www.brettonwoodsproject.org/art-566307>>.
- Buck, Matthias and Verheyen, Roda, *International Trade Law and Climate Change—A Positive Way Forward* (July 2001), at <<http://library.fes.de/pdf-files/stabsabteilung/01052.pdf>>.
- Buiter, Willem H. and Sibert, Anne, *The Icelandic Banking Crisis and What to Do About It: The Lender of Last Resort Theory of Optimal Currency Areas* (October 2008), at <<http://www.cepr.org/pubs/PolicyInsights/PolicyInsight26.pdf>>.
- Burleson, Elizabeth, *The Bali Climate Change Conference* (18 March 2008), at <<http://www.asil.org/insights080318.cfm>>.
- Calvo, Guillermo, *Reserve Accumulation and Easy Money Helped to Cause the Subprime Crisis: A Conjecture in Search of a Theory* (27 October 2009), at <<http://www.voxeu.org/index.php?q=node/4135>>.
- Charnovitz, Steve, *Beyond Kyoto: Advancing the International Effort against Climate Change* (July 2003), at <http://www.pewclimate.org/docUploads/Beyond_Kyoto_Trade.pdf>.
- Cole, Daniel H., "Climate Change and Collective Action" (12 December 2007), *SSRN eLibrary*, at <<http://ssrn.com/paper=1069906>>.
- Congressional Research Service, *The Proposed U.S.-South Korea Free Trade Agreement (Korus FTA): Provisions and Implications* (24 March 2009), at <<http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA498266>>.
- Cosbey, Aaron et al., *Environmental Goods and Services Negotiations at the WTO: Lessons from Multilateral Environmental Agreements and Ecolabels for Breaking the Impasse* (March 2010), at <http://www.iisd.org/pdf/2009/bali_2_copenhagen_egs_lessons.pdf>.
- Dadush, Uri and Eidelman, Vera, *The International Monetary System: If It Ain't Broke, Don't Fix It* (26 February 2011), at <<http://www.voxeu.org/index.php?q=node/6156>>.
- Danielsson, Jon and Zoega, Gylfi, *Entranced by Banking* (9 February 2009), at <<http://www.voxeu.org/index.php?q=node/3029>>.
- Danielsson, Jon and Zoega, Gylfi, *Lessons from the Icesave Rejection* (27 April 2011), at <<http://www.voxeu.org/index.php?q=node/6391>>.
- Denters, Erik, *Manipulation of Exchange Rates in International Law: The Chinese Yuan* (November 2003), at <<http://www.asil.org/insigh118.cfm>>.
- Dooley, Michael and Garber, Peter, *Global Imbalances and the Crisis: A Solution in Search of a Problem* (21 March 2009), at <<http://www.voxeu.org/index.php?q=node/3314>>.
- dos Santos, Paolo L., *The World Bank, the IFC and the Antecedents of the Financial Crisis* (27 November 2008), at <<http://www.brettonwoodsproject.org/art-563119>>.
- Earthjustice, *Inter-American Commission on Human Rights to Hold Hearing on Global Warming* (6 February 2007), at <<http://www.earthjustice.org/news/press/2007/inter-american-commission-on-human-rights-to-hold-hearing-on-global-warming>>.

- Ebrahim-Zadeh, Christine, *Dutch Disease: Too Much Wealth Managed Unwisely* (March 2003), at <<http://www.imf.org/external/pubs/ft/fandd/2003/03/ebra.htm>>.
- Ecofys, *G8 Climate Scorecards 2009* (July 2009), at <http://www.ecofys.com/com/publications/documents/report_g8_climate09.pdf>.
- Evenett, Simon J. (Ed.) *The US-Sino Currency Dispute: New Insights from Economics, Politics, and Law* (April 2010), at <http://www.voxeu.org/reports/currency_dispute.pdf>.
- Evenett, Simon J., *What Can We Realistically Expect from the G20?* (12 November 2010), at <<http://www.voxeu.org/index.php?q=node/5777>>.
- Gallagher, Kevin P., *Policy Space to Prevent and Mitigate Financial Crises in Trade and Investment Agreements* (May 2010), at <<http://www.ase.tufts.edu/gdae/Pubs/rp/KGCapControlsG-24.pdf>>.
- Gallagher, Kevin P., *Reforming United States Trade and Investment Treaties for Financial Stability: The Case of Capital Controls* (April 2011), at <http://www.iisd.org/pdf/2011/iisd_itn_april_2011_en.pdf>.
- Gallagher, Kevin P., *Financial Reform: Whatever Happened to the Stiglitz Commission* (9 May 2011), at <<http://triplecrisis.com/stiglitz-commission/>>
- Godoy, Julio, *No Sign of Financial Regulation* (20 July 2010), at <<http://www.globalissues.org/news/2010/07/20/6350>>.
- Gray, Kevin R., *Eleventh Meeting of the Conference of the Parties to the United Nations Framework Convention on Climate Change/First Meeting of the Parties to the Kyoto Protocol* (3 April 2006), at <<http://www.asil.org/insights060403.cfm>>.
- Hiar, Corbin, *Is China Unwilling to Play the Climate Negotiation Game?* (7 September 2010), at <<http://www.undispatch.com/is-china-unwilling-to-play-the-climate-negotiation-game>>.
- Hoekman, Bernard and Mattoo, Aaditya, *Services Trade Liberalization and Regulatory Reform: Re-Invigorating International Cooperation* (January 2011), at <<http://www.cepr.org/pubs/new-dps/showdp.asp?dpno=8181>>.
- International Centre for Trade and Sustainable Development, *Cancun Climate Summit Exceeds Low Expectations, but Sidesteps Trade Issues* (22 December 2010), at <<http://ictsd.org/i/news/bridgesweekly/99004/>>.
- International Centre for Trade and Sustainable Development, *Brazilian Finance Minister Warns of 'International Currency War'* (29 September 2010), at <<http://ictsd.org/i/news/bridgesweekly/85803/>>.
- International Centre for Trade and Sustainable Development, *G-20 Falls Short of Agreement on Trade Balances, Makes New Plug for Doha* (17 November 2010), at <<http://ictsd.org/i/news/bridgesweekly/96519/>>.
- Inuit Circumpolar Conference, *Petition to the Inter American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States* (7 December 2005), at <http://www.ciel.org/Publications/ICC_Petition_7Dec05.pdf>.
- Kakuchi, Suvendrini, *Development: Currency Friction A Test of G-20 Mettle* (8 November 2010), at <<http://www.globalissues.org/news/2010/11/08/7570>>.
- Kelsey, Jane, *Legal Analysis of Services and Investment in the CARIFORUM-EC EPA: Lessons for Other Developing Countries* (July 2010), at

- <http://www.southcentre.org/index.php?option=com_docman&task=doc_download&gid=1860&Itemid=182&lang=en>.
- Khor, Martin, *Complex Implications of the Cancun Climate Conference* (March 2011), at <<http://www.southcentre.org/files/policy%20briefs/Climate%20PB%205%20cancunisue.pdf>>.
- Korinek, Anton and Servén, Luis, *Undervaluation through Foreign Reserve Accumulation: Static Losses, Dynamic Gains* (10 May 2010), at <<http://www.voxeu.org/index.php?q=node/5022>>.
- Kurtz, Jürgen T., *ICSID Annulment Committee Rules on the Relationship between Customary and Treaty Exceptions on Necessity in Situations of Financial Crises* (20 December 2007), at <<http://www.asil.org/insights/2007/12/insights071220.html>>.
- Lester, Simon, *Global Trade Watch on the Prudential Carve-Out* (28 May 2010), at <<http://worldtradelaw.typepad.com/ielpblog/2010/05/global-trade-watch-on-the-prudential-carve-out.html>>.
- Lester, Simon, *Todd Tucker on Prudential Measures* (1 May 2011), at <<http://worldtradelaw.typepad.com/ielpblog/2011/05/todd-tucker-on-prudential-measures.html>>.
- Levine, Ross, *An Autopsy of the US Financial System: Accident, Suicide, or Negligent Homicide?* (25 May 2010), at <<http://www.voxeu.org/index.php?q=node/5096>>.
- Ling, Chee Yoke and Tan, Celine, *China Criticizes IMF Decision on Exchange-Rate Surveillance* (3 July 2007), at <<http://www.twinside.org.sg/title2/finance/twninfofinance070701.htm>>.
- Low, Patrick et al., "The Interface between the Trade and Climate Change Regimes: Scoping the Issues" (12 January 2011), *SSRN eLibrary*, at <<http://ssrn.com/abstract=1742803>>.
- Mattoo, Aaditya and Subramanian, Arvind, *Currency Undervaluation and Sovereign Wealth Funds: A New Role for the World Trade Organization* (January 2008), at <www.petersoninstitute.org/publications/wp/wp08-2.pdf>.
- Monkelbaan, Joachim, *International Transport, Climate Change and Trade. What Are the Options for Regulating Emissions from Aviation and Shipping and What Will Be Their Impact on Trade?* (October 2010), at <http://ictsd.org/downloads/2010/11/joachim_monkelbaan_web_5.pdf>.
- Mussa, Michael, *IMF Surveillance over China's Exchange Rate Policy* (19 October 2007), at <www.iie.com/publications/papers/mussa1007.pdf>.
- Ocampo, José Antonio, *The Case for Re-Regulating Capital Accounts* (12 November 2010), at <<http://www.project-syndicate.org/commentary/ocampo7/English>>.
- Ocampo, José Antonio et al., *Damming Capital* (19 April 2011), at <<http://www.project-syndicate.org/commentary/ocampo9/English>>.
- Orellana, Marcos A. et al., *Climate Change in the Work of the Committee on Economic, Social and Cultural Rights* (May 2010), at <http://www.ciel.org/Publications/CESCR_CC_03May10.pdf>.
- Osava, Mario, *G20: Heading Towards the End of Globalisation?* (9 November 2010), at <<http://www.globalissues.org/news/2010/11/09/7588>>.
- Pauwelyn, Joost, *U.S. Federal Climate Policy and Competitiveness Concerns: The Limits and Options of International Trade Law* (April 2007), at <<http://nicholasinstitute.duke.edu/climate/policydesign/u.s.-federal-climate-policy-and-competitiveness-concerns-the-limits-and-options-of-international-trade-law>>.

- Pavlova, Anna and Rigobon, Roberto, *International Macro-Finance* (15 February 2011), at <<http://www.voxeu.org/index.php?q=node/6110>>.
- Persaud, Avinash, *The Rise and Apparent Fall of Macro-Prudential Regulation* (24 June 2009), at <<http://www.voxeu.org/index.php?q=node/3694>>.
- Pistor, Katharina, *Reforming the Financial System: Beyond Standardization on "Best Practice" Models* (2 February 2009), at <<http://www.voxeu.org/index.php?q=node/2969>>.
- Portes, Richard, *Currency Wars and the Emerging-Market Countries* (4 November 2010), at <<http://www.voxeu.org/index.php?q=node/5740>>.
- Potts, Jason, *The Legality of PPMs under the GATT: Challenges and Opportunities for Sustainable Trade Policy* (2008), at <http://www.iisd.org/pdf/2008/ppms_gatt.pdf>.
- Pozsar, Zoltan et al., "Shadow Banking" (July 2010), *Federal Reserve Bank of New York Staff Reports*, at <http://www.newyorkfed.org/research/staff_reports/sr458.pdf>.
- Public Citizen, *Fixes to Problematic Foreign Investor, Financial Deregulation Provisions in Bush's Korea FTA Text Could Limit Prospective Damage, Start Obama's Promised Trade Reforms* at <<http://www.citizen.org/documents/Talkingpointsinvestmentand%20financiaservices10.pdf>>.
- Public Citizen, *Memo to Senate Finance Committee on Conflict between Financial Regulation and WTO Rules* (21 May 2010), at <http://www.citizen.org/documents/Memo_to_Senate_Finance_on_GATS_Regulation.pdf>.
- Purdy, Ray and Macrory, Richard, *Geological Carbon Sequestration: Critical Legal Issues* (January 2004), at <<http://www.tyndall.ac.uk/sites/default/files/wp45.pdf>>.
- Raddatz, Claudio, *How Important Was the Worldwide Use of Wholesale Funds for the International Transmission of the US Subprime Crisis?* (15 March 2010), at <<http://www.voxeu.org/index.php?q=node/4749>>.
- Raghavan, Chakravarthi, *Financial Services, the WTO and Initiatives for Global Financial Reform* (2009), at <<http://www.tradeobservatory.org/library.cfm?refID=106932>>.
- Rodrik, Dani, *Don't Count on Global Governance* (8 November 2010), at <<http://www.project-syndicate.org/commentary/rodrik50/English>>.
- Rodrik, Dani, *The Case against International Financial Coordination* (11 February 2010), at <<http://www.project-syndicate.org/commentary/rodrik40/English>>.
- Romano, Cesare and Burleson, Elizabeth, *The Cancún Climate Conference* (21 January 2011), at <<http://www.asil.org/insights110121.cfm>>.
- Roubini, Nouriel, *Our G-Zero World* (11 February 2011), at <<http://www.project-syndicate.org/commentary/roubini35/English>>.
- Scott, Hal S., *An Overview of International Finance: Law and Regulation* (18 December 2005), at <<http://www.law.harvard.edu/programs/about/pifs/research/4scott.pdf>>.
- Sibert, Anne, *The Icesave Dispute* (13 February 2010), at <<http://www.voxeu.org/index.php?q=node/4611>>.
- Staiger, Robert W. and Sykes, Alan O., "Currency Manipulation" and World Trade" (13 June 2008), *SSRN eLibrary*, at <<http://ssrn.com/abstract=1151942>>.
- Stern, Robert M., *IEO Background Paper: Trade in Financial Services-Has the IMF Been Involved Constructively?* (5 June 2009), at <[326](http://ieo-</p>
</div>
<div data-bbox=)

- imf.org/eval/complete/pdf/06162009/BP0905%20-%20Trade%20in%20Financial%20Services.PDF>.
- Stewart, Terence P. and Drake, Elizabeth J., *Addressing Balance-of-Payments Difficulties under World Trade Organization Rules* (31 December 2009), at <<http://www.epi.org/publications/entry/wp288/>>.
- Trachtman, Joel P., *Applicability of the NAFTA "Prudential Carveout" to Capital Controls* (20 January 2011), at <<http://worldtradelaw.typepad.com/ielpblog/2011/01/applicability-of-the-nafta-prudential-carveout-to-capital-controls.html>>.
- Tucker, Todd and Wallach, Lori, *No Meaningful Safeguards for Prudential Measures in World Trade Organization's Financial Service Deregulation Agreements* (September 2009), at <<http://www.citizen.org/documents/PrudentialMeasuresReportFINAL.pdf>>.
- Tucker, Todd, *In Which GATS Gang Calls Each Other and Decides GATS Gang Not a Problem* (1 June 2010), at <<http://citizen.typepad.com/eyesontrade/2010/06/simon-lester-has-written-some-reactions-to-our-recent-memo-to-the-senate-finance-committee-on-the-conflict-between-financial.html#more>>.
- Tucker, Todd, *The WTO Conflict with Financial Transaction Taxes and Capital Management Techniques, and How to Fix It* (9 July 2010), at <<http://www.citizen.org/documents/MemoonCapitalControls.pdf>>.
- Tucker, Todd, *"That's All They've Got?": What the Latest WTO Secretariat Paper on Financial Crisis Does and Does Not Say About GATS Disciplines on Financial Regulation* (15 March 2010), at <<http://www.citizen.org/documents/That%27sAllTheyGot.pdf>>.
- Tucker, Todd, *Don't Abuse Me: The Prudential Quandary* (8 February 2011), at <<http://citizen.typepad.com/eyesontrade/2011/02/dont-abuse-me-the-prudential-quandary.html>>.
- Tucker, Todd, *PMD: "Strictly Business" Interpretations of a WTO Rule* (29 April 2011), at <<http://citizen.typepad.com/eyesontrade/2011/04/reflections-on-meaning-of-prudential-language-in-the-wto.html>>.
- Tucker, Todd, *Postscript on PMD* (6 May 2011), at <<http://citizen.typepad.com/eyesontrade/2011/05/postscript-on-pmd.html>>.
- Verma, Sid, *Brazil Rebuff for IMF Reserves Plan* (22 March 2010), at <<http://www.emergingmarkets.org/article.asp?PositionID=2601&ArticleID=2449724>>.
- Viterbo, Annamaria, "Dispute Settlement over Exchange Measures Affecting Trade and Investments: The Overlapping Jurisdictions of the IMF, WTO, and the ICSID" (13 July 2008), *SSRN eLibrary*, at <<http://ssrn.com/paper=1154673>>.
- Watson, *IMF Surveillance in Europe: Progress in Refocusing. Report by an External Consultant* (2008), at <<http://www.imf.org/external/np/pp/eng/2008/090208c.pdf>>.
- Waibel, Michael, *Iceland's Financial Crisis—Quo Vadis International Law* (1 March 2010), at <<http://www.asil.org/insights100301.cfm>>.
- Wolfe, Robert and Halle, Mark, *Did the Protectionist Dog Bark? Transparency, Accountability, and the WTO During the Global Financial Crisis* (March 2011), at <<http://www.iisd.org/publications/pub.aspx?id=1434>>.
- Zimmermann, Claus D., *Congress Continues to Attack Currency Manipulation as China Defuses G-20 Pressure for Now: The International Law Issues* (30 June 2010), at <<http://www.asil.org/insights100630.cfm>>.

Zimmermann, Claus D., "Fundamental Exchange Rate Misalignment and International Law" (on file).

Conference Presentations

Bernanke, Ben S., "The Global Saving Glut and the U.S. Current Account Deficit", *Sandridge Lecture, Virginia Association of Economists*, (Richmond, Virginia, 10 March 2005), at <<http://www.federalreserve.gov/boarddocs/speeches/2005/200503102/>>.

Blundell-Wignall, Adrian and Atkinson, Paul, "The Sub-Prime Crisis: Causal Distortions and Regulatory Reform", *Lessons from the Financial Turmoil of 2007 and 2008* (H.C. Coombs Centre for Financial Studies, Kirribili, Australia, 2008), at <www.rba.gov.au/publications/confs/2008/blundell-wignall-atkinson.pdf>.

Caruana, Jaime, "Basel III: Towards a Safer Financial System", *3rd Santander International Banking Conference* (Madrid, 15 September 2010), at <<http://www.bis.org/speeches/sp100921.htm>>.

Wellink, Nout, "A New Regulatory Landscape", *16th International Conference of Banking Supervisors* (Singapore, 22 September 2010), at <<http://www.bis.org/speeches/sp100922.pdf>>.

Dictionaries and Encyclopaedias

"Coexistence", in *Oxford English Dictionary* 2nd ed. (1989).

"Commercial Paper", in Jonathan Law and John Smullen (Eds.), *A Dictionary of Finance and Banking* (2008).

"Fractional Reserve Banking", in John Black et al. (Eds.), *A Dictionary of Economics* (2009).

"Group of Ten", in Jonathan Law and John Smullen (Eds.), *A Dictionary of Finance and Banking* (2008).

"Liberalism", in Iain McLean and Alistair McMillan (Eds.), *The Concise Oxford Dictionary of Politics* (2009).

Carter, Ian, "Positive and Negative Liberty", in Edward N. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy* (2008).

Feichtner, Isabel, "Subsidiarity", in Rüdiger Wolfrum (Ed.) *The Max Planck Encyclopedia of Public International Law*, at <<http://www.mpepil.com>>.

Financial Times Lexicon, *Asset-Backed Securities*, at <http://lexicon.ft.com/Term?term=asset_backed-securities>.

Financial Times Lexicon, *Credit Default Swaps CDS*, at <<http://lexicon.ft.com/Term?term=credit-default-swaps--CDS>>.

Financial Times Lexicon, *Naked Short Selling*, at <<http://lexicon.ft.com/Term?term=naked-short-selling>>.

Financial Times Lexicon, *Real Economy*, at <<http://lexicon.ft.com/term.asp?t=real-economy>>.

Friedman, B. M., "Monetary Policy", in Neil J. Smelser and Paul B. Baltes (Eds.), *International Encyclopedia of the Social & Behavioral Sciences* (Pergamon, 2001).

- Gaus, Gerald and Courtland, Shane D., "Liberalism", in Edward N. Zalta (Ed.) *The Stanford Encyclopedia of Philosophy* (2010).
- Hall, John A., "Liberalism", in Joel Krieger (Ed.) *The Oxford Companion to the Politics of the World* (Oxford University Press, 2001).
- Kiss, Alexandre, "Abuse of Rights", in Rüdiger Wolfrum (Ed.) *The Max Planck Encyclopedia of Public International Law*, at <<http://www.mpepil.com>>.
- Koivurova, Timo, "Due Diligence", in Rüdiger Wolfrum (Ed.) *The Max Planck Encyclopedia of Public International Law*, at <<http://www.mpepil.com>>.
- Mahiou, Ahmed, "Interdependence", in Rüdiger Wolfrum (Ed.) *The Max Planck Encyclopedia of Public International Law*, at <www.mpepil.com>.
- Oppermann, Thomas, "Intervention", in Rudolf Bernhardt (Ed.) *Encyclopedia of Public International Law*.
- Oxman, Bernard H., "Jurisdiction of States", in Rudolf Bernhardt (Ed.) *Encyclopedia of Public International Law*.
- Rauschnig, Dietrich, "Lac Lanoux Arbitration", in Rudolf Bernhardt (Ed.) *Encyclopedia of Public International Law*.
- Rozakis, Christos L., "Territorial Integrity and Political Independence", in Rudolf Bernhardt (Ed.) *Encyclopedia of Public International Law*.
- Schröder, Meinhard, "Principle of Non-Intervention", in Rudolf Bernhardt (Ed.) *Encyclopedia of Public International Law*.
- Steinberger, Helmut, "Sovereignty", in Rudolf Bernhardt (Ed.) *Encyclopedia of Public International Law*.
- Thürer, Daniel and Burri, Thomas, "Self-Determination", in Rüdiger Wolfrum (Ed.) *The Max Planck Encyclopedia of Public International Law*, at <<http://www.mpepil.com>>.
- Torres Bernardez, Santiago "Territorial Sovereignty", in Rudolf Bernhardt (Ed.) *Encyclopedia of Public International Law*.
- Wolfrum, Rüdiger, "International Law of Cooperation", in Rudolf Bernhardt (Ed.) *Encyclopedia of Public International Law*.
- Wouters, Jan and Verhoeven, Sten, "Desuetudo", in Rüdiger Wolfrum (Ed.) *The Max Planck Encyclopedia of Public International Law*, at <<http://www.mpepil.com>>.
- Ziegler, Katja S., "Domaine Réservé", in Rüdiger Wolfrum (Ed.) *The Max Planck Encyclopedia of Public International Law*, at <<http://www.mpepil.com>>.

News Reports

- BBC News, *Russia plants flag under N Pole* (2 August 2007), at <<http://news.bbc.co.uk/2/hi/europe/6927395.stm>>.
- BBC News, *Iceland Parliament Votes for New Icesave Deal* (16 February 2011), at <<http://www.bbc.co.uk/news/business-12485819>>.
- BBC News, *G20 Reaches Deal on Imbalance Indicators* (20 February 2011), at <<http://www.bbc.co.uk/news/business-12515467>>.
- BBC News, *Iceland President Calls Referendum on New Icesave Deal* (20 February 2011), at <<http://www.bbc.co.uk/news/world-europe-12519355>>.

- Bowley, Graham, "As Dollar's Value Falls, Currency Conflicts Rise", *New York Times*, 20 October 2010.
- Ibison, David and Parker, George, "Transcript Challenges Darling's Claim over Iceland Compensation", *Financial Times*, 24 October 2008.
- Lewis, Michael, "Wall Street on the Tundra", *Vanity Fair*, at <http://www.vanityfair.com/politics/features/2009/04/iceland200904>.
- Meeks, Gregory and Shank, Michael, "U.N. Security Council Must Act Pre-Emptively-on Climate Change", *The Christian Science Monitor* 24 March 2008.
- Richardson, Alex, *Factbox-Outcome of the Seoul G20 Summit* (12 November 2010), at <http://www.reuters.com/article/2010/11/12/g20-outcomes-idUSN0911933720101112>.
- Stiglitz, Joseph, "Watchdogs Need Not Bark Together", *Financial Times*, 9 February 2010.
- Ward, Andrew, "Reykjavik to seek fresh debt agreement", *Financial Times* (6 March 2010).