Regulating Trade in Petroleum under the WTO Regime: Trade Rules vs. Reality of the Petroleum Industry

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ABSTRACT

This thesis critically assesses the effectiveness of WTO legal rules in the regulation of international trade in petroleum and highlights potential conflicts between competing resources of energy from the WTO regime's perspective. The theoretical framework of the thesis is built on the concepts used in natural resource economics, trade theories and international relations. On the basis of Hotelling's rule of natural resource economics, it proposes a model that reconciles the use of petroleum and the development of renewable sources of energy in the power generation sector, which prospectively can be adopted with respect to the transport sector and other sectors involving energy use. The proposed model may improve global sustainable development. However, it is argued that WTO rules are not properly designed to regulate trade in petroleum and, if applied without due respect to specific issues pertaining to the petroleum industry, would obstruct the achievement of the social optimum, and detrimentally affect the national economies of WTO members and global welfare in general.

To improve the WTO system, I propose a reformation of its normative ideology through the introduction of the strategic trade policy theory in complement to the neoclassical theory of trade, at least when trade in energy is concerned. On the basis of the study of the applicability of WTO rules to trade in petroleum and a review of proposals put forward by other scholars to improve the regulation of trade in energy, it is argued that the most effective way to improve the trading regime is to negotiate a new general agreement on trade in energy.

The role of the WTO in the regulation of trade in energy is analyzed through a regime management theory borrowed from international relations studies. It is argued that the WTO as a regime manager is capable of improving the regime by properly maintaining the existing equilibrium and by initiating, and leading in negotiations of a new equilibrium.

RÉSUMÉ

Cette thèse évalue de façon critique l'efficacité des règles juridiques de l'OMC dans la régulation du commerce international de pétrole et met en évidence les conflits potentiels entre les ressources d'énergie concurrentes du point de vue du régime de l'OMC. Le cadre théorique de la thèse est construit à partir des concepts utilisés en économie des ressources naturelles, les théories du commerce et des relations internationales. Sur la base de la règle de Hotelling d'économie des ressources naturelles, la thèse propose un modèle qui concilie l'utilisation du pétrole et le développement de sources renouvelables dans le secteur de la production d'énergie, qui peut être adopté de façon prospective en ce qui concerne le secteur des transports et autres secteurs impliquant l'utilisation de l'énergie. Le modèle proposé peut améliorer le développement durable de la planète. Cependant, il est soutenu que les règles de l'OMC ne sont pas correctement conçues pour réglementer le commerce du pétrole. Si elles sont appliquées sans tenir compte des questions spécifiques relatives à l'industrie pétrolière, ells risquent d'entraver la réalisation de l'optimum social, et nuire aux économies nationales des membres de l'OMC et au bien-être global en général.

Pour améliorer le système de l'OMC, je propose une réforme de son idéologie normative grâce à l'introduction de la théorie de la politique commerciale stratégique en complément de la théorie néoclassique du commerce, au moins lorsque le commerce de l'énergie est concernée. Sur la base de l'étude de l'applicabilité des règles de l'OMC pour le commerce de pétrole et l' analyse des propositions présentées par d'autres chercheurs pour améliorer la réglementation du commerce de l'énergie, il est soutenu que la façon la plus efficace d'améliorer le régime est de négocier un nouvel accord général sur le commerce de l'énergie.

Le rôle de l'OMC dans la régulation du commerce de l'énergie est analysé à travers une théorie de gestion de régime tirées des études sur les relations internationals. On soutient que l'OMC, en tant que gestionnaire, capable d'améliorer le régime en entretenant l'équilibre existant et en initiant la recherche et la mise en place d'un nouvel équilibre.

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To my family I dedicate this thesis.

LIST OF ABBREVIATIONS

AB	Appellate Body
Agreement Establishing the WTO	*Marrakesh Agreement Establishing the World Trade Organization*
ANP	Agência Nacional do Petróleo (Brazil)
APEC	Asia-Pacific Economic Cooperation
API	American Petroleum Institute
Art.	Article
ASCM	*Agreement on Subsidies and Countervailing Measures*
ASEAN	Association of Southeast Asian Nations
BISD	Basic Instruments and Selected Documents (published by GATT)
BIT	Bilateral investment treaty
BP	British Petroleum
BTU	British thermal unit
CAD	Canadian dollar
CIS	Commonwealth of Independent States
CNOOC	China National Offshore Oil Corporation
CNPC	China National Petroleum Corporation
DDA	Doha Development Agenda
DSB	Dispute Settlement Body
DSO	Domestic supply obligation
DSU	*Understanding on Rules and Procedures Governing the Settlement of Disputes*
EC	European Communities
ECJ	European Court of Justice
ECT	*Energy Charter Treaty*
EEC	European Economic Community
EFTA	European Free Trade Association
E&P	Exploration and production
EU	European Union
GATS	*General Agreement on Trade in Services*
GATT	*General Agreement on Tariffs and Trade*
GSI	Global Subsidies Initiative program of the IISD
HS	Harmonized Commodity Description and Coding System

ICJ	International Court of Justice
IEA	International Energy Agency
IISD	International Institute for Sustainable Development
ILC	International Law Commission
IMF	International Monetary Fund
IOC	International oil and gas company
IOCL	Indian Oil Corporation
IR	International relations
ITO	International Trade Organization
JODI	Joint Organizations Data Initiative
LCR	Local content requirement
LNG	Liquefied natural gas
LPG	Liquefied petroleum gas
MENA	Middle East and North Africa
MFN	Most-favoured-nation
MOU	Memorandum of Understanding
NAFTA	*North American Free Trade Agreement*
NATO	North Atlantic Treaty Organization
NGO	Non-governmental organization
NNPC	Nigerian National Petroleum Corporation
NOC	National oil and gas company
NT	National treatment
OECD	Organization for Economic Co-operation and Development
ONGC	Oil and Natural Gas Corporation Limited (Indian state-owned company)
OPEC	Organization of the Petroleum Exporting Countries
ORC	Oman Refinery Company
PDO	Petroleum Development Oman
PDVSA	Petróleos de Venezuela S.A.
PEMEX	Petróleos Mexicanos
PETROBRAS	Petróleo Brasileiro S.A.
Petronas	Petroliam Nasional Berhad (Malaysian state-owned company)
PPM	Process and production method
PSA	Production sharing agreement
RSC	Risk-service contract

R&D	Research and development
SDFI	State direct financial interest
STE	State trading enterprise
STP	Strategic trade policy theory
TBT Agreement	*Agreement on Technical Barriers to Trade*
TFEU	*Treaty on the Functioning of the European Union*
TPRM	Trade Policy Review Mechanism
TRIM	Trade-related investment measure
TRIMs Agreement	*Agreement on Trade-Related Investment Measures*
TRIPS	Trade-related aspects of intellectual property rights
UAE	United Arab Emirates
UK	United Kingdom
UN	United Nations
UNCTAD	UN Conference on Trade and Development
UNDP	UN Development Programme
UNEP	UN Environment Programme
U.S. /USA	United States of America
USD	United States dollar
VCLT	*Vienna Convention on the Law of Treaties*
WTO	World Trade Organization

GENERAL INTRODUCTION

Why does it matter?

Oil and gas are the primary sources of global energy supply and as such are vital for the world economy. In light of the importance of oil and gas (hereinafter: "petroleum") for international trade and given the fact that neither the GATT 1947 nor its successor, GATT 1994, excluded petroleum from their coverage, it is astonishing to observe that only two petroleum related cases have been adjudicated under the GATT/WTO dispute settlement system.[1] Perhaps such a lack of attention to trade in petroleum was both the cause and the consequence of the long-lasting misconception that free trade agreements did not apply to it.

International law publications cite a number of interrelated reasons for this lack of attention. Firstly, due to its strategic importance, trade in petroleum was treated as a special case in political contexts and was thus excluded from international trade rules by a "gentlemen's agreement".[2] Petroleum issues were not discussed in the early GATT forum because of the fear that security concerns would "politicize" the debate.[3] Secondly, the overwhelming majority of exporting countries were not GATT members until the 1980s; most of them were colonies of other states until the 1950s, whereas the major independent oil nations of that time did not have exporting capabilities to protect during the negotiations of the GATT 1947.[4] Thirdly, it was suggested that multilateral trade rules were not tried to challenge petroleum trade policies because of the perception that the exceptions provided in the GATT were so vague that a

[1] GATT Panel Report, *United States – Taxes on Petroleum and Certain Imported Substances*, adopted on 17 June 1987, L/6175, BISD 34S/136, online: WTO < http://www.wto.org/english/tratop_e/dispu_e/87superf.pdf> accessed on 1 May 2012 [hereinafter: *US – Superfund*]; and WTO Panel Report *United States – Standards for Reformulated and Conventional Gasoline*, WT/DS2/R, adopted 20 May 1996, as modified by Appellate Body Report WT/DS2/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: *US – Gasoline*].

[2] United Nations Conference on Trade and Development [hereinafter: UNCTAD], *Trade Agreements, Petroleum and Energy Policies,* UNCTAD/ITCD/TSB/9 (New York: United Nations, 2000), at 1.

[3] Murray Gibbs, "Energy Services, Energy Policies and the Doha Agenda" in UNCTAD, *Energy and Environmental Services: Negotiating Objectives and Development Priorities,* UNCTAD/DITC/TNCD/2003/3 (New York: United Nations, 2003), at 4.

[4] Kenneth Aidelojie & Zen Makuch, "Multilateral Organisations, Fossil Fuels and Energy Law and Policy: The Tower of Babel Re-visited", (2008, August) European Energy and Environmental Law Review 227 at 230. See also UNCTAD, *supra* note 2, Gibbs, *supra* note 3.

defending party could easily justify its actions under any or all of them.[5] Fourthly, it was asserted that the focus of the GATT rules has been the access of domestic products to foreign markets and that therefore they have been primarily designed to eliminate import barriers, which are not pertinent for trade in petroleum.[6] Finally, it was suggested that given the importance of energy inputs for production growth, developed states were interested in keeping petroleum "flowing to feed their energy-hungry economies after World War II and avoid problems that may cause unnecessary oil supply disruptions".[7]

The history of the petroleum industry shows that, except for two or three decades after the first oil wells were drilled in the late 1850s, the world petroleum market has never been open for competition.[8] By the end of the 19th century it was dominated by three companies, Standard Oil (the U.S.), Shell (the U.K.) and Royal Dutch (the Netherlands), which had coordinated actions among themselves since as early as 1895.[9] The dismantling of Standard Oil into several companies after a U.S. Federal court decision in 1911 and the emergence of new petroleum producers such as the Anglo-Persian Oil Company (later British Petroleum) did not change the oligopolistic nature of the market. Although these market players competed with each other from time to time, their main *modus operandi* was effective co-operation: dividing the global market, controlling production, sharing information and expelling newcomers from the market.[10] Since few players controlled the upstream and downstream sectors of the world petroleum industry, there was little incentive for them to initiate any dispute under international trade law. Hence, the

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[5] For example, GATT articles XX(g) and XXI provide exceptions in relation to the conservation of exhaustible natural resources and national security. See *infra* Chapters VII & VIII, see also David S. MacDougall, "Trade in Energy and Natural Resources: the Role of the GATT and Developing Countries" (1994) 12 (1) J. Energy Nat. Resources L. 95 at 112; and Donald N. Zillman, "Energy Trade and the National Security Exception to the GATT" (1994) 12 (1) J. Energy Nat. Resources L. 117 at 117.
[6] Yulia Selivanova, *The WTO and Energy: WTO Rules and Agreements of Relevance to the Energy Sector*, International Centre for Trade and Sustainable Development, Trade and Sustainable Energy Series Issue Paper No. 1, (Geneva: ICTSD, 2007) at 5.
[7] Hussein Abdallah, "Oil exports under GATT and the WTO" (2005) OPEC Review 267 at 273.
[8] For a comprehensive history of the petroleum industry see Daniel Yergin, *The Prize: The Epic Quest for Oil, Money, and Power* (New York: Free Press, 1991). A concise version of the history of the oil industry is provided in Roy Nersesian, *Energy of the 21st Century: A Comprehensive Guide to Conventional and Alternative Sources* (New York: M.E. Sharpe, 2007) at 103-167.
[9] See Yergin, *supra* note 8, at 72.
[10] *Ibid.* at 125 (Royal Dutch and Shell), at 132 (European Petroleum Union), at 203-206 (Red Line Agreement), at 260-268 (Achncarry "As-Is" Agreement).

oligopolistic nature of the world petroleum market and highly integrated structure of transnational petroleum corporations can also be considered as additional reasons for the aforementioned lack of attention to trade in petroleum.

The nationalization of natural resources resulting from sovereignty movements,[11] as was the case of the OPEC states, or in earlier times, as was the case of Russia and Mexico, did not change the situation considerably: during the existence of the GATT 1947, the market was still dominated by a few collaborating producers. However, the market conditions have since improved, allowing for more competition during the WTO period. The improvements can be attributed to the circumstances that coincided with the Uruguay round, namely: the collapse of the Soviet Union (which led not only to the dismantling of the largest command-controlled economy but also to the emergence of new petroleum producers); increasingly frequent contests among OPEC members; rising competition for investment among resource-endowed states; evolution of the global petroleum market, transportation infrastructure and new pricing arrangements; and the development of alternative sources of energy.[12]

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[11] The rise of the right of self-determination of states and peoples and the decolonization of many natural resource endowed countries led to important developments in public international law after World War II. One of the developments – the emergence of the principle of permanent sovereignty over natural resources – was arguably the formal cause and/or justification for many states for nationalization of their natural resources. For an account of the evolution of the principle of permanent sovereignty over natural resources see Nico Schrijver, *Sovereignty Over Natural Resources: Balancing Rights and Duties* (Cambridge: Cambridge University Press, 1997); K. Hossain & S.R. Chowdhury, eds, *Permanent Sovereignty over Natural Resources in International Law* (New York: St.Martin's Press, 1984); G.W. Haight, "The New International Economic Order and the Charter of Economic Rights and Duties of States" (1975) 9 (4) Int'l Law. 591-604; Karlos N. Gess, "Permanent Sovereignty over Natural Resources. An Analytical Review of the United Nations Declaration and its Genesis" (1964) 13 Int'l & Comp. L. Q. 398-449; Stephen M. Schwebel, "The Story of the U.N.'s Declaration on Permanent Sovereignty over Natural Resources" (1963) 49 A.B.A.J. 463-469; Emeka Duruigbo, "Permanent Sovereignty and Peoples' Ownership of Natural Resources in International Law" (2006) 38 Geo. Wash. Int'l L. Rev. 33-100.

[12] After the fall of the Soviet Union, the former single petroleum champion was represented in the modern market by several oil and/or gas exporting countries; in addition to Russia, Azerbaijan, Kazakhstan, Turkmenistan, and Uzbekistan. Moreover, in the 1990s these states were in need of hard currency which mainly flowed in from oil and/or gas exports. Thus, none of these states could afford co-operation with other states to limit overall market supply. As for the OPEC, in fact its members produce less than a half of the world oil supply; see OPEC, *World Oil Outlook 2007* (Vienna: OPEC, 2007) at 12. OPEC members do not co-operate in the gas market, not least because their cumulative share in the world's gas production is considerably smaller than that of their share in oil production.

In fact, if considered on the global level, the structure of the modern petroleum market does not differ significantly from the markets for many other products: agricultural (bananas, wheat, coffee), industrial (steel, timber, leather) manufactured goods (cars, computers and electronics) or some minerals etc. The world markets for these products are represented by a smaller number of net exporting states and a larger number of net importing states.

The energy industry is changing too. National oil and gas companies are becoming more powerful. Transnational private petroleum companies are experiencing more constraints in getting access to reserves and are switching to the development of alternative energy resources, thereby releasing their bonds with petroleum exporting states. In the energy importing states governments are deregulating energy market and unbundling highly integrated energy companies. At the same time, renewable energy sources are developing. On the one hand, the ties in the energy industry are weakening and vanishing. On the other hand, trade disciplines are getting stronger, case law in the field of international trade and investment is developing on unprecedented scales. As the result, it may be expected that energy trade disputes will be frequently raised in the future.

It has to be noted that Saudi Arabia joined the WTO in 2005, Russia attained membership in 2012, and six more major petroleum exporting states are now in the process of becoming WTO members.[13] These six states are among the top-twenty states with the largest proven oil reserves and they account for a significant share of the world's natural gas production.[14] Thus, it is expected that due to major changes in the balance of powers in the world petroleum market during the second half of the last century, and thanks to the establishment of a more effective system regulating international trade, the petroleum policies of WTO members will face increasing scrutiny through the prisms of trade rules. At the same time, given the potential competition between petroleum and renewable sources of energy, the latter is likely to attract more attention from trade diplomats. Hence, both petroleum exporting and importing states would hardly allow any lack of attention to trade in energy goods because "there are few, if any, commodities as widely traded on sophisticated world markets that raise such concerns over national security and economic impact as to continually invite high-level government scrutiny and, potentially, intervention".[15]

[13] The six states are: Algeria, Azerbaijan, Iran, Iraq, Kazakhstan, and Libya.
[14] OECD, International Energy Agency [hereinafter: IEA], *World Energy Outlook 2006* (Paris: IEA, 2006) at 89.
[15] Shelly P. Battram & Reinier H. Lock, "The Canada/United States Free-Trade Agreement and Trade in Energy" (1988) 9 (2) Energy L. J. 327 at 328.

Research objectives

This study has three main objectives. Firstly, to analyze the effectiveness of WTO legal rules in the regulation of international trade in petroleum. The hypothesis is that WTO rules are not properly designed to address the specific issues raised by trade in petroleum. If applied without taking into account the peculiarities of the petroleum industry, the rules may have a detrimental effect on national and global welfare. In testing this hypothesis, this study does not intend to provide a comprehensive examination of all measures and practices relating to the petroleum industry, nor does it attempt to test the applicability of each and every WTO rule to such measures and practices. Such an examination is hardly practical given the variety of political and business expedients, which have rapidly evolved overtime, found in the petroleum industry. Instead, it analyzes the main WTO disciplines that may have an effect on trade in petroleum goods. A comprehensive review of international trade in petroleum services is not undertaken in this thesis as this is a complex area for a separate research. However, certain disciplines of the General Agreement on Trade in Services (GATS) are interrelated with, and may have an effect on, trade in goods and are therefore addressed here inasmuch as they correspond to the disciplines regulating international trade in petroleum goods.

Secondly, this study aims to address the potential relationship between competing resources of energy from the WTO regime's perspectives. The hypothesis is that WTO rules may obstruct the development of alternative sources of energy by requiring states to treat different sources of energy similarly. If the treatment is different, the rules may provoke "tit-for-tat trade wars" between petroleum exporting states and states trying to decrease their dependence on imported petroleum by developing alternative sources of energy.[16] The petroleum industry is part of a larger economic sector – the energy industry. WTO rules applied to trade in petroleum may

[16] By the "tit-for-tat trade wars" I mean a series of measures that countries may implement in response to trade actions of other states, including initiation of trade disputes that may be unrelated to the product being contested. For example, if country A brings a case against the petroleum subsidies of country B, country B may in response initiate a dispute on renewable energy subsidies provided in country A hoping to settle the first case in exchange for the second before the subsidies are declared prohibited by adjudicating bodies.

have implications for other sources of energy, such as coal and renewable resources. While various energy resources may receive different political and economic treatment on the basis of their environmental impact, trade disciplines require equal treatment for similar products. Hence, this thesis, while primarily analyzing the application of WTO rules to trade in petroleum, also attempts to identify potential sources of conflict that may arise between trade rules and environmental concerns in the energy sector.

Finally, based on an assessment of the effective applicability of WTO rules to the petroleum industry, the study proposes initiation of a new framework for the regulation of trade in energy. Such a framework should accommodate concerns of sustainable development (which includes social development, environmental issues, efficient use of exhaustible natural resources, and stability in the supply of energy) and the specifics of the energy industry, which are not adequately addressed in the existing trade regime. In effect, the proposal is not intended to be exhaustive; rather, it aims to contribute to discussions on the future of the international regulation of trade in energy, and to invite critical assessments and better alternative proposals to the benefit of trade in energy and the international trading system in general.

Methodology and concepts of significant usage

In pursuing the objectives of the study I employ a doctrinal approach to legal research complemented by historical, comparative, and empirical analyses associated with non-doctrinal approach to legal research. The research is text-based and, where necessary, is furnished by the results of empirical studies drawn from secondary literature. The analysis of the effectiveness of WTO legal rules in any market requires an investigation of economic conditions and institutional structures prevailing in the market concerned. Hence, this research is facilitated by comparison of state policies, industrial data and business practices pertaining to the petroleum industry in different jurisdictions.

Since trade measures in the petroleum industry have so far been successful in escaping judicial scrutiny in WTO fora, it is difficult to predict precisely how a trade rule would apply to a petroleum-related trade measure. Therefore, the practical side of the study uses projections of potential scenarios, which are made through the extrapolation of measures commonly found in the petroleum industry to the legal framework of the WTO system. The information on the measures examined herein is drawn from a variety of official sources including national regulations, reports and databases of international and non-governmental organizations, official statements and trade-policy reviews of states, corporate reports and so on.

Some concepts which reoccur quite often in this thesis need to be clarified from the outset. The term "petroleum" comes from the ancient Greek words "*petro*" which means rock, and "*oleum*" which means oil.[17] Initially petroleum signified only crude oil; however, in the modern industry the term generally embraces both crude oil and natural gas.[18] Therefore, throughout this thesis the term petroleum will be used to refer to both crude oil and natural gas, unless the context or citations narrow it down to mean crude oil only. Similarly, the term "petroleum goods" refers to both petroleum and refined petroleum products if the context does not require a restrictive reading to mean petroleum only. In this thesis, the term "petroleum industry" includes all stages of the production and sale of petroleum and petroleum goods, in other words, both the upstream and downstream sectors.[19] However, when emphasis is placed on the trade-side of the industry, I use the term "petroleum market".

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17 Norman J. Hyne, *Nontechnical Guide to Petroleum Geology, Exploration, Drilling, and Production* (Tulsa: Penn Well, 2001) at 1.
18 For example, Norwegian Act of 29 November 1996, No. 72 on Petroleum Activities defines petroleum as "all liquid and gaseous hydrocarbons existing in their natural state in the subsoil, as well as other substances produced in association with such hydrocarbons". Unofficial English translation available online: Petroleum Safety Authority Norway <http://www.ptil.no/getfile.php/Regelverket/Petroleumsloven_e.pdf> accessed on 1 May 2012. Under Section 15(1) of Petroleum Act of the Federation of Nigeria (dated 17 November 1969) petroleum "means mineral oil (or any related hydrocarbon) or natural gas as it exists in its natural state in strata, and does not include coal or bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation." Similarly, Section 10 of Malaysian Petroleum Development Act of 1974 defines petroleum as "any mineral oil or relative hydrocarbon and natural gas existing in its natural condition and casinghead petroleum spirit including bituminous shales and other stratified deposits from which oil can be extracted." Unofficial English translation available online: <http://www.kpdnkk.gov.my/akta/akta_kemajuanpetroleum1974.pdf> accessed on 1 May 2010.
19 One of the entries in the Oxford English Dictionary defines "industry" as "trade and manufacture collectively". *The New Shorter Oxford English Dictionary*, L. Brown, ed., (Oxford: Clarendon Press, 1993) Vol. 1 at 1356.

Outline of the thesis

The outline of this work is as follows. Chapter I establishes a conceptual framework for the subsequent chapters. Its first section explains the economic concepts that inform, guide and shape my analysis of the regulation of trade in petroleum under WTO rules. The second section of Chapter I reviews the purpose of the world trade system and its influence on the interpretation of WTO rules. At the same time, it establishes the methodology of legal interpretation which will be employed throughout the thesis. The third section studies the tension between state sovereignty and international trade co-operation, and argues that the WTO accession procedures are insufficiently respectful of the principle of sovereign equality of states, which will have detrimental effects for the WTO system in the long-term. In the fourth section, on the basis of international relations theory I discuss the role of the WTO as a manager of the multilateral trade regime. I argue that the future of the world trade system does not depend solely on negotiations between states but, to a very significant extent, also depends on the ability of the WTO to cope with the controversies, uncertainties and deficiencies currently existing in the multilateral trade regime, and to anticipate their long-term implications.

Chapters II through VII study specific issues pertinent to the regulation of trade in petroleum under WTO law. Chapter II discusses the likeness and substitutability of various energy resources. I argue that competition among different sources of energy can escalate conflicts of international trade interests between the camps of energy exporting and importing states, and therefore may impede the adoption of environmental policies by states. I focus on the differential taxation of renewable sources of energy and similar trade measures of petroleum importing states that are currently implemented in the transport and electricity generation sectors.

Chapter III examines the applicability of WTO rules regulating state trading enterprises to national oil and gas companies. I will show that the WTO rules are not well suited for the regulation of the trade activities of national oil and gas companies because of their shortcomings in both the definition of state trading enterprises and the substantial obligations imposed on them. National oil and gas companies as well as major transnational petroleum corporations are capable of distorting trade at any level of their vertically integrated supply chains. Hence, I argue that prospective rules must take into account the specifics of industrial organization and apply to trade measures exercisable by both private and state-owned petroleum corporations alike.

Chapter IV provides a study of trade-related investment measures practiced in the petroleum industry. In this chapter I observe that the WTO rules regulating trade-related investment measures are primarily designed for manufacturing industries and therefore do not properly address the measures taken in extractive industries. I demonstrate that the applicability of WTO rules to petroleum trade-related investment measures largely depends on how such measures are formally enacted. This means that contested measures can escape scrutiny from the WTO if they are properly redesigned. It also means that measures having similar economic effects are treated differently under WTO rules. Moreover, I question whether WTO rules can be applied to measures implemented through petroleum contracts. Lastly, I suggest that the prohibition of certain trade-related investment measures in the petroleum industry may lead to underinvestment in the industry and, consequently, to the shortage of petroleum supply.

Chapter V explores the compatibility of subsidies in the petroleum industry with WTO law. I find that WTO rules are not fully applicable to subsidies provided in the downstream sector because such subsidies are, as a rule, not specific. Subsidies provided in the upstream sector are usually specific and some of them are not compliant with WTO rules; however, most of the actionable subsidies in fact have a positive impact on the world's energy supply. Hence, much like in the case of trade-related investment measures, I argue that the prohibition of certain types of subsidies in the petroleum industry may have detrimental effects on the world market.

Chapter VI analyzes the effectiveness of existing and proposed WTO rules with respect to the transit of petroleum. While the transit rules apply to all modes of transportation, their effectiveness is questionable in the case of petroleum transportation by pipelines. On the basis of an analysis of trade rules against technical and legal peculiarities related to pipeline transits, I argue that the rules cannot facilitate transit flow unless there are sufficient transit capacities. In turn, the expansion of transit capacities can be obstructed by WTO rules, which prohibit trade-related investment measures and subsidies that are necessary for the development of the transit infrastructure.

Chapter VII discusses export restrictions used in trade in petroleum. It mainly focuses on quantitative restrictions as exercised by OPEC in the form of production quotas, and also covers export duties. I observe that quantitative restrictions as implemented by OPEC states cannot be effectively contested under WTO law because, on the one hand, petroleum in its natural underground state may not qualify as a commodity and therefore it should not be subject to trade rules; and on the other hand, such measures are likely to be exempted under one or several of the general exceptions set out in Art. XX of the GATT. In the second part of this chapter I review some specific obligations accepted by some newly acceded WTO members with respect to duties levied on petroleum exports, and present their potential implications for countries acceding to the WTO.

Chapter VIII examines the national security exception provided in Art. XXI of the GATT. Unlike the previous chapters that focused on the petroleum industry, Chapter VIII broadens the scope of its inquiry to analyze energy security in general. Given the growing importance of energy security for all WTO Members, it is argued that WTO Members are likely to invoke the exception provided in Art. XXI to protect measures which are directly or indirectly related to their energy security. If a dispute concerning energy security arises under WTO law, the Dispute Settlement Body of the WTO (hereinafter: DSB) will have to strike a very delicate balance between the effectiveness of trade rules and the sovereignty concerns of WTO Members. A failure to strike the right balance will have serious detrimental effects on the multilateral trading system.

In the conclusion of the thesis I sketch some proposals that have been put forward in the international trade community to improve the legal regime regulating trade in energy, as well as make my own policy recommendations.

Petroleum and the petroleum industry

In order to study the application of the WTO agreements to trade in petroleum, it is first necessary to understand the nature of petroleum and the structure of the petroleum industry. This section describes in a nutshell the main features of petroleum and the petroleum industry that have to be taken into account when analyzing the legal problems associated with international trade in petroleum. Specific issues related to particular trade measures are further detailed where necessary in the relevant parts of the subsequent chapters.

The most important chemical elements in both crude oil and natural gas are hydrogen and carbon; they are thus alternatively called “hydrocarbons”.[20] The difference between crude oil and natural gas is mainly based on the size of their hydrocarbon molecules. In their common usage oil and gas are differentiated on the basis of their physical characteristics, i.e. oil as a liquid and gas as gaseous hydrocarbons. However, gas in fact can be and often is as liquid as oil: gas condensates naturally in some subsurface gas reservoirs, and there also exists liquefied natural gas (LNG), which is methane gas that has been artificially liquefied by cooling it to -160 Celsius degrees under atmospheric pressure, and liquefied petroleum gas (LPG), which is propane and/or butane gases liquefied under atmospheric pressure.[21]

Crude oil is a complex mixture of liquid hydrocarbons and other chemical compounds, such as sulphur, paraffin and sometimes metals.[22] There are over 130 crude oil grades around the

[20] IEA, *Energy Statistics Manual* (Paris: OECD Secretariat, 2004), online: IEA <www.iea.org> accessed on 1 May 2012 [hereinafter: IEA, *Energy Statistics Manual*]; see also Hyne, *supra* note 17, at 2.
[21] Gas condensate removed from natural gas in the field is even classified as crude oil by regulatory agencies. See Hyne, *supra* note 17, at 11; and IEA, *Energy Statistics Manual, supra* note 20, at 188.
[22] Energy Charter Secretariat, *Putting a Price on Energy: International Pricing Mechanisms for Oil and Gas* (Brussels: Energy Charter Secretariat, 2007) [hereinafter: Energy Charter Secretariat, *Putting a Price on Energy*] at 69.

world which are compared and described by gravity[23]. The most commonly used gravity scale is the °API – a standard adopted by the American Petroleum Institute.[24] Heavy crude is oil under API 25°, light crude is oil above API 35°, and medium grades are in between.[25] Since crude oil for trade purposes is measured in volume (barrels) and weight (tonnes) units, a tonne of heavy oil would provide fewer barrels than a tonne of lighter oil. The gravity and content structure of crude oil determine the final purpose of its use, and affect the cost of production, refining and transportation (and thus transit charges as well).[26] With rare exceptions, crude oil has no direct end use; it needs to be refined into petroleum products (gasoline, heating oil, petrochemicals and other) to be consumed.[27]

Natural gas produced from subsurface reservoirs is a mixture of gases (methane, ethane, propane, butane and pentanes), but the methane content predominates (typically greater than 85%).[28] Natural gas is produced from gas fields (non-associated gas) or from oil fields (associated gas). Associated gas occurs in oil fields as the free gas cap or as gas dissolved in the crude oil because of high pressure in the subsurface reservoir.[29] In many cases, associated gas does not have any commercial value due to its occurrence in small volumes and the high technological costs required to bring it to a marketable form; in such cases, depending on

[23] *Ibid.* at 68. There are several benchmark crude oil grades that serve as the reference for crude oil of similar qualities and locations. Most commonly used in the world trade are West Texas Intermediate (WTI), Brent (North Sea), Dubai (Middle East), Urals (ex-Soviet states), Tapis (Malaysia), Minas (Indonesia) and Bonny Light (Nigeria). The so-called "OPEC Basket" is made up of 11 crude oil grades: Saharan Blend (Algeria), Minas (Indonesia), Iran Heavy (Iran), Basra Light (Iraq), Kuwait Export (Kuwait), Es Sider (Libya), Bonny Light (Nigeria), Qatar Marine (Qatar), Arabian Light (Saudi Arabia), Murban (UAE) and BCF 17 (Venezuela).

[24] For further details see IEA, *Energy Statistics Manual, supra* note 20, at 72.

[25] Energy Charter Secretariat, *Putting a Price on Energy*, *supra* note 22, at 69.

[26] It is the total value of the products derivable from crude – gross product worth (GPW) – that determines the value of crude oil. Each grade of crude oil has its own property and generates different combinations of products, thus, from the refiner's perspectives, the value of crude oil differs from one grade to another. See Energy Charter Secretariat, *Putting a Price on Energy*, *supra* note 22, at 68. Besides varying gravity and other factors noted above, economists identify numerous other factors affecting the price of crude oil; see generally Bassam Fattouh, *The Dynamics of Crude Oil Price Differentials* (Oxford: Oxford Institute for Energy Studies, 2009).

Additional costs of transportation rise in some oil pipeline (mainly in ex-Soviet states) because of heating of high viscosity and paraffin oil to prevent its solidification during low external temperatures. See Energy Charter Secretariat, *From Wellhead to Market: Oil Pipeline Tariffs and Tariff Methodologies in Selected Energy Charter Member Countries* (Brussels: Energy Charter Secretariat, 2007) [hereinafter: Energy Charter Secretariat, *Oil Pipeline Tariffs*] at 35. High sulphur content of petroleum also increases its cost of production, transportation and refining because of technological and environmental regulations.

[27] Energy Charter Secretariat, *Putting a Price on Energy*, *supra* note 22, at 69.

[28] IEA, *Energy Statistics Manual, supra* note 20, at 55.

[29] Hyne, *supra* note 17, at 11.

regulatory and technological conditions, it is reinjected into the subsurface reservoir, burned away or used to operate equipment in the field (by burning it for heating systems or generating electricity to use within the oilfield area).[30] Natural gas is measured in volume units (cubic feet or cubic meter) or in energy density units (kilojoule or British thermal unit (BTU), or alternatively barrels/tonnes of oil equivalent) and, in the case of LNG, in weight units (metric tonnes).[31]

The distinct physical properties of oil and gas have effects on their markets and pricing mechanisms. Oil, because of its high energy density, transportability and storability, became a globally traded commodity.[32] The full range of market pricing mechanisms is used in oil trades. Rotterdam, New York and Singapore are the largest spot markets for oil,[33] and the New York Mercantile Exchange and the International Petroleum Exchange are the major markets for futures oil transactions.[34] Although most internationally traded oil is contracted at spot and future markets, long-term contracts and barter deals exist as well.[35] Due to all these features, the present day oil market has become a highly liquid global commodity market. The liquidity of the oil market, in addition to its positive effects, has some features that may have undesirable effects. For example, the liquidity of the oil market means that a major disruption in oil supply, whether caused by OPEC states or a large individual producer, such as Russia or Saudi Arabia, will have global effects. Moreover, as oil becomes a global commodity, investment in it may provide opportunities for hedging against currency depreciation or speculation, which may artificially increase demand for oil and raise its prices.[36]

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[30] *Ibid*. at 426.

[31] One BTU is about the amount of heat given off by burning one wooden match and is almost equal to 1 kilojoule. See Hyne, *supra* note 17, at 13. Energy density is also called a "heat content" measure or a calorific value; the former prevails in Continental European usage with joules used as unit measures, the latter is used mostly in ex-British colonies and commonly valued in BTU. See also IEA, *Energy Statistics Manual, supra* note 20, at 19.

[32] Energy Charter Secretariat, *Putting a Price on Energy, supra* note 22, at 65.

[33] *Ibid.*

[34] *Ibid*.

[35] *Ibid*.

[36] For example, the U.S. mortgage market crisis boosted oil prices at the beginning of 2008, but since oil has been more expensive in storage and is supplied over time comparing to other investment alternatives such as precious metals, the prices went down as soon as the oil market was overbought. See "Oil Prices in Retreat from Record", *BBC News*, 17 March 2008, online: BBC <http://news.bbc.co.uk/2/hi/business/7300204.stm> accessed on 1 May 2012; or: "Oil Prices Rising due to Speculation – OPEC Resident", *Reuters News*, 16 March 2008, online: Reuters

In contrast to oil, natural gas has developed into a liquid commodity market only at regional levels: in North America, Western Europe, and South-East Asia.[37] The difference between the features of the market for oil and the market for natural gas are caused by the fact that the energy density of gas is lower, which increases its transportation and storage costs.[38] Although a considerable part of natural gas is traded in the form of LNG, the gas market is essentially tied to the pipeline infrastructure. As a result, long-term contracts are customarily used in the gas market with some exceptions, notably in the markets of North America, Western Europe, and South-East Asia, where gas is traded under short-term contracts. The price for natural gas in long-term contracts is usually linked to the price of crude oil or oil products.[39] Hence, save for short-term fluctuations, the dynamics of the oil market dictate the changes in the gas market.

Both oil and gas are important sources of energy and accounted for 32.8% and 20.9% of the world total primary energy supply respectively in 2009.[40] Of all electricity generated in the world in 2009, 21.4% was fueled by natural gas and 5.1% by oil.[41] The transport sector consumes a large majority of the oil and a small part of the gas produced in the world.[42] Enormous volumes of oil and gas are used for industrial and household heating purposes during cold seasons. Apart from energy uses, there are many non-energy uses of petroleum. Several industries, such as the construction, agriculture, textile, pharmaceutical, automobile, and chemical industries, use oil and gas products in the manufacturing of plastics, synthetic fibres and rubbers, fertilisers, pesticides, lubricants, detergents, solvents, and so on. Figures 1 and 2

Group Plc. < http://www.reuters.com/article/bondsNews/idUSL1656650020080316> accessed on 1 May 2012; and "Amaranth Trader Given $30m Fine for Market Manipulation", *BBC News*, 21 April 2011, online: BBC <http://www.bbc.co.uk/news/business-13166033> accessed on 1 May 2012.

[37] Energy Charter Secretariat, *Putting a Price on Energy, supra* note 22, at 99.

[38] *Ibid*.

[39] *Ibid*.

[40] IEA, *Key World Energy Statistics 2011*, online: IEA <www.iea.org> accessed on 1 May 2012 [hereinafter: IEA, *Key World Energy Statistics 2011*] at 6.

[41] The rest being originated from power plants using coal (40.6%), hydro (16.2%), nuclear (13.4%), and other (3.3%) resources. See *ibid.* at 24.

[42] 61.7% of oil and 5.5% of natural gas produced in the world in 2009 were consumed as transport fuel. *Ibid*. at 33-34.

below illustrate oil and gas flows through the supply chain from indigenous production to final consumption.

Figure 1: Simplified flow chart for oil[43]

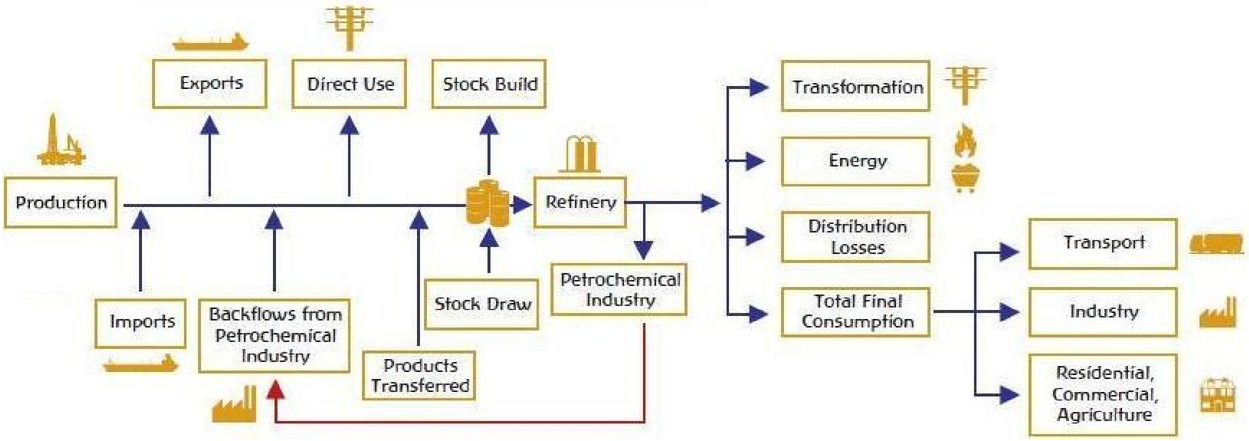
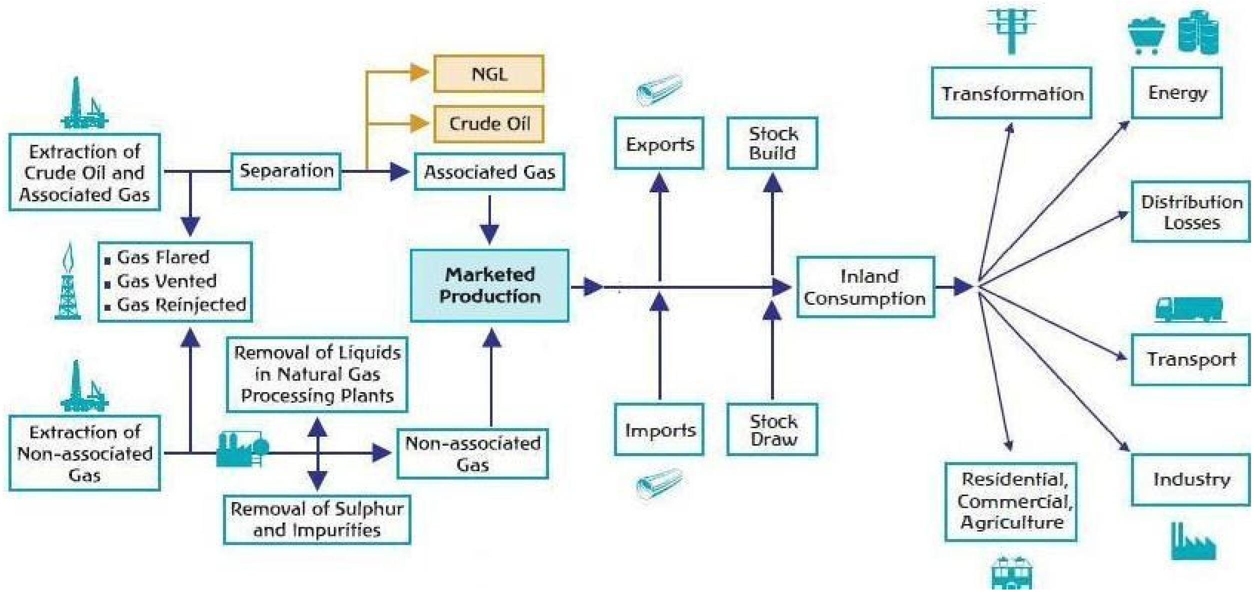


Figure 2: Simplified flow chart for natural gas[44]



Since the establishment of Standard Oil in the 1870s, petroleum companies have sought to acquire control over each stage of the petroleum supply chain.[45] Such control, on the one hand, allows them to realize maximum returns from the value chain and, on the other hand,

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[43] Adapted from IEA, *Energy Statistics Manual, supra* note 20, at 76 & 85.
[44] Adapted from IEA, *Energy Statistics Manual, supra* note 20, at 58 & 61.
[45] The growth of Standard Oil started with the consolidation of refineries. After such a horizontal integration it acquired control over distribution, transportation, and production, becoming the first fully integrated petroleum company in the history of the industry. See Yergin, *supra* note 8, at 40-55.

secures the stability of the petroleum supply. As a result, vertical integration became a standard pattern of business in the petroleum industry well before the conclusion of the GATT 1947.[46]

It must be noted that when the GATT 1947 was negotiated, many current oil exporting states were the colonies of a few European states whose highly integrated petroleum corporations, which we now call international oil and gas companies (IOCs), controlled the entire oil and gas production chain of literally all current WTO Members.[47] After gaining independence, most of the petroleum producing countries established their own national oil and gas companies (NOCs), pushing IOCs out of the domestic industry in whole or at least in part.[48] It has been stated that full IOC access to reserves crashed from 85% of the world total in 1970 to just 7% in 2007, with the rest now in the hands of NOCs and Russian companies.[49] However, the newly-formed NOCs did not possess the capital, equipment, technology and qualified personnel necessary to operate exploration and production (E&P) at a level comparable with IOCs. Therefore, the NOCs had to either co-operate with IOCs or hire contractors who provided all of the services necessary for E&P. Moreover, traditional concession agreements used before the 1950s were reconsidered to increase the stake of sovereign states in the revenue earnings. New arrangements, such as production-sharing agreements, joint-ventures and service contracts, gradually diminished the role of IOCs in the upstream industry and led to the increased participation of independent service contractors. Furthermore, large petroleum importing states, such as China and India, established their own NOCs that had to procure access to foreign petroleum reserves, thereby strengthening the stability of energy supply for their home markets.

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[46] By the 1940s most of the world petroleum industry was controlled by seven companies: Esso, Gulf, Texaco, Chevron, Mobil, Shell and BP. These, so called "Seven Sisters" dominated the industry until the 1970s. See generally, Anthony Sampson, *The Seven Sisters: The Great Oil Companies and the World They Shaped*, (New York, Viking Press, 1975), and Yergin, *supra* note 8.

[47] The USSR was not a party to the GATT and none of the CIS net petroleum exporting states are members of the WTO yet; however, all of them are in the process of accession to the WTO.

[48] There are certain problems with differentiating IOC from NOC: because the latter may be privatized or partially privatized, the NOCs may carry government functions in the national petroleum industry or operate without regulatory power. Italian ENI and French Total used to be NOCs, whereas Norwegian Statoil, Russian Gazprom and Brazilian PETROBRAS, which are partially privatized, are still regarded as NOCs. Moreover, current trends show that NOCs are expanding globally and such companies as Saudi Aramco, Gazprom, PETROBRAS, CNPC compete with IOCs well beyond the borders of their respective states.

[49] Peter Kemp, "The Future of the Majors" (2008) Vol. XIX (9) *Energy Compass* at 5.

Due to the uneven distribution of the petroleum reserves in the world, the NOCs, IOCs, and independent service contractors have highly interrelated but frequently competing interests in the international trade arena. The producer states' NOCs need access to consumer markets, IOCs and the consumer states' NOCs require access to reserves, and independent service contractors seek customers for their services. Access to foreign markets and reserves is frequently impeded by trade and non-trade barriers, which cannot be easily surmounted without governmental support. Thus, NOCs, IOCs, and independent service contractors have become powerful special interest groups influencing the international trade policies of their governments.

However, there are numerous other special interest groups capable of affecting the trade and energy policies of governments, regardless of whether the state is an exporter or importer of petroleum. The most powerful (when well-organized) special interest group is the general population of a state, which is both the ultimate owner and consumer of energy resources. Whether through voting, mass protests or revolutions, the population may change any decision of its government and surpass any other special interest group. Another group comprises non-governmental, especially environmental, organizations. This special interest group is well organized on both local and international levels; therefore, it is able to exercise pressure not only over the host government but also over foreign governments and international organizations as well. Indigenous people, certain tribes and ethnic groups are also considered as special interest groups in many petroleum producing states. Although activities of such groups are essentially local, their concerns are similar across the globe – preservation of the environment and fair attribution of economic wealth realized from natural resources of their lands. Finally, a powerful special interest group may be formed by various stakeholders associated with other industries, such as transport and agriculture, which use petroleum resources as economic inputs in the production of non-petroleum goods and services. In fact, depending on the diversity of their views, these stakeholders may represent a number of individual special interest groups.

Bearing this essential information in mind, we now turn to the conceptual framework of the thesis, which describes the economic, political and institutional issues that shape our discussion of the trade measures and industry practices relevant to international trade in petroleum in the light of WTO law.

CHAPTER I. CONCEPTUAL FRAMEWORK: ECONOMIC, POLITICAL AND INSTITUTIONAL ASPECTS

"[t]*he ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas… soon or late, it is ideas, not vested interests, which are dangerous for good or evil.*" John Maynard Keynes[50]

"[t]*he Stone Age did not end for lack of stone, and the Oil Age will end long before the world runs out of oil.*" Sheikh Zaki Yamani[51]

"[t]*he time of absolute and exclusive sovereignty… has passed; its theory was never matched by reality. It is the task of leaders of States today to understand this and to find a balance between the needs of good internal governance and the requirements of an ever more interdependent world.*" Boutros Boutros-Ghali[52]

"[t]*he political problem of mankind is to combine three things: economic efficiency, social justice and individual liberty.*" John Maynard Keynes[53]

1.1. Introduction

This chapter establishes a map for all subsequent chapters and can be viewed as a jigsaw puzzle composed of economic, political, institutional, and legal pieces. To assist the reader in getting a sense of the puzzle, I briefly preview the content of each piece herein.

The first section of this chapter describes a basic model employed in natural resource economics: Hotelling's rule. On the basis of Hotelling's rule, I propose a model that could reconcile petroleum and renewable energy resources in the management of long-term energy consumption, which should allow for fairer inter-generational allocation of petroleum reserves. The second part of the first section discusses international trade theories, on the premise of

[50] John Maynard Keynes, *The General Theory of Employment, Interest, and Money* (London: Macmillan, 1939) at 383.

[51] Sheikh Zaki Yamani (formerly Saudi Arabian Oil Minister) as quoted in "The end of the Oil Age" *The Economist*, 23 October 2003, online: The Economist <http://www.economist.com/node/2155717> accessed on 1 May 2012.

[52] Boutros Boutros-Ghali, *An Agenda for Peace. Preventive diplomacy, peacemaking and peace-keeping* (New York: United Nations, 1992), para. 17. online: United Nations < http://www.un.org/Docs/SG/agpeace.html > accessed on 1 May 2012.

[53] John Maynard Keynes, *The Collected Writings of John Maynard Keynes*, vol. 9: Essays in Persuasion (London: Macmillan, 1971) at 311.

which I build my analysis of the regulation of trade in petroleum under WTO rules, and serves as the connection between trade theories and energy resource economics. It will be argued that the normative context of the WTO system, which has for several decades been informed by neo-classical trade theory, must be reconsidered to accommodate the strategic trade policy/theory.

The legal piece of the puzzle is provided in the second section of Chapter I, which has two main objectives. The first objective is to establish that the purpose of the WTO system is not confined to the international exchange of goods and services or the realization of economic benefits from such an exchange, and that the WTO is an active participant capable of shaping the future of the multilateral trade regime. On the basis of an analysis of the purpose of the multilateral trading system reflected in the preambles of the GATT 1947 and the Agreement Establishing the WTO, it will be argued that the purpose set out in the latter can be viewed as the purpose of both the multilateral trading system and the international organization. It will be shown (and further elaborated upon in the fourth section) that the WTO as an international organization is entrusted with the task of implementing and furthering the objectives of the multilateral trading system. The other objective of the second section is to establish a methodology to be applied in the interpretation of WTO rules in the subsequent chapters, and to indicate how the object and purposes set in out the Agreement Establishing the WTO influence the interpretation of WTO legal provisions.

The third section introduces the political problem of maintaining the balance between state sovereignty and international trade co-operation. It shows that as long as the balance is properly maintained for each WTO member state, the multilateral trading system will succeed. Based on a review of the factual and procedural aspects of the process of accession to the WTO, I argue that in post-1995 accessions to the WTO, the principle of sovereign equality of states is impaired in a way which can destroy the delicate but necessary balance. I suggest that the WTO, as an organization responsible for furthering the objectives of the multilateral trading system, should deal cautiously with accession procedures and the corresponding special obligations of newly acceded member states.

In the fourth section, drawing on the regime management model of international relations theory I describe the institutional role of the WTO in maintaining and furthering the multilateral trade regime. Firstly, I will elaborate that apart from the authority formally vested in the WTO by legal rules, certain features of the institutional design of the multilateral trade regime also contribute to the power and/or autonomy of the international organization. The authority of the WTO inversely correlates with the sovereignty of its member states and therefore affects the balance described in the preceding section. I will argue that the proper use of authority will strengthen the trade regime whereas improper use may destroy it. Secondly, it will be shown that the multilateral trade regime is evolving dynamically and that interpretative activity of the WTO (by its Secretariat, panels, Appellate body or other organs) not only represents interim solutions for problems between the periodic rounds of negotiations of member states, but is also capable of influencing such negotiations, thereby shaping the future of the regime. Trade in energy has distinct features whereas WTO rules are by and large of general application. Thus, the interpretative activity of WTO organs will inevitably affect the future negotiations on trade in energy, whether positively or negatively.

1.2. Energy resource economics and trade theories

1.2.1. Energy resource economics

Basically, there are three main types of commodities traded in the global market: manufactured goods, agricultural goods and natural resources. Although commodities of each of the three types can be used as inputs in the production of other goods (milk for milk products, machinery for production of other manufactured goods, oil for oil products), only natural resources are universally regarded as an economic factor of production along with land, capital, labor, and R&D (including technology and/or know-how and/or entrepreneurial ability).[54] The use of natural resources as factors of production underlines their importance over manufactured and agricultural goods. In addition to this, there are other important specific features of natural resources. Natural resources can be exhaustible or renewable.[55] Some materials made of natural resources may be recyclable. Moreover, different materials made of natural resources have varying terms of durability, ranging from weeks to centuries.

Some petroleum-based materials are recyclable (lubricants, plastics, synthetic rubber). However, petroleum is mostly used in the production of energy, where it is irreversibly consumed. Consumption of petroleum directly correlates with economic and demographic growth. While the global economy may experience growth and decline, the world population has been continuously growing. The rapid growth of the world population after World War II resulted in an estimated population of 6.1 billion in the year 2000, nearly two-and-a-half times the population in 1950.[56] It has increased by about 1 billion within the last decade, surpassing 7 billion in 2011.[57]

Oil and gas are exhaustible natural resources. The world's petroleum resources, whether conventional or unconventional, are finite. However, the modern debate is not about "running out" of petroleum but about the "peaking" of petroleum production, which is the date beyond which production can no longer be increased. The concept of "peak oil" was introduced by M. King Hubbert in 1956.[58] He rightly predicted "peaking oil" in the U.S. industry between 1965

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[54] Machinery is sometimes (especially in older economic studies) also regarded as a factor of production; however, I think that in modern economics it should be considered as a derivative rather than an independent factor of production because it can be acquired by capital or created using the aforementioned factors of production.

[55] Even renewable resources may exhaust if overexploited, e.g. water, forestry and fishery.

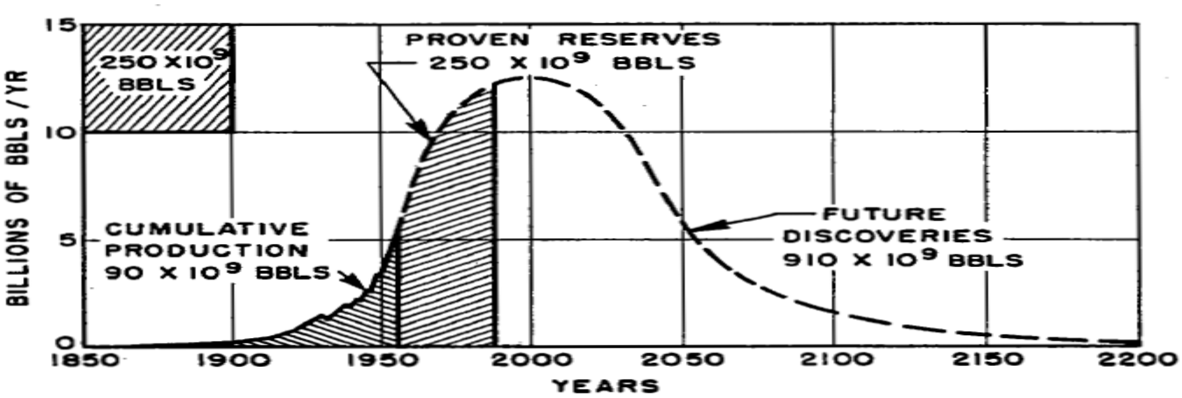
[56] Information and External Relations Division of the United Nations Population Fund, *The State of World Population 2011*, online: UNFPA < www.unfpa.org/public/home/news/events/pid/7266 > accessed on 1 May 2012, at 2.

[57] *Ibid*.

[58] Marion King Hubbert, "Nuclear Energy and the Fossil Fuels 'Drilling and Production Practice'". A Paper presented before the Spring Meeting of the Southern District Division of Production, American Petroleum Institute. San Antonio, Texas: Shell Development Company; online <http://www.hubbertpeak.com/hubbert/1956/1956.pdf> accessed on 1 May 2012.

and 1970.[59] In the same work he predicted "peaking" of the world's oil production in 2000. Figure 3 presents the original Hubbert's curve for world oil production:

Figure 3: Hubbert's curve[60]



According to the IEA's estimates of 2010, the all-time peak of world conventional oil production, about 70 mb/d, was nominally reached in 2006,[61] which was quite close to Hubbert's estimates. However, the post-2006 decline in world conventional oil production was primarily attributable to a decrease in energy consumption as the result of the global economic downturn which began in 2008. Apart from declines in economic growth, other factors may postpone the peaking of world oil. For instance, improvements in the efficiency of using existing and future conventional oil deposits, development of unconventional sources of oil (oil and tar sands, heavy oil and shale oil) and alternative energy resources. Each of these factors almost entirely depends on the development of technology.[62] Nevertheless, there is little doubt that the peak will be reached; the real question is: when?

Every country realizes the exhaustibility of its natural resources. The extraction and consumption of natural resources today irreversibly alters the extraction and consumption possibilities of future generations, and every country is concerned, at least in theory, with

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[59] Adam Brandt "Testing Hubbert" (2007) 35.*Energy Policy,* 3074 at 3076.
[60] Hubbert, *supra* note 58, at 22.
[61] IEA, *World Energy Outlook 2010* (Paris: IEA, 2010) at 125.
[62] The world's unconventional petroleum resources are several times larger than its conventional petroleum resources. However, the cost of production of the unconventional resources is higher, and the associated CO2 emissions are larger than in the case of conventional petroleum resources (see *ibid.* at 144). Development of unconventional resources is highly dependent upon technological advancements, local environmental regulations and international climate policies. The IEA suggests that if governments adhere to their climate policy commitments, then the crude oil production probably peaked in 2006 (*ibid.* at 126).

maximization of the welfare of both current and future generations. In his seminal paper "The Economics of Exhaustible Resources",[63] Harold Hotelling offered a framework for the socially optimal extraction of natural resources, which is now known as Hotelling's rule. According to this rule, the social optimum is achieved when the price of the resource net of extraction costs grows at a rate equal to the rate of interest.[64] In other words, the net present value of natural resources is equal in present and future periods, so that there is no preference for a resource owner whether to extract now or in the future. Although Hotelling's rule has a number of limitations,[65] it provides a good theoretical basis for the development of prospective models on the optimal use of natural resources.

The interest rate in Hotelling's model may be interpreted as an opportunity cost. Thus, most of the cost-benefit analyses for investments are made in comparison with yields attainable from relatively risk-free state treasury notes.[66] Alternatively, the profitability of investments in one enterprise may be compared with returns on investments in other enterprises. Considering the energy sector, in certain cases when non-renewable resource may be substituted by renewable resource, investment in the former represents an opportunity cost for investment in the latter. Consequently, as long as the development of non-renewable resources is less cost-intensive than the development of renewable resources, the latter would receive less investment than the former.

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[63] Harold Hotelling "The Economics of Exhaustible Resources" (1931) 39 Journal of Political Economy 137.

[64] WTO, *World Trade Report 2010. Trade in Natural Resources*, online: the WTO <www.wto.org> accessed on 1 May 2012 [hereinafter: WTO, *World Trade Report 2010*] at 75.

[65] Economists often criticize the "price" side of Hotelling's rule saying that the rule:

> does not take into account other important factors influencing price trends, such as the fact that the market structure of non-renewable resource sectors is better characterized as imperfect (such as monopoly or oligopolistic producers) rather than perfect competition, that on-going technological changes affect incentives to extract resources, that extraction costs tend to increase over time (e.g. digging deeper mines) and that uncertainty regarding future supply and demand affects decisions.

See WTO, *World Trade Report 2010*, at 75. In addition, it may be stated that Hotelling's rule ignores demographic changes. In countries with high population growth future generations under Hotelling's optimum would get less benefit than the present generation. In contrast, in states where the fertility rate is below the level necessary for the reproduction of population, the future generations are supposed to enjoy more benefits from the natural resources than the present generation, if the natural resources are available at that time.

[66] For example, Gerard Gaudet states: "in order for the asset markets to be in equilibrium, this rate of return must be equal to the rate of return that can be expected by its owners if they were to sell the marginal unit and invest the proceeds elsewhere. I will assume for now that the alternative is a 'bond' that yields an exogenously given riskless rate of return and will call it the 'rate of interest'." See Gerard Gaudet, "Natural Resource Economics under the Rule of Hotelling" (2007) 40 The Canadian Journal of Economics, 1033 at 1036

Although it is difficult to find renewable substitutes for some non-renewable resources, for others it is possible. Perhaps it is impossible to find a perfect substitute for petroleum given the diversity of its uses, but it may be possible to find different substitutes for a majority of its discrete uses, for example, by substituting gasoline and bioethanol, diesel and biodiesel. Prospectively, petroleum fuel can be compared with hydrogen fuel and other alternative energy sources. Instead of juxtaposing commodities at the input level, a more promising perspective would be comparing the results of their use at the output level; for example, the cost of electricity generated by burning oil or gas can be compared with the cost of electricity generated by wind power, solar energy, etc. Thus, in the case of energy production, we can modify Hotelling's rule to state that **the social optimum is achieved when the cost of energy generated from the non-renewable resource is equal to the cost of energy generated from the alternative renewable resource**.[67]

While Hotelling's original rule is price-based and therefore revenue-oriented, the modified rule is cost-based and is rather oriented towards a consideration of the stable supply of energy. Hence, the new rule proposed here is an instrument for a social planner rather than for a profit-seeking oilman. In effect petroleum will be gradually replaced by renewable sources of energy in the transport and electricity sectors, and later in some sectors of the petrochemical industry. The modified rule is limited to natural resources used as inputs in the production of energy. Subject to technological developments it can be applied to other exhaustible resources for which renewable natural of artificial substitute may be economically viable.

The modified rule employs a single factor (the cost of energy) rather than two different factors (price and interest rate) whose dynamics are affected by different variables. It assumes competition among several sectors which produce energy from different renewable and non-renewable resources. Hence, the limitations of Hotelling's original rule, such as imperfect competition, on-going technological changes, increasing extraction costs and asymmetric

[67] The cost of energy should be interpreted as a social cost, inclusive of any external costs generated by the setting up, extraction and transportation of resources, production of energy, its transmission, and curing the related pollution.

information about future supply and demand become less important in the determination of the socially optimal extraction of natural resources.

If the suggested modification to Hotelling's rule is correct, then it is important for society to decrease the price of renewable substitutes to the level of petroleum prices so that the cost of energy production becomes equal in both inputs.[68] The sooner it happens, the longer petroleum would be available. In terms of Hubbert's curve (given the same amount of world oil reserves and assuming peaking of production at the time of writing), the period of oil availability may increase for centuries, making more oil available for future generations.

The early convergence of input costs affects the sustainability of world development not only because it would lead to the longer availability of petroleum, but also because the sooner it is replaced in the transport and electricity sectors, the cleaner the environment will become.[69] The convergence of petroleum and alternative energy resource prices may be facilitated through regulatory measures and investment incentives. International trade plays a crucial role in such convergence of prices by optimizing the allocation of resources across countries. However, the theoretical basis and institutional design of the multilateral trading system may have detrimental effects on the process of such a convergence of prices, and thus for the socially optimal use of non-renewable resources and the sustainability of world development.

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[68] It is true that coal, as the cheapest and most widely available source of energy, may prevent the replacement of petroleum by renewable sources in the production of energy. However, when the social costs of energy produced by coal account for environmental costs associated with CO2 emissions, coal is likely to become one of the most expensive inputs. See William Blyth "How Do Emerging Carbon Markets Influence Energy Sector Instruments?" in Andreas Goldthau & Jan Martin Witte, eds. *Global Energy Governance: The New Rules of the Game* (Washington DC: Brookings Press, 2010) at 134. Similarly, nuclear energy production potentially bears high environmental costs.

[69] Here and throughout this work I use the definition for the term "sustainable development" provided by the World Commission on Environment and Development:

> Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:
> - the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
> - the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

See Report of the World Commission on Environment and Development "Our Common Future" online: the UN <http://www.un-documents.net/ocf-02.htm> accessed on 1 May 2012.

1.2.2. Theories of international trade

Trade is an exchange of one utility for another utility of higher value. Through this exchange individuals increase their well-being, in the material sense, mental sense, or both. If the receiving utility has a value (whether tangible or intangible) equal or lower than the conveying utility, no exchange will occur. So, trade is not conducted for the sake of trading, but to increase well-being. In other words, trade is a means for achieving an objective.

Similar to individuals, states engage in international trade to maximize their welfare. Economists have put much effort into explaining the causes and patterns of international trade, and as a result a number of trade theories have been developed.[70] The effect of economic thought on the modern world trade system should not be underestimated. In fact, "for good or evil", it is trade theories that lay the normative basis of international trade law.

In this section, I introduce the basic theories of trade through which I will analyze trade in petroleum goods in this work. I limit the theoretical base for this work to the classical, neoclassical and STP theories, because the former two were most influential in shaping the modern world trade system whereas the latter, I believe, will gather momentum in the near future.

A. Classical theory of trade

The classical theory of trade emerged in the late 18th century in response to the ideas of mercantilists. Mercantilists held that to maximize welfare, a state should export commodities to earn gold but should restrict imports in order to prevent outflows of gold from the country.[71] The founder of classical trade theory, Adam Smith, argued that due to differences in productivity of labor across countries, instead of protecting domestic markets, each state should specialize in the

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[70] For descriptions of trade theories see, for example, WTO, *World Trade Report 2008. Trade in a Globalizing World*, online: the WTO <www.wto.org> accessed on 1 May 2012 [hereinafter: WTO, *World Trade Report 2008*] at 57-64; Mordechai Kreinin & Michael Plummer, "Economic Principles of International Trade" in Patrick Macrory, Arthur Appleton & Michael Plummer, eds. *The World Trade Organization: Legal, Economic and Political Analysis. Volume I.* (New York: Springer, 2005); Sunanda Sen "International Trade Theory and Policy: What Is Left of the Free Trade Paradigm?" (2005) 36(6) *Development and Change* 1011.

[71] Nigel Grimwade, *International Trade. New Patterns of Trade, Production and Investment*, 2nd ed. (London: Routledge, 2000) at 30.

export of goods which it can produce more cost-efficiently than other states (absolute cost advantage).[72]

On the basis of Adam Smith's theory of absolute cost advantage, David Ricardo developed the theory of comparative advantage. According to Ricardo, if a country enjoys an absolute advantage in the production of several goods over another country, it is still beneficial to concentrate on the export of goods which it produces more cost efficiently compared to the production of other goods it exports.[73] The logic behind comparative advantage is grounded in the concept of opportunity cost. Opportunity cost can be explained as the revenue foregone as a result of producing one product instead of increasing production of another more cost-efficient product. For example, if a farmer spends one labor-hour to produce milk and two labor-hours to produce apple juice, then the opportunity cost of making apple juice is twice as high as the production of milk. In this scenario, other things (including prices and consumer preferences) being equal, the farmer will earn higher revenue if he specializes in the production of milk.

The classical trade theory of Adam Smith and David Ricardo assumes that labor is the only input in the production, markets are perfectly competitive, there are no trade costs, returns to scale are constant, endowments are fixed and factors of production are internationally immobile.[74] Hence under the classical theory of trade, since markets are perfectly competitive, import restrictions only cause harm to trade flows and therefore reduce the welfare of states.

B. Neoclassical theory of trade

In the early 20th century two economists, Eli Heckscher and Bertil Ohlin, independently enhanced the classical model of trade with different inputs, the factors of production.[75] The Heckscher-Ohlin model is built on the premise that countries are differently endowed with factors of production, and therefore the cost of producing the same commodity differs across

[72] *Ibid*.
[73] *Ibid*. at 32.
[74] WTO, *World Trade Report 2008, supra* note 70, at 26.
[75] Steven Husted & Michael Melvin, *International Economics,* 6th ed. (Boston: Perason, 2004) at 86.

countries.[76] The Heckscher-Ohlin model, which became known as the neoclassical theory of trade, states that "a country will have comparative advantage in, and therefore will export, that good whose production is relatively intensive in the factor with which that country is relatively well endowed".[77] In other words, a country with a relatively abundant labor force should specialize in labor-intensive products, whereas countries with abundant capital should export capital-intensive goods. By the same token, if a country has a comparative advantage in natural resources it should specialize in the export of those natural resources.

The neoclassical theory assumes that there are two countries, two goods and two factors of production. It also assumes that factor endowments differ and that factors are mobile between industries but not between countries.[78] Like the classical theory, the neoclassical theory assumes that markets are perfectly competitive (for both products and factors of productions), that technologies and tastes are identical across countries, that no trade costs and no externalities exist, and that returns to scale are constant.[79]

Both classical and neoclassical trade theories assume that markets are competitive. On the basis of this assumption, due to international trade, the goods (in both theories) and factors of production (in neoclassical theory) are allocated optimally. Hence, any interference by a government with trade inevitably distorts an optimal allocation of resources.[80]

C. Strategic trade policy theory

Strategic trade policy theory (STP) was developed in the 1980s.[81] Since then it has had a significant influence on international economic scholarship and trade politics. Today STP is widely regarded as the new trade theory.[82]

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[76] *Ibid*.
[77] *Ibid*. at 88.
[78] *Ibid*. at 87-94.
[79] WTO, *World Trade Report 2008, supra* note 70, at 32-33.
[80] Nigel Grimwade, *supra* note 71, at 304.
[81] Sonali Deraniyagala & Ben Fine, "New Trade Theory Versus Old Trade Policy: A Continuing Enigma" (2001) 25 Cambridge Journal of Economics 809 at 812.
[82] See WTO, *World Trade Report 2008, supra* note 70, at 40.

Although critics of STP regard it as a protectionist theory, in fact STP was developed on the basis of neoclassical theory and favors free trade in the same way. However, STP recognizes that since certain assumptions of the neoclassical trade theory do not always hold true in the real world, the optimal allocation of resources may not occur. In such cases state intervention may be justified under STP theory.

The main advantage of STP is that it is more practicable in real world markets. It recognizes that markets are not always competitive, that returns to scale are rather increasing, and that externalities do exist, all of which is ignored in neoclassical trade theory. According to STP, governmental intervention may correct market failure in a single domestic market, which may produce zero-sum or positive effect on global welfare.[83] However, any such intervention must be applied cautiously because if a market failure is not correctly identified and/or assessed, the intervention may produce negative effects on both domestic and global welfare. By the same token, a wrong choice of an economic tool to cure the market failure may lead to undesirable consequences. In order to apply market intervention a government has to cautiously identify the source of market failure, measure the extent to which it should be corrected, and choose the right economic tool for intervention. STP admits that it is very difficult to meet all these conditions; therefore, any intervention is only the second-best solution when the first-best – the "invisible hand of market" – does not produce positive results.

1.2.3. Interplay between the energy resource economics and trade theories

It is widely acknowledged that the normative ideology of the WTO trading system is based on the neoclassical trade theory;[84] however, real world markets are far from being

[83] State intervention to guide foreign trade is called trade policy. Hence, the use of state intervention in markets is embodied in the name of the theory – strategic trade policy. See Jeffrey Hart & Aseem Prakash "Strategic Trade and Investment Policies: Implications for the Study of International Political Economy" (1997) 20 *The World Economy* 457 at 457.

[84] See, for example, Mordechai Kreinin & Michael Plummer, "Economic Principles of International Trade" in Patrick Macrory, Arthur Appleton & Michael Plummer, eds. *The World Trade Organization: Legal, Economic and Political Analysis. Volume I.* (New York: Springer, 2005) at 4. Gunnar Sjöstedt, "Norms and Principles as Support to Postnegotiation and Rule Implementation" in B.I. Spector & I.W. Zartman eds. *Getting It Done: Post-Agreement Negotiation and International Regimes* (Washington D.C.: United States Institute of Peace Press, 2003) at 95.

perfectly competitive.[85] The STP makes a number of useful adjustments to the neoclassical theory which adapt it to the real world.[86] Although the STP is based on the neoclassical theory, its basic instrument – state intervention – contradicts the spirit of the WTO system (with a few exceptions)[87] even though such intervention may under certain circumstances facilitate the achievement of the objectives declared in the preamble to the Agreement Establishing the WTO. Thus, it can be argued that the prejudice established in the normative framework of the WTO towards state intervention should be reconsidered in line with STP so as to allow state intervention if it produces zero-sum or positive effect to the global welfare.

For example, state intervention may be allowed to help least-developed countries to create comparative advantages before their economies become exhausted. The neoclassical trade theory fails to explain how countries abundant in exhaustible natural resources may maintain their comparative advantage while specializing in export of the exhaustible resources. A country having such a comparative advantage has to solve the dilemma of maintaining its comparative advantage by restraining exports or earning money by exporting its resources, thereby reducing its comparative advantage. Since the comparative advantage will diminish as a function of the increase in exports of exhaustible resources, the country has to develop another comparative advantage before its natural resources are exhausted. In such a case, state intervention may become necessary; however, as has been stated above, such intervention is against the paradigms of the neoclassical theory and is therefore not allowed. The problem is that if that country's comparative advantage exhausts, then the global community would experience a zero sum effect,

[85] In fact, some ideas close to the STP theory were present in GATT 1947. For example: balance of payment provision of Art. XII, emergency actions on import of particular products under Art. XIX, exceptions due to local shortage of supply of goods of Art. XX, governmental assistance to economic development in Art. XVIII. The presence of STP-type ideas in the GATT 1947 is not surprising because economic thought in that period was heavily influenced by Keynesian theory, which favors government intervention in domestic markets. Moreover, according to one author, Keynesian economists dominated in the ITO negotiations in the mid-1940s. See Dongsheng Zang "Textualism in GATT/WTO Jurisprudence: Lessons for the Constitutionalization Debate" (2005-2006) 33 Syracuse J. Int'l L. & Com. 393 at 417.
[86] The STP also has a number of limitations. See Sonali Deraniyagala & Ben Fine, *supra* note 81, who provide an excellent critical survey of articles on both neoclassical trade theory and the STP.
[87] State intervention that is allowed under WTO rules does not aim to cure a market failure; rather, it is allowed with respect to public policy matters as in the case of GATT Article XX and XXI exceptions, or in response to non-market behavior of other states as in the case of antidumping and countervailing measures.

because the benefits from trade with that country are discontinued, or, more likely, the global welfare would experience a negative effect due to social, political and economic instability in that country, which may affect the neighboring states.

If the above example is transposed to international trade in petroleum, the problem would be faced by both exporting and importing states. The issue of lessening dependence on petroleum through diversification is equally important for both the producer and consumer states. For producer states it is important to decrease their dependence on export proceeds. The less dependent these states become on export proceeds the less they will be interested in higher world prices for energy resources, and the less stimulus would they have to affect the prices. For consumer states it is important to decrease their dependence on imports through diversification of energy inputs. The less petroleum is demanded the less the world prices for energy resources are. On both consumers' and producers' sides this dependence can be decreased through government intervention to the market, and such intervention would likely be beneficial to the global welfare.

Another example is telling. In the preceding section it was stated that the convergence of the prices of petroleum and alternative energy resources may be facilitated by state intervention in the market through regulatory measures and investment incentives. If the world trade system is based exclusively on the neoclassical trade theory, then such intervention is prohibited and the society must wait until petroleum prices rise to the level when return on investment in the development of renewable energy resources becomes high enough to make their production economically feasible. This is the base scenario. In contrast, if STP is applied, then investment incentives and regulatory measures assisting the development of renewable energy can ensure that due to increasing returns to scale such development becomes economically viable well before the date assumed by the base scenario, thereby saving more petroleum, making the environment cleaner and world development more sustainable.[88]

[88] The 2008 world financial crisis demonstrated that the renewable energy sector is more vulnerable to market fluctuations than any other sector of the energy industry. In a recent study, Huntington and Jojarth observed that

1.3. The purpose of the WTO and the interpretation of WTO Agreements

1.3.1. The purpose of the WTO

Nowadays, we are rarely reminded of the fact that the multilateral trading system emerged, at least in part, in response to the World Wars, the Great Depression, and fascism.[89] Cordel Hull, one of the ideological founders of the contemporary world trade system, firmly believed that "enduring peace and the welfare of nations are indissolubly connected with friendliness, fairness, equality and the maximum practicable degree of freedom in international trade."[90] Well before Cordel Hull, a number of great philosophers, including Montesquieu, Kant, and Mill, believed that international trade ensures peace among nations.[91]

When the GATT was negotiated in 1947, its purpose was not restricted to the elimination of trade barriers. In fact, its preamble sets multiple objectives, the accomplishment of which was envisaged through trade liberalization. The GATT 1947 preamble states, *inter alia*:

> Recognizing that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, developing *the full use of the resources of the world* and expanding the production and *exchange of goods*,

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between 2004 and 2008, investment into renewable energy plummeted sevenfold while the market capitalization of renewable energy companies more than doubled. However, in the fall of 2008 the renewable energy sector was the first to experience the adverse effects of the 2008 financial crisis. Investments into the sector were cut severely, market capitalization of renewable energy companies collapsed, and many companies went bankrupt. Huntington and Jojarth argue that governments have to support the renewable energy sector because such support "can be justified on the grounds both of the negative spillover effects of dependence on fossil fuels and of the positive knowledge externalities associated with investments in the research and development of alternative energy". Hillard Huntington & Christine Jojarth "Financing the Future: Investments in Alternative Sources of Energy" in Goldthau & Witte, *supra* note 68, at 162.

[89] Douglas Irwin, Petros Mavroidis & Alan Sykes, *The Genesis of the GATT* (New York: Cambridge University Press, 2008) at 5.

[90] *Ibid*. at 10.

[91] According to Montesquieu "peace is the natural effect of commerce" – trade strengthens interdependency between the trading nations and therefore necessitates maintenance of peaceful relationship between them (Charles de Secondat baron de Montesquieu, *The Spirit of the Laws* (1749) translated from the French by Thomas Nugent (London: Collingwood, 1823) vol. 1 at 324). Similarly to Montesquieu, Immanuel Kant believed that nations would unite against violence and war to farther mutual interests or gains realizable from international trade, because "among all those powers (or means) that belong to a nation, financial power may be the most reliable in forcing nations to pursue the noble cause of peace", therefore "the spirit of trade cannot co-exist with war, and sooner or later this spirit dominates every people". (Immanuel Kant, *Idea for a Universal History from a Cosmopolitan Point of View* (1784), translated by Lewis White Beck. From Immanuel Kant, *On History* (New York: Bobbs-Merrill, 1963) at 25). John Stuart Mill considered international trade as the "principal guarantee of peace of the world…, the great permanent security for the uninterrupted progress of the ideas, the institutions and the character of the human race" (John Stuart Mill *Principles of Political Economy* (London: Parker, 1848) at 123).

> Being desirous of contributing to these objectives by entering into reciprocal and mutually advantageous arrangements directed to the substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international commerce.[92]

During the Uruguay Round, the GATT 1947 preamble was used as a template for drafting the preamble to the Agreement Establishing the WTO.[93] Though they reaffirmed the objectives of the GATT 1947, the Uruguay Round negotiators substantially modified and added new provisions to the original preamble. The preamble to the Agreement Establishing the WTO reads, in its relevant parts:

> Recognizing that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and *trade* in goods *and services*, while allowing for the *optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development*,
>
> Recognizing further that there is need for positive efforts designed to ensure that developing countries, and especially the least developed among them, secure a share in the growth in international trade commensurate with the needs of their economic development,
>
> Being desirous of contributing to these objectives by entering into reciprocal and mutually advantageous arrangements directed to the substantial reduction of tariffs and other barriers to trade and to the elimination of discriminatory treatment in international trade relations,
>
> Resolved, therefore, to develop an integrated, more viable and durable multilateral trading system encompassing the General Agreement on Tariffs and Trade, the results of past trade liberalization efforts, and all of the results of the Uruguay Round of Multilateral Trade Negotiations,
>
> Determined to preserve the basic principles and to further the objectives underlying this multilateral trading system.[94]

In contrast to the GATT 1947, the Agreement Establishing the WTO declares sustainable development as one of the objectives of the WTO regime. Hence, it emphasizes the need for protecting the environment and the "optimal" rather than "full" use of the world's resources. Moreover, it recognizes the necessity of positive integration of developing and least developed countries into the world trading system. The GATT 1947 viewed liberalization of trade as the

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[92] Preamble to the GATT 1947 [emphasis added].

[93] AB Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, adopted 6 November 1998, WT/DS58/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: *US – Shrimp*] at para. 152.

[94] Preamble of the Marrakesh Agreement Establishing the World Trade Organization, 15 April 1994, 1867 U.N.T.S. 154 (entered into force on 1 January 1995) [emphasis added] [hereinafter: Agreement Establishing the WTO].

means for accomplishing its stated objectives, among which was the "exchange of goods".[95] Differently, the Agreement Establishing the WTO names the "expanding of trade" as one among other objectives of the WTO to be achieved through relevant means including the "reduction of tariffs and other barriers to trade" and the "elimination of discriminatory treatment". [96] Notably, the preamble to the GATS explicitly views trade in services "as a means of promoting the economic growth of all trading partners and the development of developing countries".[97]

More importantly than the textual differences in the preamble, it must be stressed that the GATT 1947 was a trade agreement whereas the Agreement Establishing the WTO has a dual nature: on the one hand, it is an umbrella agreement for the complex trading system it contemplates; on the other hand, it is a constituent instrument of an international organization.[98]

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[95] Note the replacement of the word "exchange" in the preamble to GATT 1947 with the word "trade" in the corresponding provision of the preamble to the Agreement Establishing the WTO.

[96] It has to be noted that the AB already ruled on the hierarchy of objects and purposes in WTO agreements stating that the object and purpose in individual treaty provisions should be in consonance with the object and purpose of the Agreement Establishing the WTO of which it is but a component. See AB Report, *European Communities – Customs Classification of Frozen Boneless Chicken Cuts*, adopted 27 September 2005, WT/DS269/AB/R, WT/DS286/AB/R online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: *EC – Chicken Cuts*] at para. 238.

[97] See the second paragraph of the preamble to the GATS.

[98] The observation of basic differences between the GATT 1947 and the Agreement Establishing the WTO calls to mind an old discussion on the classification of international treaties and applicability of a single set of rules to different types of treaties. In 1930, Lord McNair suggested that since several kinds of treaties possess quite a different legal character, they cannot be governed adequately by a single set of rules (see Lord Arnold McNair "The Functions and Differing Legal Character of Treaties" (1930) 11 British Year Book of International Law 110). He proposed that different rules be framed for each kind of treaties as appropriate. He identified four broad categories of international treaties: (i) treaties having the character of conveyances; (ii) treaties having the character of contracts; (iii) law-making treaties; and (iv) treaties akin to charters of incorporation. In our case, the GATT 1947 would fall into the category of law-making treaties, while the Agreement Establishing the WTO would represent the category of "treaties akin to charters of incorporation"; however, the multilateral agreements annexed to it would be classified as law-making treaties.

Lord McNair submitted that although the "treaties akin to charter of incorporation" represent a species of the "law-making treaties" they have certain special features one of which is the presence of "machinery which avoids 'as a matter of practical administration' necessity of the unanimity of the signatories in many of their operations" that make it subject to a different set of rules. He did not elaborate on what types of rules he had in mind and how they should be differentiated but he seems to assume that the rules on treaty interpretation should also differ depending on the types of treaties. For example, he supported Quincy Wright's view that in interpretation of contractual treaties a tribunal may resort to *travaux préparatoires* but should refrain from doing so in dealing with law-making treaties (see Quincy Wright "The Interpretation of Multilateral Treaties" (1929) 23 Am.J.Int'l.L. 94). Since Lord McNair viewed the "treaties akin to charters of incorporation" as a species of the "law-making treaties" and because the former type is distinguished from the latter by, inter alia, the presence of the machinery, which sometimes "avoids necessity of the unanimity of the signatories", it may be supposed that he would have favored a constrained use of *travaux préparatoires* in the interpretation of treaties like the Agreement Establishing the WTO. Regrettably, these calls for classification of treaties and differentiation of rules applicable to them have not evolved into a recognizable trend in the contemporary international law. Nevertheless, the special features of treaties establishing international organizations may add some useful insights to our understanding of the process of interpretation of WTO Agreements. For a review of scholarship on this discussion see Tetsuo Sato "Constituent Instruments of International Organizations and Their Interpretative Framework: Introduction to the Principal Doctrines and Bibliography" (1986) 14 Hitotsubashi Journal of Law and Politics 1. See also Ian Brownlie, *Principles of Public*

Therefore, the purposes reflected in the preamble to the Agreement Establishing the WTO can be viewed as the purposes of both the multilateral trading system and the international organization simultaneously.[99]

Here, it is necessary to outline the difference between the WTO trading system and the WTO itself. The WTO trading system is a set of primary and secondary rules agreed upon by the member states, including the rules constituting the WTO as an international organization.[100] Thus, the WTO is a part of this trading system. The WTO is an international organization that has a legal personality distinct from its member states, and which is capable of developing and adding its own secondary rules to the original trading system.[101] In this regard, it should be noted that WTO rules as legal norms may "be adapted or supplemented either way: towards further liberalization or taking a step backwards".[102]

The capacity to develop secondary rules was vested in the WTO by its founding members (and accepted by the acceded states) with the purpose of enabling the organization to perform the tasks it was assigned. Art. III of the Agreement Establishing the WTO states that it "shall facilitate the implementation, administration and operation, *and further the objectives*" of the Agreement Establishing the WTO and the multilateral WTO Agreements.[103] In other words, the WTO is the keeper of the rules who shall direct the trading system towards its goal. This is an important role of the WTO that will be analyzed closer in further sections of this chapter. Now,

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International Law 5th ed. (Oxford: Clarendon Press, 1998) at 639; and Catherine Brolmann, "Law-Making Treaties: Form and Function in International Law" (2005) 74 Nordic J. Int'l L. 383.

[99] The last paragraph of the preamble presents these objectives as "underlying this multilateral trading system", which encompasses the GATT, the "results of past trade liberalization efforts", and the WTO Agreements. Even if the preambular purposes cannot be considered as the objectives of the WTO, then it must be noted that pursuant to Art. III of the Agreement Establishing the WTO the organization has to further these objectives, which practically equates the treaty's objectives to those of the organization itself.

[100] In this sense, the GATT 1947 also represented a trading system (albeit much simpler than the WTO's system) comprising a set of rules of primary and secondary character. The GATT 1947's rules were fixed once, and were amendable later, by unanimous agreement of the contracting parties.

Here I use Hart's concept of law as a union of primary and secondary rules to describe in general the WTO rules containing rights and obligations of member states as primary whereas procedural rules, the violation of which do not result in breach of the members' obligations, as secondary ones. See Herbert L.A. Hart, *The Concept of Law* (Oxford: Clarendon Press, 1961) at 77-97.

[101] For example, Art. IV:2-6 of the Agreement Establishing the WTO vests in some WTO divisions the power to establish their respective rules of procedure.

[102] Joost Pauwelyn, *Conflict of Norms in Public International Law: How WTO Law Relates to other Rules of International Law* (Cambridge: Cambridge University Press, 2003) at 404.

[103] Art. III:1 of the Agreement Establishing the WTO [emphasis added].

bearing these features of the Agreement Establishing the WTO in mind, we turn to the issue of treaty interpretation in the WTO system.

1.3.2. Interpretation of WTO Agreements

The object and purpose reflected in the preamble to the Agreement Establishing the WTO play an important role in the interpretation of the WTO Agreements. The WTO Appellate Body (AB) once stated that "preambular language reflects the intentions of negotiators of the WTO Agreement, we believe it must add colour, texture and shading to our interpretation of the agreements annexed to the WTO Agreement".[104] The preambular wording becomes all the more important when it is borne in mind that interpretation of individual provisions of the WTO law is not only informed by but also must be consonant with the object and purpose of the Agreement Establishing the WTO.[105]

It is generally submitted that when a provision of an international treaty is analyzed, the task of interpretation is: "the duty of giving effect to the expressed intention of the parties, that is, their intention as expressed in the words used by them in the light of the surrounding circumstances".[106] The intention of the parties may be reflected in multiple sources, such as the preamble to a treaty, the treaty's text, its *travaux préparatoires*, and other evidence. Different sources of evidence, or as they are customarily called "means of interpretation", may reflect varying information on intentions of the parties to the treaty. In such a case an interpreter faces the problem of ordering and weighing the means of treaty interpretation. There are three main schools of treaty interpretation that emerged in international public law scholarship in response to this problem. These schools are differentiated on the basis of the relative weight given by an

[104] *US – Shrimp*, *supra* note 93, at para. 153; the term "WTO Agreement" in the quotation refers to the Agreement Establishing the WTO.
[105] *EC –Chicken Cuts*, *supra* note 96, at para. 238.
[106] Lord Arnold McNair, *The Law of Treaties* (Oxford: Clarendon Press, 1961) at 365. See also Lassa F. L. Oppenheim, Robert Y. Jennings, and Arthur D. Watts, eds. *Oppenheim's International Law*, 9th ed. (London: Longman, 1996), Vol. 1. at 1266.

interpreter to each of the means of interpretation.[107] The objective (text-based or textual) school opines that intent should be determined primarily from the text of a treaty, while the contextual materials and the purpose of the treaty should supplement the text.[108] The subjective (intent-based or contextual) school places more importance on the original intent of the parties to the treaty, which should be retrieved from the treaty's drafting history or other instruments that may reflect the parties' original intent. The teleological school gives priority to the object and purpose of a treaty, thereby allowing a broader interpretation of the treaty's terms than can be derived from the text and the context of the treaty.[109] These schools "are not opposed to each other;

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[107] For detailed discussion see Francis J. Jacobs "Varieties of Approach to Treaty Interpretation: With Special Reference to the Draft Convention on the Law of Treaties before the Vienna Diplomatic Conference" (1969) 18 (2) International and Comparative Law Quarterly, 318.

[108] Since interpretation is the identification of intent through finding the correct meaning of words, legal interpreters frequently use dictionaries but rarely attempt to address the linguistics. In a recent book on the interpretation of international treaties Ulf Linderfalk undertook an interesting inquiry into the theory of verbal communication. He observes that there are two models explaining how verbal communication is achieved: the code model and the inferential model. In the theory of verbal communication all acts of communication comprise three elements: a message (i.e. intent), a signal (i.e. utterance), and a code (i.e. in our case the text). According to the code model, verbal communication is a process of coding and decoding messages. Linderfalk explains that:

> [a] distinguishing characteristic of the code model is the importance placed on the utterance as a conveyor of messages. In the code model, the utterance is a fact, through which the receiver (in our case the reader) can immediately form a true opinion of what the sender (the writer) wished to convey with that utterance; the only thing required is that the reader has access to the right code.

In contrast, the inferential model places the most importance on the original message (i.e. intent) and regards the utterance as:

> just a piece of indirect evidence. The utterance is a fact, from which the receiver-reader can only infer what the sender-writer wished to convey. The receiver-reader must insert the utterance into some sort of context. Only by drawing on a context is it possible for the reader to arrive at a conclusion with regard to the content of the utterance.

Elucidating the concept Linderfalk writes:

> [b]y a context we would have to understand something that belongs exclusively to the intellect of the reader… When trying to understand an utterance, it is not the physical word as such that a reader brings to bear on the understanding process, but the mental representations he makes of the physical world. We would then have to accept that context is defined as the entire set of assumptions about the world in general, that a reader – through decoding, through inference, through direct perception or through using his memory – has access to when reading a text.

See Ulf Linderfalk, *On the Interpretation of Treaties. The Modern International Law as Expressed in the 1969 Vienna Convention on the Law of Treaties* (Dordrecht: Springer, 2007) at 33-35. Linderfalk draws his observations mainly from the following source: Dan Sperber & Deirdre Wilson, *Relevance. Communication and Cognition* (Oxford: Basil Blackwell, 1986). For further information on this issue see Francisco Yus Ramos, "A Decade of Relevance Theory" (1998) 30 *Journal of Pragmatics* 305, who provides a lucid explanation of the relevance theory, which introduced the inferential model, its criticism and the relevant literature review.

The models of the theory of verbal communication can be extrapolated to the legal theory of treaty interpretation. The code model represents the textual school of treaty interpretation. The widespread use of dictionaries contemplated by the textual school of treaty interpretation can be explained as the search of the interpreter for "the right code". The inferential model embraces the contextual and the teleological schools because the object and purpose of a treaty would fall into the set of assumptions represented in the context of the inferential model.

[109] A good explanation for the essence of teleology is provided by Isabelle Van Damme:

> [t]he 'object and purpose' is a singular concept, even if strictly speaking the 'object' is about what the treaty covers and the 'purpose' is about why the treaty covers an issue. Finding the 'object and purpose' is a matter of 'extracting the "essence", the overall "mission" of the treaty'. The title, preamble, specific provisions, overall framework, and negotiating history of the treaty are only some of the elements shaping the impression of the 'object and purpose'.

Isabelle Van Damme, "Treaty Interpretation by the WTO Appellate Body" (2010) 21 European Journal of International Law 605 at 631.

instead, they compete for significance rather than relevance".[110] The interpretative practice established in the WTO dispute settlement system is influenced to a varying degree by each of these schools.

In its very first report, the AB employed the general rule of treaty interpretation laid down in Art. 31 of the Vienna Convention on the Law of Treaties (VCLT),[111] which states that "a treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose".[112] Although not all WTO member states ratified the VCLT, the AB referred to the general rule because, in the AB's view, it "has attained the status of a rule of customary or general international law".[113] Later, the same status was given by the AB to other rules of treaty interpretation contained in Arts 32 and 33 of the VCLT.[114] In fact, the VCLT rules on treaty interpretation have been equated with the "customary rules of interpretation of public international law",[115] not least due to the absence of other international instruments comparable to the VCLT in status and content.

The drafters of the VCLT, the International Law Commission (ILC), emphasized that the process of interpretation is a single combined operation – a holistic exercise; however, the starting point of interpretation has to be the "text", which should be followed by the "context"

It must be noted that some scholars consider the "object and purpose" as distinct concepts. A good comparative analysis of how the "object and purpose" is considered in the English, French and German legal traditions can be found in Isabelle Buffard & Karl Zemanek, "The Object and Purpose of a Treaty: An Enigma?" (1998) 3 Austrian Review of International and European Law 311, at 322 *et seq*.

[110] Isabelle Van Damme, "Treaty Interpretation by the WTO Appellate Body" (2010) 21 European Journal of International Law 605, at 618.

[111] Vienna Convention on the Law of Treaties, UN Doc.A/CONF.39/27 (1969) reprinted in (1969) 8 I.L.M. 679.

[112] Art. 31.1 of the VCLT.

[113] AB Report, *US – Gasoline*, *supra* note 1, at 16. The "customary rules of interpretation of public international law" are prescribed to the WTO Dispute Settlement Body by Art. 3.2 of the Understanding on Rules and Procedures Governing the Settlement of Disputes, which states:

> The dispute settlement system of the WTO is a central element in providing security and predictability to the multilateral trading system. The Members recognize that it serves to preserve the rights and obligations of Members under the covered agreements, and to clarify the existing provisions of those agreements in accordance with customary rules of interpretation of public international law. Recommendations and rulings of the DSB cannot add to or diminish the rights and obligations provided in the covered agreements.

Understanding on Rules and Procedures Governing the Settlement of Disputes, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 2, 1869 U.N.T.S. 401, 33 I.L.M. 1226 (1994) [hereinafter: DSU].

[114] Isabelle Van Damme, *Treaty Interpretation by the WTO Appellate Body* (Oxford: Oxford University Press, 2009) at 22.

[115] See Asif H. Qureshi, *Interpreting WTO Agreements Problems and Perspectives* (Cambridge: Cambridge University Press, 2006) at 8.

and the "object and purpose".[116] The order of interpretation, according to the ILC, is suggested by the logic rather than the hierarchy among the elements of interpretation.[117] This approach has been rigorously followed by the AB. For example, in the *US – Zeroing* report it stated:

> The principles of interpretation that are set out in Articles 31 and 32 are to be followed in a *holistic* fashion. The interpretative exercise is engaged so as to yield an interpretation that is harmonious and coherent and fits comfortably in the treaty as a whole so as to render the treaty provision *legally effective*. A word or term may have more than one meaning or shade of meaning, but the identification of such meanings in isolation only commences the process of interpretation, it does not conclude it. Nor do multiple meanings of a word or term automatically constitute 'permissible' interpretations within the meaning of Article 17.6(ii). Instead, a treaty interpreter is required to have recourse to context and object and purpose to elucidate the relevant meaning of the word or term. This logical progression provides a framework for proper interpretative analysis. At the same time, it should be kept in mind that treaty interpretation is an integrated operation, where interpretative rules or principles must be understood and applied as connected and mutually reinforcing components of a *holistic exercise*.[118]

The ILC emphasized that it is the text that "must be presumed to be the authentic expression of the intentions of the parties", thereby putting more importance on the textual than the contextual approach to interpretation.[119] At the same time, the ILC recognized the importance of the "object and purpose" or teleological approach for treaty interpretation in connection with the principle of effective interpretation, stating that "when a treaty is open to two interpretations one of which does and the other does not enable the treaty to have appropriate effects, good faith and the objects and purposes of the treaty demand that the former interpretation should be adopted."[120] As can be seen from the WTO jurisprudence, the AB has been trying to apply the VCLT's rules consistently with the ILC's approach:

It is worth to note that in one occasion, with respect to interpretation of the GATT's Schedule of concessions, the AB stated that "the only rules which may be applied in interpreting the meaning of a concession are the general rules of treaty interpretation set out in the Vienna Convention". See AB Report, *European Communities – Customs Classification of Certain Computer Equipment*, adopted 22 June 1998, WT/DS62/AB/R, WT/DS67/AB/R, WT/DS68/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012, at para. 84.

[116] International Law Commission "Draft Articles on the Law of Treaties with commentaries 1966" *Yearbook of the International Law Commission*, 1966, vol. II [hereinafter: ILC, *Commentaries*] at 219 & 220.

[117] *Ibid*. at 220.

[118] AB Report *United States – Continued Existence and Application of Zeroing Methodology*, WT/DS350/AB/R, adopted 19 February 2009, as modified by AB Report WT/DS350/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012, at para. 268 [emphasis original].

[119] ILC, *Commentaries*, *supra* note 116, at 220. In these commentaries the ILC addressed the characteristics and limitations of each of the three schools of treaty interpretation. In the view of divergent opinions on the means of interpretation (and, perhaps, trying to avoid future misunderstandings) the ILC made it clear that it supported the textual approach to treaty interpretation.

[120] *Ibid*. at 219.

> As we have emphasised numerous times, these rules call for an examination of the ordinary meaning of the words of a treaty, read in their context, and in the light of the object and purpose of the treaty involved. A treaty interpreter must begin with, and focus upon, the text of the particular provision to be interpreted. It is in the words constituting that provision, read in their context, that the object and purpose of the states parties to the treaty must first be sought. Where the meaning imparted by the text itself is equivocal or inconclusive, or where confirmation of the correctness of the reading of the text itself is desired, light from the object and purpose of the treaty as a whole may usefully be sought.[121]

However, as can be derived from the last sentence of the quote above as well as from other cases, [122] the AB tends to overemphasize the importance of the text at the expense of the context and the object and purpose of the treaty, thereby deviating from the holistic approach to interpretation. One scholar summarized this tendency as follows:

> In practice, the different techniques used by the WTO dispute settlement bodies tend to promote the text of a treaty. In particular, the AB and the panels sometimes apply a sequential approach under which the context, object and purpose of a treaty are only examined when textual methods fail to elucidate the meaning of a provision, or are used as a mere confirmation of the results obtained on the basis of purely textual interpretation…
>
> This obviously reduces the importance of the purpose and object of a treaty, as an interpreter is required to consider those elements only in order to confirm the results obtained through purely textual methods or to clarify a text which remains equivocal or inconclusive after the application of textual methods. Note also that such an approach mixes different interpretative guidelines provided by the Vienna Convention on the Law of Treaties. According to Article 31, a text needs to be interpreted in its context and in light of the object and purpose of a treaty. This requirement is not conditioned under the Convention upon the existence of specific circumstances (e.g. ambiguity or inconclusiveness of a text). Situations that are identified by the AB should rather lead to the application of the rules provided in Article 32, but only after the text is interpreted in its context and taking into account the purpose and object of a treaty.[123]

The heavy reliance of the AB on the treaty text has been noted by many authors, and acknowledged by ex-members of the AB, Abi-Saab and Ehlermann.[124] Professor Hudec explains

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[121] *US – Shrimp*, *supra* note 93, para. 114.

[122] See generally Lukasz Gruszczynski, "Customary Rules of Interpretation in the Practice of WTO Dispute Settlement Bodies" in A. Nollkaemper & O. K. Fauchald, eds, *Unity or Fragmentation of International Law: The Roles of International and National Tribunals* (Oxford: Hart Publishing, 2012).

[123] *Ibid*. at 31.

[124] See George Abi-Saab, "The Appellate Body and Treaty Interpretation", in G. Sacerdoti, A. Yanovich & J. Bohanes, eds, *The WTO at Ten – The Contribution of the Dispute Settlement System* (Cambridge: Cambridge University Press, 2006) 453, at 461; Claus-Dieter Ehlermann, "Six Years on the Bench of the "World Trade Court". Some Personal Experiences as Member of the Appellate Body of the World Trade Organization" (2002) 36 Journal of World Trade 605, at 608; Warren Maruyama, "A New Pillar of the WTO: Sound Science" (1998) 32 The International Lawyer 651, at 673; Michael Lennard, "Navigating by the Stars: Interpreting the WTO Agreements" (2002) 5 J.Int'l Econ. L. 17 at 86; Asif Qureshi, "Interpreting World Trade Organization Agreement for the Development Objective" (2003) 37 Journal of World Trade 847 at 866; Dongsheng Zang, *supra* note 85, at 413–438; Gruszczynski, *supra* note 122, at 31.

Some authors argue that the AB favors both textual and contextual approaches while "grudgingly and sparingly" using the teleological one. See D. Irwin & J. Weiler, "Measures Affecting the Cross-Border Supply of Gambling and Betting Services (DS 285)" (2008) 7 World Trade Review 71, at 90.

that the choice in favor of a textual approach was made by the AB due to legitimacy concerns during the early years of development of the WTO. According to him, the fact that the WTO's

> policing activity intrudes upon domestic regulatory sovereignty leaves the new WTO legal institutions particularly exposed to damaging criticism from national governments that do not yet fully accept the WTO's authority in this area. Recognizing this very exposed position, the Appellate Body may well have concluded that the safest refuge from political criticism was to stay as close as possible to the shelter of the legal texts accepted by governments.[125]

There is some apprehension that the reliance of the AB on textualism may deepen because, as the number of cases increases, the AB has to keep consistency in its interpretative approach. Extensive textualism may impair the integrity of the interpretative process and the principle of effectiveness of treaty interpretation. Ultimately, it may lead to the misconstruction of the role of the text as a sufficient means of interpretation rather than as the starting point of an integrated process. There is the danger that as a result of this trend the WTO panels and AB may eventually lose sight of the intent of the parties reflected in the object and purpose and the context of the treaty. Moreover, textualism may undermine the ability of the WTO to perform the mission it was entrusted with by Art. III of the Agreement Establishing the WTO because, as one author argues:

> [s]uch an approach denies the relevance of policy considerations in the dispute settlement process, since it assumes that a particular issue is decided on the basis of a neutral text and does not require the dispute settlement bodies to make difficult normative decisions. The logical consequence of strict textualism is to deny any policy-making role to dispute settlement bodies.[126]

Furthermore, it has been suggested that the textual approach may satisfy the short-term aims of the parties to the dispute or at least some of them. However, the long-term objectives of the world trading system necessitate adoption of a teleological approach to treaty interpretation.[127] Hence, if the WTO is tasked with facilitating the objectives of the world trading

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[125] Robert Hudec, "GATT/WTO Constraints on National Regulation: Requiem for an "Aim and Effects" Test" (1998) 32 The International Lawyer 619, at 633. A similar view was expressed by Ehlermann, an ex-member of the AB; see Ehlermann, *supra* note 124, at 617. See also Laurence Helfer, "Adjudicating Copyright Claims Under the TRIPs Agreement: The case for a European Human Rights Analogy" (1998) 39 Harv. Int'l L.J., 410.
[126] Gruszczynski, *supra* note 122, at 45. A similar conclusion was made by another scholar on the basis of her analysis of interpretative practice with respect to the GATS. See Nellie Munin, *Legal Guide to GATS* (Alphen aan den Rijn: Kluwer Law International, 2010) at 53.
[127] Qureshi, *supra* note 124, at 849.

system, it has to depart from strict textualism, giving more consideration to the object and purpose of the WTO Agreement.

Although reliance on textualism by the WTO panels and AB needs to be emphasized, it should not be exaggerated. As the WTO matures and its legitimacy strengthens, it may be expected that textualism will become increasingly balanced with the context and the *telos* in the interpretative practice of its dispute settlement bodies. Indeed, on a number of occasions the context and the *telos* have received due attention in the interpretations given by the AB.[128] Some authors have suggested that the AB is trying to emancipate itself from the extensive textualist approach and that the WTO panels would eventually follow this trend.[129] Therefore, the question of whether extensive textualism will continue to prevail or will become more balanced with contextual and teleological approaches in the WTO dispute settlement system remains open.

It is hoped that the WTO panels and AB choose the latter path. This would have two important implications for furthering the objectives of the world trading system. On the one hand, it would enable the WTO to perform its mission of keeper of the rules more effectively.[130] On the other hand, it would strengthen the role of the purpose and objectives established in the preamble to the Agreement Establishing the WTO because the preambular language indicates the *telos* of the treaty and forms a part of the context for the purposes of the contextual component in the interpretation of treaties.[131]

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[128] See e.g. *EC –Chicken Cuts*, *supra* note 96, at para. 238; *US – Shrimp*, *supra* note 93, at para. 152. See also AB Report, *Japan – Taxes on Alcoholic Beverages*, adopted 1 November 1996, WT/DS8/AB/R, WT/DS10/AB/R, WT/DS11/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: AB Report, *Japan – Alcoholic Beverages*] at paras. 105-109; and AB Report, *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, adopted 5 April 2001, WT/DS135/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: *EC – Asbestos*] at paras. 97–99.

[129] Federico Ortino, "Treaty Interpretation and the WTO Appellate Body Report in US-Gambling: A Critique" (2006) 9 (1) J. Int'l Econ. L. 117 at 129; Gruszczynski, *supra* note 122, at 46.

[130] The "keeper of the rules" role of the WTO is elaborated in subsequent sections of this chapter.

[131] Para 2 of Art. 31 of the VCLT states that the context for the purpose of the interpretation of a treaty shall comprise *inter alia*, the text including its preamble and annexes.

The main problem of using the preambular text is that the purposes reflected in the Agreement Establishing the WTO are multiple and diverse. In some cases the interpretation of a provision may support one stated purpose while simultaneously contradicting other purposes. The plurality and diversity of stated purposes may, however, help to overcome this problem – in such cases, an interpreter shall give the meaning which is least incompatible with the purposes of the Agreement Establishing the WTO taken as a whole. In addition, a global welfare dynamics test may also be introduced, whereby the choice of the meaning should be the one that provides more global welfare in the

Finally, it would be no exaggeration to say that the WTO will not be able to further the long-term objectives of the trade regime if it is not able to adapt the rules to the changing environment and technological progress that affect international trade. The use of an evolutionary approach to treaty interpretation may greatly facilitate such adaptation. In short, it requires a treaty to be interpreted in light of the contemporary factual context rather than be based only on the context prevalent at the time of the treaty's conclusion.[132] In the *US – Shrimp*, the AB showed its readiness to apply an evolutionary interpretation at least with respect to issues relevant to sustainable development. In this case the AB, noting that Article XX(g) of the GATT had been drafted over 50 years ago, when sustainable development was not such an important issue, found that sea turtles constitute "exhaustible natural resources" for the purposes of Article XX(g) of the GATT 1994.[133]

Against this background, throughout this work I adhere to the interpretative methodology established by the VCLT in the matters of sequence of interpretation, integrity of interpretation, the principle of effectiveness, and evolutionary interpretation. Keeping in mind that a strict sequence of interpretation may lead to a bias towards the textual at the expense of the teleological and contextual approaches, I try to keep the balance to ensure that interpretation is conducted as a holistic exercise.

1.4. The balance between the sovereignty of states and freer trade

1.4.1. Sovereign equality and international co-operation

The WTO, being one of the largest and one of the most important international organizations, it is also the biggest arena for simultaneous multilateral confrontation and co-operation. The organization is expanding in terms of both its membership and the scope of the global trade issues it covers. Saudi Arabia and Russia joined the WTO in 2005 and 2012

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future, that is referring to the long rather than the short-term perspectives; for example, when a trade-related environmental measure is disputed.

[132] The concept of evolutionary interpretation originates from the general rule that treaties must be interpreted in good faith. See ILC, *Commentaries*, *supra* note 116, at 222.

[133] *US – Shrimp*, *supra* note 93, at paras. 127-134.

respectively, whereas Iran, Iraq as well as some other petroleum exporting states are negotiating their accession to the organization. The scope of coverage of the world trade system is continuously being extended; one of the main goals of the ongoing Doha round is to liberalize trade in energy services. The further the WTO expands the more complicated the relations among its Members become. Increasing tensions among the states may weaken the Members' loyalty to the WTO and, generally, to the established world trading system. Due to the uneven distribution of hydrocarbon resources on the earth and their strategic importance in the modern economy, the world petroleum industry has become a vulnerable point in balancing the political and economic interests of states. Thus, the trade rules established in the energy sector, unless well understood and coherently applied, might be replaced by the diplomacy of power.

In the rapidly globalizing world, very few states, if any, are able to sustain economic and technological development in autarky. Globalization and current trends toward the liberalization of world trade require modern states to give up more sovereign power than a few decades ago. International peace, development, and economic co-operation require international order. International order, based on the sovereign equality of states, requires strict observance of international agreements, that is, of the obligations that states have accepted to benefit from this order. Bearing this in mind, states enter into international agreements accepting certain constraints on their sovereign rights.

There is no universally accepted definition for the term "state sovereignty" in public international law, though many proposals have been suggested in the legal and political literature.[134] There are two vital constituents commonly identified in the majority of the proposed definitions: internal and external sovereignty of the state.[135] The two can be embraced as the

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[134] For an analysis of the evolution of the concept of state sovereignty see Winston P. Nagan & Craig Hammer, "The Changing Character of Sovereignty in International Law and International Relations" (2004) 43 (1) Colum. J. Transnat'l L. 141; and M.P. Ferreira-Snyman, "The Evolution of State Sovereignty: a Historical Overview" (2006) 12 (2) FUNDAMINA: A Journal of Legal History 1; Djura Ninčić, *The Problem of Sovereignty in the Charter and in the Practice of the United Nations* (The Hague: M. Nijhoff, 1970).

[135] See George Elian, *The Principle of Sovereignty over Natural Resources*, translated from Romanian by Andrei Bantas (Alphen aan den Rijn: Sijthoff & Noordhoff, 1979) at 6; Stephen J. Kobrin, "The Architecture of Globalization: State Sovereignty in a Networked Global Economy", in John H. Dunning ed., *Governments,*

ultimate supremacy of the state in affairs within its territory and its independence from any other subjects in international relations. The external sovereignty of states has never been regarded as an absolute concept; its limits – though never defined precisely – are implied in other concepts of international law, including the principle of sovereign equality of states.[136] In contrast, the absolute character of the internal sovereignty of states was hardly questioned until the 1940s.[137] The establishment of the UN, the adoption of the Universal Declaration of Human Rights, and the emergence of the Bretton Woods system necessitated a revision of the concept of internal sovereignty. Since then, the internal sovereignty of states has been subjected to the limits shaped by the rules of international law, at least by the rules accepted by those states.

The limits placed on states in the regulation of domestic affairs were further strengthened with the establishment of the WTO. The WTO rules may, and often do, affect the sovereign power of its Members to determine economic and environmental policy as well as their sovereignty over natural resources. The member states accepted certain limits on their power in exchange for economic benefits, freer trade and, perhaps, a better world. Hence, the legitimacy of the WTO is based on the voluntary and informed decisions of its Members to limit their sovereign power for the sake of creating a level playing field for international trade.

The trade-off between self-restriction and freer trade represents a balance of interest of a state. Once the balance is destroyed the legitimacy of the WTO may become undermined. Any attempt to liberalize trade further is also dependent on this balance, because trade liberalization leads to the imposition of further limits to sovereignty. A state will accept further limits if it expects to obtain greater benefits from trade liberalization. This point is further elaborated below under the regime management model; now, however, we should turn to the WTO's accession

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Globalization, and International Business (Oxford: Oxford University Press, 1999) at 155; Ferreira-Snyman, *supra* note 134, at 4.

[136] Ferreira-Snyman, *supra* note 134, at 6, 17, 21 *et seq*.; Steven Lee "A puzzle of sovereignty" (1997) 27 Cal. W. Int'l L.J. 241 at 253. On sovereignty-equality relationship see Robert A. Klein, *Sovereign Equality Among States: The History of an Idea* (Toronto: University of Toronto Press, 1974); see also Djura Ninčić, *supra* note 134, at 37 *et seq*.

[137] Ferreira-Snyman, *supra* note 134, at 26.

rules to analyze potential claims of newly acceded and future members of the organization that may affect both the legitimacy of the WTO and potential future trends in trade liberalization.

1.4.2. WTO accession rules and sovereign (in-) equality

At the time of its establishment the WTO had 123 members; more than 30 states joined thereafter. A state willing to join the WTO must go through a complicated procedure established by the WTO for the accession of new members. Art. XII of the Agreement Establishing the WTO organization stipulates that a state may accede to the WTO on terms to be agreed between it and the WTO, and that decision on accession shall be taken by the Ministerial Conference on the terms of accession by a two-thirds majority of the WTO Members. There is no detailed explanation for "terms of accession" provided in the WTO agreements. However, procedural issues are set out in a note drafted by the Secretariat of the WTO entitled "Accession to the World Trade Organization: Procedures for Negotiations Under Article XII".[138] In fact, as has been developed in practice, an applicant state must negotiate its trade conditions with each interested member of the relevant working party. The working party issues a report based on these negotiations which serves as the basis for an accession protocol to be approved by the Ministerial Conference. Since each member of the working party has to agree with the applicant's terms of accession, the report must be adopted by virtually the unanimous voting of such members.[139] This means that each member of the working party has the power to block the applicant's accession.[140] Moreover, while negotiating its terms of accession the applicant does

[138] WTO, Note by the Secretariat "Accession to the World Trade Organization: Procedures for Negotiations Under Article XII", WT/ACC/1, 24 March 1995, the WTO Secretariat, Geneva, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012.

[139] See paras. 14 and 15 of the Note by the Secretariat "Accession to the World Trade Organization: Procedures for Negotiations Under Article XII". It is worth noting that its paragraph 2 states that "it has been prepared by the Secretariat as *a practical guide for delegations… and is not a general policy statement on accession negotiations*" [emphasis added].

[140] A recent example of such situation was a block posed by Georgia on Russia's accession resulting from their military conflict in 2008. For a detailed review of the procedural peculiarities of the WTO accession rules see Steve Charnovitz, "Mapping the Law of WTO Accession", in M. E. Janow, V. Donaldson & A. Yanovich, eds, *The WTO: Governance, Dispute Settlement, and Developing Countries* (Huntington NY: Juris Publishing, 2008); Igor I. Kavass "WTO Accession: Procedure, Requirements and Costs" (2007) 41 (3) Journal of World Trade 453; Julia Ya Qin ""WTO-Plus" Obligations and Their Implications for the World Trade Organization Legal System: An Appraisal of the China Accession Protocol" (2003) 37 Journal of World Trade 483; Anna Lanoszka "The World Trade Organization Accession Process. Negotiating Participation in a Globalizing Economy" (2001) 35 (4) Journal of

not have the right to demand reciprocal benefits from the interested member. Thus, the accession process represents not a negotiation, but in fact comprises a unidirectional acceptance by the applicant of the terms imposed by the interested member.[141] It has been observed that:

> [s]ince the applicant may make no demands it can impose no marginal cost on the demandeur. Because of the inherent flaws, the demands on acceding countries are invariably onerous and bear little or no relation to their size, significance or development status,…it has resulted in the proliferation of 'WTO-plus' and 'WTO-minus' demands by members pressing applicant countries for commitments beyond the requirements of the WTO agreements on the one hand, and on the other hand prohibiting them from, among others, such provisions as special and differential treatment and transitional periods which many member countries enjoyed[142]

Due to the aforementioned characteristics of the WTO accession process, in relation to the GATS "it was found that at each level of services sectoral classification the commitments made by acceding countries were far larger than those made by WTO Members."[143] When analyzed at a disaggregated level, the services sector shows that countries which joined the WTO from 1995 to 2005 made commitments more than twice as great as the initial WTO Members.[144] Another example is the Agreement on Government Procurement, which is optional and thus is supposed to be signed by acceding states voluntarily; however, a majority of countries who acceded to the WTO after 2000 have committed to signing the GPA in exchange for positive voting by incumbent WTO Members during the accession process.[145]

The features of the WTO accession procedure have far reaching implications for the energy sector. Acceding states are likely to be asked to undertake obligations in excess of those

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World Trade 575; Raj Bhala, *Modern GATT Law. A Treatise on the General Agreement on Tariffs and Trade* (London: Sweet & Maxwell, 2005) [hereinafter: Bhala, *Modern GATT Law*] at 1116 *et seq*.

[141] Craig VanGrasstek "Why Demands on Acceding Countries Increase over Time: A Three-dimensional Analysis of Multilateral Trade Diplomacy" in UNCTAD, *WTO Accessions and Development Policies,* UNCTAD/DITC/TNCD/11 (New York: United Nations, 2001) at 79.

[142] Roman Grynberg, Victor Ognitsev & Mohammad A Razzaque, *Paying the Price for Joining the WTO: a Comparative Assessment of Services Sector Commitments by WTO Members and Acceding Countries* (London: Commonwealth Secretariat, c2002) at vii-1.

[143] *Ibid*. at 39.

[144] Roman Grynberg, Manleen Dugal & Mohammad A. Razzaque, *The Evaluation of the Terms of Accession to the World Trade Organization: a Comparative Assessment of Services and Goods Sector Commitments by WTO Members and Acceding Countries* (London: Commonwealth Secretariat, 2006) at 51.

[145] See reports from respective working parties on the accession of states: Albania (WT/ACC/ALB/51, para 123), Armenia (WT/ACC/ARM/23, para 153), China (WT/ACC/CHN/49, para 334), Croatia (WT/ACC/HRV/59, para 156), Georgia (WT/ACC/GEO/31, para 117), Macedonia (WT/ACC/807/27, para 177), Moldova (WT/ACC/MOL/37, para 150), Oman (WT/ACC/OMN/26, para 121), Saudi Arabia (WT/ACC/SAU/61 para 231) and Ukraine (WT/ACC/UKR/152, para 358), online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012. It has to be acknowledged that the strength of the commitment to join the GPA varies from one state to another. Some commitments are subject to a satisfactory regime for applicants (e.g. Oman and Saudi Arabia) whereas others have no reservations (e.g. China and Ukraine).

actually provided in WTO agreements. For example, in relation to the GATT, as a result of pressure from working party members, Oman agreed to consider Petroleum Development Oman company, only 60 percent of which is owned by the government, as a state trading enterprise for the purposes of Art. XVII of the GATT, which meant that the company would have to conduct its sales and purchases in a non-discriminatory manner.[146] Saudi Arabia and Russia, during negotiations on their accession to the WTO, were requested by the EC to raise domestic prices of natural gas to the level established in international markets.[147] Similarly, the elimination of petroleum export duties was the only issue pending the EC's consent on Kazakhstan's accession to the WTO. Although export duties compliant with the MFN principle are allowed under GATT Art. XI, newly acceded states, such as China, Croatia, Saudi Arabia, Latvia, Mongolia, Ukraine, and Vietnam to various degrees "voluntarily" committed to abstain from their application.[148] These states were also requested to make "WTO-minus" commitments, which forced them to waive the right to use certain exemptions (grace periods, relieves, special treatment, etc.) available under WTO agreements.

The WTO accession process challenges the principle of sovereign equality of states. The world trading system is based on the idea of reciprocity, which assumes attainment of mutual advantages based on the freedom of states. The freedom of states, according to Lon Fuller,

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[146] Working Party Report on the accession of Oman, WT/ACC/OMN/26, paras. 110-112, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012. As will be discussed herein later, the mere fact that the state holds a majority of voting shares in an enterprise is not a sufficient criterion to treat it as a state trading enterprise for the purposes of the GATT.

[147] See Sanam S. Haghighi, "Dual Pricing of NGLs in Saudi Arabia and the Rules of the World Trade Organization on Subsidies" (2005) 48 Middle East Economic Review, 17; and Yulia Selivanova, *Energy dual pricing in WTO law: analysis and prospects in the context of Russia's accession to the WTO* (London: Cameron May, 2008) [hereinafter: Selivanova, *Energy dual pricing*] at 143.

[148] See WTO Panel Report, *China – Measures Related to the Exportation of Various Raw Materials*, adopted 5 July 2011, WT/DS394/R, and AB report WT/DS394/AB/R, 30 January 2012, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: *China – Raw Materials*] at footnote 186. Some authors argue that reduction or elimination of export duties is not a WTO-plus obligation conceptually, although it may formally appear as such. According to these authors, an obligation not to impose export duties is equivalent to binding export duties at zero in the GATT schedule of concessions. See Lothar Ehring & Gian Franco Chianale, "Export Restrictions in the Field of Energy" in Yulia Selivanova, ed., *Regulation of Energy in International Trade Law. WTO, NAFTA and Energy Charter* (Alphen aan den Rijn, the Netherlands: Kluwer Law International, 2011) [hereinafter: Selivanova, *Regulation of Energy*] at 121. See also *infra* Chapter VII.

implies not only "freedom to choose" but also "freedom from choice".[149] He admits that in an economic market it may be essential to set some constraints on the freedom of traders:

> [t]he most perfect markets are not those that arise spontaneously, but those that are the result of deliberate organization and planning. To make such a market function effectively, it may be necessary to impose restraints on economic freedom.[150]

He further states that:

> [a]n economic market is not a denial of economic freedom of choice, but a specific mechanism allocating economic choice in specific ways. Within the framework of a given distribution of purchasing power, a perfect economic market would grant to each individual the maximum freedom of economic choice consistent with a maximization of the freedom of choice granted to others. [151]

These statements are true for a trade organization desired by the international community – as long as constraints on freedom of economic choice are agreed by all members and bind them equally, they should accept limits to their own interests which balance with those of others. However, this is not the case with the WTO, whose accession rules do not procure equal positions of initial members and newcomers; the latter of whom includes states possessing the larger part of world oil and gas resources. Thus, the freedom of newcomers, when they accede to the WTO, is different from the freedom of the initial members. Undoubtedly it can be argued that the states acceding to the WTO after the Uruguay round are not forced to accept membership: these states are free at least not to enter the club. However, with the world comprising over 150 WTO Members and over 30 states in the process of accession, which represents the most part of the global consumer market, are there any alternative options left for the non-members? They have "freedom to choose" – the right to join the organization, but are left with very limited "freedom from choice" – to enter the WTO, paying the price of late accession, or not to enter, and remain fenced off by the trade barriers of over 150 states.

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[149] Lon Fuller, "Some Reflections on Legal and Economic Freedoms – A Review of Robert L. Hale's 'Freedom through Law'", (1954) 54, Columbia Law Review 70 at 72.
[150] *Ibid*. at 77.
[151] *Ibid.* at 78.

The accession process formally complies with the principle of freedom of consent assumed by the principle *pacta sunt servanda*.[152] The principle is strictly adhered to in international dispute resolution, and adjudicators are not expected to take into account economic hardship, necessity or other circumstances that a state had undergone before accepting terms and conditions of the contract. Although national courts may "refuse to lend themselves to the enforcement of a 'bargain' in which one party has unjustly taken advantage of the economic necessities of other",[153] it is unlikely that the DSB would find the accession procedures and circumstances accompanying such procedures unjust or unfair and somehow act upon such findings. The Panel in *China – Raw Materials* while reviewing China's "WTO-plus" commitments admitted that "the acceding Member and the WTO membership recognize that the intensively negotiated content of an accession package is the 'entry fee' to the WTO system."[154] In earlier cases the AB confirmed that "WTO-plus" commitments of acceding states are binding upon, and enforceable against, committed states.[155] Hence, once a state becomes a member of the WTO it has again "freedom to choose" – the right to leave the organization. However, if membership becomes too burdensome, it has again very small "freedom from choice" – to leave the WTO and "stay ring-fenced by trade barriers" or stay in and live with the "excess baggage" it has accepted.

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152 Although this statement is challengeable in itself, given the purpose and the scope of this research I do not pretend to elaborate upon the issue of its relevance to the problems studied herein. Nevertheless, it can be suggested that the principle of freedom of contract would also be formally complied with where the states acceded to the WTO under the administration of a government which does not enjoy majority support or looses support subsequently after elections. Art. 7 of the VCLT should also recognize such government's capacity. For example, it has been stated that the record speed of Iraq's WTO accession progress in fact is driven by an oil-thirst U.S. government rather than by the newly elected Iraqi administration. See Mary L. Malig "Accession through the Backdoor: How the US is Pushing Iraq into the WTO", Focus on the Global South (January 2006), online: Global Policy Forum <http://www.globalpolicy.org/security/issues/iraq/attack/consequences/2006/01wto.htm> accessed on 1 May 2012.

153 *United States v. Bethlehem Steel*, 315 U.S. 289, 326 (1942)) as quoted by Ronald Dworkin in "The Model of Rules" (1967) 35 U. Chi. L. Rev. 14 at 24. In this article Dworkin, analyzing two cases ((*Standard Oil v. United States*, 221 U.S. 1, 60 (1911); *United States v. American Tobacco Co.*, 221 U.S. 106, 180 (1911)), provides an example where the U.S. Supreme Court modifies a provision of the Sherman Act introducing a reasonableness test to qualify contracts imposing restraints on trade as void.

154 *China – Raw Materials*, *supra* note 148, at para. 7.112.

155 See e.g. AB Report, *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products*, adopted 19 January 2010, WT/DS363/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012, paras. 199-200.

The harsh accession rules do not directly affect the legitimacy of the WTO; however, they raise unfairness in the trading system and undermine the loyalty of its members, which eventually may lead to the destruction of the system. Moreover, as the result of accepted "WTO-plus" obligations, some members may feel that they paid a higher price than the founding members for a smaller set of benefits. In order to get even, such members may be tempted to create new non-tariff barriers that are not regulated by existing WTO rules (including the respective protocols of accession).[156] By the same token, they may obstruct future multilateral negotiations on trade liberalization because they have already sacrificed more sovereignty than others.

Economic fairness requires that freedom of economic choice be provided to all parties and that constraints on such freedom, if necessary, be imposed equally on all members. While freedom of economic choice and constraints on such freedom are not intrinsic to the current trade system, the situation may improve with the further liberalization of trade, provided that all states take part in finding a compromise in further negotiations. It is foreseeable that large petroleum exporting states acceding to the WTO would accept excess "WTO-plus" and "WTO-minus" obligations to join the club. One may expect that after getting on board these countries would take an active part in further negotiations aiming to balance the accepted excess obligations with benefits accruable from other states in the result of trade liberalization negotiations. Thus, in promoting the goals of the multilateral trading system and in facilitating the further liberalization of international trade, it is important for the WTO to take into account these special interests of the newly acceded states. In the next section we will consider some institutional features of the WTO system which underline the ability of the WTO to manage the trading system.

[156] Similarly, such countries may take other economic measures to restore the initial balance. For example, if as a result of accepted WTO-plus obligation an oil exporting country is deprived of its right to impose export duties, it may well increase state participation in the oil and gas industry to compensate for the national budget with income from state-owned companies.

1.5. WTO as a manager of the trade regime

In the international relations (IR) literature, it has been stated that one important function performed by the WTO is to survey the compliance of states with agreement obligations and to preserve fixed procedures, agreed timelines and instruments. In other words, it acts as "a gate-keeper of the rules of the game".[157] Scholarship presenting this role of the WTO uses Rawls' concept of a "veil of ignorance", which assumes that upon entering a social co-operation the parties are situated behind a veil of ignorance – "they do not know how the various alternatives will affect their own particular case and they are obliged to evaluate principles solely on the basis of general considerations".[158] With respect to the negotiations of multilateral trade agreements, the concept of the "veil of ignorance" has been narrated in a WTO publication:

> "a veil of ignorance means that contracting parties do not know the future distribution of gains and losses from an initial agreement with certainty. Negotiations among prospective signatories to a trade agreement take place in ignorance of; (i) the identity of future acceding countries; (ii) the economic significance of a country in the distant future; (iii) the role of contracting parties in future trade disputes, and (iv) generally of how future contingencies are going to impact on signatories' political and economic well-being".[159]

Once the WTO agreements were concluded under a veil of ignorance by equal parties, the WTO as an international organization is tasked to preserve the order that is deemed to be just in its original position:

> [u]nder the influence of the veil of ignorance the trade agreement is perceived *ex ante* as fair and efficient to every participant. Signatories will then want to confer on the institution the role of a gate-keeper of the previously agreed "rules of the game". The organization acts as a surveillance mechanism that can effectively prevent countries from diluting, disregarding and reneging on the original agreement once the "veil of ignorance" is lifted and reality is exposed to the signatories. *Ex post facto*, all parties know with certainty where they stand and what is best for them. Thus, they may experience regret over the original terms of the agreement and have an incentive to skew, bend or even change the rules of the agreement to their benefit.[160]

I argued above that there is no equality in the original position of the parties in the WTO because membership in the organization is expanding gradually under *de facto* increasing accession requirements. As the gate-keeper, the WTO is neither supposed nor assigned to judge the fairness of the original arrangement. Hence, regardless of whether the arrangement is just or

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157 WTO, *World Trade Report 2007. Six Decades of Multilateral Trade Cooperation: What Have We Learnt?* online: the WTO <www.wto.org> accessed on 1 May 2012 [hereinafter: WTO, *World Trade Report 2007*] at 119.
158 John Rawls *A Theory of Justice* (London: Oxford University Press, 1976) at 136-142.
159 WTO, *World Trade Report* 2007, *supra* note 157, at 119.
160 *Ibid*., at 119-120.

not, the WTO preserves compliance by states with the obligations accepted in the original position.

As international trade relations evolve, so does the WTO regime.[161] This evolutionary process is of vital importance for the maintenance of any international regime, and particularly for an institutionalized regime such as the WTO system.[162] In the IR scholarship, this importance is nicely explained through an analogy between a regime and a bicycle; to put it in one IR scholar's words:

> [t]he periodic rounds of GATT/WTO multilateral trade talks have helped retain the effectiveness of existing trade rules. This proposition has been named the bicycle theory, the essence of which is that stability presupposes dynamic movement. The cyclist cannot keep the bike standing unless he or she keeps it moving. The bicycle theory suggests that if the GATT/WTO treaty had not been recurrently renegotiated, its effectiveness as a regime would have been much less than it actually has been.[163]

This evolution in the WTO system is driven by deliberate actions of the Members, such as acceptance of new states into the membership, successful negotiations on the further reduction of tariffs and/or the extension of the coverage of trade regulations to new fields. At the same time, the system also evolves on its own due to interpretative developments with respect to primary rules and/or creation of secondary rules by the WTO bodies. Hence, it is important to bear in mind that apart from preserving the rules of the game established in the original position, the WTO also manages the dynamics of the game.

To manage the dynamics of the regime effectively, the WTO may require more autonomy from its Members than is necessary to fulfill the role of "a gate-keeper of the rules of the

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161 In the IR discipline a regime is usually defined as "implicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given issue-area" (Stephen. D. Krasner, ed., *International Regimes* (Ithaca, NY: Cornell University Press, 1983) at 1). In a recent publication on international regimes Spector and Zartman emphasize the evolutionary nature saying that regimes are "not final legislation but ongoing normative processes, and to treat them as hard law by focusing on compliance is both to miss their reality and to mistake their nature." See Bertram Spector & William Zartman, "Regimes and Negotiations: An Introduction" in Spector & Zartman, *supra* note 84, at 5. For a good review of IR theories on international organizations see Beth A. Simmons and Lisa L. Martin "International Organizations and Institutions" in W. Carlsnaes, T. Risse & B. Simmons, *Handbook of International Relations* (London: SAGE Publications, 2002).

162 As Zartman explains, "regimes persist as regimes by maintaining their flexibility, their ability to change in response to the varying needs for coordination and problem solving that gave them birth, and their adaptability to the shifting constellations of power and interests among their members." William Zartman, "Negotiating the Rapids: The Dynamics of Regime Formation" in Spector & Zartman, *supra* note 84, at 17.

163 Gunnar Sjöstedt, "Norms and Principles as Support to Postnegotiation and Rule Implementation" in Spector & Zartman, *supra* note 84, at 91 (footnotes omitted).

game”.[164] However, the level of the WTO's autonomy inversely correlates with the level of state sovereignty of its Members. Therefore increased autonomy of the regime manager may have two extreme effects: on the one hand, it may improve compliance within the regime; on the other hand, it may destroy the regime. This paradox may be better explained through the regime management model of international organization proposed by Thompson and Snidal.[165] However, before introducing this model a short philosophical digression needs to be made.

The ultimate goal of the world trading system is to maximize global welfare by making the world market more efficient. In the world market each state endeavors to maximize its own benefits.[166] Since improvements in the world market do not automatically imply improvement in a national economy, a rational government would tend to maximize benefits from international co-operation for its state, paying lesser attention to the overall benefits realizable by the world

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[164] The role of “a gate-keeper of the rules of the game” assumes that the WTO manages a regime that evolves through repeated negotiations which adjust the rules over time. From the perspective of game theory, such a regime may be viewed as an iterated game. However, in reality the WTO trade regime changes rather dynamically; as Brett Frischmann argues:

> “the games being played by States evolve, meaning that the rules of the game may change dynamically in response to exogenous events, independent from players performance and chosen strategies. States understand *ex ante* not only that they face noncompliance risks as traditionally conceived… but also that dynamic change may threaten the stability of the game. Accordingly, *ex ante*, States design institutions (to implement strategies) directed not only at detecting defection and altering payoffs in the event of defection – but also to maintain cooperation in the face of dynamic change triggered by exogenous events.”

Brett Frischmann “A Dynamic Institutional Theory of International Law” (2003) 51 Buffalo Law Review 679 at 722 (footnotes omitted).

The use of an evolutionary approach to treaty interpretation by the AB is a good illustration of the WTO's response to dynamic changes. For example, in the *US – Shrimp* (*supra* note 93, at paras. 127-134) the AB, noting that Article XX(g) of the GATT has to be read in the light of contemporary factual context, found that sea turtles constitute “exhaustible natural resources” for the purposes of Article XX(g) of the GATT. Had the AB acted as “a gate-keeper of the rules” in an iterated game, i.e. adhered to the strict meaning of the text and/or relied on the negotiating history (where under the term “exhaustible natural resources” the parties meant mainly minerals), the result could have been different. This example suggests that the WTO may be viewed as an individual player who joined the game started by states, i.e. the other players. If this is true, then the regime is an iterated game rather than the game proposed by Frischmann. Thus, in the example above, the WTO did not respond to a dynamic change but initiated a new round of the game and, since the Members did not overrule the AB's decision, changed the regime. In this sense, the regime may be viewed as a “legal order” described by Voegelin as a series of aggregates of valid rules imagined as a series of static points on the line that never run together into a continuum. Voegelin draws this description using an example of one of Zeno's paradoxes, which states that a succession of static points in time, no matter how nearly spaced, will never become the continuum of a thing in motion. See Eric Voegelin, Robert Pascal, James Babin & John Corrington, eds, *The Nature of the Law and Related Writings*. Vol. 27 of the *The Collected Works of Eric Voegelin* (Baton Rouge: Louisiana State University Press, 1991) at 16-20.

[165] A. Thompson & D. Snidal, “Guarding the Equilibrium: Regime Management in the WTO”, paper presented at the Annual Meeting of the American Political Science Association, Washington, D.C., 1-4 September 2005, available online at:<http://www.law.northwestern.edu/colloquium/international/Snidal.pdf> accessed on 16 December 2008.

[166] Maximization of own benefits by individual states makes the global market subject to the economic and behavioral problem known as the Prisoner's Dilemma (see e.g.: William Poundstone, *Prisoner's Dilemma* (New York: Doubleday Press, 1992) or Wagner, R. Harrison, “The Theory of Games and the Problem of International Cooperation” (1983) 77 American Political Science Review 330).

trade community. If we consider the world trade community and states as society and individuals respectively, it could be suggested that the idea of maximizing global welfare is based on the classical utilitarian principle of "the greatest happiness of the greatest number".[167] Utilitarianism in its institutional dimension holds that the best political and social institutions are those that produce the greatest total well-being, i.e. maximize the total happiness of humanity.[168] In maximizing total well-being, utilitarians are not concerned as to how the well-being is distributed. As a result, they may favor benefits to the well-off at the expense of the worse-off.[169] Since a rational member of society "would not accept a basic structure merely because it maximized the algebraic sum of advantages irrespective of its permanent effects on his own basic rights and interests",[170] such a justice in the world trade community might be unfair to one or more of its members whose lower than average realized benefits are outweighed by higher than average realized benefits of the other members.

The world trading system, as established in WTO law, can be viewed as a system of social co-operation designed to attain mutual advantage for all its members, and as such it is marked by what Rawls called conflict and identity of interests:

> [t]here is an identity of interests since social cooperation makes possible a better life for all than any would have if each were to live solely by his own efforts. There is a conflict of interests since men are not indifferent as to how the greater benefits produced by their collaboration are distributed, for in order to pursue their ends they each prefer a larger to a lesser share.[171]

It can be supposed that the WTO was established by the identity of interests of its founding members – equilibrium was set at its original position; however, a conflict of interests arises thereafter as to how the outcomes produced by the co-established trade regime should be distributed. The conflict of interests provides an incentive for states to shift the equilibrium from

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[167] See Tim Mulgan, *Understanding Utilitarianism* (Stocksfield: Acumen Publishing Ltd, 2007) at 11. It seems useful to provide herein Rawls' description of the utilitarian doctrine as his *Theory of Justice* is a prominent critique of classical utilitarianism. He describes it as an idea in which "society is rightly ordered, and therefore just, when its major institutions are arranged so as to achieve the greatest net balance of satisfaction summed over all the individuals belonging to it". See Rawls, *supra* note 158, at 22. For detailed discussion of utilitarianism see Frederick Rosen, *Classical Utilitarianism from Hume to Mill* (London: Routledge, 2003); Donald Regan *Utilitarianism and Co-operation* (New York: Oxford University Press, 1980); David Lyons *Forms and Limits of Utilitarianism* (Oxford: Oxford University Press, 1965).
[168] Tim Mulgan, *supra* note 167, at 128.
[169] *Ibid.* at 110.
[170] Rawls, *supra* note 158, at 14.
[171] Rawls, *supra* note 158, at 126.

its original position, but the same conflict precludes determination of the exact point for a new equilibrium. For example, the need to liberalize energy services (that is shifting the equilibrium) was acknowledged by the majority of the WTO Members and thus was put on the agenda of the Doha round; however, the scope of the services, their description and the form of liberalization (that is, a new equilibrium point) have not yet received consensus among the parties.

The regime management model proposed by Thompson and Snidal is based on different views among states over what is the best collective outcome from collaboration. According to them, if the states know that several alternatives produce better outcomes than the existing equilibrium position but cannot agree on which of the alternatives is the best for all, they may entrust an international organization to select among the alternatives. An option selected by such an international organization may become the new equilibrium if the majority (simple or qualified as applicable) of member states prefer it to the *status quo*.[172] Such a shift in equilibrium is concerned with the primary rules.[173] However, with respect to the secondary rules, the WTO has more autonomy to change the equilibrium.[174] By delegation of a power to choose among alternatives, the states expand the WTO's autonomy, simultaneously giving up their own sovereignty to a certain extent. With respect to international organizations generally, Thompson and Snidal assert that:

> [n]o state would accept the initial delegation of authority if it expected to be a loser, and delegation also raises important issues of sovereignty costs. But if states generally expect to gain from such international organization's autonomy, and if their occasional losses and sovereignty costs are limited, then they might well delegate.[175]

The more states join the WTO, the more heterogeneous the preferences of its membership become, and thus the more autonomy the organization gains. In relation to trade in the petroleum market, it can be expected that after accession to the WTO by energy rich states such as Iran and Iraq, the organization will have more alternatives to choose from concerning how the trade

[172] Thompson & Snidal, *supra* note 165, at 11.
[173] Put it in game theory's terminology it is a change in an iterated game.
[174] This is what may be called a change in a dynamic game. A few examples of such an alteration of secondary rules are discussed herein with respect to interpretation of treaty obligations by the DSB and adoption of procedural rules by WTO bodies that may affect the primary rules.
[175] Thompson & Snidal, *supra* note 165, at 12.

framework for the energy market should develop.[176] As an international organization, the WTO is given certain autonomy from and by its member states. Due to the institutional design of the WTO, no state can effectively exercise individual control over it. Collective control can be exercised by states through a majority of votes cast, though in many cases a qualifying majority is required to adopt a decision. Since the membership in the WTO is vast and highly heterogeneous it is difficult to exercise effective collective control over the organization. For example, according to Art. IX of the Agreement Establishing the WTO interpretations of the WTO agreements developed by the DSB can only be overruled by interpretation adopted by consensus or a three-fourths majority of members of the Ministerial Conference or the General Council.[177] Hence, unless the membership, by consensus or qualified majority, manages to compromise on a different interpretation, an understanding of agreements provided by the WTO DSB would actually be adhered to by its bodies.[178] Adjudication by the DSB of the WTO illustrates one example of the expansion of an international organization's own autonomy. To preserve the regime set by its Members, as an agent acting in absence of necessary directions from its principals, the WTO is compelled to adopt some flexibility in the execution of its duties:

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[176] Perhaps this is what Pascal Lamy, then WTO Director General, actually implied in the conclusion of his speech at the 20th World Energy Congress: "[a] stronger WTO is needed with new members, such as Ukraine and hopefully Russia, joining the family soon." (Pascal Lamy speech at the 20th World Energy Congress, Rome, 15 November 2007, online: the WTO <www.wto.org> accessed on 1 May 2012).

[177] See Art. IX of the Agreement Establishing the WTO, *supra* note 94. Also see Statement by the Chairman "Decision-making Procedures under Articles IX and XII of the WTO Agreement" (as agreed by the General Counsil), WTO Document: WT/L93 dated 24 November 1995.

[178] Reports of the WTO's dispute settlement bodies do not have legal value of precedents. However, there is a large body of legal literature arguing that in fact the panels and AB follow previous decisions as precedents. See e.g. Qureshi, *supra* note 115, at 30 *et seq.*; Claude E. Barfield *Free Trade, Sovereignty, Democracy: the Future of the World Trade Organization* (Washington, D.C.: The AEI Press, 2001) at 45 *et seq.*; Raj Bhala, "The Precedent Setters: De Facto Stare Decisis in WTO Adjudication (Part Two of a Trilogy)" (1999) 9 Journal of Transnational Law and Policy 1; Chua A., "The Precedential Effect of WTO Panel and Appellate Body Reports" (1998) 11 L.J.I.L. 45; Fabien Gélinas, "Dispute Resolution as Institutionalization in International Trade and Information Technology" (2005) 74 (2) Fordham Law Review 489; John Jackson, "Dispute Settlement and the WTO: Emerging Problems" (1998) 1 (3) Journal of International Economic Law 329; William J. Davey "Has the WTO Dispute Settlement System Exceeded Its Authority?" (2001) 4 Journal of International Economic Law 79; James K. R. Watson *The WTO and the environment: development of competence beyond trade* (New York: Routledge, 2013) at pp. 63-94.

In *US – Final Antidumping Measures on Stainless Steel from Mexico* the Panel disagreed with the line of reasoning that had been developed by the AB on similar issues in other cases. However, during the appeal the AB was "deeply concerned about the Panel's decision to depart from well-established Appellate Body jurisprudence clarifying the interpretation of the same legal issues… corrected the Panel's erroneous legal interpretation and have reversed all of the Panel's findings and conclusions that have been appealed". See AB Report *US – Final Antidumping Measures on Stainless Steel from Mexico*, WT/DS344/AB/R, adopted 30 April 2008, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 15 April 2014.

> [t]he legitimacy derived from political institutions in Member States supports the rules contained in the WTO Agreement and the covered agreements. What is at stake is the fate of those rules and the regime they put in place once the main decision-making mechanism not based on positive consensus – the only realistic mechanism for evolution – is adjudication.[179]

The WTO is not a passive third party waiting for proposals of new alternatives and choosing an outcome among them. As the regime manager, the WTO plays a crucial role in maintaining the equilibrium and, as is observable from the Doha and other rounds, in the promotion of further trade liberalization by providing research information, moderating discussion meetings, mediating among member states, and interpreting the agreements.[180] Thompson and Snidal suggest that by active regime management an international institution may expand its own autonomy to an extent not assumed by its founders at the time of the initial bargain: "while rules may have a life of their own, control over rules potentially increases the autonomous life of IO [international organization] by incrementally determining a new equilibrium".[181]

Extension of the WTO's autonomy implies a corresponding reduction in the scope of the sovereign rights of its members. Hence, the Members, individually or collectively, try to limit or control the expansion of the WTO's autonomy. These attempts will unlikely be successful as long as there is both conflict and identity of interests among the Members, which weakens both collective and individual control over the organization. As Thompson and Snidal suggest: "the effort to control IO [international organization] autonomy is inherently limited by the tension

[179] Fabien Gélinas, "Dispute Resolution as Institutionalization in International Trade and Information Technology" (2005) 74 (2) Fordham Law Review 489 at 501.
[180] The WTO agreements as many other international treaties exemplify classical incomplete contracts. Unspoken provisions in such contracts are filled in by interpretation. The WTO bodies: Ministerial Conference and General Council *de jure* under Art. IX (2) of the Agreement Establishing the WTO, the dispute settlement bodies and the Secretariat *de facto* may clarify provisions of the agreements to the extent of creation of new rules. At the same time, as Joel Trachtman submitted, "the principle of sovereignty requires that what is not positively prohibited to states is permitted to them", see Joel Trachtman "The Domain of WTO Dispute Resolution" (1999) 40 Harv. Int'l L. J. 333 at 341. For controversies over the scope of competence of the WTO dispute settlement bodies to interpret the agreements and to legislate new rules see the literature listed in *supra* note 178. As to the WTO Secretariat, we discussed above that its Note "Accession to the World Trade Organization: Procedures for Negotiations Under Article XII" considerably expands substance of the Art. XII of the Agreement Establishing the WTO, *supra* note 138.
[181] Thompson & Snidal, *supra* note 165, at 15.

between individual and collective control and by the desire to maintain the benefits – both individual and collective – of IO [international organization] autonomy."[182]

The replacement of the GATT by the WTO manifested a shift from a consensus-based to an enforcement-based world trade system with the appearance of a new global market player – the WTO, the trade system manager whose power and autonomy arise from escalating conflict and identity of interests of its Members. The liberalization of international trade and increasing autonomy of the WTO may increase the sovereignty costs for its Members. These sovereignty costs, combined with dissatisfaction with unauthorized actions of the WTO, may end up in mass non-compliance with trade obligations by a number of states who do not represent the ruling majority, but a "large minority".[183] Eventually the WTO would be compelled to force such states to observe the regime invoking the *pacta sunt servanda* rule. Since the regime is based not only on the agreements concluded in the original position but also on institutionally developed rules, the states may find the rules unfair and the regime illegitimate.

On the other side of the dilemma, the increasing autonomy of the WTO may strengthen the world trade regime. As long as in international trade relations, the identity of interests prevails over the conflict of interests, the states will accept some autonomy for the WTO, sacrificing a measure of sovereignty in exchange for gains only realizable through co-operation. Therefore, in strengthening the world trade regime, the main task for the WTO is to preserve the

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[182] *Ibid.* at 16.

[183] It has been stated that although after the establishment of an initial international arrangement the sovereignty objections are easier to overcome, they, nevertheless, may affect the international regime during the post-agreement processes. As Bertram Spector observes:

> With acceptance in principle of the initiating international commitment, the boundary between sovereignty and interdependence arguments often begins to blur. Demands to preserve national sovereignty have usually softened by the time postagreement negotiation occurs. Acceptance of the initiating agreement reflects national realization that international coordination and interdependent action are required to have a meaningful impact on the problem at hand. Thus, overcoming sovereignty objections, at least at the conceptual level, is often less of a problem in the postagreement period. On the other hand, sovereignty issues certainly do come to the fore concerning the details of implementation, when constraining regulations and reporting requirements are imposed to comply with international commitments. Powerful domestic stakeholders who may be asked to bear the costs of an agreement then often bring pressure on government officials to push sovereignty rights issues to protect domestic interests and thus weaken implementation.

Bertram Spector, "Deconstructing the Negotiations of Regime Dynamics" in Spector & Zartman, *supra* note 84, at 59. Spector's observation is made with respect to international regimes generally, including institutional and non-institutional international arrangements. In the WTO's specific case, the issue of sovereignty is greater because the international organization acts as a regime manager who can increase its own autonomy, and because of the difference of sovereignty costs which arises due to the WTO accession rules.

identity of interests, to prevent the conflict of interests, and to procure increasing gains realizable by the Members from the trading system.[184] In this way it is important for the WTO to be guided primarily by the object and purpose of the Agreement Establishing the WTO, as it reflects the identity of interests and provides shelter from criticism, which may escalate the conflict of interests.[185] This is especially important for the DSB whose interpretative practice may crucially affect the ultimate outcome of the dilemma.

The energy market, and particularly trade in petroleum, is of strategic importance for all states and represents highly exacerbated conflict and identity of interests. In this market, while global trade efficiency is primarily an economic issue, national policy is heavily influenced by political concerns that frequently outweigh economic interests.[186] Attention to trade in petroleum heightened with the launch of the Doha round and the recent accession of Russia as well as the application of Iraq, Iran, and several other significant oil and gas exporters for WTO membership. In the process of accession of said countries, and during discussion of liberalization of trade in energy services under the Doha round, negotiations are conducted by all states, each of them deliberately aiming to achieve maximization of its own interests. To balance the interests of states effectively, the WTO may need less control from its members and, as we observed above, may expand its own autonomy. Due to both inter-state negotiations and the WTO's autonomy expansion, the sovereign costs at stake are high and may cause considerable threats to the stability of the world trade system. Thus, the energy sector may become a primary challenge

[184] The strength of a regime and its stability are to a certain extent overlapping concepts. Zartman defines stability of a regime as "a function of the degree of certainty of information about the transaction problem, the degree of divergence of the participating states' interests, and the degree of harmony of current norms and expectations". According to him "the greater the capacity of a regime's negotiated formula to resolve the transaction problem, to meet the participating states' interests, to fit current norms and establish coherent expectations, and so to overcome opposition to it, the more stable the regime". See William Zartman, "Negotiating the Rapids: The Dynamics of Regime Formation" in Spector & Zartman, *supra* note 84, at 15.

[185] Earlier we noted that interpretative textualism protected the DSB from criticism. However, textualism may be good protection only from the short-term criticism of parties affected by the dispute. I believe that it is the reliance on the object and purpose of the treaty that may save the WTO from much stronger criticism of the overall world trade community from the long-term perspectives.

[186] Actions of governments in the international arena are driven by the political situation in their countries, which is shaped by various special-interest groups, who are frequently able to compel the government to take economically inefficient decision. See Gene M. Grossman & Elhanan Helpman "Trade Wars and Trade Talks" (1995) 103 Journal of Political Economy 675; Ngo Long & Neil Vousden "Protectionist Responses and Declining Industries" (1991) 30 Journal of International Economics 87.

to the WTO trading system and its regime manager, and their fate will largely depend on how timely and effectively the regime manager detects and handles the challenge.

1.6. Conclusion

This chapter established the conceptual framework on the basis of which I will, in the next chapters, analyze the regulation of trade in petroleum under WTO rules. The economic, political, institutional, and legal pieces of the framework must be viewed in a holistic way, in their complex inter-relationship. The main findings of this chapter that will guide our further analysis are that: (i) any analysis of trade in petroleum should take into account the exhaustibility of natural resources, and that any developments in the petroleum sector will inevitably affect the energy industry as well as world trade in general; (ii) the normative basis of the world trading system should recognize that in certain cases state intervention is necessary for the improvement of global welfare; and that (iii) the WTO as an international organization has the duty to further the objectives of the world trading system, and in performing this duty it must cure controversies, uncertainties and deficiencies currently existing in the multilateral trade regime to avoid their long-term negative effects. With this in mind, we turn to the discussion of specific issues pertinent to the regulation of trade in petroleum under WTO law.

CHAPTER II. "LIKE PRODUCTS" & "DIRECTLY COMPETITIVE OR SUBSTITUTABLE PRODUCTS": PETROLEUM VS. OTHER ENERGY RESOURCES

2.1. Introduction

Trade in petroleum inevitably intersects with the environmental policies of states. Greenhouse gas emissions from burning petroleum and coal contribute to climate change. Economists have called climate change "the greatest example of market failure" ever seen by humanity.[187] In the case of climate change and other environmental externalities, governments adopt environmental policies because market forces alone fail to produce an efficient outcome. Environmental policy in most cases means market intervention by government.[188] Such market intervention is justified from STP theory perspectives. Although in neo-classical trade theory, markets are assumed to be free of externalities, its adepts should also recognize the necessity of state intervention in the face of modern environmental problems.

Economic development does not always imply sustainable development, not least because many trade rules were drafted without proper concern for environmental externalities. Would environmental policies related to petroleum survive trade imperatives that are consistently preserved by the WTO? From a macro-perspective, the answer depends on whether the normative theory of trade warrants state intervention in the case of environmental externalities and whether the objective of the WTO system equally encompasses sustainable development and free trade. From a micro-perspective, the answer largely depends on whether petroleum and other energy products are "like products", or "directly competitive or substitutable products". In this chapter, we focus on the micro-perspective as it is provided in the GATT and assess potential implications of such products' categorization to the environmental policies of petroleum importing states.

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187 Nicholas Stern, *The Economics of Climate Change: The Stern Review*, (Cambridge: Cambridge University Press, 2006), at 1.

188 Taxation and subsidies are considered market interventions. State policies that are not concerned with market intervention include criminal charges, educational programs aiming to increase environmental awareness etc.

2.2. The concept of "like product"

Art. I of the GATT establishes the principle of most favored nation treatment (MFN), which requires that "any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties." Another important principle, the national treatment (NT), is laid out in Art. III of the GATT. Paragraph 2 of Art. III prohibits discriminatory taxation: "[t]he products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products", whereas its paragraph IV sets a broader scope of the NT standard: "[t]he products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use." Moreover, Art. 2.1. of the Agreement on Technical Barriers to Trade (TBT Agreement) combines the MFN and the NT principles in a single provision which requires that "Members shall ensure that in respect of technical regulations, products imported from the territory of any Member shall be accorded treatment no less favourable than that accorded to like products of national origin and to like products originating in any other country."

These two important principles of international trade law hinge on the term "like product". This term is critical to all agreements governing international trade and, accordingly, has been studied intensely in legal and economic scholarship.[189] Nonetheless, the precise

[189] Almost every textbook on international trade law devotes a section or a chapter to the idea of "like product"; there is at least one book particularly dedicated to the problem of identification of like products in GATT/WTO disputes. See Won-Mog Choi, *"Like products" in International Trade Law: Towards a Consistent GATT/WTO Jurisprudence* (Oxford: Oxford University Press, 2003); Bhala, *Modern GATT Law*, *supra* note 140; Mitsuo Matsushita, Thomas J. Schoenbaum & Petros C. Mavroidis, *The World Trade Organization Law, Practice, and*

meaning of this term has never been determined.[190] The GATT 1947 negotiators were unable to provide a definition for the term and agreed to "leave it to the ITO later on to establish a jurisprudence on the meaning of this term."[191] Hence, it is necessary to search the meaning for the term in the GATT/WTO jurisprudence. Rather than exploring the idea of like products in detail, we will summarize the main approaches taken in the GATT/WTO legal rulings to identify similarities and differences between petroleum and non-petroleum products.

On 2 December 1970, the GATT Working Party adopted a report discussing the question of border tax adjustments raised by the contracting parties.[192] Amid the tax issues, this report touched on the definition of the term "like products" in a single paragraph. It states:

> With regard to the interpretation of the term "...like or similar products...", which occurs some sixteen times throughout the General Agreement, it was recalled that considerable discussion had taken place in the past, both in GATT and in other bodies, but that no further improvement of the term had been achieved. The Working Party concluded that problems arising from the interpretation of the term should be examined on a case-by-case basis. This would allow a fair assessment in each case of the different elements that constitute a "similar" product. Some criteria were suggested for determining, on a case-by-case basis, whether a product is "similar": 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. It was observed, however, that the term "...like or similar products..." caused some uncertainty and that it would be desirable to improve on it; however, no improved term was arrived at.[193]

Many years later in its report *Japan – Taxes on Alcoholic Beverages*, the AB observed that the approach set out by the Working Party "was followed in almost all adopted panel reports after *Border Tax Adjustments*."[194] The AB upheld the use of the criteria provided in the Working

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Policy (Oxford: Oxford University Press, 2006); Petros C. Mavroidis, *The General Agreement on Tariffs and Trade: a Commentary* (Oxford: Oxford University Press, 2005).

190 John H. Jackson, William J. Davey & Alan Sykes, *Legal Problems of International Economic Relations: Cases, Materials, and Text on the National and International Regulation of Transnational Economic Relations* (St. Paul, Minn: West Group, 2002) at 525.

191 See GATT Doc. E/PC/T/A/PV/40 (1) at 14.

192 GATT Working Party Report, *Border Tax Adjustments*, adopted on 2 December 1972 (L/3464); BISD 18S/97, [hereinafter: *Border Tax Adjustments*] at. 97

193 *Ibid.* para. 18.

194 AB Report, *Japan – Alcoholic Beverages*, *supra* note 128, at section H1(a).

A well reasoned critique of the *Border Tax Adjustments* report was provided by Robert Hudec, who concluded that "[i]t is difficult to understand why so much respect is accorded to this passage, given that it is discussing the term 'like or similar' and 'similar', whereas the key words of Article I, III:2 and III:4 are 'like product' – period. Moreover, the criteria listed in the report were just 'suggestions' from one or more members of the Working Party, and even at that are merely an illustrative list of "some" criteria that might be applied. The suggestions are merely reported by the Working Party, but in no way officially recommended by it." Robert E. Hudec, "'Like product': The Differences in Meaning in GATT Articles I and III", in Thomas Cottier & Petros Mavroidis, eds, *Regulatory Barriers and the Principle of Non-Discrimination in World Trade Law*, (Ann Arbour, MI: University of Michigan Press 2000) at 112.

Party's report to determine "likeness" of products; it also reaffirmed the centrality of the "case-by-case" approach. However, in addition to the product's end-use, consumer behavior, and physical characteristics of the product (i.e. properties, nature and quality), the AB introduced another potential criterion in determining what "like products" are: the uniform tariff classification of products. The AB noted that not all states specified their tariff bindings as punctiliously as the Harmonized System classification,[195] possibly because of the non-obligatory character of the latter. Hence, the AB determined that tariff bindings can be used for identification of "like products" only when the bindings are precise and clear with regard to product description. The precision of description should still be ascertained on a case-by-case basis. Vague tariff bindings containing a wide range of products are not a reliable criterion for determining product "likeness."[196]

Upon review of *Japan – Taxes on Alcoholic Beverages,* the AB also concluded that the range of "like products" under the first sentence of Art. III:2 should be construed as more narrow, "as opposed to the range of 'like' products contemplated in some other provisions of the GATT 1994 and other Multilateral Trade Agreements of the WTO Agreement." Moreover, the AB also admitted that no precise and absolute definition of "likeness" exists in the trade rules: "[t]he concept of 'likeness' is a relative one that evokes the image of an accordion. The accordion of 'likeness' stretches and squeezes in different places as different provisions of the WTO Agreement are applied." The dissimilarities between the term's usage and scope in different provisions of the GATT have also been acknowledged in subsequent cases and legal scholarship.[197] For example, while criticizing the *Border Tax Adjustments,* report professor Hudec argued that the report, generally referring to sixteen occurrences of the term in the agreement, does not take into account the differences in policy context of various GATT articles

[195] The Harmonized Commodity Description and Coding System was developed by the World Customs Organization to provide a unified tariff nomenclature.
[196] AB Report, *Japan – Alcoholic Beverages*, *supra* note 128, at section H1(a).
[197] See e.g. *EC – Asbestos*, *supra* note 128, at para. 99; Donald H. Regan, "Regulatory Purpose and "Like Products" in Article III:4 of the GATT (With Additional Remarks on Article III:2)" (2002) 36(3) Journal of World Trade, 443; Rex J. Zedalis, "A Theory of the GATT "Like" Product Common Language Cases", (1994) 27 Vand. J. Transnat'l L. 33.

that contain the term "like product." He asserted that the term has different meanings under Art. I and III. According to Hudec, "the term 'like product' should be interpreted to allow rather fine distinctions between products when it is applied to product distinctions made by tariffs, but the 'like product' term should not allow such fine distinctions when it is being applied to product distinctions made by internal taxes and internal regulations."[198] More generally, Hudec suggested that the meaning of "like products" is broad in the context of GATT's obligations, but narrow in the context of exceptions from the obligations provided in the agreement.[199]

EC – Asbestos is another frequently cited case that used the *Border Tax Adjustments*' criteria.[200] In this case the Panel, assessing the "likeness" of chrysotile asbestos fibers and non-asbestos fibers, concluded that although the two types of products do not share the same structure or chemical composition, they are "like products" because the products have similar applications and can replace one another in some industrial uses. Hence, the Panel stressed the importance of the "market access" criterion.[201] A similar conclusion was reached concerning cement-based products because, in the Panel's view, the only difference between cement containing asbestos and other types of cement was that the former's structure incorporated a different fiber.[202] However, the Panel found that the measure adopted by the EC was a necessary

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198 Hudec, *supra* note 194, at 103.
199 Zedalis, *supra* note 194, at 121.
200 The WTO Panel Report, *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, adopted 5 April 2001, WT/DS135/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: Panel Report, *EC – Asbestos*]. In 1996 the French Government adopted a decree banning the import, export, production and marketing of asbestos and products containing asbestos. This measure was taken to protect consumers' and workers' health as asbestos is a carcinogenic product. Having substantial interest in the French market, Canada challenged the decree arguing that asbestos containing products (such as chrysotile fibers and cement) that it exports are like non-asbestos containing products (fibrous and non-fibrous products, cement, etc.) produced in France. The AB Report (*supra* note 128) proved controversial in legal scholarship. Some scholars appreciated it as "a landmark like-product interpretation" whereas some others were not so enthusiastic, saying that "[i]ts reasoning, however, is so decidedly non-definitive that it is not, consequently, possible to say whether it represents a veritable paradigm shift or is just a badly reasoned case by the Appellate Body (AB), albeit with a non-controversial result." See for the former and the latter opinions respectively: Jochem Wiers & James Mathis, "The Report of the Appellate Body in the Asbestos Dispute: WTO Appellate Body Report 12 March 2001, WT/DS135/AB/R, European Communities – Measures Affecting Asbestos and Asbestos-containing Products" Legal Issues of Economic Integration (2001) 28(2) 211 at 225; and, Henrik Horn & Joseph Weiler, "EC–Asbestos European Communities – Measures Affecting Asbestos and Asbestos-Containing Products" (2004) 3(1) World Trade Review 129 at 130.
201 Panel Report, *EC – Asbestos*, *supra* note 200, at paras. 8.123–8.126.
202 *Ibid.* paras. 8.145-8.150.

measure to protect human health under Art. XX(b) of the GATT.[203] The AB agreed with the Panel on the legitimacy of the measures but reversed the conclusion on the "likeness" of the products:

> [t]he Panel disregarded the quite different "properties, nature and quality" of chrysotile asbestos and PCG fibres, as well as the different tariff classification of these fibres; it considered no evidence on consumers' tastes and habits; and it found that, for a "small number" of the many applications of these fibres, they are substitutable, but it did not consider the many other end-uses for the fibres that are different... For the reasons we have given, we find this insufficient to justify the conclusion that the chrysotile asbestos and PCG fibres are "like products" and we, therefore, reverse the Panel's conclusion.[204]

The main critique by the AB was the Panel's failure to examine fully the physical properties of the products, specifically properties that influenced competition between products in the marketplace. The health risk associated with carcinogenicity of asbestos based products was one such decisive property.[205]

It is hardly deniable that the criteria of "likeness" established by the Working Party in 1970 have directed and will continue to direct international trade adjudicators in all cases requiring the identification of like products.[206] It is notable, however, that at least two GATT cases explicitly deviated from the traditional *Border Tax Adjustments* criteria, as the two panels instead used the so-called "aims and effects" test.[207] Deliberation in these cases emphasized the phrase, "so as to afford protection" in Art. III:1, leading the panels to conclude that the

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[203] *Ibid*. para 8.194.
[204] AB Report, *EC – Asbestos*, *supra* note 128200, at paras. 125-126.
[205] *Ibid.* paras. 113-114 More generally, the AB asserted that the Panel failed to examine all four criteria comprehensively: "[b]y reaching a 'conclusion' without examining all of the criteria it had decided to examine, the Panel, in reality, expressed a conclusion after examining only some of the evidence. Yet, a determination on the 'likeness' of products cannot be made on the basis of a partial analysis of the evidence, after examination of just one of the criteria the Panel said it would examine." (*ibid*. para. 109).
[206] Some criteria within the framework provided by the *Border Tax Adjustments* Report could be more decisive than others (e.g. consumer behavior is proposed to be the ultimate criterion by Adrian Emch (see Adrian Emch "Same Same But Different? Fiscal Discrimination in WTO Law and EU Law: What Are 'Like' Products?" (2005) 32 (4) Legal Issues of Economic Integration 369); some scholars stress market place and comparative advantage criterion (see Jonell Goco, "Non-Discrimination, 'likeness', and Market Definition in World Trade Organization Jurisprudence" (2006) 40 (2) Journal of World Trade 315; and from US perspectives see Bruce Steen, "Economically Meaningful Markets: an Alternative Approach to Defining "Like Products" and "Domestic Industry" under the Trade Agreements Act of 1979" (1987) 73 Va. L. Rev. 1459); some criteria may need to be modified respectively to each particular case (e.g. to take into account growing environmental concerns, in the vein of *EC – Asbestos* and *US – Shrimp* decisions, an ecological criterion could be introduced as proposed by Nanno Kube in "Competence Conflicts and Solutions: National Tax Exemptions and Transnational Controls" (2002) 9 Colum. J. Eur. L. 79).
[207] GATT Panel Reports, *United States – Measures Affecting Alcoholic and Malt Beverages*, adopted 19 June 1992, DS23/R, BISD 39S/206 [hereinafter: *US – Malt Beverages*]; and, *United States – Taxes on Automobiles*, 11 October 1994 (unadopted), DS31/R [hereinafter: *US – Taxes on Automobiles*].

determination of "likeness" is essentially grounded on an examination of the regulatory purposes of the measures and their effect on the market, and that determination should not be limited to such criteria as the products' physical characteristics.[208] This approach has been widely criticized because, on the one hand, it lacked textual basis in the GATT, and, on the other hand, it heavily relied on subjective factors that must be interpreted to identify the aims and, to a lesser extent, the effects of regulatory measures.[209] Perhaps due to these shortcomings, none of the subsequent WTO cases to date used this test.

As far as determination of "like products" is concerned within the GATT,[210] adjudicators consider it inappropriate to take into account the technological process by which products are made.[211] Proponents of the process and production method (PPM) argue that differences in the technological process of a product's manufacturing are likely to affect consumer preferences.[212]

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[208] See *US – Malt Beverages*, para 5.71. A coherent explanation for this test was provided by the Panel in *United States – Taxes on Automobiles* (para. 5.10):

> "the phrase 'so as to afford protection' called for an analysis of elements including the aim of the measure and the resulting effects. A measure could be said to have the aim of affording protection if an analysis of the circumstances in which it was adopted, in particular an analysis of the instruments available to the contracting party to achieve the declared domestic policy goal, demonstrated that a change in competitive opportunities in favour of domestic products was a desired outcome and not merely an incidental consequence of the pursuit of a legitimate policy goal. A measure could be said to have an effect of affording protection to domestic production if it accorded greater competitive opportunities to domestic products than to imported products."

[209] See e.g., Hudec, *supra* note 125; Won Mog Choi, "Overcoming the "Aim and Effect" Theory: Interpretation of the 'like product' in GATT Article III" (2002) 8 U. C. Davis J. Int'l L. & Pol'y 107; see also AB Report, *Japan – Alcoholic Beverages*, *supra* note 128, at section H2(c). However, a number of scholars advocate the test; see e.g., Regan, *supra* note 194, at 121; Frieder Roessler, *The Legal Structure, Functions & Limits of the World Trade Order* (London: Cameron May, 2000) at 122 *et seq.*

[210] To distinguish it from the TBT Agreement and the Agreement on the Application of Sanitary and Phytosanitary Measures in which technical regulations can affect the products' 'likeness' criteria. See Matsushita, Schoenbaum & Mavroidis, *supra* note 189, at 163; Thomas J. Schoenbaum, "International Trade and Protection of the Environment: The Continuing Search for Reconciliation" (1997) 91 Am. J. Int'l L. 268 at 288 *et seq.*, Patrick Low, Gabrielle Marceau & Julia Reinaud, "The Interface between the Trade and Climate Change Regimes: Scoping the Issues" (2012) 46 (3) Journal of World Trade 485 at 519-524, Gabrielle Marceau, "The New TBT Jurisprudence in US – Clove Cigarettes, WTO US – Tuna II and US – Cool" (2013) 8 (1) Asian J. WTO & Int'l Health L & Pol'y 1 at 6-8. Also see generally Gabrielle Marceau & Joel P. Trachtman, "A Map of the World Trade Organization Law of Domestic Regulation of Goods: The Technical Barriers to Trade Agreement, the Sanitary and Phytosanitary Measures Agreement, and the General Agreement on Tariffs and Trade" (2014) 48 (2) Journal of World Trade 351 [hereinafter: Marceau & Trachtman "A Map of the WTO"].

[211] GATT Panel Reports: *Spain – Tariff Treatment of Unroasted Coffee*, adopted 11 June 1981, L/5135, BISD 28S/102 at para. 46; *United States – Restrictions on Imports of Tuna*, DS21/R, 3 September 1991, BISD 39S/155 (unadopted) at para. 5.11; *United States – Restrictions on Imports of Tuna*, DS29/R, 16 June 1994 (unadopted) at paras. 5.8-5.9; and, WTO Panel Reports: *US – Gasoline*, *supra* note 1, at paras. 6.11-6.13; *Canada – Certain Measures Concerning Periodicals*, adopted 30 July 1997, as modified by AB Report WT/DS31/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: *Canada – Periodicals*] paras. 5.24 -5.25.

[212] See e.g. Ilona Cheyne, "Environmental Unilateralism and the WTO/GATT System" (1994-1995) 24 Ga. J. Int'l & Comp. L. 433; William J. Snape III & Naomi B. Lefkovitz, "Searching for GATT's Environmental Miranda: Are "Process Standards" Getting "Due Process"?" (1994) 27 Cornell Int'l L.J. 777; Douglas A. Kysar, "Preferences for

Hence, two final products, which are found "like products" under the traditional criteria, could be viewed as different by consumers and, consequently, may appear as neither competing nor substitutable. The main arguments against the PPM are that if such regulations were permitted, trade rules would be unilaterally abused. The PPM requirements aim to regulate production factors and therefore run counter to the theory of comparative advantage on which the trading system is based; the PPM regulations have extra-territorial effects.[213] Nonetheless, considering the growing engagement of the general public in environmental issues, the rapid development of biogenetical engineering, and different religious practices regarding food and other consumer products, it is too early to dismiss the PPM from international trade adjudication.

During the GATT 1947 *travaux préparatoires*, a delegate from Norway said with respect to the definition of "like-product": "to try to make any sort of definition was really impossible and one would… have to wait until complaints were made to the Organization. It would then be for the Organization to evolve gradually a sort of… Case Law, as these complaints arise."[214] Case Law evolution has indeed been slow. After more than six decades, as this section attempted to demonstrate, the only clear conclusions that can be drawn from the GATT/WTO jurisprudence are that "likeness" of products is determined on a "case-by-case" basis and that the term may have varying meanings in different provisions of the GATT.[215] The Tax Border Adjustments

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Processes: The Process/Product Distinction and the Regulation of Consumer Choice" (2004) 118 (2) Harvard L. Rev. 525.

[213] See John H. Jackson, "World Trade Rules and Environmental Policies: Congruence or Conflict Environmental Quality and Free Trade: Interdependent Goals or Irreconcilable Conflict" (1992) 49 Wash. & Lee L. Rev. 1227; Andrew L. Strauss, "From GATTzilla to the Green Giant: Winning the Environmental Battle for the Soul of the World Trade Organization" (1998) 19 U. Pa. J. Int'l Econ. L. 769; Christian Tietje "Process-Related Measures and Global Environmental Governance" in Gerd Winter ed., *Multilevel Governance of Global Environmental Change: Perspectives from Science, Sociology and the Law* (Cambridge: Cambridge University Press, 2006) at 256-259; Schoenbaum, *supra* note 210, at 291; Michael Reiterer, "The International Legal Aspects of Process and Production Methods" (1994) 17 World Competition 111.

At least one provision of the GATT expressly refers to the "process-product" method. Art. XX (e) provides an exception for measures "relating to the products of prison labour." By the same token, it is expected that trade measures adopted by a state against the products of another state which uses child labor may not be challenged in the DSB. However, it has been suggested that use of child labor could be discouraged on different grounds – as measures taken under Art. XX (b) of the GATT, see Matthew T. Mitro, "Outlawing the Trade in Child Labor Products: Why the GATT Article XX Health Exception Authorizes Unilateral Sanctions" (2001-2002) 51 Am. U. L. Rev. 1223.

[214] GATT Doc. E/PC/T/A/PV/40 (1) at 14.

[215] A leading GATT researcher concluded on the "like product" jurisprudence that "case-law in the context of NT has not been helpful: if the role of case-law, beyond resolving a dispute, is to *complete* the contract and make it

report established basic criteria that may be modified or interpreted according to the needs of each particular case. In other words: "[t]hese criteria are, it is well to bear in mind, simply tools to assist in the task of sorting and examining the relevant evidence. They are neither a treaty-mandated nor a closed list of criteria that will determine the legal characterization of products."[216]

2.3. The notion of "directly competitive or substitutable products"

Art. III of the GATT is supplemented by the Interpretative Note *Ad*. Art. III, which provides another important notion used for comparison of domestic and imported commodities for the purposes of the NT obligation: "directly competitive or substitutable products." The addendum elucidates the second paragraph of Art. III, and reads as follows:

> A tax conforming to the requirements of the first sentence of paragraph 2 would be considered to be inconsistent with the provisions of the second sentence only in cases where competition was involved between, on the one hand, the taxed product and, on the other hand, a directly competitive or substitutable product which was not similarly taxed.

Thus, a different regime is established for "like products" and "directly competitive or substitutable products" under the GATT's Art. III:2. In short, if like products are taxed differently, the provisions of Art. III:2, first sentence are violated, meaning that differential taxation is prohibited *per se*. However, in the case of directly competitive or substitutable products, after determination of differential taxation, tax policy must be proven to afford protection to domestic production.[217] In contrast to the first sentence of Art. III:2, the provision of the second sentence dealing with directly competitive or substitutable products requires evidence that discrimination was applied to afford protection for domestic products.

In *Japan – Taxes on Alcoholic Beverages,* the Panel addressed the relationship between the terms "like products" and "directly competitive or substitutable products". The Panel stated that the term "directly competitive or substitutable products" should be interpreted more broadly

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clearer and, crucially, more predictable, then case-law on NT has failed its basic mission". Mavroidis, *supra* note 189, at 247 [emphasis original].

[216] AB Report, *EC – Asbestos*, *supra* note 128200, at para. 102.

[217] AB Report, *Japan – Alcoholic Beverages*, *supra* note 128, at section H2.

than "like products" and that the latter should be viewed as a subset of the former: "all like products are, by definition, directly competitive or substitutable products, whereas all directly competitive or substitutable products are not necessarily like products."[218] According to the Panel, "like products" need not be identical in all respects, they "must share apart from commonality of end-uses, essentially the same physical characteristics."[219] But in the case of "directly competitive or substitutable products," the Panel concluded that two products need not share the same physical characteristics as long as they compete in the given market.[220] The Panel emphasized consideration of the market place in which competition is allegedly taking place. Moreover, the Panel asserted that "the decisive criterion in order to determine whether two products are directly competitive or substitutable is whether they have common end-uses, *inter alia*, as shown by elasticity of substitution."[221] The Panel narrated this point using "general econometric principles":

> [t]he Panel noted that the extent to which two products are competitive in economics is measured by the responsiveness of the demand for one product to the change in the demand for the other product (cross-price elasticity of demand). The more sensitive demand for one product is to changes in the price of the other product, all other things being equal, the more directly competitive they are. This is related to the substitutability of one product for another (elasticity of substitution).

The AB agreed with the Panel's characterization of "directly competitive or substitutable products," and emphasized that elasticity of substitution is one of many means of examining markets for compared products.[222] The AB also confirmed that determination of the range of "directly competitive or substitutable products" must be made on a case-by-case basis, similarly to determination of "like products."[223]

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[218] WTO Panel Report, *Japan – Taxes on Alcoholic Beverages*, adopted 1 November 1996, as modified by AB Report, WT/DS8/R, WT/DS10/R, WT/DS11/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: Panel Report, *Japan –Alcoholic Beverages*] at para. 6.22. This view was supported by the AB later in a similar case, see AB Report *Korea – Alcoholic Beverages*, *infra* note 224, at para. 118.

[219] Panel Report, *Japan – Alcoholic Beverages*, *supra* note 218, at paras. 6.21 and 6.22.

[220] *Ibid.* para. 6.22.

[221] *Ibid*. The Panel further stated that "independently of similarities with respect to physical characteristics or classification in tariff nomenclatures, greater emphasis should be placed on elasticity of substitution. In this context, factors like marketing strategies could also prove to be relevant criteria, since what is at issue is the responsiveness of consumers to the various products offered in the market." See *ibid*. at *para* 6.28.

[222] AB Report, *Japan – Alcoholic Beverages*, *supra* note 128, at para. 25.

[223] *Ibid.*

Similar conclusions were made in the *Korea – Taxes on Alcoholic Beverages* case. Here the AB went further, stating that analysis of a competitive relationship should not rely solely on reference to current consumer preferences but must also take into account potential changes in consumer preferences:

> The term "directly competitive or substitutable" describes a particular type of relationship between two products, one imported and the other domestic. It is evident from the wording of the term that the essence of that relationship is that the products are in competition. This much is clear both from the word "competitive" which means "characterized by competition", and from the word "substitutable" which means "able to be substituted". The context of the competitive relationship is necessarily the marketplace since this is the forum where consumers choose between different products. Competition in the market place is a dynamic, evolving process. Accordingly, the wording of the term "directly competitive or substitutable" implies that the competitive relationship between products is *not* to be analyzed *exclusively* by reference to *current* consumer preferences. In our view, the word "substitutable" indicates that the requisite relationship *may* exist between products that are not, at a given moment, considered by consumers to be substitutes but which are, nonetheless, *capable* of being substituted for one another.[224]
>
> The words "competitive or substitutable" are qualified in the *Ad* Article by the term "directly". In the context of Article III:2, second sentence, the word "directly" suggests a degree of proximity in the competitive relationship between the domestic and the imported products. The word "directly" does not, however, prevent a panel from considering both latent and extant demand.[225]

The Panel in *Korea – Taxes on Alcoholic Beverages,* arguing against a narrow interpretation of the term "directly and substitutable products," referred to the negotiating history of Art. III:2 and found that the GATT 1947 negotiators discussed whether various sets of commodities may fall under this category.[226] Products characterized as "directly competitive or substitutable products" included apples and oranges, linseed oil and tung oil, synthetic rubber and natural rubber. Tramways and buses, coal and fuel oil were also discussed but as no clear

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[224] AB Report, *Korea – Taxes on Alcoholic Beverages*, adopted 17 February 1999, WT/DS75/AB/R, WT/DS84/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: AB Report, *Korea – Alcoholic Beverages*] para. 114 [emphasis original], see also paras. 115, 120, 124. Notably, while articulating this view the AB suggested that tax or regulatory measures can distort consumer preferences and therefore a "latent demand" should be taken into account in such cases.
Since the provision of the Interpretative note Ad. Art. III is applicable in either "competitive" or "substitutable," it is not necessary to elaborate on the difference between the two terms in addition to what the AB offered in the quoted passage. An interesting analysis on this point can be found in Won-Mog Choi, *supra* note 189, at 14 *et seq*.

[225] *Ibid.* para. 116.
It is unclear whether the word "directly" qualifies only the term "competitive" or also "substitutable". Won-Mog Choi looks to the French text of the provision, where the qualification is repeated for each term. See Won-Mog Choi, *supra* note 189, at 16.

[226] WTO Panel Report, *Korea – Taxes on Alcoholic Beverages*, WT/DS75/R, WT/DS84/R, adopted 17 February 1999, as modified by Appellate Body Report WT/DS75/AB/R, WT/DS84/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: Panel Report, *Korea – Alcoholic Beverages*] para 10.38.

consensus was established, negotiators left the distinction to be resolved in each particular case.[227] Then the Panel further elaborated on the negotiating history of this provision:

> This negotiating history illustrates the key question in this regard. It is whether the products are **directly** competitive or substitutable. Tramways and busses, when they are not directly competitive, may still be indirectly competitive as transportation systems. Similarly even if most power generation systems are set up to utilize either coal or fuel oil, but not both, these two products could still compete indirectly as fuels. Thus, the focus should not be exclusively on the quantitative extent of the competitive overlap, but on the methodological basis on which a panel should assess the competitive relationship.[228]

In a footnote to this paragraph the Panel stated:

> To follow on from these hypotheticals, it can be noted that some large power generation facilities may be convertible from coal to fuel oil or a series of power stations in a particular market could be set for replacement and alternative fuel sources might be under consideration. In such instances there may be direct competition. Hence the statements of the delegates that a review of the specific market structure is necessary to determine the nature of the competition [*sic.*].[229]

Although elasticity of substitution is one among many potential means of examining competitiveness and substitutability of products, WTO cases concerned with the issue were heavily based on economic studies of the product's market.[230] When determining competitiveness and substitutability of products, the Panels' use of elasticity of substitutability varied considerably from case to case. The Panels did not express what was the degree of elasticity of substitution that was sufficient to characterize two products as directly competitive or substitutable, and therefore the specific threshold of elasticity of substitution remains undetermined.[231] Considering that the Panels are allowed to consider latent and potential substitutability, the specific threshold may be quite low.

Before turning to GATT/WTO jurisprudence, which dealt with the categorization of petroleum products, it must be stated that in these cases, the Panels did not consider whether

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[227] The example of tramways and busses, and coal and fuel oil was discussed during the Havana session of the GATT Preparatory Committee by the representative of Lebanon. The UK representative considered those products not directly competitive or substitutable. The Cuban representative suggested that each case should be determined as it arises, while the US representative opined that these commodities may fall into the category if the tax policy is designed to protect domestic products but also had to be determined on a case-by-case basis. See GATT Doc. E/CONF.2/C.3/SR.40 at 2.
[228] Panel Report, *Korea – Alcoholic Beverages*, *supra* note 226, para 10.39 [emphasis original, footnote omitted].
[229] *Ibid*. fn. 354.
[230] In addition to the cases reviewed, directly competitive or substitutable products were examined in WTO Panel Reports, *Canada – Periodicals* (*supra* note 211) and *Chile – Taxes on Alcoholic Beverages*, WT/DS87/R, WT/DS110/R, adopted 12 January 2000, as modified by AB Report WT/DS87/AB/R, WT/DS110/AB/R.
[231] Won-Mog Choi, *supra* note 189, at 29.

products were directly competitive or substitutable as the products concerned were found alike, and therefore did not require further categorization.

2.4. Like products in the petroleum related trade disputes

Both petroleum-related cases resolved under the GATT/WTO agreements were concerned with differential taxation of imported and domestic petroleum products.[232] In *US – Superfund*, the GATT Panel, referring to the traditional criteria, found that "one of the possible methods for determining whether two products were like products was to compare their end-uses in a given market."[233] Emphasizing the common end-use of domestic and imported crude oil, crude oil condensate, natural gasoline, refined and residual oil, and the substantially identical end-uses of certain other liquid hydrocarbon products, the Panel concluded that all aforementioned products were "like products."[234] Notably, the Panel did not distinguish between crude oil and refined products, nor did it examine other traditional criteria. Moreover, the Panel, having reviewed previous cases and the 1979 Understanding on Dispute Settlement, concluded that "while the contracting parties had not explicitly decided whether the presumption that illegal measures cause nullification or impairment could be rebutted, the presumption has in practice operated as an irrefutable presumption."[235] Finally, in response to the defendant's argument that the tax differential was too small to nullify or impair the benefits of foreign trade partners, the Panel reaffirmed that the provisions of Art. III:2, first sentence, protect expectations on the competitive relationship between domestic and imported products rather than expectations on export volumes.[236]

In *US – Gasoline,* the issue of "like products" did not receive much attention among the parties and the Panel, nor did the responding party appeal the decision. The Panel "noted that

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[232] *US – Superfund* and *US – Gasoline*, see *supra* note 1.
[233] *US – Superfund, supra* note 1, para. 5.1.1. Note, the GATT Panel uses "*one of the possible methods*" without saying that all criteria should be evaluated; compare it with AB Report, *EC – Asbestos*, *supra* note 128, at paras. 125-126.
[234] *Ibid*.
[235] *Ibid*. para. 5.1.7.
[236] *Ibid*. para. 5.1.9. See also GATT Working Party Report, *Brazil – Internal Taxes*, adopted on 30 June 1949, GATT/CP.3/42, BISD II/181, para. 16; *US – Malt Beverages*, *supra* note 207, at para. 5.6; AB Report, *Japan – Alcoholic Beverages*, *supra* note 128, at section F1.

chemically-identical imported and domestic gasoline by definition have exactly the same physical characteristics, end-uses, tariff classification, and are perfectly substitutable" and found that imported gasoline was like domestic reformulated gasoline though the latter, due to its compositional and performance specifications, might be less air polluting.[237] Clean air, according to the report, was an exhaustible natural resource.[238] Responding to the claim made by the U.S. that the measures under consideration were necessary to protect human, animal, and plant life, the Panel reaffirmed the interpretation of the word "necessary" used in previous cases with regard to Art. XX.[239] It held that the measures taken by the U.S. were not "necessary," as the U.S. could have employed an alternative reasonably available measure consistent with the country's obligations under the GATT.[240]

2.5. Potential implications to trade and environmental state policies

Both the *US – Superfund* and the *US – Gasoline* cases were concerned with state sovereign actions taken to decrease environmental pollution. In both cases adjudicators found the relevant environmental measures inconsistent with international trade rules. Based on the reasoning in these cases, petroleum-exporting states might be expected to challenge

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[237] WTO Panel Report, *US-Gasoline*, *supra* note 1, at para. 6.9. In fact, imported gasoline was compared to domestic gasoline of two types: conventional and reformulated. Since the Panel found that all three types of gasoline are like products, analysis of the differences between the three was unnecessary. These, as well as other issues raised in this case were thoroughly discussed in legal scholarship. See e.g. Scott H. Segal, "Reconciling Trade and the Environment (Again): Venezuela, GATT, and the Refining of Gasoline" (1994) 24 St. B. Tex. Envtl. L. J. 193; Edwin Friesenhahn, "Tradenotes: WTO Panel Report on the U.S. Gasoline Rule" (1996) 5 Currents Int'l Trade L. J. 60; Cynthia M. Maas, "Should the WTO Expand GATT Article XX: An Analysis of United States – Standards for Reformulated and Conventional Gasoline" (1996) 5 Minn. J. Global Trade 415; Jennifer Schultz, "The Demise of "Green" Protectionism: The WTO Decision of the US Gasoline Rule" (1996-1997) 25 Denv. J. Int'l L. & Pol'y 1; Jeffrey Waincymer, "Reformulated Gasoline under Reformulated WTO Dispute Settlement Procedures: Pulling Pandora out of a Chapeau?" (1996-1997) 18 Mich. J. Int'l L. 141; Torsten H. Strom, "Pouring Fuel on the Fire? The WTO's Reformulated Gasoline Case" (1996) 34 Can. Y.B. Int'l L. 249; Dominique M. Calapai, "International Trade and Environmental Impact: The WTO Reformulated Gasoline Case" (1996-1997) 3 Envtl. Law 209.

[238] *Ibid.* para. 6.37.

[239] The Panel cited the *United States – Section 337 of the Tariff Act of 1930*, (GATT Panel Report) adopted on 7 November 1989, BISD 36S/345, para. 5.26: "a contracting party cannot justify a measure inconsistent with another GATT provision as "necessary" in terms of Article XX(d) if an alternative measure which it could reasonably be expected to employ and which is not inconsistent with other GATT provisions is available to it. By the same token, in cases where a measure consistent with other GATT provisions is not reasonably available, a contracting party is bound to use, among the measures reasonably available to it, that which entails the least degree of inconsistency with other GATT provisions." This interpretation was extrapolated to Art. XX(b) in the same way as in: *Thailand – Restrictions on Importation of and Internal Taxes on Cigarettes*, (GATT Panel Report) adopted on 7 November 1990, BISD 37S/200, para. 75.

[240] WTO Panel Report, *US – Gasoline*, *supra* note 1, at paras. 6.24 – 6.25.

environmental policies of other states that are intended to decrease carbon emissions. Saudi Arabia has already raised concern about the use of carbon taxes and energy subsidies policies by OECD countries and their consistency with the WTO rules.[241] According to Saudi Arabia's trade representatives, OECD countries apply different tax rates on fossil fuels, heavily discriminating against oil.[242] For example, EU taxes on gasoline and automotive diesel range from 62% to 82% of the end-use price. Moreover, as part of their environmental policy to reduce carbon-dioxide emissions, some EU members have introduced carbon and energy taxes. However, in most of these states this tax is not imposed on the main carbon-dioxide source: coal. Furthermore, many states provide direct or indirect subsidies to the coal industry.[243] These measures by OECD countries may interfere with the interests of energy exporting states. For example, in relation to consumption taxes on gasoline and automotive diesel, the UK government is estimated to receive 1.6 times more revenue from these taxes than an average OPEC member accrues from oil sales.[244]

Simonetta Zarrilli's article provides a thoughtful study of the relationship between environmental taxes and WTO rules.[245] Analyzing GATT/WTO jurisprudence on like-products from the energy tax perspectives she concludes:

> If energy products are alleged to be "like products" for the narrow purposes of Article III:2, first sentence, they would be subject to the strictures of that sentence. Hence, the prohibition of discriminatory taxation of energy products would not be conditional on a "trade effects test", nor would it be qualified by a *de minimis* standard. Dissimilar energy taxation *per se* would be in tension with GATT obligations. Conversely, if those same products are alleged to be among the broader category of "directly competitive or substitutable products" ex Article III:2, second sentence, the protective impact of the discriminatory taxation would be assessed as a distinctive requirement. Discriminatory energy taxation would not be *per se* inconsistent with that provision. As a consequence of the different discipline under the first and second sentence of Article III:2, it

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[241] Submission by Saudi Arabia (as then observer) to the WTO Committee on Trade and Environment, 23 September 2002, WTO Doc. WT/CTE/W/215, TN/TE/W/9.
[242] *Ibid.* para. 13.
[243] *Ibid.* paras. 13-20.
[244] OPEC Secretariat, *Who Gets What from Imported Oil?* (Vienna: OPEC Secretariat, 2008); online: OPEC <http://www.opec.org> accessed on 1 May 2012. The study asserts that between 2003 and 2007 Canada, France, Germany, Italy, Japan, the UK and the USA received $2,585 billion of total revenue from oil taxation, whereas total revenue of the OPEC Members over the same period comprised $2,539 billion. Moreover, as the study emphasizes, oil taxation proceeds are pure profit, whereas the OPEC nations must meet the cost of finding, producing and transporting oil from the stated income.
[245] Simonetta Zarrilli, "Domestic Taxation of Energy Products and Multilateral Trade Rules: Is This a Case of Unlawful Discrimination?" (2003) 37 (2) Journal of World Trade, 359.

is much easier to substantiate a claim of violation of Article III if products are proved to be "like", than when products are proved to be only "directly competitive or substitutable.[246]

Coal, oil, and natural gas produce an estimated 41%, 39% and 20% of energy-related emissions respectively.[247] The power generation and transport sectors are the main contributors to global energy-related carbon-dioxide emissions, accounting for 41% and 20% respectively, while the rest is produced by the industrial, residential, public, and agriculture sectors.[248] In 2004, coal-fired power plants generated roughly 40% of all electricity, gas-fired power plants accounted for 20%, and oil, 7% of electricity generation.[249] Therefore, the transport and power generation sectors require special attention in order to assess the compatibility of environmental policies and trade rules. In the following paragraphs, we review the basic characteristics of energy products used in the two sectors to determine their "likeness" and "substitutability," before analyzing the policies' compliance with the GATT's NT obligations.

2.5.1. Transport sector

Let us first try to determine the meaning of "like" and "directly competitive or substitutable products" in the transport sector. Although oil based gasoline and diesel (hereinafter, collectively referred to as conventional fuel) are the main transportation fuels, demand for alternative fuels such as gasoline and diesel derived from coal or biomass (hereinafter, collectively called non-conventional fuel) is rapidly increasing in the world market.[250] The physical properties and chemical composition of conventional and non-

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[246] *Ibid*. at 373.
[247] IEA, *World Energy Outlook 2006*, *supra* note 14, at 80.
Inter-state data shows that OECD countries produce more than half of carbon-dioxide emissions; however, reference scenario projections expect developing countries to overtake the role of biggest emitters by around 2012. The growth of the developing world's share is mainly due to the economic growth of coal abundant China and India. See *ibid*. at 81.
[248] *Ibid*. at 78. Estimates are from 2004. The document contains the IEA projections to 2030, but the reference scenario forecasts do not change the proportions significantly.
[249] *Ibid*. at 140-141. The remaining one-third is produced by power plants using nuclear, hydro, and renewable sources.
[250] The potential market for biofuel (biodiesel, biobutanol, ethanol) and coal-to-liquid, as well as other alternative motor fuels, should not be underestimated. With high oil prices and faster depletion (relative to coal) of global oil reserves the market for transport fuel may shift dramatically towards so-called non-traditional fuels. In some states, alternative fuels have already become "traditionalized". For example, in Brazil bioethanol accounts for about 30% of gasoline demand (see IEA, *Biofuels for Transport: An International Perspective*, online: IEA <www.iea.org> accessed on 1 May 2012 [hereinafter: IEA, *Biofuels for Transport*]) at 11. Since the mid-1980s up to 60% of

conventional fuel may not differ significantly. The two have common end uses. Consumer habits might differ as much as consumer environmental concerns; correspondingly, the PPM is different but neglected by the WTO adjudicators. All aforementioned products are listed in Chapter 27 of the Harmonized System but coal-based products belong to a different heading than the others. Biodiesel and gasoline share a six-digit subheading, whereas conventional diesel coincides with them under five-digit coding.[251] Recalling the *US – Superfund*'s presumption that regardless of the size of economic damage, illegal measures cause nullification or impairment, petroleum exporting states might conclude that they are being discriminated against if even a small amount of non-conventional fuel enters the market. Thus, depending on the factual and legal findings of each particular case, conventional and non-conventional fuels may be classified as "like products."

Let us now consider whether the products are directly competitive or substitutable. In the case of consumption taxes on automotive fuel, customers bear the tax burden and cannot easily switch to other forms of consumption by changing transport type or automotive fuel.[252] In the language of economics, transport fuel is price-inelastic (at least in the short and medium term) as there are few substitutes for gasoline and diesel.[253] Indeed, in 2005, conventional fuel completely

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transportation fuel requirements in the South African Republic have been met by coal (see the UK Department of Trade and Industry (DTI), *Coal Liquefaction: Technology Status Report*, online: DTI <www.dti.gov.uk/ent/coal> accessed on 27 January 2009). Liquefied coal had a significant market share in Europe as early as the 1940s. During the World War II, coal-derived liquid fuels supplied all of Germany's aviation gasoline and were a major source of motor gasoline, diesel fuel, fuel oil, and some lubricating oils. See Takao Kaneko et al, *Coal Liquefaction* (Weinheim: Wiley-VCH Verlag GmbH & Co., 2005) at 3; according to this source, there are two technological methods of coal-liquefaction. Indirect liquefaction provides high-quality diesel fuel and intermediates for olefin production; direct liquefaction yields high-octane gasoline and excellent feedstock for aromatic chemicals.

[251] The Harmonized System classifies coal-to-liquid (benzene) under 2707.10, gasoline and biodiesel blends 2710.11, diesel, other than blends 2710.19, and liquefied petroleum gas 2711.12. Crude petroleum oil appears under a different heading than all of the mentioned products– 2709.00. Recalling that in *US – Superfund* (*supra* note 1) crude oil and gasoline were classified as "like products" and keeping in mind the view that tariff classification is provided for the purposes of MFN treatment under Art. I of the GATT rather than for NT under Art. III, it can be concluded that tariff classification criterion can be waived in the case of energy products.

[252] However, the situation is changing rapidly with technological developments. Nowadays, nearly all car manufacturers produce vehicles compatible, fully or with slight adjustments, with ethanol or biodiesel blends (mixtures with petroleum gasoline and diesel). See IEA, *Biofuels for Transport*, *supra* note 250, at 101-110; and, IEA, *Automotive Fuels for the Future: The Search for Alternatives* (2000) at 13, online: IEA <www.iea.org> accessed on 1 May 2012.

[253] Demand for fuel responds slowly to a shift in price after changes in consumer behavior. The time lag could be longer for some industries where consumption patterns depend on new equipment and technologies, or shorter where a switch to another fuel does not require significant technological changes. Thus, fuel demand elasticity (i.e. change in demand for fuel as a result of change in its price) is higher in the long term and smaller in the short term.

dominated the global transport sector while non-conventional fuel accounted for less than 3% of the market. [254] Hence, in the short and medium term, oil based gasoline and diesel has no directly competitive or substitutable products. However, the opposite perspective may not necessarily lead to the same conclusion. Prices for non-conventional fuels are closely tied to prices for conventional ones, as the market for traditional fuel is thirty-two times bigger than the market for alternative fuel. How would WTO adjudicators resolve the issue if in a given market, product A does not compete with product B, but product B competes with product A? The answer is to deliberate on a "case-by-case" basis. Nevertheless, as we have seen, WTO rules do not require actual substitution of the products; substitutability implies some potential, even latent, capability for one product to substitute another.[255] Using this approach, conventional and non-conventional fuels are recognized as directly competitive or substitutable products.

2.5.2. Power sector

While the transport sector uses products substantially brought to their "likeness" through processing methods, the power generation sector uses natural gas and coal, which are not refined, and heating oil, which is less refined than gasoline and other petroleum products.[256] Chemical composition in coal, gas, and oil largely consists of carbon; hydrogen content is higher in oil and gas than in coal. Although the chemical structures of these three products (which are all used for heating) are by and large similar, their physical properties are very distinct in terms of their form (solid, gaseous and liquid), energy density and environmental impact.[257] The difference in physical properties results in significant cost variation for their transportation and storage. All

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Analysis of "like" fuels, as well as of substitutable and directly competitive fuels requires examination of cross-price elasticity i.e. sensitivity of demand for one fuel in relation to changes in other fuel prices. See IEA, *World Energy Outlook 2006*, *supra* note 14, at 283-289.

[254] IEA, *Energy Technology Perspectives 2008: Scenarios & Strategies to 2050*, online: IEA <www.iea.org> accessed on 1 May 2012, at 430.

[255] AB Report, *Korea – Alcoholic Beverages*, *supra* note 224, at para. 114.

[256] For the purposes of this chapter we do not include into the power generation sector nuclear and hydro-power plants and those based on other renewable resources (solar, wind and geothermal energy sources).

[257] To give a sense of the energy density of these fuels: oil has about 40-45 GJ/t (or 35-40 GJ/m3 in volume measures) depending on gravity and sulphur content; coal has about 20-30 GJ/t depending on its ash content; natural gas (methane) has only 35-45 MJ/m3 (i.e. thousand times less than oil), ethane, propane and butane have higher heating content. From an environmental viewpoint, the CO2 emission factor from burning fuel oil is about 35% higher and, for coal, about 55% higher than for gas. See Energy Charter Secretariat, *Putting a Price on Energy*, *supra* note 22, at 35.

three have a common end use in fossil fuel firing plants. However, oil, gas, and to a lesser extent, coal are also used in other sectors.

Applying traditional criteria for determining their "likeness," one would find that the three are different products.[258] Adhering to the same traditional approach to define whether these products are directly competitive or substitutable, we would reach the same conclusion as the Panel in *Japan – Taxes on Alcoholic Beverages:* regardless of varying physical characteristics, these products are "like" products as long as they can compete in the given market.[259] Thus, employing economic data to identify elasticity of substitution (cross-price elasticity) would be the next step. Elasticity of substitution among coal, gas, and heating oil is higher in power generation than in any other sector (transport, residential heating etc.)[260] However, the degree of elasticity depends on the market's specific characteristics: existence of multi-firing equipment at fossil fuel firing plants, regulatory requirements, climate conditions, and availability of alternative sources of energy are a few factors that affect elasticity. Cross-price elasticity among carbon products in the power industry is high in countries such as China, India, Italy, the US, and the UK, and low in France and Germany.[261] As in the case of transport fuels, it can be concluded that, inasmuch as potential or latent capability of substitution exists in a given market, natural gas, coal, and heating oil are directly competitive or substitutable products.

2.5.3. Legal implications of product categorization

Now we will explore the implications of the categorization of the above energy products in the transport and power generation sectors. It should be recalled that if the products are acknowledged as like under the first sentence of Art. III:2, then any tax differential is prohibited. If the products are directly competitive or substitutable, then identification of dissimilarity in taxation is the next step – it must be established that the tax differential is in excess of *de minimis*

[258] Because of their physical properties (*Tax – Border Adjustments*), tariff classifications (*Japan – Alcoholic Beverages*) and end-uses all differ, these products might be considered different. (*EC – Asbestos*).
[259] Panel Report, *Japan – Alcoholic Beverages*, *supra* note 218, at paras. 6.21-6.22
[260] IEA, *World Energy Outlook 2006*, *supra* note 14, at 293.
[261] See Energy Charter Secretariat, *Putting a Price on Energy*, *supra* note 22, at 101, and IEA, *World Energy Outlook 2006*, *supra* note 14, at 293.

so that it "affords protection to domestic production".[262] The evidence will be examined, again, on a "case-by-case" basis.

Reports show that many states do not tax, or levy considerably lower taxes on, biofuels compared to conventional fuels. For example, the rate of excise taxes for gasoline is at least twice as high as for bioethanol in France, Germany and Spain.[263] If gasoline and ethanol are "like products", then the tax policies violate the NT obligation. If not, then there is little doubt that they are directly competitive or substitutable products.

In the power generation sector, coal, natural gas, and heavy fuel oil are likely to be found competitive and substitutable products. Taxation policies in the UK and Germany best illustrate discrimination among energy products in this industry.[264] The UK imposes 94.20 pounds sterling and Germany levies 25 Euros of excise tax per ton of heavy fuel oil intended for electricity generation, whereas coal and natural gas used for the same purposes are not taxed.[265]

If energy products in the transport and power generation sectors are directly competitive or substitutable, tax differentials must be proven to afford protection for domestic production. In the cases above, consumption taxes are levied on a non-discriminatory basis, as taxes do not vary among source states. However, analyzing taxation practices of the OECD states, Zarrilli suggests that in cases where no domestic production exists, taxes apply *de facto* only to imported products:

> [t]he imported (in most cases oil and oil-products) and the domestic (other energy sources) products are not similarly taxed in the consuming countries and the dissimilar taxation may be applied so as to afford protection to domestic production. Thus, a *prima facie* case of violation of the national treatment obligation, as articulated in GATT Article III:2, second sentence, takes place.[266]

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[262] AB Report, *Japan – Alcoholic Beverages*, *supra* note 128, at p. 30.
[263] IEA, *Biofuels for Transport*, *supra* note 250, at 152. The UK's excise tax for biofuel is reduced to one third of the conventional fuel rate. The study lists a number of states and describes their policies such as differential taxation, subsidies or other measures to support production of biofuels; see *ibid*. at 147-167.
[264] The UK and Germany are examined because the former has both domestic coal and petroleum industries, whereas the latter has no substantial domestic production of oil and gas. In both of these states, coal, oil, and gas are used for electricity generation. Although, for the sake of consistency with the previous example, it would be better to also use France and Spain, these two states do not use heavy fuel oil for power generation (gas and coal are not taxed in their cases).
[265] IEA, *Energy Prices and Taxes, Fourth Quarter 2008*, online: IEA <www.iea.org> accessed on 1 May 2012.
[266] Zarrilli, *supra* note 245, at 360.

De facto discrimination has an interesting implication in our case: the UK, with domestic petroleum production, does not violate the rule, while the other EU states, with no domestic petroleum production, do. In the case of the EU's power generation sector, this statement is debatable on the ground that the EU might be considered as a single market in which the UK and the Netherlands provide substantial domestic petroleum production. In the EU, trade in natural gas enjoys the same benefits as coal; these products, along with oil, are freely traded in this market. Moreover, there is no import duty for coal or, in most cases, oil imported from non-EU members. Therefore the excise tax differentials *per se* could hardly protect domestic coal production against imported oil.[267]

Should the same conclusion apply to biofuels? The EU produces biofuels domestically and supports their consumption as part of its environmental policy intended to combat carbon-dioxide emissions. In 2003 the EU adopted a directive that set a 5.75% indicative target for the share of renewable fuels in transport in 2010.[268] Within four years of the directive's implementation, EU production of biofuels for transport had quadrupled, amounting to an estimated 2.1% of total transport fuel consumption.[269] The market share of biofuels is continuously increasing at the expense of conventional fuel, thanks to various forms of governmental support. A report by the EC Commission acknowledges that:

> [t]ax exemptions are a longstanding form of support for biofuels. In 2005 and 2006, several Member States announced the introduction of a new form of support: biofuel obligations. These are legal instruments requiring fuel suppliers to include a given percentage of biofuels in the total amount of fuel they place on the market. Some Member States are using obligations as a complement to tax exemptions, others as an alternative… The EU maintains significant import protection on some types of biofuels, notably ethanol which has a tariff protection level of around 45% ad valorem. Import duties on other biofuels – biodiesel and vegetable oils – are much lower (between 0 and 5%).[270]

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[267] The EU applies customs duties for oil imports from Saudi Arabia, Libya, Russia as well as some OECD countries (including the United States and Canada). Germany and Spain apply import duties on coal volumes beyond a certain threshold; however, by 2008, neither country had had actual imports reach the threshold (see IEA, *Energy Prices and Taxes, Fourth Quarter 2008*, *supra* note 265, at 38). The coal industry is considerably subsidized in Germany by federal and provincial governments (see IEA, *Energy Policies of IEA Countries: Germany, 2007 Review*, at 88; online: IEA <www.iea.org> accessed on 1 May 2012). State support could be challenged under WTO rules; however, given the scope of this research, we do not attempt to explore this issue.

[268] Directive 2003/30/EC On the Promotion of Use of Biofuels and Other Renewable Fuels for Transport.

[269] IEA, *IEA Energy Policies Review: European Union, 2008*, at 110; online: IEA <www.iea.org> accessed on 1 May 2012.

[270] Communication from the Commission of the European Communities to the Council and the European Parliament, *Biofuels Progress Report* (Brussels, 10.1.2007, COM(2006) 845), sections 3 and 6. Other additional

The reasons for biofuel promotion recounted in the Commission's report are quite illuminating:

> [b]iofuels have a unique role to play in European energy policy. They are today the only direct substitute for oil in transport that is available on a significant scale… Changing the fuel mix in transport is important because the European Union's transport system is almost entirely dependent on oil. Most of this oil is imported, much of it from politically unstable parts of the world. Oil is the energy source that represents the most severe security of supply challenge for Europe.
>
> Biofuels have a second great advantage: the fact that their production and use leads to greenhouse gas savings. They are not the cheapest way to get greenhouse gas savings. But they are one of the few measures – alongside improvements in vehicle efficiency – offering the practical prospect of large-scale savings in the transport sector in the medium term.[271]

In the light of measures taken by the EU to promote the production of biofuels, it could be suggested that the transport sector is different from the power generation industry. Domestic production of at least some types of biofuels (e.g. ethanol) is protected from outside competition, which implies a violation of the NT provision under Art. III:2, second sentence. Consequently, the biofuel mixture obligations imposed on the fuel suppliers violate provision of Art. III:5, which prohibits the establishment of requirements as to the mixture, processing, or use of products in specified amounts or proportions.[272]

Whether conventional and non-conventional transport fuels are found to be "like products" or directly competitive or substitutable ones, the EU, using GATT exceptions provided in Art. XX (b) and (g), may try to justify varying taxes as necessary to protect human, animal, or plant life and to the conserve exhaustible natural resources. In anticipation of such justifications Zarrilli, on the basis of an analysis of GATT/WTO cases, persuasively asserts that:

> [t]axation is usually regarded as an effective tool to tackle environmental problems and may be difficult to replace. However, there are other aspects of the enforcement measure that should be considered in evaluating a measure as "necessary". One is the common interest protected. The protection of human, animal or plant life or health is certainly a common interest/value of the highest importance. The other is the extent to which the measure contributes to the realization of the end pursued. The greater the contribution, the more easily a measure might be considered to be "necessary". High tax rates on oil and oil-products contribute to limit the consumption of these

measures are taken in the EC through public-private partnerships and funding, see e.g. European Parliament Resolution of 13 March 2008 on the Global Energy Efficiency and Renewable Energy Fund (2007/2188(INI)). Although tariff protection for biodiesel is smaller than for ethanol, it is worth noting that the EC has already applied countervailing duty on imports of biodiesel originating in the United States of America (see EC Commission Regulation No: 194/2009 of 11 March 2009).

[271] *Ibid.* section 1.

[272] Consequently, these measures would be inconsistent with Art. II:1 of the Agreement on Trade-Related Investment Measures.

> products and, ultimately, result in environmental protection. However, if the consumption of other equally polluting or even more polluting energy sources is not discouraged, environmental protection is more difficultly achieved. The rather incoherent taxation systems applying to energy sources may jeopardize the achievement of the final goal – environmental protection – and make tax measures applying to specific energy products partially ineffective...[273] The conclusion that health and environmental protection is not the priority of energy taxation finds support in the fact that particularly polluting energy sources, such as coal, not only enjoy a favourable tax treatment, but are as well subsidized in a number of countries.[274]

Indeed, taking into account the share of coal in power generation, the share of power generation in total pollution, the absence of excise taxes for coal, and the corresponding environmental benefits from biofuels,[275] it is evident that environmental policies such as those illustrated are "oriented towards supporting domestic industries and revenue generation, while carbon abatement does not appear to be the first priority, despite the political statements affirming so."[276] WTO adjudicators might well find that a policy designed to levy taxes on products proportionally to their carbon-dioxide (or other green-house-gas) emission or energy density would yield WTO-compliant sustainable development more effectively.[277] In the specific case of the EU, adjudicators would certainly be informed that the EU has considered this alternative policy and expressly rejected it.[278] Adjudicators might reject the EU's justification of their environmental policy as a measure relating to the conservation of clean air (exhaustible natural resource) as long as coal is not taxed according to its polluting content. The EU could

[273] Zarrilli, *supra* note 245, at 385.
[274] *Ibid.* at 393.
[275] Given the facts noted above and assuming that biofuels produce 50% less green-house gas pollution than conventional fuel (see EC Commission, *Biofuels Progress Report*, *supra* note 270, section 6) the current 2.1% market share of biofuels would decrease overall pollution by 0.21%.
[276] Zarrilli, *supra* note 245, at 369.
[277] Although evaluation of carbon emissions is not an easy task because there is no universally accepted methodology for determining the value of carbon emissions associated with most final consumer products, the case of fuel for transport and power generation is less complicated and seems feasible. For the problems associated with the assessment of carbon emission in the making of final consumer products see: Olga Nartova, "Carbon Labelling: Moral, Economic and Legal Implications in a World Trade Environment" NCCR Trade Working Paper No 2009/5 (February 2009); online, Swiss National Centre of Competence in Research: <www.nccr-trade.org> accessed on 1 May 2012.
[278] EC Commission, *Proposal for a Council Directive introducing a tax on carbon dioxide emissions and energy*, 30 June 1992, COM (92) 226 final [1992] OJ C196/1. The document proposed a tax on all energy products, except for renewables, based on 50% of energy density and 50% of the carbon content. The proposal has not been implemented.

hardly justify the Art. XX (b) exception as there were alternative measures consistent, or at least less inconsistent, with the GATT.[279]

In sum, the growth of biofuel's market share in the transport sector would apparently affect not only energy exporting states and their NOCs, but also importing countries. Once WTO adjudicators find the likeness or substitutability of biofuel and oil products in the transport sector, their findings may be extended to other sectors and products, as petroleum and petrochemicals are used heavily in most areas of human economic activity. Extending the sustainability criteria to petroleum products, as proposed in the EU to encourage more environmentally efficient biofuel production, would be pointless unless similar sustainability criteria are applied consistently to coal.[280]

2.6. Conclusion

From the analysis provided in this chapter, it is apparent that in certain cases, contested petroleum-related environmental policies likely conflict with WTO rules. Whether such policies can be brought into compliance with WTO rules is often a matter of economic and political feasibility. In any case, implementation of such policies is constrained by WTO rules and by the objections WTO members would likely raise. These concerns impede the development of renewable sources of energy and enforce fossil fuel's role as the primary source of energy. As a result, the costs of combating climate change increase globally and non-renewable sources of energy are depleted at a faster pace.

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[279] On the term "necessary" and Art. XX (b) exception see e.g. GATT Panel Reports: *Thailand – Restrictions on Importation of and Internal Taxes on Cigarettes*, *supra* note 239, at paras. 73-81 and *United States – Restrictions on Imports of Tuna*, *supra* note 211, at paras. 5.24-5.29 (in DS21/R) and paras. 5.28-5.39 (in DS29/R); and WTO AB Reports: *EC – Asbestos*, AB Report *supra* note 128, at paras. 164–175, *Brazil – Measures Affecting Import of Retreaded Tyres*, AB Report adopted 3 December 2007, WT/DS332/AB/R online: WTO Documents Online <http://docsonline.wto.org/> accessed on 15 April 2014 [hereinafter: AB Report, *Brazil – Retreaded Tyres*] at paras. 133-155. Also see Marceau & Trachtman "A Map of the WTO" *supra* note 210, at 370-375.

[280] The sustainability criterion is proposed for determination of the final environmental impact of production of biofuels and bioliquids to ban ecologically unfriendly methods. See Commission of the European Communities, *Proposal for a Directive of the European Parliament and the Council on the promotion of the use of energy from renewable sources* (Brussels, 23.1.2008 {COM(2008)19 final}). For an analysis of this proposal as well other environmental measures from the WTO perspectives see Aidelojie & Makuch, *supra* note 4, at 247, who argue that trade restrictions derived from the sustainability criteria requirements could be found discriminatory under the GATT's Art. III, and that sustainability criteria will not be taken into account by adjudicators in the determination of "likeness" of the criteria-compliant and non-compliant products.

A workable compromise between environmental and trade policies must be established through harmonization of instruments existing in the relevant domains of international law. Whether such harmony is achievable in the long run depends largely on the steps taken by the WTO in the short-run. If it hopes to facilitate accord, the WTO must recognize the legitimacy of STP ideas within the normative theory of trade, pursue its analytical and judicial activity correspondingly, pay due respect to the diversity of objectives in the world trading system, and carefully interpret the notions of "like" and "directly competitive or substitutable" products, taking into account long-term implications of interpretations to trade in energy and non-energy products.

CHAPTER III. STATE TRADING OPERATIONS & NOCS

3.1. Introduction

Throughout the history of the petroleum industry states have always supported their companies in securing the production and marketing of petroleum regardless of whether the companies were privately owned, as Shell and British Petroleum[281] (backed by the UK) and the Royal Dutch (encouraged by the Netherlands) were in past; or belonged to the government, as Saudi Aramco and Chinese CNPC do at present. The tightness of the relationship between the governments and petroleum companies is not surprising – energy security for states became an indispensable part of their national security. Their close connection has two crucial effects on international trade relations: on the one hand, the NOCs can effectively lobby the government to take actions against unfavorable conditions in consumer markets; on the other hand, petroleum-importing states treat the NOCs as the agents of the foreign states, meaning that NOCs may potentially have an impact on the national security of petroleum-importing states and therefore their activity in the market requires cautious scrutiny.

Nowadays, NOCs or state-controlled petroleum corporations control over half of the global oil and gas reserves.[282] Oil and gas pipelines are controlled by state enterprises in the CIS states, China and in the overwhelming majority of the OPEC states.[283] Many states totally or partially control the refining capacities and retail marketing of oil as well as the gas distribution network. In fact, NOCs have become vertically integrated corporations akin to major IOCs thereby capturing all value added through the whole chain of production, from oilfield to final consumers.

Vertical integration is of crucial importance for NOCs of both exporting and consumer states not only due to the importance of energy resources and value that can be reaped from integrated chains of production but also because of the volatility of the oil and gas market. By

[281] The government had smaller or larger stake in British Petroleum from time to time.
[282] IEA, *World Energy Outlook 2008* (Paris: IEA, 2008) at 335.
[283] See Energy Charter Secretariat, *Oil Pipeline Tariffs*, *supra* note 26; Energy Charter Secretariat, *Gas Transit Tariffs in Selected Energy Charter Countries* (Brussels: Energy Charter Secretariat, 2006) [hereinafter: Energy Charter Secretariat, *Gas Transit Tariffs*] at 35; and OPEC, *Annual Statistical Bulletin 2006*, at 103-110.

acquisition of control over transportation, refining and marketing of petroleum products producer state NOCs (e.g. Saudi Aramco, Gazprom, Kazmunaigaz) secure regular, predictable and controllable production of the resources from oil and gas fields. To procure a stable supply of crude petroleum, consumer state NOCs (e.g. CNPC, ONGC) seek to attain a reliable leverage in the upstream industry by acquiring rights in the exploration and production of oilfields in the countries abundant in hydrocarbon resources.

The process of vertical integration leads to dominant positions and even monopolies of state enterprises in domestic markets and thus conflicts with the idea of trade liberalization. The WTO Secretariat states that the breaking up of the public monopolies and the unbundling of vertically integrated utilities is the first market access issue on the road to multilateral liberalization in the energy sector.[284] This is acknowledged from a diametrically opposed perspective. An OPEC officer, Dr. Shihab-Eldin (Director of OPEC's Research Division in 2004) predicted that internationalization and the opening up of domestic markets to competition would be the greatest challenge to NOCs in the future.[285]

The legitimacy of state trading has been recognized in the GATT framework since 1947. It has also been recognized that state trading operations might be used to conceal trade-distortive governmental measures prohibited by the GATT. To extend the regulatory regime established for governmental measures to the measures exercisable by state trading enterprises (STE), the GATT sets specific rules for regulation of state trading activity in Art. XVII and extends the norms on trade restrictions governed by Articles XI (general elimination of quantitative restrictions), XII (restrictions to safeguard the balance of payments), XIII (non-discriminatory administration of quantitative restrictions), XIV (exceptions to the rules of non-discrimination) and XVIII (governmental assistance to economic development) to state trading operations.

[284] WTO Secretariat, Energy Services, Background Note S/C/W/52, 9 September 1998.
[285] Speech by Adnan Shihab-Eldin at the Tenth Energy Conference, Emirates Centre for Strategic Studies and Research, Abu Dhabi, 26-27 September 2004 as cited in Marcel Valérie, *Oil titans: national oil companies in the Middle East* (London: Chatham House; Baltimore: Brookings Institution Press, c2006) at 191.

In this chapter we explore the applicability of GATT rules regulating state trading operations to NOCs. No definition is provided for the term "state trading operations" in the GATT.[286] The term was understood by panels as operations of STEs.[287] However, as we shall see below, such an approach, if applied to NOCs, is not entirely effective for the elimination of trade barriers in the world petroleum market nor for the promotion of economic development. To explain the deficiency in such an approach in respect of NOCs, it is shown that the definition of STE is scarcely suitable to cover NOCs. Consequently, if an NOC is not regarded as an STE, its operations would not be recognized as state trading operations, thereby putting NOCs out of the GATT's regulatory framework. After exploring the definitional issues we try to assess the effectiveness of substantive obligations imposed on STEs when they are applied to NOCs. It will be argued that GATT rules are not designed to address the peculiarities of the petroleum industry and therefore, if applied to NOCs without due economic analysis, can impair global welfare rather than improve it.

3.2. Definition of STE

Art. XVII:1 of the GATT states:

> (a) Each contracting party undertakes that if it establishes or maintains a State enterprise, wherever located, or grants to any enterprise, formally or in effect, exclusive or special privileges, such enterprise shall, in its purchases or sales involving either imports or exports, act in a manner consistent with the general principles of non-discriminatory treatment prescribed in this Agreement for governmental measures affecting imports or exports by private traders.
>
> (b) The provisions of sub-paragraph (a) of this paragraph shall be understood to require that such enterprises shall, having due regard to the other provisions of this Agreement, make any such purchases or sales solely in accordance with commercial considerations, including price, quality, availability, marketability, transportation and other conditions of purchase or sale, and shall afford the enterprises of the other contracting parties adequate opportunity, in accordance with customary business practice, to compete for participation in such purchases or sales.

[286] GATT *Ad* Articles XI, XII, XIII, XIV and XVIII states that throughout these Articles "the terms 'import restrictions' or 'export restrictions' include restrictions made effective through state-trading operations."

[287] See GATT Panel Reports: *Republic of Korea – Restrictions on Imports of Beef – Complaint by the United States,* L/6503, adopted 7 November 1989, BISD 36S/268; *Spain – Measures Concerning Domestic Sale of Soyabean Oil – Recourse to Article XXIII:2 by the United States*, L/5142, 17 June 1981, unadopted; *Belgian Family Allowances, infra* note 405; *Canada – FIRA, infra* note 404; *Canada – Import, Distribution and Sale of Alcoholic Drinks by Canadian Provincial Marketing Agencies*, *infra* note 406; WTO cases: *Korea – Beef*, *infra* note 291, and *Canada – Wheat*, *infra* note 291.

(c) No contracting party shall prevent any enterprise (whether or not an enterprise described in sub-paragraph (a) of this paragraph) under its jurisdiction from acting in accordance with the principles of sub-paragraphs (a) and (b) of this paragraph."

The Understanding on the Interpretation of Article XVII of the GATT provides the following working definition for STE:

> [g]overnmental and non-governmental enterprises, including marketing boards, which have been granted exclusive or special rights or privileges, including statutory or constitutional powers, in the exercise of which they influence through their purchases or sales the level or direction of imports or exports.[288]

This working definition was provided for the purposes of submission by members of notification on their STEs.[289] Although the DSB undoubtedly will use this definition as part of a context of the rule, it is not clear to what extent the DSB can apply this definition to enterprises when substantive GATT obligations other than the notification requirement of Art. XVII: 4 are considered. McCorriston & MacLaren observed that in practice:

> there has been some dispute regarding whether state trading enterprises actually exist even when none are reported. This confusion is due to the definition of state trading enterprises as having 'exclusive rights'. In many importing countries, particularly those in which privatization has been undertaken, the state trading enterprises co-exist with the private sector. This occurs for example in Egypt, Mexico, Korea and, most recently, in Indonesia. However, this ambiguity leads some countries to report the existence of a state trading enterprise that coexists with the private sector while others report no state trading activity in line with a strict interpretation of the WTO definition.[290]

The only two cases resolved after adoption of the definition dealt with non-governmental enterprises (producer controlled monopolies), which had been notified as STEs, had exclusive rights, and ultimately were able to influence their respective markets.[291] However, if an enterprise is not notified as an STE but conducts state trading operations, substantive obligations of the GATT presumably still apply to it. If a case is brought against trade-distortive operations

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[288] Understanding on the Interpretation of Article XVII of the General Agreement on Tariffs and Trade 1994, paragraph 1.

[289] The original text of Art. XVII of the GATT 1947 had no reporting obligations. Paragraph 4 of Art. XVII, which imposes reporting obligation on the contracting parties, was added in 1957. See Ivan Bernier, "State Trading and the GATT", in M. Kostecki ed., *State Trading in International Markets* (New York: St. Martin's Press, 1982).

[290] Steve McCorriston & Donald MacLaren, "State Trading, the WTO and GATT Article XVII", 25 (2002) The World Economy, 107 at 116.

[291] Livestock Products Marketing Organization in *Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef*, WT/DS161/R, WT/DS169/R, adopted 10 January 2001, as modified by AB Report WT/DS161/AB/R, WT/DS169/AB/R, [hereinafter: *Korea – Beef*] and Canadian Wheat Board in *Canada – Measures Relating to Exports of Wheat and Treatment of Imported Grain*, WT/DS276/R, adopted 27 September 2004, upheld by AB Report WT/DS276/AB/R [hereinafter: *Canada – Wheat*], both cases available online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012.

of such an enterprise, the DSB would have to identify whether it is an STE. In the absence of other interpretative instruments provided for the term of STE, the DSB would be compelled to adhere to this definition.

Note that Art. XVII operates with two types of entities, "a state enterprise" and "any enterprise having exclusive or special privileges." Except for the heading of Art. XVII and the Understanding on its interpretation, the term "state *trading* enterprise" is not used elsewhere in the GATT; however, its appearance in the said places will influence the interpretation of Art. XVII whether through context or object and purpose of the article. The original provision plainly refers to "state enterprise." It is not clear why GATT negotiators choose to define "state trading enterprise" rather than defining the term "state enterprise" or, more importantly, interpreting the expression "exclusive or special privileges." A state enterprise can be identified through the form of its establishment (e.g. statutory enterprises), or governmental ownership of shares, or effective control exercised by government.[292] As we shall see below, it is the phrase "exclusive or special privileges," rather than "state enterprise," that causes ambiguity in the meaning of STE, at least when NOCs are concerned.

The STE's definition, which is the Uruguay Round's innovation, refers to any enterprise which (a) has been granted special rights,[293] and (b) influences through its purchases or sales the level or direction of imports or exports. The two criteria are not sufficient to determine whether an enterprise is an STE or not. The phrase "in the exercise of which" indicates that the power to influence the market has to originate from special rights vested in the enterprise by its state.

[292] According to the WTO *Analytical Index* draftsmen of the GATT attempted to define the term "state enterprise" during preparatory work. However, its definition was removed during the final stage of negotiations in Geneva because it was thought that such enterprises were defined as precisely as practicable in sub-paragraph 1(a). During the Havana Conference negotiators on state trading noted that the term "state enterprise" in the text of the Havana Charter did not require any special definition; and that the term includes, inter alia, any agency of government that engages in purchasing or selling. See WTO, *Analytical Index, supra* note 937, at 438. The early GATT drafting history does not indicate any use of the term "state trading enterprise," except for headings of corresponding articles. The Understanding on Interpretation of Article XVII, which provides definition for "state trading enterprise," resulted from the Uruguay Round negotiations.

[293] The term "special rights" is used instead of the longer form "exclusive or special rights or privileges" because the former, as we argue herein later, embraces the latter term. It is also notable that Art. XVII uses term "exclusive or special privileges," whereas the Understanding on its interpretation uses the term "exclusive or special rights or privileges,"

Hence, a causal link must be established between the special rights and the market influence. A non-state natural monopoly which affects a market for particular goods without having special rights or privileges granted by the state will not be considered an STE. Conversely, an entity that has special rights but cannot influence the market should not be treated as an STE. If a monopoly is merely granted special rights (e.g. income tax privileges, rights to access pipelines and other infrastructure) and such rights are not associated with the market upon which it exercises influence, it should not be regarded as an STE. Let us now outline the current practice of notifications of petroleum STEs made by WTO Members.

The only petroleum enterprises that have been notified by Members pursuant to Art. XVII:4(a) of the GATT 1994 and paragraph 1 of the Understanding on the Interpretation of Article XVII are Petróleos de Venezuela S.A. (PDVSA), Indian Oil Corporation (IOCL), and a large group of Chinese companies.[294] Brazil notified its Petróleo Brasileiro S.A. (PETROBRAS) in 1996; however, the enterprise was removed from the list of STE's in 1997.[295] A majority of petroleum exporting states have NOCs. WTO member states, such as Mexico, Nigeria, Peru, Qatar, Saudi Arabia, and United Arab Emirates have submitted their notifications of STEs without mentioning their NOCs.[296] A logical question arises as to why IOCL and PDVSA are qualified as STE, whereas PEMEX (Mexico),[297] NNPC (Nigeria), Petronas (Malaysia), Saudi Aramco, and many other NOCs are not.

So far only two states have been asked why their NOCs were not notified as STEs – Norway with regard to its Statoil and Norsk Hydro, and the Sultanate of Oman with respect to PDO (Petroleum Development Oman) and ORC (Oman Refinery Company). Norway replied that although Statoil and Norsk Hydro may have received "exclusive or special rights or privileges," the enterprises do not "influence through their purchases or sales the level or

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[294] As of 1 October 2009. See WTO Documents: G/STR/N/7/VEN (6 December 2001), G/STR/N/7/IND (8 October 2001), G/STR/N/7/CHN and G/STR/N/8/CHN (13 December 2002).
[295] See WTO Documents: G/STR/N/1/BRA (21 March 1996) and G/STR/N/3/BRA (11 December 1997).
[296] See WTO Documents: G/STR/N/1/MEX (10 March 1997), G/STR/N/12/NGA (6 November 2008), G/STR/N/10/PER (5 April 2005), G/STR/N/11/QAT (6 August 2007), G/STR/N/12/SAU (11 March 2009), G/STR/N/1/ARE (14 October 1996). Some Member states have not yet provided any notifications on STEs.
[297] Note that in Annex 1001.1a-2 of the NAFTA Petróleos Mexicanos (PEMEX) is listed as Government Enterprise subject to government procurement rules of NAFTA.

direction of imports or exports."[298] The Sultanate of Oman stated that "neither PDO nor ORC fall within the context of the definition of State Trading, as they do not have the exclusive or special rights or privileges which would enable them to influence, through their purchases or sales, the level or direction of their exports."[299]

These responses from Norway and Oman indirectly support the observation we made earlier that in order to qualify as an STE three conditions have to be satisfied: (a) an enterprise is granted "exclusive or special rights or privileges," (b) it influences imports or exports in the market, and (c) there is a causal link between the special rights and privileges of the enterprise and its power to affect the market. In the absence of one of the three conditions an enterprise may be excluded from the coverage of STE's definition, at least formally. In order to apply the three conditions to NOCs it is necessary to provide a practical background using examples of existing NOCs.

Exploitation of petroleum resources is exercised differently throughout the world. Some states allow private participation in the industry; others restrict all or part of activities in the sector to state enterprises. NOCs also differ considerably from one to another due to varying political and economic conditions as well as historical background of their states. Thus, it is hardly possible to provide a one-size-fits-all hypothetical example that would allow effective examination of the three conditions for STE. Hence, we are compelled to provide a case study with a brief description of NOCs and summary of petroleum market structures for two groups of states. The first group is represented by the states that have reported their NOCs to the WTO –

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[298] See Communication from Norway WTO Doc. G/STR/W/5 (7 February 1996). On 1 October 2007 NorskHydro merged with Statoil and the company changed its name to StatoilHydro ASA. On 1 November 2009 StatoilHydro ASA changed it name to Statoil ASA.

[299] WTO Doc. G/STR/N/9/OMN (29 January 2004). Perhaps the word "their" before "exports" at the end is placed mistakenly. The two companies are able to influence *their* exports without being granted any special rights or privileges. Here, in my view, exports should refer to overall out-flow trade of Oman, including independent traders, rather than trading activities of the two companies.

The Sultanate of Oman provided a similar statement in its first notification on STEs: WTO Doc. G/STR/N/7/OMN (26 April 2001). With regard to PDO it stated: "there are other foreign oil companies with concessions in the Sultanate of Oman to explore and exploit crude oil and natural gas on a Cost Recoverable basis. These companies are allowed to export oil equivalent to the amount of money agreed for recovery (Recoverable Costs) in any particular year." ORC according to the notification also operated in a competitive market: "[t]he level of production and export of refined products are determined by local demand. Products in excess of local demand (fuel oil) are exported. International market forces determine export prices."

China, India, and Venezuela. Five WTO member states, whose NOCs are not in the current list of reported STEs, are chosen for the second group – Norway, Malaysia, Nigeria, Mexico, and Brazil. The first four states are selected because of differences in the structure of their petroleum markets and divergence of roles of their NOCs. Geographical diversification and data availability were also decisive for the selection. Brazil deserves special attention because its NOC was once reported and then excluded from notification of STEs.

3.2.1. Case study: states with reported NOCs

China

The following enterprises are notified by China as STEs dealing with both export and import of crude oil and petroleum products: China National Chemicals Import and Export Co. (Sinochem), China International United Petroleum and Chemicals Co. (subsidiary of Sinopec), China National United Oil Co. (subsidiary of CNPC). Over fifty Chinese STEs were notified as trading only with importation of fuel oil.[300] To simplify analysis, we will leave the second group aside in the study.[301]

Neither CNPC nor Sinopec, the largest Chinese vertically integrated NOCs, appear in the notification, though their dominance in the domestic petroleum industry and market is well documented.[302] The two NOCs are supposed to compete with each other and the rest of the business, but in reality Sinopec controls the southern and southeastern regions, whereas CNPC dominates the rest of China's mainland.[303] If CNPC and Sinopec's marketing activities are not

[300] WTO Doc: G/STR/N/8/CHN (13 December 2002).

[301] These enterprises are notified as engaging only in import of fuel oil, whereas the STEs of the first group operate in both export and import, and trade in both crude oil and petroleum products.

[302] WTO, *Trade Policy Review: China*, Report by the Secretariat, WTO Doc.: WT/TPR/S/199 (16 April 2008) at 120-121. In addition to CNPC (China National Petroleum Corporation) and Sinopec (China Petrochemical Corporation) the government owns some smaller petroleum giants e.g. CNOOC (China National Offshore Oil Corporation) and China New Star Petroleum Corporation (CNSPC). Petrochina is the listed subsidiary of CNPC, whereas Sinopec Corporation (China Petroleum and Chemical Corporation) is the listed subsidiary of Sinopec. Foreign NOCs and IOCs have been entering the Chinese retail market for transport fuel since the state's accession to the WTO. Saudi Aramco, ExxonMobil, BP, Royal Dutch Shell, and Total are forming joint ventures with Chinese NOCs to operate in the gasoline market. See Shai Oster, "Gasoline Suppliers Could Gain As China Bolsters Pump Prices" The Wall Street Journal, 16 March 2006.

[303] Steven W. Lewis, *Chinese NOCs and World Energy Market: CNPC, Sinopec and CNOOC*, James A, Baker III Institute for Public Policy, 2007, online: Rice University

carried out exclusively by their WTO notified subsidiaries, then why are the parent companies not treated as STEs? The only criterion that formally distinguishes the notified enterprises from their parent companies and other enterprises seems to be that the listed STEs have been granted licenses by the Chinese government to import and export crude oil and refined products.[304] Sinochem is not strictly a vertically integrated NOC as it does not operate in the upstream industry. Nonetheless, it is widely regarded as an NOC because of its control over a large part of the Chinese downstream industry and the special trading rights it enjoys in the import of crude oil and export of petrochemicals.[305] Inclusion of Sinochem while leaving CNPC and Sinopec aside from the list of reported STEs suggests that exclusive rights and privileges, in China's understanding, represent merely trading licenses.

To comply with its WTO commitments China has considerably opened its downstream oil and gas sector to private participation.[306] However, most wholesale and retail companies are still controlled by Sinopec and CNPC because market entrance for private companies is barred by strict technical requirements imposed by the government.[307] The petroleum industry and market are regulated by the government through a number of agencies, each responsible for an area of activities corresponding to its profile.[308] Chinese NOCs do not exercise administrative functions.

<u>India</u>

Similarly to China, India notified only its IOCL whereas the other two vertically integrated NOCs – ONGC (Oil and Natural Gas Corporation Limited) and Oil India Ltd. – are

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<http://www.rice.edu/energy/publications/docs/NOCs/Papers/NOC_CNOOC_Lewis.pdf> accessed on 1 March 2008.

304 Hong Kong Trade Development Council, *The Impact of WTO Entry on China's Petroleum and Petrochemical Industry*, online: < http://info.hktdc.com/econforum/sc/sc001201.htm> accessed on 19 January 2009.

305 See Xin Ma, "China's Energy Strategy In The Middle East" (2008) 23 (51) Middle East Economic Survey.

306 Ashley Howlett & Gao Yan, "China Issues New Regulations Opening the Market for Oil Products and Crude Oil", 4 (2008) Int'l Energy Law Review 131.

307 WTO, *Trade Policy Review: China*, *supra* note 302, at 121.

308 *Ibid.* See also generally, OECD, *OECD Reviews of Regulatory Reforms: China. Defining the Boundary between the Market and the State.* (2009) online: OECD <http://www.sourceoecd.org> accessed on 1 May 2012.

not mentioned in the document.[309] According to the Indian notification, export of crude oil is allowed only through STEs. Gasoline, diesel, and jet fuel are restricted for import. IOCL has been granted special privileges on cross-border trade in these goods.[310]

The case of India is more straightforward than that of China. ONGC and Oil India Ltd. mainly focus on the upstream sector, whereas IOCL's activity is concentrated on downstream operations.[311] Whatever rights on imports and exports, if any, might be granted to ONGC and Oil India Ltd., the IOCL is the single champion in the domestic petroleum retail market.[312] However, the issue becomes complicated when one traces the relationships among the government and its upstream and downstream NOCs. Hypothetically, ONGC is able to influence retail market because IOCL does not have considerable crude oil production capacities and has to procure raw inputs from upstream companies. In reality, the government regulates activities of both companies; therefore ONGC is hardly able to command IOCL and vice versa. According to an ONGC report, it has been sharing under recoveries of state-owned marketing companies because it has been selling crude oil, LPG and kerosene at discounted prices "on administrative instructions of the Ministry of Petroleum & Natural Gas, Government of India."[313] It is this Ministry which is responsible for setting prices for petroleum products in the Indian market and for regulating petroleum activities of NOCs and private players.[314] None of the Indian NOCs have regulatory authority in the industry and the market.

<u>Venezuela</u>

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[309] WTO Doc. G/STR/N/7/IND (8 October 2001). According to the Annual Report 2011-2012 of the Ministry of Petroleum & Natural Gas, the government of India held 74.14% of common shares in ONGC, 78.92% in IOCL, and 78.43% in Oil India Ltd. as of 31 December 2011, see Government of India, Ministry of Petroleum & Natural Gas, *Annual Report 2011-2012*, at 136, online: Ministry of Petroleum & Natural Gas <http://petroleum.nic.in/petroleum/annual_report.jsp> accessed on 1 May 2013.

[310] *Ibid*.

[311] ONGC and Oil India Ltd. dominate in the country's upstream sector. In 2005, they controlled about 87% of total oil production. See WTO, *Trade Policy Review: India*, Report by the Secretariat, WTO Doc.: WT/TPR/S/182 (18 April 2007), at 114.

[312] In December 2011 IOCL held 34% of the country's refining capacity, more than 50% in the retail marketing and pipeline throughput capacity in India. The rest was in the hands of other public and private (including foreign) enterprises. See Government of India, Ministry of Petroleum & Natural Gas, *Annual Report 2011-2012*, *supra* note 309, at 44.

[313] ONGC, *Annual Report 2008-2009*, at 34, online: ONGC <http://www.ongcindia.com> accessed on 3 November 2009.

[314] Government of India, Ministry of Petroleum & Natural Gas, *Annual Report 2011-2012*, *supra* note 309, at 136.

Unlike China and India, Venezuela is a petroleum exporting state, which exploits domestic hydrocarbon resources through a single vertically integrated NOC: PDVSA and its subsidiaries. The oil industry is reserved for the Venezuelan state for reasons of national interest.[315] Thus, the exercise of primary activities (i.e. exploration, extraction, recovery, initial transport and storage) is conducted by the state through PDVSA.[316] All six refineries located in the country belong to PDVSA; however, new refining activities, as well as marketing of petroleum products, are open to the private sector.[317] All activities in the gas industry are open for private participation.[318] However, due to political and technical barriers to private investment, there are no significant competitors to PDVSA in the domestic petroleum market.

PDVSA is not given any administrative powers in the petroleum industry. The Ministry of Energy and Mining is responsible for regulation of activities in the oil and gas sector, upstream and downstream, including supervision of PDVSA and setting domestic prices for petroleum products.

3.2.2. Case study: states with unreported NOCs

Norway

In 2009, the country was the world's seventh largest exporter of petroleum and the second largest exporter of natural gas.[319] The Norwegian petroleum industry is regulated by the Act of November 29, 1996 (the "Petroleum Act"). The Petroleum Act states that the Norwegian state has the proprietary right to subsea petroleum deposits and the exclusive right to resource management.[320] The Ministry of Petroleum and Energy implements petroleum policy through administering licensing regimes and approving operators' field and pipeline development plans,

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[315] WTO Doc: G/STR/N/7/VEN (6 December 2001)
[316] WTO, *Trade Policy Review: Venezuela*, Report by the Secretariat, WTO Doc.: WT/TPR/S/108 (30 October 2002), at 97. Private participation in upstream oil segment is allowed through minority shareholding in joint ventures with PDVSA.
[317] *Ibid.* at 98.
[318] *Ibid*. at 99.
[319] IEA, *Key World Energy Statistics 2011*, *supra* note 40, at 11-13.
[320] Section 1-1 of the Petroleum Act. Act 29 November 1996 No. 72 relating to petroleum activities. Last amended by Act 26 January 2007 No3.

as well as overseeing petroleum transport and gas sales contracts.[321] Norwegian law does not differentiate among investors on the basis of ownership or nationality. According to the law, the state reserves a specified share of a licence either in the form of produced petroleum or respective cash payment. This is called the state direct financial interest (SDFI).[322] The SDFI is managed by Petoro AS, a limited company wholly owned by the state.[323] All revenues, operating expenses, investments and liabilities of Petoro resulting from the management of SDFI are carried by the state.[324] All oil and gas from the SDFI is marketed by state controlled company Statoil ASA in its own name but at the government's expense and risk.[325] The relationship between Statoil and Petoro is governed by the marketing and sales instruction issued by the Norwegian government. This regulates the division of roles between the two companies. Statoil is responsible for marketing and sale of the SDFI's gas, oil and other petroleum products. Petoro's role is to check that the maximum value is created from the overall portfolio and that expenses and revenues are equitably divided between Statoil and the government.[326]

As of 31 December 2012, the Norwegian state held 67% of ordinary voting shares in Statoil.[327] Although Statoil is majority-owned by the state, it does not receive any preferential treatment with respect to regulatory, including licensing, rules enforced by the Norwegian state. There is no reference to the company in the Petroleum Act.

Statoil is one of the biggest crude oil sellers in the world. Through its marketing offices in Stavanger, Oslo, London, Singapore, Calgary and Stamford, the company sells large volumes of its own and SDFI's crude oil, refined products, gas condensate and LNG to Europe, Asia and

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[321] It has been stated that under the licensing regime the Norwegian state may request the licensees to reduce the level of production of petroleum in the public interest. The last time such curtail of production was exercised in 2002. See Statoil ASA, *Annual report on Form 20-F 2012*, online: Statoil <http://www.statoil.com/AnnualReport2012/en> accessed on 1 May 2013, at 60.

[322] Sections 4-10, 11-1 and 11-2 of the Petroleum Act.

[323] WTO, *Trade Policy Review: Norway*, Report by the Secretariat, WTO Doc.: WT/TPR/S/205/Rev.1 (16 January 2009), at 85.

[324] Sections 11-2 through 11-5 of the Petroleum Act.

[325] Petoro AS, *Annual Report 2011*, online: Petoro AS <http://www.petoro.no> accessed on 1 May 2013, at 30.

[326] Petoro AS, *Annual Report 2008*, online: Petoro AS <http://www.petoro.no> accessed on 1 May 2012, at 27.

[327] In addition to this direct ownership interest Norwegian State had a 3.33% indirect interest through the National Insurance Fund (Folketrygdfondet), totaling 70.33%. As of 31 December 2012 no other entity held more than 5% of shares in the company. See Statoil ASA, *Annual report on Form 20-F 2012*, *supra* note 321, at 120.

North America.[328] In 2012, Statoil was the second largest natural gas supplier in Europe after Gazprom.[329]

Malaysia

Malaysia is a substantial producer of oil and one of the largest LNG exporters in the world, accounting for about 16% of the world's total LNG exports.[330] According to the Malaysian Petroleum Development Act of 1974 "the entire ownership in, and the exclusive rights, powers, liberties and privileges of exploring, exploiting, winning and obtaining petroleum" in Malaysia is vested in Petroliam Nasional Berhad (Petronas), a corporation formed under the companies law of Malaysia and wholly owned by the government.[331] Petronas is responsible for the regulation of all activities in the upstream petroleum sector whereas downstream activities are regulated by the Ministry of Domestic Trade and Consumer Affairs (for the marketing and distribution of petroleum and petrochemical products) and the Ministry of International Trade and Industry (for the processing and refining of petroleum as well as the manufacture of petrochemical products).[332]

Subject to agreement with Petronas, the owner and holder of the exclusive right to explore and to exploit subsurface petroleum resources, the Malaysian upstream oil and gas industry is open to private and foreign participation. Contractual arrangements with Petronas may only take the form of contracts of work that bear the production-sharing principle.[333] It has been stated that under the terms of such contracts Petronas may request operators to increase or decrease the rate of production in any oil field located in the contract area for the purposes of

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[328] Statoil ASA, *Annual report on Form 20-F 2012*, supra note 321, at 39.
[329] *Ibid*. at 35.
[330] WTO, *Trade Policy Review: Malaysia*, Report by the Secretariat, WTO Doc.: WT/TPR/S/156 (12 December 2005), at 82.
[331] Section 2 (1) Petroleum Development Act of 1974.
[332] WTO, *Trade Policy Review: Malaysia*, Report by the Secretariat, WTO Doc.: WT/TPR/S/156 (12 December 2005), at 83.
[333] Bernard Taverne, *Petroleum, industry, and governments: an introduction to petroleum regulation, economics, and government policies* (The Hague: Kluwer Law International, 1999) at 266.

optimizing oil and gas recovery (including minimization of natural gas wastage), or for safety and operational reasons, or in the national interest.[334]

In 2009 Petronas produced about 70% of domestic oil and gas.[335] The company is the leader in the country's market for petroleum products, holding around 42.7% of the sector in 2011.[336] The company is one of the biggest players in the world LNG market. In 2008, about 19% of LNG consumed in Japan, 22% in South Korea, and 30% in Taiwan were supplied by Petronas.[337]

Nigeria

The state was ranked the world's fourth largest exporter of oil in 2009.[338] The Oil and Gas Journal listed the country among the top ten states in terms of proven oil reserves at the end of 2005.[339] The entire ownership and control of all petroleum in Nigeria is vested in the federal government on behalf of the State.[340] The upstream industry is open to private participation subject to a licensing regime;[341] however, foreign participation is restricted to joint operation with the Nigerian National Petroleum Corporation (NNPC).[342] About 95% of Nigerian crude oil produced by joint ventures of NNPC with multinational companies such as Royal Dutch/Shell, Chevron, Mobil, AGIP, Elf, Texaco, and Pan Ocean.[343]

All regulatory functions in the petroleum industry are conferred on the Minister of Petroleum Resources under the Petroleum Act of 1969. This includes the provision of licenses for exploration and mining of the resources, refining and distribution, and export and import of

[334] *Ibid*. at 267.
[335] Petronas, *Annual Report 2009*, at 24, online: Petronas <www.petronas.com.> accessed on 1 May 2012. [Although more recent reports have become available, no data was provided therein about Petronas' share in Malaysian oil and gas production.]
[336] Petronas, *Annual Report 2011*, at 52, online: Petronas <www.petronas.com.> accessed on 1 May 2012.
[337] Petronas, *Annual Report 2009*, *supra* note 335, at 41. [Although more recent reports have become available, no data was provided therein about Petronas' share in the LNG markets of these countries.]
[338] IEA, *Key World Energy Statistics 2011*, *supra* note 40, at 11.
[339] Oil and Gas Journal, 19 December 2005.
[340] See preamble and Section 1 of Petroleum Act of the Federation of Nigeria dated 17 November 1969 (Petroleum Act of 1969).
[341] Production-sharing contracts are also in use.
[342] WTO, *Trade Policy Review: Nigeria*, Report by the Secretariat, WTO Doc.: WT/TPR/S/147 (13 April 2005), at 62.
[343] *Ibid*.

petroleum.[344] The Minister may delegate to another person any power vested in him except the power to make orders and regulations.[345] The Minister also serves as the Chairman of the Board of Directors of NNPC; the government appoints the other members of the board.[346] According to the law establishing NNPC, the corporation is empowered to engage in all commercial activities relating to the petroleum industry and to enforce all regulatory measures relating to the general control of the petroleum sector through its Petroleum Inspectorate department.[347] Section 10(2) of the NNPC Act of 1977 states that any regulatory function conferred on the Minister under petroleum regulations "shall, as from the appointed day, be deemed to have been conferred upon and may be discharged by the chief executive of the Inspectorate." This explicitly includes "issuing permits and licenses for all activities connected with petroleum exploration and exploitation and the refining, storage, marketing, transportation and distribution thereof."[348]

Petroleum refineries, pipelines, and storage depots in the country are controlled by NNPC; however, the retailing of petroleum products is largely in the hands of the private sector.[349] NNPC is the only wholesale supplier of petroleum products, through both its own refining activities and imports.[350] The Nigerian Gas Company, a subsidiary of NNPC, has a monopoly on the supply of natural gas to the domestic market.[351]

<u>Mexico</u>

The country was the world's eighth largest oil producer in 2010.[352] Pursuant to Art. 27 of the Political Constitution of the United Mexican States exploration and production of all hydrocarbons located in Mexico are reserved to the state. The state shall carry out the activities

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[344] Sections 2 through 10 of the Petroleum Act of 1969.
[345] Section 12 of the Petroleum Act of 1969.
[346] Section 1 of the Nigerian National Petroleum Corporation Act of the Federation of Nigeria dated 1 April 1977 (NNPC Act of 1977).
[347] Preamble of the NNPC Act of 1977.
[348] Section 10(2) of the NNPC Act of 1977.
[349] WTO, *Trade Policy Review: Nigeria*, Report by the Secretariat, WTO Doc.: WT/TPR/S/147 (13 April 2005), at 64.
[350] *Ibid*. at 64. The subsidies provided to petroleum products until September 2003 had been discouraging investments in the refining sector; as the result of limited capacities of existing refineries domestic market experienced shortage of petroleum products. To cover the shortfall the NNPC had to import refined products because, due to subsidized low prices for refined products, it was not economically feasible for private traders to import the products.
[351] *Ibid*. at 65.
[352] IEA, *Key World Energy Statistics 2011*, *supra* note 40, at 11.

exclusively entrusted to it in the strategic areas of petroleum, hydrocarbons and basic petrochemicals through its NOC, Petróleos Mexicanos (PEMEX) and its subsidiaries.[353] Hence, PEMEX has exclusive rights over exploration, production, refining, and first-hand sale of oil in the domestic market. Transport, storage and distribution of natural gas, LPG and oil products are open to private participation through the granting of permits. Marketing of oil products is also open to private participation but through the system of PEMEX franchises which can only purchase PEMEX-refined products.[354]

According to the WTO Secretariat, though Mexican laws allow import and export of crude oil (after first-hand sale) by private traders, in practice, crude petroleum is imported and exported exclusively by PEMEX. By the same token, although importation of refined petroleum products is allowed under a permit system, such permits are not being granted in practice.[355]

Regulatory power over the petroleum industry is vested in the Ministry of Energy, which is responsible, among other things, for controlling activities of petroleum state-owned enterprises, granting authorizations and permits, and issuing official standards within its area of responsibility.[356] The Minister of Energy also chairs the board of directors of PEMEX.[357] The board is comprised of fifteen members, ten of which are appointed by the Federal Executive and five by the Petroleum Workers' Union.[358] Operative management of PEMEX is exercised by the Director General, who is also appointed by the Federal Executive.[359]

Among the states reviewed above, Mexico is most similar to Venezuela when their petroleum industry and markets are compared. Through these lenses PEMEX can be viewed as

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[353] Art. 2 of the Law of Petróleos Mexicanos (PEMEX Law) (unofficial English translation), online: PEMEX < http://www.ri.pemex.com/files/content/Law%20of%20Petroleos%20Mexicanos%20_version%20ingles_.pdf> accessed on 1 May 2012.
[354] WTO, *Trade Policy Review: Mexico*, Report by the Secretariat, WTO Doc.: WT/TPR/S/195 (7 January 2008), at 112.
[355] *Ibid.* at 113. Although Mexico is a net exporter of crude oil and PEMEX owns six refineries with a total installed capacity of 1.54 million barrels per day, it is a net importer of refined petroleum products. See *ibid*. at 111.
[356] *Ibid.* at 110.
[357] Art. 9 of the PEMEX Law.
[358] Art. 8 of the PEMEX Law.
[359] Art. 7 and 31 of the PEMEX Law.

the mirror-image of PDVSA.[360] Nevertheless, in contrast to PDVSA, PEMEX is not on the list of STEs notified to the WTO.[361]

Brazil

Brazil is an ideal country to serve as the benchmark for juxtaposing different national petroleum markets. It is the fifth largest state in the world in terms of both surface area and population. It is the largest energy consumer and second to Venezuela as oil and gas reserves possessor in Latin America.[362] In the world oil market, Brazil was the fourteenth largest producer and the eighth largest consumer in 2006.[363] The country is a net exporter of crude oil, and a net importer of natural gas; a substantial amount of petroleum products are also imported due to technological and infrastructural features of the domestic industry.[364] Brazil is also the world's largest ethanol exporter.[365] Biofuels and other renewable resources represent a significant share in the energy mix of the country.[366] Besides market characteristics, focus on Brazil is also useful due to developments in the regulatory framework of its petroleum sector that have occurred since the establishment of the WTO.

The institutional and legal framework of the Brazilian petroleum industry before 1995 was akin to that of Mexico. Pre-1995, the text of Art. 177 of the Brazilian Federal Constitution gave the state a complete monopoly over the industry, which was closed to private actors in both the upstream and downstream sectors. The federal government operated through the state-owned enterprise Petróleo Brasileiro S.A. (PETROBRAS), which was established in 1953.[367] Since the company enjoyed a complete monopoly in the sector, supervision of the company, and thus the industry, was effected by the Ministry of Mines and Energy, rather than by a special oil or gas authority.

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[360] This similarity is not surprising given that PEMEX was once the model for other Latin American NOCs. See Sam Fletcher "Pemex, PDVSA, PETROBRAS: how Strategies, Results Differ." Oil & Gas Journal, 3 August 2009.

[361] It has to be noted that under NAFTA PEMEX has the status of "Government Enterprise," which is subject to the government procurement rules of the treaty. See Annex 1001.1a-2 of the NAFTA.

[362] IEA, *World Energy Outlook 2006*, *supra* note 14, at 448-449.

[363] IEA, *Oil Information 2007* (Paris: OECD Publishing, 2007) at II.10 & II.31.

[364] IEA, *World Energy Outlook 2006*, *supra* note 14, at 449 & 456.

[365] *Ibid.* at 449.

[366] *Ibid*. at 454.

[367] Under the Law No. 2,004, of 3 October 1953.

In 1995, the Brazilian Congress amended Art. 177 of the Brazilian Federal Constitution, allowing the government to contract private companies for operations in the oil and gas industry.[368] However, implementation of the reform required the enactment of a law of direct application in the absence of which the institutional structure of the Brazilian petroleum market would have seen no effective transformation. When Brazil submitted its first notification on STEs in 1996, PETROBRAS was included in the list of STEs along with its two subsidiary companies.[369]

On August 6, 1997 Brazil adopted the necessary law, which ended PETROBRAS' monopoly, allowed private participation in the industry, and established Agência Nacional do Petróleo (ANP), a governmental body specifically tasked with regulating the petroleum industry.[370] Under the new law PETROBRAS became a publicly listed corporation ("*sociedade de economia mista*") controlled by the federal government via ownership of 50% plus one share of its voting capital.[371] As at November 2008 the federal government held 55.7% of PETROBRAS' voting shares with the rest in the hands of private domestic and foreign investors.[372] Art. 61 of the law requires that economic activities of PETROBRAS be carried out under free competition with other enterprises within market conditions.[373] Consequently, the NOC was removed from the Brazilian notification of STEs in 1997.[374]

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368 Constitutional Amendment No. 9 of November 9, 1995.

369 WTO Doc.: G/STR/N/1/BRA (21 March 1996). The two subsidiaries are Petrobrás Química S.A. and Petrobrás Distribuidora S.A.

370 Law No. 9.478 of 6 August 1997.

371 Art. 61 and 62 of Law No. 9.478 of August 6, 1997 (unofficial English translation) online: Zeus Virtual Energy Library <http://www.zeuslibrary.com/LNG/regulatory/PDF/Lei_do_Petroleo_ingles.pdf> accessed on 29 September 2009.

372 PETROBRAS, Annual Report 2008, at 23, online: PETROBRAS <http://www.petrobras.com> accessed on 7 October 2009

373 Law No. 9.478 of August 6, 1997. The only small privilege left to the company is provided in Art. 42, which stipulates that in case of a tie in the bidding for grant of concession contracts "the bid must be decided in favor of PETROBRAS, provided it is not bidding in consortium with other enterprises." It is difficult to assess the practical effect of this provision because it is hardly possible to face similar terms in two proposals from different bidders. The bidding proposals are judged under numerous criteria that evaluate financial, technical, environmental, socio-economic and other indicators.

374 WTO Doc.: G/STR/N/3/BRA (11 December 1997). Petrobrás Distribuidora S.A. was also removed from the STE list. The other subsidiary, Petrobrás Química S.A. is still among Brazilian notified STEs. However, according to the notification, Petrobrás Química S.A. does not participate in international trade; its activities are limited to the management of its shareholding participation in other companies involved in manufacture, trade, imports and exports of products in the petrochemical sector.

Although over fifty private companies, foreign and domestic, are now active in the Brazilian upstream petroleum industry and there are no barriers in the downstream sector for private participation, PETROBRAS still dominates the country's petroleum production, refining, and distribution.[375] In 2007, the company was responsible for about 80% of all imports of petroleum-based products; at the same time refineries controlled by PETROBRAS produced 99% of Brazil's total output of oil.[376] The industry became open for competition relatively recently. Petroleum production by private investors is emerging, infrastructure for distribution of petroleum is developing, and more investors are entering the industry and the market. Against this background it is likely that PETROBRAS' dominance in the market will diminish gradually. Nevertheless, PETROBRAS is currently a state-owned enterprise, which is yet able to influence the Brazilian petroleum market.

In sum, the Brazilian legal framework and the status of PETROBRAS before the mid-1990s was akin to Mexico's with PEMEX and Venezuela's with PDVSA. After the reforms it became comparable to Norwegian Statoil, although not in terms of the market position. These facts shed light on why PETROBRAS's WTO status was changed. Having established a practical background to operate with, we can resume the analysis of the three conditions required for qualification of STE.

3.2.3. Exclusive or special rights or privileges

The term "exclusive or special rights or privileges" has not been interpreted in the GATT/WTO jurisprudence. The Oxford Dictionary of English defines "exclusive" to mean, *inter alia*, "excluding or not admitting other things" or "excluding all but what is specified."[377] Hence, "exclusive" are those rights and privileges that are granted to a single entity and are not available

[375] IEA, *World Energy Outlook 2006*, *supra* note 14, at 452.
PETROBRAS is likely to become a prototype for new generation national energy corporations – along with oil and natural gas production PETROBRAS' business includes production of ethanol and biodiesel, electricity generation from thermoelectric and hydropower plants, wind and solar power stations.

[376] WTO, *Trade Policy Review: Brazil*, Report by the Secretariat, WTO Doc.: WT/TPR/S/212/Rev.1 (11 May 2009), at 109 & 111.

[377] "exclusive *adjective*" *The Oxford Dictionary of English* (revised edition). ed. C. Soanes & A. Stevenson. Oxford University Press, 2005. *Oxford Reference Online*. Oxford University Press. McGill University. 2 October 2009 <http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t140.e26055>

to others. In other words, exclusive rights should coincide with a monopoly or, as the case may be, a duopoly. Can a number of entities be provided with exclusive rights within one market, however? Looking at Art. VIII:5 of the GATS where the term "exclusive service suppliers" refers to "a small number of service suppliers" authorized or established by a state, it seems that the WTO system allows such a possibility.

The word "special" is defined in the Oxford Dictionary of English to mean, *inter alia*, "different from what is usual" or "belonging specifically to a particular person or place."[378] Thus, in its broader meaning "special right" can mean any, including "exclusive," out of the ordinary right. The word "privilege" by definition does not need the qualitative adjective "special."[379] As we see, literal analysis does not provide a clear understanding of the term under consideration because a vast variety of rights and privileges may qualify as "special" if not "exclusive" from the international trade perspectives. However, it suggests that "exclusive or special rights or privileges" (read together) may be provided to more than one entity, meaning that an enterprise granted privileges does not have to be a monopoly or a monopsony. Notification by China of its various petroleum trading enterprises as STEs suggests that at least one country has such an understanding.

Determination of "exclusive or special rights or privileges" in the petroleum industry is an even more complicated exercise. Due to technical regulations related to health, safety and the environment, as well as regulations associated with efficiency of the recovery of petroleum resources, the vast majority of activities in the industry are subject to special rights (concessions, licenses, permits). At almost each stage of the petroleum production chain (exploration, drilling, extraction, transportation, refining, and distribution) states impose certain requirements on operators. Since the industry players tend to integrate the entire chain of production vertically,

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378 "special *adjective*" *The Oxford Dictionary of English* (revised edition). ed. C. Soanes & A. Stevenson. Oxford University Press, 2005. *Oxford Reference Online*. Oxford University Press. McGill University. 2 October 2009 <http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t140.e74101>

379 Privilege means "a special right, advantage, or immunity granted or available only to a particular person or group." See "privilege *noun*" *The Oxford Dictionary of English* (revised edition). ed. C. Soanes & A. Stevenson. Oxford University Press, 2005. *Oxford Reference Online*. Oxford University Press. McGill University. 2 October 2009 <http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t140.e61715>

any special right associated with an intermediate stage of the chain may ultimately provide the grantee with a power to influence the market. As we will see below, GATT negotiators have tried to deal with this concern by clarifying the meaning of exclusive and special privileges granted for the exploitation of national natural resources.

Perhaps realizing the difficulty of defining the term "exclusive or special rights or privileges," the WTO Working Party on STEs used a different approach to facilitate the definition of STE. Based on notifications received from member states the Working Party adopted an Illustrative List of relationships that exist between governments and STEs.[380] According to the Illustrative List, notifications revealed that STEs may take various forms: (a) a government body (branch of government) or government-owned enterprise, (b) an enterprise entirely separate from government established to carry out government-mandated policies or programs subject to legislated controls, or separate enterprise established for commercial purposes, including producer-controlled monopolies.[381] Clearly, each of the five unreported NOCs covered by the case study above would fall under either of these categories.

The Illustrative List suggests two types of relationship between enterprises and governments that could be considered as possible indications of the existence of an STE: (a) special authorization or mandate provided by the government to the enterprise: (i) to control and/or conduct import or export operations, (ii) to distribute imports, (iii) to control domestic production, processing, or distribution; and (b) the support of the enterprise by the government in one or more of the following ways, where the support afforded is specific or more favorable to the enterprise and not generally available to other entities, or is not warranted by purely commercial considerations: (i) budget allocations, (ii) interest rate or tax concessions, (iii) guarantees (e.g. for loans or against business failure), (iv) revenue from the collection of tariffs, (v) preferential access to foreign exchange, (vi) any off-budget support or assistance.[382] Although

[380] Illustrative List of Relationships between Governments and State Trading Enterprises and the Kinds of Activities Engaged in by these Enterprises. WTO Doc. G/STR/4 (30 July 1999).
[381] *Ibid.* para. 8.
[382] *Ibid.*

the suggested inventory of relations is broad enough to cover numerous possible cases, it is non-exhaustive, and other types of relationship between states and enterprises may be used to indicate STEs.[383]

Among the unreported NOCs reviewed above PEMEX, as a legally authorized monopoly, explicitly has special authorization to control domestic production, processing, or distribution of petroleum, and may be supported by the government in one or more of the described ways. Petronas and NNPC are also authorized to control production of petroleum; the former through contractual arrangements, and the latter through directing decision-making process in joint ventures or using regulatory power of its Petroleum Inspectorate department. PETROBRAS and Statoil seem to have no officially prescribed authorization or mandate to control other players in the market. As to financial support and off-budget support or assistance that are more favorable or specific to enterprises, being owned by their governments each of the five NOCs may receive, at least occasionally, support from their main shareholder or other affiliated institutions. Studies have shown that even in countries where state-owned enterprises are put into fully competitive environment and any preferential support to such enterprises is banned, state-owned enterprises receive sympathetic service (loans, guarantees, etc.) from state-owned financial institutions.[384]

When applying the definition of STE to petroleum companies, it must be noted that paragraph 1(a) of the Interpretative Note *Ad* Article XVII states that "privileges granted for the exploitation of national natural resources but which do not empower the government to exercise control over the *trading* activities of the enterprise in question, do not constitute 'exclusive or special privileges.'"[385] This provision purports to exclude private enterprises that have been granted licenses, concessions or other contractual rights to exploit natural resources from STE regulations. However, by introducing an additional test specific to the exploitation of natural

[383] The Illustrative List also provides a long catalogue of activities in which an STE might be engaged within the relevant market. Majority of the activities mentioned therein are attributable to petroleum enterprises. See *ibid*. para. 9.
[384] OECD, *Corporate Governance of State-Owned Enterprises: a Survey of OECD Countries*, 2005, at 190, online: OECD <http://www.sourceoecd.org/governance/9264009426> accessed on 1 May 2012.
[385] Paragraph 1(a) of the Interpretative Note *Ad* Article XVII [emphasis added].

resources, i.e. the power of the government to exercise control over trading activities of the enterprise required, the Interpretative Note substantially limits the applicability of otherwise general definition provided in the Understanding on the interpretation of Art. XVII of the GATT.[386] On the one hand, with this additional requirement it is not possible to treat as an STE an enterprise that has exclusive rights on the exploitation of natural resources and enjoys influence on the market if the government has no power over trading activities of the enterprise. On the other hand, the scope of governmental control is limited to trading activities of the enterprise. This means that an oil and gas company whose production activities are controlled by the government but whose trading activities are exercised without government involvement would not be considered as an STE.

As we have shown in the case study above, NOCs are vertically integrated companies that tend to control the entire chain of production: subsoil deposits, transportation, refining, and marketing. Governmental measures concerning extraction of hydrocarbons from subsurface, transportation or refining affect marketing, which is the final stage of the production chain directly associated with trade. If the measure were applied to extraction of hydrocarbons, as we have mentioned in the previous section of this chapter, it would not be discriminatory and, therefore, trade distortive. However, if it is applied to intermediate stages of the production chain, it would likely affect trading operations. For example, if an NOC is instructed to increase domestic refining operations to use refineries at full capacity, then, *ceteris paribus*, the company's export volumes would reduce *pro rata* the increase in volume of refined petroleum products. In this example, although the governmental measure is not aimed at trading operations, it decreases the volume of exports of both crude oil and refined products, even though the NOC is not banned from exporting refined products. Consequently, the added supply of petroleum products in the domestic market affects their price as well as the volume of imports of crude oil by non-state refineries. This happens because in most countries transportation of refined products

[386]It must be noted that both the Interpretative Note and the Understanding on the interpretation of Art. XVII of the GATT represent contextual elements for the interpretation of Art. XVII.

through pipelines, tankers or railway is more costly and technically difficult than transportation of crude oil. The only way to compensate the shortage of exportable crude oil in such a case is to increase its production; however, not all NOCs have readily available excess production capacities.

The other problem with control over trading activities is the difficulty of its definition or differentiation from general control, unless trade management is exercised through official administrative instructions from the state. The general meeting of shareholders or the boards of directors do not usually take decisions on trade directions at NOCs. Operational management in NOCs is deemed to be independent of shareholders. Moreover, marketing activities of NOCs are usually conducted through specialized subsidiaries, often located abroad and registered under legislation of foreign jurisdiction. Hence, in the absence of prescribed regulations or official instructions from the government to NOCs, it seems impossible to identify state control over trading activities, at least in the case of publicly listed NOCs with a portion of private shareholding. If there is no control over the trading activities of an NOC, then, according to paragraph 1(a) of the Interpretative Note *Ad* Article XVII, there are no exclusive or special privileges. Consequently, if the definition of STE provided in the Understanding on the Interpretation of Article XVII is applied, such NOC is not subject to the GATT rules on state trading operations.

The full text of paragraph 1(a) of the Interpretative Note *Ad* Article XVII reads:

> [g]overnmental measures imposed to insure standards of quality and efficiency in the operation of external trade, or privileges granted for the exploitation of national natural resources *but which do not empower the government to exercise control over the trading activities of the enterprise in question*, do not constitute "exclusive or special privileges".[387]

Clearly designed to bring state mining companies into the GATT's framework while leaving aside private enterprises engaged in the exploitation of natural resources, this provision, ironically, allows state-owned corporations to escape GATT obligations imposed on STEs. Hence, it may be proposed that in order to make state trading rules more clearly applicable to

[387] Paragraph 1(a) of the Interpretative Note *Ad* Article XVII [emphasis added].

NOCs while not affecting private mining enterprises, the underlined qualification should be removed from the paragraph to read as follows:

> [g]overnmental measures imposed to insure standards of quality and efficiency in the operation of external trade, or privileges granted for the exploitation of national natural resources, do not constitute "exclusive or special privileges."

Under such wording, the rights for exploitation of natural resources (under concessions and production-sharing agreements) granted to both public and private entities would not be considered as "exclusive or special privileges" and examination whether an NOC qualifies as an STE would hinge on the examination of its influence on the market. If such influence is found to be sufficient to conduct discriminatory trading, then it would be necessary to investigate the source of the NOC's market power. However, as we shall see below, due to definitional shortcomings, it is not easy to assess the market influence of NOCs and identify the source of such power before the occurrence of trade distortion.

3.2.4. Market influence of NOCs and the source of their market power

References to export and imports in Art. XVII:1(a) and in the definition of STE indicate that the boundaries of market in which influence of an enterprise is evaluated are the boundaries of state to which the enterprise belongs or corresponding boundaries of a single market formed by a number of states, such as the EC. Hence, NOC's influence in foreign markets, such as Statoil's market share in the EC and Petronas' market power in African states, is disregarded.[388]

The scope of market in terms of product composition has to be accounted, too. Should we refer to the market for petroleum, or separate markets for oil and gas, or further dissect transport fuel, LPG, heating oil and natural gas for household use? This depends on the economic conditions of particular markets and has to be addressed on an *ad hoc* basis. Since STEs under Art. XVII:1(a) are required to "act in a manner consistent with the general principles of non-discriminatory treatment," any analysis of market influence of NOCs would have to consider the

[388] Unless an NOC exercises dumping trading in a foreign market.

products' likeness, their competitiveness, and their substitutability.[389] In such a vein, if a case-specific examination is restricted to transport fuel, it would also require inclusion of biofuels into the scope of the market analysis.[390] For ease of further discussion, let us limit product coverage to crude oil.

In petroleum importing states the market for crude oil is assumed to be competitive. If private companies are allowed to own refineries and distribution network, then they would import crude oil because domestic production is not sufficient to cover final demand for crude oil and petroleum products. However, in states where vertically integrated NOCs control the infrastructure necessary to transport and refine crude oil, the proliferation of competition depends on the government's energy policy, that is, whether it aims to reduce the cost of energy inputs to the overall economy or favors stable revenue from NOC's operations. The governments of China and India seem to pursue the median policy by controlling cross-border trade and through their NOCs. As we have mentioned above, the import of crude oil to China and India is allowed only to STEs. In the absence of cross-border trade restrictions, which enterprise would be able to influence the crude oil market in China and India?

If the domestic market is not regulated, then any enterprise that has access to the upstream industry and transportation infrastructure would be able to compete with others, and, perhaps, none would be able to exercise trade-distortive practices. The ownership of enterprises would not be important in an unregulated market. Hence, if numerous state-owned enterprises compete with each other and none of them can ultimately influence the market so as to affect the level and direction of exports and imports, then such enterprises would not be considered as STEs *stricto sensu*. However, there is neither free access to upstream industry and transportation infrastructure nor free cross-border trade in crude oil in China and India. Recalling that Indian

[389] The general non-discriminatory principles in Art. XVII:1(a), as we observe below, include both the MFN and NT standards, which application, in turn, as we discussed in earlier sections of this chapter, is contingent upon determination of products' likeness and, in the case of NT, their competitiveness and substitutability.
[390] PETROBRAS is already a leading exporter of bioethanol. Some other NOCs, such as IOCL and Statoil, are increasing their investments into development of biofuels whether voluntarily or under government pressure. Such developments might in the future require not only analysis of market for conventional and non-conventional transport fuel but also examination whether treatment of these goods within STE is differential.

IOCL has exclusive rights on exports and imports of crude oil and is the biggest player in the domestic market as well as that IOCL's activity is coordinated with ONGC and Oil India Ltd. by the Government, further analysis of the petroleum market in India would not add considerably to our study.

In the case of China, not CNPC and Sinopec but some of their trading subsidiaries are notified as STEs along with Sinochem. The reported subsidiaries of CNPC and Sinopec do not produce crude oil and do not own refining and transportation capacities, nor do they have separate marketing networks. Thus, their trading operations are dependent on supply of and demand for crude oil from their parent companies. Hence, actual market power belongs to the parent companies rather than their reported subsidiaries. CNPC and Sinopec effectively divided the Chinese mainland into zones of their market dominance, while Sinochem specializes in the production of petrochemicals. The three companies import crude oil as primary input for manufacturing petroleum products. They, or the government of a planned economy, segmented China's market by territory and product specialization. Should these enterprises be considered as STEs if their individual operations do not alter the overall level of the country's export and import flows? Exclusive and special rights, as we concluded above and as is evident from the Chinese notification, could be granted to many; however, not all of them would be able to influence exports and imports individually. To complicate things further, the definition of STE does not say what degree of influence should be counted and how it should be estimated in the determination of STE.

In a petroleum-exporting country with a state-monopolized upstream industry the NOC also effectively enjoys a monopoly in the domestic market for crude oil, the downstream sector. Even if the importation of crude oil is allowed for private traders, such market would hardly become competitive because of objective economic reasons.[391] Hence, the influence of PEMEX

[391] Even if the cost of production of crude oil of a foreign exporter were considerably lower than that of NOC of another petroleum exporting state, the foreign exporter would trade its oil in world market full of net importers, rather than trying to enter the market of another petroleum exporting state. It is possible that, due to technological and geographical features, two oil-exporting states trade with each other in crude oil (e.g. if one's oilfields are

and PDVSA in the crude oil markets of Mexico and Venezuela, respectively, is unquestionable. The source of such influence is the privilege granted by the state in the form of a monopoly power.

Control over the refinery and marketing network also provides an effective leverage in the crude oil market because there are no customers for it except for refineries.[392] Although the upstream industry in Brazil and, to some extent, in Nigeria (through joint ventures with NNPC) is open for private participation, control over local refining capacities by PETROBRAS and NNPC make their influence so far in domestic crude oil markets indisputable. However, PETROBRAS is different from NNPC in that it can only affect the level of imports into the domestic market; it cannot restrict export of petroleum by private upstream companies. The source of PETROBRAS' market influence is the natural monopoly in the downstream sector that it inherited from the aforementioned legal monopoly privileges eliminated in 1997. The power of NNPC to regulate the level and direction of exports comes from the authority of its Petroleum Inspectorate and through its participation in the decision-making process of joint ventures. This power is potential; NNPC may exercise it or may choose not to exercise it.

In contrast to PEMEX and PDVSA, Malaysian Petronas is not a sole operator in the upstream industry, nor does it have ultimate control over downstream infrastructure as do PETROBRAS and NNPC. Although Petronas is the biggest petroleum market player in Malaysia, there are many private producers, refineries and distributors freely operating in the market. However, Petronas, as the owner of all petroleum subsurface resources in Malaysia, may regulate the rate of production of oil, which may affect the level and direction of exports and imports regardless of Petronas' market position. Hence, the source of potential market influence

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located close to adjacent territory of another state whose oilfields are located in its other distant areas). For example, eastern regions of Kazakhstan import oil from the adjacent Siberian area of Russia, whereas western regions of Kazakhstan export oil to the bordering Russian Samara region. However, even in such cases, competition among domestic and foreign suppliers (private or NOCs) of crude oil hardly exists because of infrastructural shortcomings such as transportation costs, location of pipelines and refineries, etc.; neighbor states monopolize each other's regional markets.

[392] In cases where refineries are not buyers but service providers the producing company has to market refined products rather than crude oil.

of Petronas is not associated with its market position, but with the special privilege in the form of ownership of subsoil resources and the related authority it has been granted by the state.

The petroleum market and industry structure of Norway is similar to that of Malaysia. Norway's upstream industry is open for private players and so is the downstream sector; neither imports nor exports of crude oil are restricted by the state. Although Statoil is one of the world's largest producers of oil, it does not dominate the domestic market for crude oil. If the NOC's dominance in the market is dubious, what degree of influence prescribed in the definition of STE should be regarded? Norwegian SDFI, which is accounted in the merchandise volumes of Statoil, is traded under marketing and sales instruction issued by the government and monitored by Petoro AS. If Statoil directed substantial part of SDFI oil to the Norwegian market, it would certainly affect domestic prices even though the company's stable market share is relatively small.[393] Could SDFI trading be regarded as special rights granted to Statoil? The answer would depend on the actual influence on the market of Statoil's SDFI related trading.

If contextual and teleological interpretations are taken into account with respect to Art. XVII, it becomes clear that it is an actual rather than potential influence that is referred to in the definition of STE.[394] Hence, Petronas, NNPC and Statoil as well as Chinese petroleum giants would not be regarded as STEs until trade distortive effects of their operations are *post facto* proved to have originated from certain special rights vested in them. Returning to the three conditions we started this section with, we suggest that it is scarcely possible to find simultaneous satisfaction of the three conditions by an NOC unless it is given monopoly rights in both the petroleum market and industry.[395] In the absence of the definition of STE provided in the Understanding on the Interpretation of Art. XVII all state enterprises would be required to follow the general principles of non-discriminatory treatment regardless of whether they meet the

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[393] SDFI volumes of oil are three times larger than the total Norwegian demand for oil. On average about 217 kb/day of oil were consumed in Norway in 2006 (see *BP Statistical Review of World Energy June 2007*, at 11, online: BP <www.bp.com/statisticalreview> accessed on 1 May 2012). In the same year, on average 723 kb/day of oil and NGL produced within Norwegian SDFI (see Petoro AS, Annual Report 2008, *supra* note 325, at 4.

[394] Let us recall that STEs are not prohibited *per se*. It is discriminatory actions of STEs that Art. XVII aims to fight.

[395] To recall, the three conditions that have to be satisfied under definition of STE are: (a) an enterprise is granted with "exclusive or special rights or privileges", (b) it influences imports or exports in the market, and (c) there is a causal link between the special rights and privileges of the enterprise and its power to affect the market.

three conditions. Hence, all NOCs that are controlled by their governments through shareholding would be subject to Art. XVII obligations. The article in such a case would still keep private enterprises that are granted exclusive or special privileges within the state trading regime. Thus, we suggest repealing the definition from the Understanding on the Interpretation of Article XVII.

However, it could be argued that setting aside the definition would destroy the notification procedure stipulated by Art. XVII:4. There are several reasons that could be presented against such an argument. First, in fact Art. XVII:4 requires notification of products that are traded by STEs rather than enterprises themselves, as such practice and its derivative rules developed later. Secondly, the STE notification procedure did not prove to be effective.[396] Thirdly, review of state trading (products and enterprises) is already covered by a comprehensive system of reporting established under the Agreement establishing the Trade Policy Review Mechanism.[397] Current trade policy reviews seem to be more effective in disclosing potential distortive operations of state trading enterprises. Most of the reports made by the WTO trade policy review body reveal a large number of enterprises that are not notified as STEs but bear all the features thereof.[398]

Abolishing the STE's definition would not help in dealing with the main peculiarity of enterprises operating in the petroleum market. Vertical integration of NOCs and IOCs provides ample room for measures exercisable at the intermediate stages of the petroleum production chain that lead to trade distortive effects, whereas the scope of Art. XVII:1(a) is limited to "purchases or sales involving either imports or exports." This limitation works not only towards NOC but also for private monopolies or oligopolistic cartels in the petroleum market, which can create barriers to free trade as effectively as state enterprises. The intermediate stage measures cannot be effectively dealt with in the current scope of the GATT because most of such measures

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[396] See Working Party on State Trading Enterprises, Note by the Chairman, *Notification of State Trading Enterprises*, WTO Doc. G/STR/W/39 (13 February 2003); Michael T. Roberts, "The Unique Role of State Trading Enterprises in World Agricultural Trade: Sifting through Rhetoric" 6 (2001) Drake J Agric. L. 287 at 310; McCorriston & MacLaren, *supra* note 290, at 112-113.

[397] Agreement establishing the Trade Policy Review Mechanism, Annex 3 of the Marrakesh Agreement Establishing the World Trade Organization.

[398] See, for example, trade policy reviews referred to in footnotes to the case studies presented herein above.

lay in the domains of competition rules and international investment law.[399] GATT provisions, other than Art. XVII, regulating monopolies are expressly limited to importations. Although trade-related investment measures are covered by the WTO rules, as we shall see in the subsequent section of this chapter, the Agreement on Trade-Related Investment Measures has its own imperfections, which do not allow effective regulation of such measures. A better system of comprehensive rules for petroleum market may need to be developed. Advisably, an approach taken by the Energy Charter Treaty[400] (ECT) could be used as a starting point for the development of such a system.

3.3. The ECT approach

Art. 22 (State and Privileged Enterprises) of the ECT states:

> (1) Each Contracting Party shall ensure that any state enterprise which it maintains or establishes shall conduct its activities in relation to the sale or provision of goods and services in its Area in a manner consistent with the Contracting Party's obligations under Part III of this Treaty.
> (2) No Contracting Party shall encourage or require such a state enterprise to conduct its activities in its Area in a manner inconsistent with the Contracting Party's obligations under other provisions of this Treaty.
> (3) Each Contracting Party shall ensure that if it establishes or maintains an entity and entrusts the entity with regulatory, administrative or other governmental authority, such entity shall exercise that authority in a manner consistent with the Contracting Party's obligations under this Treaty.
> (4) No Contracting Party shall encourage or require any entity to which it grants exclusive or special privileges to conduct its activities in its Area in a manner inconsistent with the Contracting Party's obligations under this Treaty.
> (5) For the purposes of this Article, "entity" includes any enterprise, agency or other organization or individual.

Like the GATT's provisions, the ECT provisions cover state enterprises and entities with exclusive or special privileges granted by states. The first section of the Article subjects activity of a state enterprise "in relation to the sale or provision of goods and services" to state obligations under Part III of the Treaty, which concerns the promotion and protection of investment. Part II establishes trade rules for energy materials and products. Art. 5 governs trade-related investment measures, whereas Art. 6 is dedicated to competition.

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[399] Inclusion of competition rules into the world trading system to address collusive practices of private enterprises has long been discussed. See, for example, Peter Lloyd & Gary Sampson, "Competition and Trade Policy: Identifying the Issues After the Uruguay Round" 18 (1995) The World Economy 681; Bernard Hoekman, "Competition Policy and the World Trading System" 20 (1997) The World Economy 383; Eleanor Fox, "International Antitrust and the Doha Dome" 43 (2002-2003) Va. J. Int'l. L. 911.
[400] Energy Charter Treaty dated 17 December 1994, entered into force on 16 April 1998; 44 I.L.M. 360 (1995) [hereinafter: ECT].

Sections 2-4 of Art. 22 refer to provisions of the treaty other than investment rules. These sections establish distinct legal regimes for three types of entities. With regard to state enterprises and entities with exclusive or special privileges the ECT sets out that a contracting party shall not encourage or require a state enterprise or privileged entity to conduct activities within the country in a manner inconsistent with the contracting party's obligations under the treaty. This provision differs from the terms of Art. XVII:1(a) of the GATT in that it concerns the state's measure, not the activity of the enterprise itself. The GATT obligates an STE to act consistently with the principles of non-discriminatory treatment, whereas the ECT bans a state from encouraging or requiring a qualified enterprise to act inconsistently with that state's obligations under the treaty. Hence, state enterprises and privileged enterprises are not subject to the ECT rules *per se*.

Unlike the GATT, the ECT distinguishes entities entrusted with regulatory, administrative or other governmental authority. If a state establishes or maintains an entity and entrusts it with certain authority, such entity "shall exercise that authority in a manner consistent with" the state's obligations under the ECT. Although here the treaty puts an obligation on the entity directly, it does so only with respect to the authority that entity exercises, and it does not interfere with the entity's sales, purchases, or other activities.

The ECT is an energy sector specific treaty, drafted accordingly by lawyers and trade and industry experts as well as government representatives. They made it clear that state enterprises such as NOCs may act as both a trader and a regulator. Hence, they distinguished economic activity from exercise of authority of the NOC. At the same time, they understood that private actors, such as privileged enterprises, could be used by states to regulate the market and that such an enterprise may use its rights and privileges to dominate the market without getting directions from the government. In the first case the state is in breach of its obligations; in the second the state is not responsible for private actors' operations, unless it is obliged to enforce competition rules. That is why competition rules were incorporated in the ECT.[401]

The ECT's approach, on the one hand, provides a thought-through classification of energy market players that might conduct trade collusive practices; on the other hand, it embraced competition and investment regulations, thereby establishing a comprehensive framework for effective regulation of the petroleum market.[402]

3.4. Substantive obligations imposed on STE

3.4.1. GATT Article XVII:1(a)

Assuming full applicability of the STE's definition to NOCs, we now try to address substantive obligations imposed on STEs. Since an STE has to operate consistently with the general principles of non-discriminatory treatment, it is necessary to examine the relationship among Articles XVII, I and III, the latter two containing the main principles of non-discrimination – the MFN and NT. No doubt has been expressed in the WTO literature that the MFN standard of Art. I has been included in the general principles of non-discriminatory treatment of Art. XVII:1(a). However, the case is different for the NT standard of Art. III. There are no components of the context of the provision that could provide a clear answer as to whether the NT standard is covered by the general principles of non-discriminatory treatment of Art. XVII:1(a). However, the object and purpose of the provision suggests that if the NT standard is not omitted from the scope

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[401] Art. 6 of the ECT requires each contracting party to maintain and enforce domestic laws that are necessary and appropriate to address anti-competitive conducts in the energy sector.

[402] An approach more relaxed than ECT's, but better applicable to the petroleum market than GATT's regime can be found in Chapter 15 of the NAFTA, which regulates competition, monopoly and state enterprises. Unlike the GATT's "state trading enterprise," NAFTA uses the term "state enterprise," which is defined in Art. 201 as "an enterprise that is owned, or controlled through ownership interests, by a Party." Most of the NAFTA provisions applicable to state enterprises also cover monopolies. Monopoly is defined in Art. 1505 as "an entity, including a consortium or government agency, that in any relevant market in the territory of a Party is designated as the sole provider or purchaser of a good or service, but does not include an entity that has been granted an exclusive intellectual property right solely by reason of such grant." A separate definition is provided in NAFTA for "government monopoly," which "means a monopoly that is owned, or controlled through ownership interests, by the federal government of a Party or by another such monopoly." The term "government monopoly" is used only once in Art. 1502:3 in pair with the undefined term "privately-owned monopoly," and thus, in our view, does not add anything to the term "monopoly."

NAFTA's approach to the regulation of state enterprises and monopolies seems less confusing than that of the GATT because state enterprise is defined in terms of governmental shareholding, and monopoly is identifiable under competition rules within the *relevant market in the territory of a Party*. However, as any detailed definition, it lacks flexibility in application to other creative forms of market dominance. Nevertheless, the NAFTA's definitions for state enterprises and monopolies provide clarity and predictability in trade and investment relations.

of the provision's coverage, then an STE would be free to discriminate foreign counterparties against local ones. This would substantially impair the effectiveness of the STE rules. Let us try to find the answer in the preparatory work and jurisprudence relevant to this matter.

During early GATT preparatory works, a delegate from South Africa expressed the view that non-discriminatory treatment prescribed for STE was limited to the MFN standard and did not extend to NT.[403] Canada's representatives in the *Canada – FIRA* Panel proceedings used this statement to argue that state trading is not subject to the NT clause.[404] They asserted that the drafting history of Art. XVII had no reference to NT, and that if the contracting parties had had it in mind, the NT would have been mentioned in the preparatory documents.[405] The Panel did not rule on the relationship between Arts XVII and III since it had already found the measures at issue to be inconsistent with other provisions of the GATT; however, it "saw great force in Canada's argument that only the most-favoured-nation and not the national treatment obligations fall within the scope of the general principles referred to in Article XVII:1(a)."

Four years later, in another case brought against Canada, the Panel also refrained from ruling whether an STE's (provincial liquor marketing boards) practices were contrary to the NT provision of Art. III but, in contrast to the previous case, it

> saw great force in the argument that Article III:4 was also applicable to state trading enterprises at least when the monopoly of the importation and monopoly of the distribution in domestic markets were combined, as was the case of the provincial boards in Canada.[406]

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[403] Second Session of the Preparatory Committee of the United Nations Conference on Trade and Employment. GATT Doc. E/PC/T/A/SR/10, 6 June 1947, at 34.
[404] GATT Panel Report, *Canada – Administration of the Foreign Investment Review Act*, L/5504, adopted 7 February 1984, BISD 30S/140 [hereinafter: *Canada-FIRA*].
[405] *Ibid.* para. 3.14. Analysis of the GATT preparatory works led professor Jackson to the same conclusion. See John H. Jackson, *World Trade and the Law of GATT* (Indianapolis: Bobbs-Merril, 1969) at 346. Another notable argument was used by Canada's representatives in a later GATT Panel in connection with the provincial liquor boards of the country. They stated that "the Interpretative Note to Articles XI, XII, XIII, XIV and XVIII showed that other GATT provisions applied to state-trading enterprises by specific reference only. In Canada's view this Note would be redundant if all GATT provisions were to apply to state-trading enterprises. In addition, if all provisions of the GATT were to apply equally to state-trading enterprises, this would mean that Article XVII was redundant." GATT Panel Report, *Canada – Import, Distribution and Sale of Alcoholic Drinks by Canadian Provincial Marketing Agencies*, L/6304, adopted 22 March 1988, BISD 35S/37 para. 3.47. In *Belgian Family Allowances* the Panel had similar view. It suggested: "[a]s regards the exception contained in paragraph 2 of Article XVII, it would appear that it referred only to the principle set forth in paragraph 1 of that Article, i.e. the obligation to make purchases in accordance with commercial considerations and did not extend to matters dealt with in Article III." GATT Panel Report *Belgian Family Allowances,* G/32, adopted 7 November 1952, BISD 1S/59, para. 4.
[406] *Canada – Import, Distribution and Sale of Alcoholic Drinks by Canadian Provincial Marketing Agencies*, *supra* note 405, at para. 4.26. The Panel further argued that: "[t]his interpretation was confirmed *e contrario* by the wording of Article III:8(a)."

Later, in a similar dispute on Canadian provincial marketing boards, the Panel found that the right to establish monopolies under Art. XVII did not entail the right to act inconsistently with Art. III:4.[407] These GATT cases provided precedential ground for the first WTO Panel ruling on STE (*Korea – Beef*), which found that the general principle of non-discrimination of Art. XVII:1(a) "includes at least the provisions of Articles I and III of GATT."[408] This finding was not debated in the subsequent appellate proceeding.

Legal scholarship, albeit with some dissent, accords with the view that the general principles of non-discriminatory treatment under Art. XVII:1(a) embrace both the MFN and the NT standards.[409] This seems reasonable because otherwise states would use their STEs to discriminate against foreign entities in favor of domestic enterprises thereby circumventing obligations incurred under the GATT.[410] If the drafters had been willing to exclude STEs from the NT obligation, they could provide an explicit exemption for state trading in Art. III:8, as they did for governmental purchases and subsidies.[411]

3.4.2. GATT Article XVII:1(b)

Under Art. XVII:1(a) an STE shall act in a manner consistent with MFN and NT standards. Sub-paragraph (b) of Art. XVII:1 clarifies that the general principles of non-discriminatory treatment under sub-paragraph (a) "shall be understood to require that such

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[407] GATT Panel Report, *Canada – Import, Distribution and Sale of Certain Alcoholic Drinks by Provincial Marketing Agencies*, DS17/R, BISD 39S/27, adopted 18 February 1992, para. 5.15.

[408] Panel Report, *Korea – Beef, supra* note 291, at para. 753.

[409] See e.g. Bhala, *Modern GATT Law*, *supra* note 140, at 1210; Matsushita, Schoenbaum & Mavroidis, *supra* note 189, at 278; Mavroidis, *supra* note 189, at 316; Bernard M. Hoekman & Michel M. Kostecki, *The Political Economy of the World Trading System: the WTO and Beyond* (Oxford: Oxford University Press, 2001) at 179. See, *contra*, Jackson, *World Trade and the Law of GATT*, *supra* note 405, at 346.

[410] Notably, Art. 1505 of the NAFTA, especially for the matters of competition policy, monopolies and state enterprises, defines non-discriminatory treatment as "the better of national treatment and most-favored nation treatment, as set out in the relevant provisions o this Agreement".

[411] An interesting approach is used in the ECT. The states signatories to the ECT came to an understanding on the principle of non-discrimination according to which the principle "means Most-Favoured-Nation Treatment as a minimum standard. National Treatment may be agreed to in provisions of the Basic Agreement and/or Protocols." (see Final Provisions of the Concluding Document of the Hague Conference on the European Energy Charter, as signed at The Hague on 17 December 1991) Thus, unless otherwise stated in the named documents, the principle of non-discrimination under the ECT does not necessarily include the NT standard. For example, in relation to investments the parties chose to include it; paragraphs 2 and 3 of Art. 10 read together: "[e]ach Contracting Party shall endeavour to accord to Investors of other Contracting Parties, as regards the Making of Investments in its Area, the Treatment… no less favourable than that which it accords to its own Investors or to Investors of any other Contracting Party or any third state, whichever is the most favourable."

enterprises shall… make any such purchases or sales solely in accordance with commercial considerations, …and shall afford the enterprises of the other contracting parties adequate opportunity, in accordance with customary business practice, to compete for participation in such purchases or sales."

The relationship between sub-paragraphs (a) and (b) has been explained in the GATT *Canada - FIRA* Panel Report as following:

> [t]he fact that sub-paragraph (b) does not establish a separate general obligation to allow enterprises to act in accordance with commercial considerations, but merely defines the obligations set out in the preceding sub-paragraph, is made clear through the introductory words 'The provisions of sub-paragraph (a) of the paragraph shall be understood to require ...' For these reasons, the Panel considers that the commercial considerations criterion becomes relevant only after it has been determined that the governmental action at issue falls within the scope of the general principles of non-discriminatory treatment prescribed by the General Agreement.[412]

In the WTO case *Korea – Beef*, the Panel referring to the preceding passage from *Canada – FIRA* stated:

> [t]he GATT jurisprudence has also made clear that the scope of paragraph (b), which refers to commercial considerations, defines the obligations set out in paragraph (a)…[413]
>
> In other words the terms 'general principle of non-discrimination treatment prescribed in this Agreement' (Art. XVII:1(a)) should be equated with 'make any such purchases or sales solely in accordance with commercial considerations' (Art. XVII:1(b)). The list of variables that can be used to assess whether a state-trading action is based on commercial consideration (prices, availability etc…) are to be used to facilitate the assessment whether the state-trading enterprise has acted in respect of the general principles of non-discrimination. A conclusion that the principle of non-discrimination was violated would suffice to prove a violation of Article XVII; similarly, a conclusion that a decision to purchase or buy was not based on 'commercial considerations', would also suffice to show a violation of Article XVII.[414]

Emphasizing the importance of sequential analysis the AB in *Canada – Wheat* proceeding found it necessary to establish a breach of non-discriminatory treatment under sub-

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[412] *Canada – FIRA*, *supra* note 404, at paras. 5-16.
[413] Panel Report, *Korea – Beef, supra* note 291, at para. 755.
[414] *Ibid.* at para. 757. Since in this case the Panel did not stress importance of subordination of the sub-paragraph (b) to (a) this passage was later cited by the U.S. representative in *Canada – Wheat*, arguing that provisions of subparagraphs (a) and (b) contain related but distinct legal obligations. Canada's representatives replied that, in the *Korea – Beef* case, "there was ample evidence of discriminatory treatment by the STE in question and ample evidence that it was not acting in accordance with commercial considerations. As a result, the statement by the panel in that case with respect to there being two obligations was not necessary to the panel's decision. Moreover, the panel in *Korea Various Measures on Beef* expressly endorsed the views of the panel in *Canada – FIRA*, which read subparagraphs (a) and (b) as one obligation." The Panel did not consider it necessary to render a decision on this issue. See Panel Report, *Canada – Wheat*, *supra* note 291, at paras. 6.52, 6.56 and 6.59.

paragraph (a) before examining whether STE's operations were consistent with the commercial considerations prescribed in sub-paragraph (b).[415] The AB concluded:

> [w]e are of the view that subparagraph (a) of Article XVII:1 of the GATT 1994 sets out an obligation of non-discrimination, and that subparagraph (b) clarifies the scope of that obligation. We therefore disagree with the United States that subparagraph (b) establishes separate requirements that are independent of subparagraph (a).
>
> … It follows that, logically, a panel cannot assess whether particular practices of an allegedly discriminatory nature accord with commercial considerations without first identifying the key elements of the alleged discrimination. We emphasize that we are not suggesting that panels are always obliged to make specific factual and legal findings with respect to each element of a claim of discrimination under subparagraph (a) before undertaking any analysis under subparagraph (b). Rather, because a panel's analysis and application of subparagraph (b) to the facts of the case is, like subparagraph (b) itself, dependent on the obligation set forth in subparagraph (a), panels must identify the differential treatment alleged to be discriminatory under subparagraph (a) in order to ensure that they are undertaking a proper inquiry under subparagraph (b).
>
> For these reasons, we are of the view that a failure to identify any conduct alleged to constitute discrimination contrary to the general principles of the GATT 1994 for governmental measures affecting imports or exports by private traders before undertaking an analysis of the consistency of an STE's conduct with subparagraph (b) of Article XVII:1 would constitute an error of law.[416]

The logic behind this finding is hardly disputable. If there is no breach of either the MFN or the NT standards, then trade rules do not apply to such situation, even when business is not conducted in accordance with commercial considerations. Once alleged discriminatory trade of an STE is established, it is necessary to assess whether the STE acted against the requirements of sub-paragraph (b), the first clause of which subjects purchases and sales of an STE to commercial considerations, whereas the second requires an STE to afford enterprises of other states adequate opportunity to compete for participation in such purchases and sales.

The Panel in the *Canada – Wheat* case provides further guidance for understanding the term "commercial considerations":

> [i]n our view, the requirement that STEs make purchases or sales solely in accordance with commercial considerations must imply that they should seek to purchase or sell on terms which are economically advantageous for themselves and/or their owners, members, beneficiaries, etc…
>
> The preceding paragraphs lead us to the view that if an STE is directed to make, or does make, purchases or sales on the basis of such considerations as the nationality of potential buyers or sellers, the policies pursued by their governments, or the national (economic or political) interest

[415] The AB stated: "in each case it is the nature of the relationship between two provisions that will determine whether there exists a mandatory sequence of analysis which, if not followed, would amount to an error of law. In some cases, this relationship is such that a failure to structure the analysis in the proper logical sequence will have repercussions for the substance of the analysis itself." See AB Report, *Canada – Wheat*, *supra* note 291, at para. 109.
[416] *Ibid.* paras. 100-112.

> of the Member maintaining the STE, it would not be acting solely in accordance with commercial considerations.[417]

The Panel rejected the U.S. argument that subparagraph (b) of Art. XVII:1 requires STEs to act as commercial actors[418] and that it prohibits them from using their exclusive rights and privileges to put commercial enterprises at a disadvantage. The Panel recognized that although STEs must conduct their purchases and sales in accordance with commercial considerations, they carry out governmental policies and therefore do not normally aim to maximize profit. The Panel agreed that the exclusive or special privileges granted to STEs may place other enterprises at a competitive disadvantage, but concluded that the requirement to make purchases and sales in accordance with commercial considerations does not "prevent export STEs from using their exclusive or special privileges to gain a competitive advantage in the marketplace."[419] The AB agreed with this conclusion.[420]

The second clause of sub-paragraph (b) states that an STE "shall afford the enterprises of the other contracting parties adequate opportunity, in accordance with customary business practice, to compete for participation in such purchases or sales." The Panel did not accept the U.S. view that the term "enterprises" in the second clause included the "enterprises selling the same product as that offered for sale by the export STE in question (i.e., the competitors of the export STE)."[421] The AB upheld this finding and further elaborated on the requirement of the second clause:

> [t]he requirement to afford an adequate opportunity to compete for participation (i.e., taking part with others) in "such" purchases and sales (import or export transactions involving an STE) must refer to the opportunity to become the STE's counterpart in the transaction, not to an opportunity to replace the STE as a participant in the transaction.[422]

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417 Panel Report, *Canada – Wheat, supra* note 291, at paras. 6.87 and 6.88. In a footnote to this passage the Panel provided an example of trade with non-commercial considerations wherein an STE is directed by a state to trade with another state in the national interest, even though such trade implied foregoing sales at higher prices with other states.

418 Under the term "commercial actors" the U.S. representatives meant "actors that maximize profit, do not enjoy government-conferred privileges and are disciplined by market forces." See *ibid.* at para. 6.91

419 *Ibid.* at paras. 6.96 – 6.106.

420 AB Report, *Canada – Wheat*, *supra* note 291, at para. 151.

421 Panel Report, *Canada – Wheat, supra* note 291, at para. 6.72.

422 AB Report, *Canada – Wheat*, *supra* note 291, at paras. 157 and 161.

In sum, the establishment of a breach of substantive obligations by an STE involves a two-tier test. Firstly, it has to be found whether the STE treated two or more counterparties differently. Secondly, it has to be proved that: (i) such differential treatment was due to non-commercial considerations of the STE, and/or (ii) the STE provided advantages to some enterprises over other enterprises not in accordance with customary business practice. The key terms, "commercial considerations" and "customary business practice," necessitate an inquiry into the specificities of a particular market and business.[423] Hence, if discriminatory treatment does not manifestly conflict with commercial considerations and is consistent with the relevant business practice or market, it would comply with Art. XVII requirements.[424] Now let us look at the peculiarities of industrial organization in the petroleum sector.

3.5. Integrated petroleum companies

From a market perspective, the petroleum sector is characterized by competitive oligopoly, limited supply capacity, and strong effect of informational asymmetries and speculative transactions on final prices. Since the price of petroleum *in situ* is hardly definable and the world market price fluctuates heavily due to informational asymmetries and exogenous factors other than the cost of production, it is nearly impossible to identify a normal commercial rate of return in the petroleum industry. In the absence of a defined price *in situ* (in the sense of a nominal natural cost), trade in petroleum is commercially viable as long as the market price is higher than the marginal cost of production. Price is not the only factor to be accounted in considering commercial considerations. Art. XVII:1 sub-paragraph (b) provides an illustrative

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[423] The AB in *Canada – Wheat* (*ibid.* at paras. 140 and 144) stated:

> [t]he Panel interpreted the term "commercial considerations" as encompassing a range of different considerations that are defined in any given case by the type of "business" involved (purchases or sales), and by the economic considerations that motivate actors engaged in business in the relevant market(s)… We nevertheless think it important to observe that the Panel's interpretation of the term 'commercial considerations' necessarily implies that the determination of whether or not a particular STE's conduct is consistent with the requirements of the first clause of subparagraph (b) of Article XVII:1 must be undertaken on a case-by-case basis, and must involve a careful analysis of the relevant market(s). We see no error in the Panel's approach; only such an analysis will reveal the type and range of considerations properly considered "commercial" as regards purchases and sales made in those markets, as well as how those considerations influence the actions of participants in the market(s).

[424] Given the vagueness of the term "commercial considerations," it seems difficult to determine an action as non-compliant with commercial considerations, unless the conflict is obvious.

list of other trade conditions such as quality, availability, marketability and transportation, that have to be assessed.

Since the marginal cost of petroleum production (i.e. cost price) is in most cases several times smaller than the market price, the high margins give the producers considerable freedom for strategic maneuvering to increase market share under conditions of oligopolistic competition. Long term strategies may include investments that appear unprofitable at present or investments with very high opportunity cost, e.g. financing R&D in hydrogen production or investment into costly alternative energy at a time when oil and gas projects that are more economically feasible are available.[425] Moreover, high profitability of petroleum operations allows enterprises to finance non-commercial activities. Although such practice is mainly associated with NOCs, private IOCs also have considerable non-business expenditures.[426] Furthermore, in dealing with independent counterparties, high margins allow petroleum enterprises to procure stability in crude oil sales during price fluctuations. Companies prefer stable long-term business relationship to probable high returns, which are vulnerable to exogenous factors.[427] Nevertheless, trade in petroleum is normally conducted by an NOC through its subsidiaries or companies affiliated with it through either shareholding or long-term contracts. Trade by private sector IOCs follows a similar structural pattern.

From an industrial organization perspective, a petroleum conglomerate, whether privately or state-owned, represents a vertically integrated chain of production, which is mainly operated through intra-group transactions and strong informational co-ordination. Through vertical integration NOCs and IOCs maximize the final value added from the chain of production, and

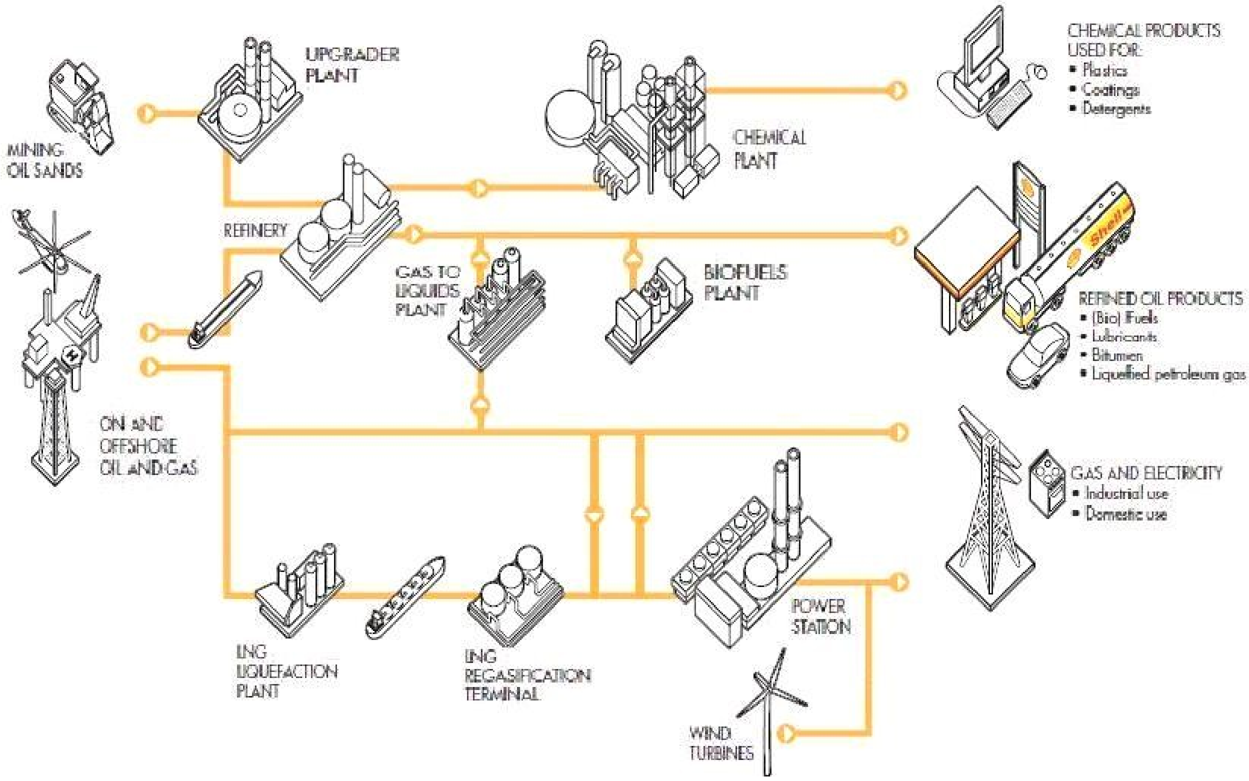
[425] The biggest petroleum players are also aggressively investing in alternative energy. IOCs, such as ExxonMobil, Shell, BP, and NOCs, such as PETROBRAS, Statoil, IOCL, already have significant assets in biofuel production and power generation.

[426] NOCs are widely used by their governments to finance social and economic development programs e.g. development of infrastructure, job creation, energy subsidization, and health care programs. By the same token, IOCs frequently provide financing for charity purposes, to sponsor unrelated research projects or to support political campaigns. Social responsibility of trans-national corporations is a growing concern in the international community. Therefore, it is to be expected that IOCs' social expenditures would increase in the future.

[427] Long-term relationship with independent counterparties may be sustained through long-term offtake sale and purchase contracts, franchising, licensing, and other forms of business arrangements.

thus the group’s total profit.[428] In this chain, an intermediate-stage subsidiary may be important in the functions it performs rather than the revenue it generates. Such a value chain may be highly sophisticated, such as Royal Dutch Shell group’s structure illustrated in Figure 4 below, or simplified to an oilfield-transportation-refinery minimum.

Figure 4: Royal Dutch Shell group’s structure[429]

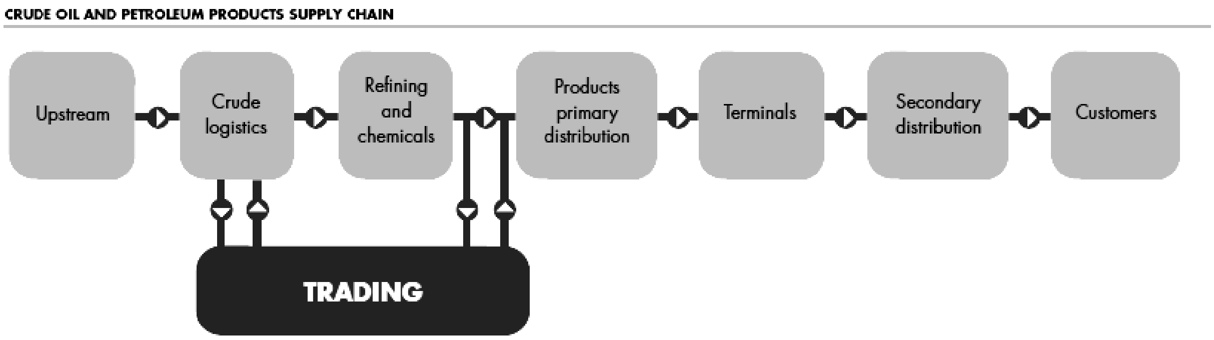


The trading activities of petroleum conglomerates are conducted by their marketing divisions through sales of crude oil or refined products. Crude oil is marketed due to lack of own capacities (refining and product marketing infrastructure), excessive rise of price for crude oil when the price for refined products has not responded adequately, geographical or technological constraints, and due to other reasons.[430] Under normal circumstances petroleum corporations

[428] As early as 1937, Ronald Coase concluded that vertical integration improves the economic efficiency of firms. See Ronald Coase “The Nature of the Firm” 4 (1937) *Economica* 386.
[429] Royal Dutch Shell plc.: *Financial and Operational Information 2004–2008*, at 1; online, Royal Dutch Shell plc.: <www.shell.com/annualreport> accessed on 1 May 2012.
[430] With regard to the first reason, lack of own capacities may occur in refinery, storage terminals, and transportation and distribution networks. Regarding the second, crude oil prices fluctuate more frequently than refined product; there is a time lag between price dynamics in the market for crude oil and the market for refined products, thus, in the latter prices do not always respond to short-term fluctuations (see S. Borenstein, A. Colin Cameron, & R. Gilbert, “Do Gasoline Prices Respond Asymmetrically to Crude Oil Price Changes?” 112 (1997) Quarterly Journal of Economics 305). Hence, given stable costs of refining and distribution, it may become relatively efficient to sell crude oil during high price rises rather than marketing final products. In relation to geographical location, as a rule, a

tend to maximize the value added by keeping oil and gas flow within their own chain of production. Figure 5 below illustrates Royal Dutch Shell group's oil value chain, which may be regarded as typical for wholly integrated IOCs and NOCs.

Figure 5: Oil value chain of the Royal Dutch Shell group[431]



The substantive obligations laid down in Art. XVII:1 sub-paragraph (b) require an STE to trade solely in accordance with commercial considerations, and afford other enterprises, in accordance with customary business practice, to compete for participation in the trade with the STE. These obligations, in their strict understanding, would require unbundling the whole value chain illustrated in the Figure 4. From a practical point of view, it is a question whether PDVSA has to sell its crude oil to independent Japan refineries on the same conditions (taking into account transportation cost) as it sells oil to U.S. refineries in which it owns shares, or as it delivers to own Venezuelan refineries. Under normal conditions overseas subsidiaries of ExxonMobil would sell their oil to the U.S. refineries of ExxonMobil group rather than to Sinopec refineries located in China or refineries of Aramco and LUKoil groups based in the U.S. PDVSA's case is no different from ExxonMobil's in this regard. Hence, it is companies outside of the group, rather than states, that both IOCs and NOCs would discriminate against in order to maximize the group's profit. In the end, both maximization of the group's profit and stability of business are purely commercial considerations.

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petroleum group's refineries are located close to consumer markets and may be far away from oilfields. In such cases, it may be more efficient to sell own crude in one market and procure oil from others in the market located close to own refineries. Such inter-group swap sales may also occur due to technological constraints, e.g. when own refineries are not able to process heavy crude oil.

[431] Royal Dutch Shell plc.: *Financial and Operational Information 2004–2008*, *supra* note 429, at 79.

Therefore, it may be suggested that Art. XVII:1 sub-paragraph (b), read in the light of customary business practices and commercial considerations established in the petroleum sector, legalizes the vertical integration of petroleum STEs and the resulting discriminatory treatment of counterparties. Otherwise, if NOCs are required to comply with Art. XVII under a strict understanding of its text, their market share would be taken by private IOCs, which also discriminate among their counterparties but are not subject to state trading rules. Hence, no trade liberalization would occur in effect. Moreover, due to the definitional shortcomings we discussed above, some NOCs may not be classified as STEs and would avoid the corresponding obligations.

3.6. Conclusion

At the outset of this section we stated that the WTO Secretariat has urged the international trade community to unbundle vertically integrated utilities to liberalize trade.[432] Perhaps it should first be asked whether all vertically integrated entities cause inefficiency in the market.[433] The petroleum sector represents a competitive oligopoly inhibited by NOCs, IOCs and small-scale independent companies. This sector is very capital and technology intensive. It is doubtful that unbundling NOCs would result in the achievement of the WTO's stated objectives. A thorough economic analysis is needed to assess possible impacts of petroleum conglomerates' disaggregation on the petroleum market. Such an analysis is beyond the scope of this research; however, it might be expected that due to asymmetric information, unstable relations among independent entities at different stages of the value chain and additional transaction costs, such disaggregation would adversely affect economic efficiency in this sector.

[432] See WTO Secretariat, Energy Services, Background Note S/C/W/52, *supra* note 284.

[433] Positive and negative effects of vertical integration or disaggregation have to be analyzed on an industry basis. In some cases vertical integration may be more beneficial, whereas it may have detrimental economic effects in other industries. For example, the 1990s' boom of offshoring and outsourcing business practices in the manufacturing industry and some types of services may indicate positive effects of disaggregation in these segments. For economic analysis of firm's choice of organizational pattern and references to the literature see G. M. Grossman & E. Helpman, "Integration versus Outsourcing in Industry Equilibrium", (2002) 117 (1) The Quarterly Journal of Economics 85), and E. Helpman "Trade, FDI, and the Organization of Firms", (2006) 44 (3) Journal of Economic Literature 589.

In fact, there is a rich body of economic literature arguing that vertical integration increases economic efficiency of firms and thus, in competitive markets, enhances social welfare.[434] For example, some economists maintain that vertical integration "would lead to an enhancement of global welfare, as the formation of highly refined linkages between firms expands global production, reduces the price of the final good, and thereby increases social surplus."[435] Similarly, it has been stated that vertical integration, if unaccompanied by a competition-suppressing horizontal integration, operates much more economically than a chain of non-integrated entities.[436] Others argue that vertical integration produces positive economic effects even in oligopolistic markets.[437] Moreover, vertical integration has also been considered as the key to stability in the market because it prevents input distortions.[438] With regard to the U.S. gasoline market, some authors concluded that forcing gasoline retailers and refineries to divorce would have detrimental effects on consumer welfare.[439] Furthermore, as to trade barriers, it has been found that vertical integration in gasoline markets *per se* does not create market power.[440] Lastly, it may be suggested that if NOCs and IOCs are unbundled, small scale companies would not be able to finance large projects and, consequently, would not be able to procure stability of petroleum flows from oilfields through refineries to final consumers.

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[434] See a working paper by K. Lajili, M. Madunic & J. T. Mahoney "Testing Organizational Economics Theories of Vertical Integration", online: <http://www.business.uiuc.edu/Working_Papers/papers/07−0104.pdf> accessed on 1 March 2009, which reviews, and provides a long list of, scholarly works applying different approaches in empirical research of vertical integration from microeconomic perspectives. A remarkable review of economic scholarship analyzing the impact of organizational structures on international trade and investment is provided by E. Helpman in "Trade, FDI, and the Organization of Firms" (2006) 44 (3) Journal of Economic Literature 589.

[435] Stephen F. Hamilton & Kyle Stiegert, "Vertical Coordination, Antitrust Law, and International Trade" (2000) 43 (1) J. L. & Econ. 143 at 153.

[436] Joseph J. Spengler "Vertical Integration and Antitrust Policy", (1950) 58 (4) Journal of Political Economy 347 at 352.

[437] M. L. Greenhut & H. Ohta "Vertical Integration of Successive Oligopolists" (1979) 69 (1) The American Economic Review 137 at 141.

[438] P. Mallela & B. Nahata, "Theory of Vertical Control With Variable Proportions." (1980) 88 Journal of Political Economy 1009 at 1023; and, J.F. Westfield, "Vertical Integration: Does Product Price Rise or Fall?" (1981) 71 American Economic Review 334 at 345; also, David Hummels, Jun Ishii, and Kei-Mu Yi. "The Nature and Growth of Vertical Specialization in World Trade." (2001) 54 (1) Journal of International Economics 75 at 95.

[439] M. G. Vita, in "Regulatory Restrictions on Vertical Integration and Control: The Competitive Impact of Gasoline Divorcement Policies" (2000) 18 (3) Journal of Regulatory Economics 217 at 232; see also L. Goldstein, R. Gold, & A. Kleit, "Divorced From the Facts: Retail Gasoline Divorcement Redux", Oil & Gas Journal (November 9, 1998) at 27-34.

[440] T.C. Honeycutt, "Competition in Controlled and Uncontrolled Gasoline Markets" (1985) 3 Contemporary Policy Issues 105, see also J. Barron & J. Umbeck, "The Effects of Different Contractual Arrangements: The Case of Retail Gasoline Markets" (1984) 27 J. L. & Econ. 313.

In order to properly assess the effect of vertically integrated businesses on the global welfare within the WTO system, the normative base of the system must be duly reconsidered. In other words, it is necessary to dismiss one of the most important assumptions of the neoclassical trade theory: that markets are competitive. That is what the STP theory does.

It is highly questionable whether the application of the GATT STE rules to NOCs can produce benefits for the world trading community, though the rules might meet certain expectations of one or more parties in discrete WTO disputes. A new set of STE rules seems to be required, at least in the energy sector, in order to realize benefits from international trade to global welfare. Such rules must be based on a thorough economic analysis of whether, how and to what extent vertically integrated businesses, both state and privately owned, affect international trade so that the benefits of vertical integration are realized while their negative impacts are eliminated.

CHAPTER IV. TRADE-RELATED INVESTMENT MEASURES

4.1. Introduction

Investment, whether coming from domestic or foreign sources, is an important factor contributing to the economic growth of a country.[441] To attract investment into a country or to a specific industry, host states may provide various forms of incentives; for example, direct and indirect subsidies or tax exemptions and privileges. In order to maximize the contribution of the investment to the country's social and economic development, the host state may require investors to undertake measures that are aimed to facilitate industrial growth in the sector receiving the investment or sectors adjacent to it. Such measures, known as performance requirements, may take a variety of forms such as domestic supply obligations, local content and export/import ratio requirements.

Both investment incentives and performance requirements are aimed at influencing investors' behavior, which would otherwise be driven exclusively by market forces and/or business practice potentially unfavorable to the host state. Such influence is felt not only on the choice of investment locales, but also on the procurement and marketing policies of investors. Investment incentives and performance requirements that are linked to, or may affect, cross-border trade flows are commonly known as trade-related investment measures (TRIMs).

This chapter provides a study of TRIMs practiced in the petroleum industry and their consistency with the WTO Agreement on Trade-Related Investment Measures (TRIMs Agreement).[442] A brief economic background necessary to understand state policies implementing TRIMs is provided at the beginning of the chapter. It is followed by a legal background which overviews historical development of the WTO rules regulating TRIMs and establishes a starting point for subsequent legal analysis of TRIMs exercised in the petroleum

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[441] Economic and legal scholarships tend to focus on the role of foreign investment (particularly foreign direct investment) because of its importance for international trade politics. Domestic investment and measures associated with it, though frequently overlooked, may also significantly affect international trade and investment flows.

[442] Agreement on Trade-Related Investment Measures, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1868 U.N.T.S. 186.

industry. In conclusion, I suggest that the prohibition of certain TRIMs in the petroleum industry may lead to underinvestment in the industry and, consequently, to the shortage of petroleum supply to other industries.

4.2. Economic background

TRIMs represent government intervention into the market and, as such, it is difficult to assert whether they distort international trade and reduce global welfare. A rational government applies economic intervention in response to market failures when efficient allocation of resources cannot be achieved by supply and demand forces. A prominent example of market failure is imperfectly competitive markets. One of the most cited reasons justifying the use of TRIMs by developing countries is the need to mitigate the restrictive business practices of transnational corporations.[443]

It must be recalled that neoclassical trade theory assumes that markets are perfectly competitive; that is, no individual player may affect the price in the market.[444] In contrast, STP views market imperfections as the rule rather than the exception in real life and therefore abandons this assumption.[445] Hence, if viewed from a neoclassical theory perspective, any TRIM inherently causes disturbance to trade but, if viewed with an STP lens, it may rectify the negative consequences of a market failure, thereby improving national and/or global welfare with or without positive impact on trade flows.

Empirical studies show different outcomes of the use of TRIMs. While some note negative effects and some find positive effects of TRIMs to trade and welfare, most of these

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[443] Report of the Working Group on the Relationship between Trade and Investment to the General Council, WTO Doc. WT/WGTI/2 (December 8, 1998) at 7. A more detailed analysis of this issue is provided in Oliver Morrissey & Yogesh Rai, "The GATT Agreement on Trade Related Investment Measures: Implications for Developing Countries and their Relationship to Transnational Corporations," (1995) 31 The Journal of Development Studies 702.

[444] A review of studies on the structure of industries with high concentration of FDI found a lack of perfect competition in those industries, which lead UNCTAD to conclude that "there is simply no empirical support for using the neo-classical paradigm to characterize industry structure in areas in which foreign direct investment predominates." UNCTAD, *The Impact of Trade-Related Investment Measures on Trade and Development. Theory, Evidence and Policy Implications*. UN Publication (ST/CTC/120), 1991, [hereinafter: UNCTAD, *The Impact of TRIMs*] at 5.

[445] James A. Brander, "Rationales for Strategic Trade and Industrial Policy," in Paul Krugman ed., *Strategic Trade Policy and the New International Economics* (Cambridge, Mass., The MIT Press, 1986) at 24.

studies have qualifications that withhold an ultimate conclusion on the effect of TRIMs.[446] The variety and uncertainty of empirical conclusions may result from a controversy over TRIMs definition and the difficulty of isolating the effects of TRIMs from the influence of other factors.[447] Methodological specifics might also contribute to the discrepancy in these findings. On balance, a common message from the empirical studies is that the use of TRIMs could be economically justified under certain circumstances but the policy implementing the TRIMs must be designed with great care; otherwise, it would produce only detrimental impacts on both domestic and international economies and may negatively affect trade flows.[448] Needless to say, with such justification, each government applying TRIMs believes that it controls the situation and has all the required information to achieve its planned results without significantly affecting the interests of other states.[449]

TRIMs are most frequently used in the automotive, oil and gas, resource-based manufacturing, chemical and petrochemical industries, as well as in computer/informatics industries.[450] The most widely cited research on TRIMs in the petrochemical industry concludes that the use of investment incentives and performance requirements:

> does not seriously distort the pattern of world trade in petrochemicals from that which might be generated by a free trade regime, but only if one takes into account (a) concerns for resources wasted because of the impracticalities of raw-materials transportation in this sector, and (b)

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[446] See review of empirical studies in UNCTAD, *Elimination of TRIMs: The Experience of Selected Developing Countries*, UN Publication (UNCTAD/ITE/IIA/2007/6); UNCTAD, *Foreign Direct Investment and Performance Requirements: New Evidence from Selected Countries.* UN Publication (UNCTAD/ITE/IIA/2003/7); WTO/UNCTAD, *Trade-Related Investment Measures and Other Performance Requirements*, Joint Study by the WTO and UNCTAD Secretariats (G/C/W/307 & G/C/W/307/Add.1) [hereinafter: WTO/UNCTAD, *TRIMs*]; and UNCTAD, *The Impact of TRIMs*, *supra* note 444.

[447] Robert H. Edwards, Jr. & Simon N. Lester, "Towards a More Comprehensive World Trade Organization Agreement on Trade Related Investment Measures," (1997) 33 Stan. J. Int'l L. 169 at 172. For various definitions of TRIMs see WTO/UNCTAD, *TRIMs*, supra note 446, at 1-5.

[448] David Greenaway, "Trade Related Investment Measures and Development Strategy," (1992) 45 Kyklos 139 at 155.

It should be noted that various types of TRIMs produce different effects e.g. investment incentives act differently than performance requirements. This difference also exists on the sub-level. Sub-types of investment incentives such as subsidies and tariff cuts do not have equivalent effects. Alternatively, sub-types of performance requirements such as local content requirements may have less impact on trade flows than export performance requirements.

[449] Political economy behind the TRIMs may vary depending not only on purely economic reasons but also environmental, social, and political factors. In some cases, especially in the renewable energy industry, certain TRIMs may be used jointly with subsidies to back-up political support for less efficient renewable energy subsidies among population and local producers of conventional energy.

[450] UNCTAD, *The Impact of TRIMs*, *supra* note 444, at 3, and WTO/UNCTAD, *TRIMs*, supra note 446, at 2.

concerns for special and more favorable trade-policy treatment for developing countries as far as infant-industry protection and minor export subsidies are concerned.[451]

Regarding the effect of TRIMs on investment decisions, the study concludes that due to a strong orientation of the petrochemical industry toward feedstock availability, vertical integration, and market outlets, incentive packages do not affect business decisions on international investment location (except within regional blocks).[452] The study underscores specifics of industrial organization in the downstream petroleum industry:

> The economies of vertical integration are of unusual importance in the petrochemical industry, and play a critical strategic role in investment planning. The need for very large-scale production units, whose sheer size implies vulnerability to demand recession, mandates vertical integration in downstream operations in order to obtain a degree of stability in product demand. Additional factors include the interrelated nature of some firms' proprietary technologies, which can result in the development of new chemicals with quite distinct qualities, and the need for particular forms of quality-control in upstream processes. This characteristic reinforces the need for vertical integration in manufacturing.[453]

The upstream petroleum industry is a more capital-intensive and more highly integrated business than the downstream sector. According to the IEA estimates, the world petroleum industry requires cumulative investments of around USD 11.8 trillion between 2007-2030 (based on 2007 dollar amounts), about USD 8.4 trillion of which must be directed to the upstream sector.[454] The bulk of this investment comes in the form of foreign direct investment. The primary investors in the upstream sector are IOCs and NOCs. Over the period of 2000-2007, IOCs accounted for around 60% of global investment in the upstream sector, almost half of which was provided by the top five super-majors: ExxonMobil, BP, Shell, Total, and Chevron.[455] The remaining 40% is attributable to NOCs' investments both domestically and abroad.[456] Since major investors are highly integrated global businesses (both IOCs and foreign NOCs), the TRIMs implemented by host states in the upstream sector may also be justified as instruments designed to mitigate the potential restrictive business practices of foreign investors.

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451 Peter H. Gray & Ingo Walter, "Investment Related Trade Distortions in Petrochemicals" (1983) 17 Journal of World Trade Law 283 at 307.
452 *Ibid.* at 305
453 *Ibid.* at 301
454 IEA, *World Energy Outlook 2008*, *supra* note 282, at 89 & 304.
455 *Ibid*. at 306.
456 *Ibid*.

4.3. Legal background

Over the past few decades, the international trade community repeatedly brought investment issues to the negotiating table. Initial discussions were held in the late 1940s during negotiations regarding the establishment of the International Trade Organization. Then, in the UN and the OECD fora several attempts were made to devise an international instrument that would regulate restrictive business practices of multinational enterprises. In the late 1990s, the OECD made attempts to create the Multilateral Agreement on Investment, hoping to open it further to non-OECD states. However, in all of these instances negotiating parties failed to reach a compromise that could result in a comprehensive multilateral investment treaty.[457] Despite these failed negotiations, international investment law has been rapidly evolving through bilateral and regional treaties, but investment rules in such treaties are rarely concerned with trade issues.[458]

[457] There is a considerable body of legal scholarship analyzing multilateral investment negotiations from historical perspectives. See, for example, Peter T. Muchlinski, "A Brief History of Business Regulation," in S. Picciotto & R. Mayne, eds, *Regulating International Business: Beyond Liberalization* (London: Macmillan, 1999) 29; Batlu Riyaz, "Journey from Havana to Paris: The Fifty-Year Quest for the Elusive Multilateral Agreement on Investment," (2004) 24 Fordham Int'l L.J. 275; Peter T. Muchlinski, "The Rise and Fall of the Multilateral Agreement on Investment: Where Now?," (2000) 34 Int'l L. 1033; Paul B. Christy III, "Negotiating Investment in the GATT: A Call for Functionalism," (1990) 12 Mich. J. Int'l L. 743; Carlos M. Correa & Nagesh Kumar, *Protecting Foreign Investment: Implications of a WTO Regime and Policy Options* (London, New York: Zed Books Ltd., 2003) at 29-43.

[458] According to UNCTAD, 5,939 international investment agreements were in effect around the world at the end of 2009, including 2,750 bilateral investment treaties, 2,894 double taxation treaties, and 295 other international investment agreements. Investment treaties usually provide for NT and MFN standards, fair and equitable treatment, protection in case of expropriation, transfer of funds and investor-state dispute settlement provisions. See UNCTAD, *World Investment Report 2010* (Geneva: UN Publication, 2010) at 81.

BITs concluded before 1994 rarely contained rules that effectively deal with trade issues. BITs concluded after the emergence of the TRIMs Agreement tend to incorporate its provisions by reference or even go beyond the scope of the TRIMs Agreement. See UNCTAD, *Host Country Operational Measures. UNCTAD Series on issues in international investment agreements* UN Publication (UNCTAD/ITE/IIT/26); and WTO/UNCTAD, *TRIMs*, supra note 446.

The ECT and the ASEAN's Comprehensive Investment Agreement incorporate provisions of the TRIMs Agreement. For the relationship between the TRIMs Agreement and the ECT see David McDougall & Peter Cameron, "Trade in Energy and Natural Resources: Trade-Related Investment Measures – Focus on Eastern Europe," (1994) 28 Journal of World Trade 171. The NAFTA has distinct regimes for trade (with reference to the GATT rules) and investment. However, Art. 606 (Chapter 6: Energy and Basic Petrochemicals) states that energy regulatory measures shall be subject to obligations on NT, export and import restrictions, and export taxes. Art. 606 broadly covers enough trade-related investment measures practiced in the energy sector.

Due to difficulties in striking the balance between the interests of a great number of developed and developing states, it can be expected that investment issues will continue to be regulated on bilateral and regional levels. For the same reason liberalization of TRIMs is likely to progress on bilateral and regional levels, rather than on a multilateral level. It has been stated that, when compared to multilateral treaties, "regional arrangements offer several advantages: they involve more binding commitments than are feasible multilaterally; they create opportunities to discriminate against and exclude outsiders; they limit bargaining to the countries on which the

Applicability of the GATT 1947 to TRIMs was first judicially tested in the 1982 *Canada–FIRA* dispute.[459] Although GATT 1947 made no reference to investment, the Panel outlawed investment measures that were inconsistent with the NT obligation.[460] Shortly after the *Canada–FIRA* case, developed countries led by the U.S. managed to overcome the developing states' objections and included TRIMs discussions into the Uruguay Round's agenda.[461] In addition to the *Canada-FIRA* dispute, it is important to note another development preceding the Uruguay Round's negotiations; a considerable body of literature in support of the STP theory had emerged by the time of the commencement of negotiations.[462]

The TRIMs section of the Uruguay Round was a controversial area highly contested by negotiating parties.[463] The core of the debate regarded the nature and effects of TRIMs. The U.S. and Japan argued that certain types of TRIMs are presumably trade distortive and must be explicitly prohibited, while other types of TRIMs were to be subject to a non-discrimination obligation i.e. to cover TRIMs by the MFN principle in addition to the NT principle, the applicability of which had been confirmed by the *Canada-FIRA* Panel. They insisted on the clarification of existing articles of the GATT and the elaboration of additional provisions that would explicitly govern TRIMs.[464]

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spillover of FDI regulation is concentrated; and they minimize the transaction costs and large number problems that plague multilateral discussions." See Kerry Chase, "From Protectionism to Regionalism: Multinational Firms and Trade-Related Investment Measures," (2004) 6 Business and Politics 1 at 32.

[459] *Canada – FIRA*, *supra* note 404.

[460] *Ibid.*

[461] Edwards. & Lester, *supra* note 447, at 193.

[462] See e.g. A. Auquier & R. Caves, "Monopolistic Export Industries, Trade, Taxes, and Optimal Competition Policy," (1979) 89 The Economic Journal 559; James A. Brander & Barbara J. Spencer, "International R&D rivalry and Industrial Strategy," (1983) 50 Review of Economic Studies 707; Avinash Dixit, "International Trade Policy for Oligopolistic Industries," (1984) 94 supplement to Economic Journal 1; James A. Brander & Barbara J. Spencer, "Export subsidies and international market share rivalry," (1985) 18 Journal of International Economics 83; Paul Krugman, ed., *Strategic Trade Policy and the New International Economics* (Cambridge, Mass.: The MIT Press, 1986); Elhanan Helpman & Paul Krugman, *Market Structure and Foreign Trade: Increasing Returns, Imperfect Competition, and the International Economy* (Cambridge, Mass., The MIT Press, 1986).

[463] Besides the TRIMs Agreement, investment issues are also touched on in other WTO agreements. Provisions of the General Agreement on Trade in Services, the Agreement on Trade-Related Aspects of Intellectual Property Rights, the Government Procurement Agreement, and the Agreement on Subsidies and Countervailing Measures are applicable to investment matters to the extent of their relevance to the subject matter of the respective agreement.

[464] See GATT documents MTN.GNG/NG12/W/20 (Submission by Japan) and MTN.GNG/NG12/W/24 (Communication from the U.S.)

The EC proposed to negotiate only TRIMs that had a direct and significant distortive effect on trade; in other words, the "measures which are directed at the exports and imports of a company and the immediate objective of which is to influence its trading patterns."[465] Among 14 measures discussed by the negotiating parties, the EC considered only eight measures to be directly trade-related.[466] To the EC, these measures, with the exception of one (export performance requirements), are well covered by existing GATT rules and therefore needed no further provisions. The EC proposed the elaboration of new provisions that would prohibit export performance requirements, not least due to the *Canada-FIRA*'s finding on legitimacy thereof.[467] Admitting the potential trade impact of other (than the eight) investment measures, the EC proposed to establish a general commitment of contracting parties to avoid causing trade distortive effects while implementing such measures.[468]

The Nordic countries proposed a two-tier classification of TRIMs. The first tier TRIMs– local content requirements and export performance requirements, as well as trade balancing requirements–was viewed as prohibitive under existing rules of the GATT because of their clear trade-distortive nature. All other TRIMs comprised the second tier and had to be actionable under the GATT on a case-by-case basis within the existing dispute settlement system. In their view, the second tier TRIMs were trade-indifferent. Therefore, an "effects test" had to be applied to assess their impact in each particular case with the burden of proof resting with the complainant. Moreover, the Nordic states called for the application of existing GATT exceptions to TRIMs of both types.[469]

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465 GATT document MTN.GNG/NG12/W/20 (Submission by the European Communities) at 3.

466 The following fourteen measures were identified by the negotiating group, of which the first eight are considered by the EC as directly trade-related: (i) local content requirements, (ii) manufacturing requirements, (iii) export performance requirements, (iv) product mandating requirements, (v) trade balancing requirements (vi) exchange restrictions, (vii) domestic sales requirements, (viii) manufacturing limitations concerning components of the final product, (ix) investment incentives, (x) licensing requirements, (xi) local equity requirements, (xii) product mandating requirements, (xiii) remittance restrictions, (xiv) technology transfer requirements. The U.S. and Japan viewed all of these plus some other measures as prohibitive.

467 GATT document MTN.GNG/NG12/W/22 (Submission by the European Communities) at 5.

468 *Ibid.* at 6.

469 GATT document MTN.GNG/NG12/W/23 (Submission by the Nordic Countries) at 3-7

Developing states emphasized that the mandate for the Uruguay Round was to discuss trade restrictive and distorting effects of investment measures along with development aspects attributable to them.[470] They argued that TRIMs are used to foster the social and economic development of countries, which is one of the fundamental ideas of the GATT. Moreover, TRIMs are used to offset restrictive business practices of transnational corporations.[471] Hence, the use of TRIMs by developing countries for their development objectives should be welcomed by the GATT.[472] At the same time, if a measure is potentially restricting or distorting trade flows, its examination should be undertaken within the existing dispute settlement of the GATT.[473] The examination should assess whether the effect is adverse, direct, and significant, and should establish a clear causal link between the measure and the effect. If a negative impact on trade is established, then the adverse effect should be cured rather than the investment measure *per se* removed.[474]

It is apparent that given such conflicting interests of the negotiating parties it was hardly possible to produce an effective multilateral instrument that could strike the right balance. The Uruguay Round TRIMs discussions and the aforementioned failure to establish a multilateral investment agreement prove that the issue of investment is a "deal-breaker" in any comprehensive multilateral negotiations. Perhaps that is why the TRIMs Agreement resulting from the Uruguay Round has no noticeable additions to the substantive issues of the GATT. It has been summarized that:

> [g]iven the polarization of positions, the TRIMs negotiations produced a modest outcome. The compromise that eventually emerged is essentially limited to an interpretation and clarification of the application to trade-related investment measures of GATT provisions on national treatment and on quantitative restrictions on imports and exports. The TRIMs Agreement did not create new obligations that went beyond those already established under the GATT. Thus, many of the measures proposed for regulation during the negotiations, such as export performance and

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470 GATT document MTN.GNG/NG12/W/25 (Communication from Argentina, Brazil, Cameroon, Colombia, Cuba, Egypt, India, Nigeria, People's Republic of China, United Republic of Tanzania, and Yugoslavia) at 1.

471 *Ibid*. at 4.

472 See Draft Declaration on Trade-Related Investment Measures prepared jointly by several developing states, GATT document MTN.GNG/NG12/W/26 (Communication from Bangladesh, Brazil, Colombia, Cuba, Egypt, India, Kenya, Nigeria, Pakistan, Peru, Tanzania, Zimbabwe).

473 GATT document MTN.GNG/NG12/W/25, at 6.

474 *Ibid*. at 2.

technology transfer requirements, were excluded from the coverage of the Agreement. Moreover, no new disciplines regarding the treatment of foreign investment per se were established.[475]

The Uruguay Round package of agreements as a whole represents a very important step in the foundation of a comprehensive trading system and a platform for further liberalization of international trade. The uneasy compromise on investment issues achieved in the TRIMs Agreement represents the aspiration of both the developed and the developing countries for its further improvement.[476] However, given diverging views on directions for improvement, it is doubtful if any significant progress is realizable on the multilateral scale so long as most of the world is divided into two camps: developed-cum-capital exporting states and developing-cum-capital importing states.[477]

Without exploring the TRIMs Agreement in detail, let us point out its basic features that are of most relevance to the petroleum industry. It applies to investment measures related to trade in goods only.[478] All exceptions provided in the GATT 1994 apply, as appropriate, to the provisions of the TRIMs Agreement.[479] The agreement is neutral to the nationality of investors; it applies to TRIMs affecting both domestic and foreign investors.[480] As long as the measures have an effect on trade flows, the TRIMs Agreement is not concerned with whether the measures relate to pre-investment or post-investment activity. The TRIMs Agreement covers both measures of general application and measures of specific application adopted under discretionary authority.[481]

[475] Martha Lara de Sterlini, "Agreement on Trade-Related Investment Measures," in Macrory P., Appleton A., & Plummer M. eds. *The World Trade Organization: Legal, Economic and Political Analysis* (Berlin: Springer, 2005) 437 at 447.

[476] Art. 9 of the TRIMs Agreement provides for the WTO Council for Trade in Goods to review the Agreement and consider whether it needs to be complemented with provisions on investment policy and competition policy within five years after entry into force of the Agreement Establishing the WTO.

[477] For recent failure of TRIMs (along with competition policy and government procurement transparency) negotiations in the Doha Round, see Simon Evenett, "Five Hypotheses Concerning the Fate of the Singapore Issues in the Doha Round," (2007) 23 Oxford Review of Economic Policy 392.

[478] Art. 1 of the TRIMs Agreement.

[479] *Ibid*. Art. 3.

[480] WTO Panel Report, *Indonesia – Certain Measures Affecting the Automobile Industry*, adopted July 23, 1998, WT/DS54/R, WT/DS55/R, WT/DS59/R, WT/DS64/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on May 1, 2012 [hereinafter: *Indonesia – Autos*] at para. 14.73

[481] Art. 5(1) of the TRIMs Agreement.

Art. 2 of the Agreement prohibits TRIMs that are inconsistent with the NT obligation set in Art. III:4 and the obligation on general elimination of quantitative restrictions provided for in Art. XI:1 of GATT 1994.[482] As mentioned above, neither economists nor trade-policy negotiators were able to reach a consensus on the term "trade-related investment measure"; therefore no definition for the term is provided in the text. However, the annex to the TRIMs Agreement contains a non-exhaustive Illustrative List of TRIMs and provides their basic legal characteristics. According to the provisions of the annex, TRIMs are measures which are mandatory or enforceable under domestic law or under administrative rulings, or compliance with which is necessary to obtain an advantage. The Illustrative List states that TRIMs that are inconsistent with the NT obligation of Art. III:4 of GATT 1994 are those which require:

- the purchase or use by an enterprise of products of domestic origin or from any domestic source, whether specified in terms of particular products, in terms of volume or value of products, or in terms of a proportion of volume or value of its local production;[483] or

- that an enterprise's purchases or use of imported products be limited to an amount related to the volume or value of local products that it exports;[484]

whereas TRIMs that are inconsistent with the obligation of general elimination of quantitative restrictions provided for in Art. XI:1 of GATT 1994 are those which restrict:

- the importation by an enterprise of products used in or related to its local production, generally, or to an amount related to the volume or value of local production that it exports;[485]

- the importation by an enterprise of products used in or related to its local production by restricting its access to foreign exchange to an amount related to the foreign exchange inflows attributable to the enterprise;[486] or,

- the exportation or sale for export by an enterprise of products, whether specified in terms of particular products, in terms of volume or value of products, or in terms of a proportion of volume or value of its local production.[487]

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[482] *Ibid*. Art. 2.
[483] Annex to the TRIMs Agreement, Illustrative List, section 1(a).
[484] *Ibid*. section 1(b).
[485] *Ibid*. section 2(a).
[486] *Ibid*. section 2(b).
[487] *Ibid*. section 2(c).

4.4. Petroleum contracts under WTO rules

As a general rule, subsurface petroleum resources are the property of the state.[488] Petroleum extracted from the subsurface may belong to the state or to the holder of the subsurface use right. The right to explore and/or produce petroleum is usually granted on the basis of licensing rounds, invitations for bidding, or direct negotiations with potential contractors.

Exploration and production (E&P) operations in the upstream industry are conducted on the basis of different types of arrangements, the most popular of which are concessions/licenses, production-sharing agreements (PSA), and risk-service contracts (RSC).[489] Each of these arrangements involves a state (or its NOC) and a contractor but the regime regulating the relationship between the two parties differs from one type of arrangement to another. Although licenses represent rather administrative instruments, these three arrangements are commonly referred to herein as petroleum contracts.

Under the concessionary/licensing regime a state grants an eligible entity (right-holder) the exploration right over a certain geographical area for a fee and, after commercial discovery, a production right for a royalty payment.[490] The right-holder owns petroleum once it is recovered at the well-head.[491] If agreed to by the parties, the state may receive royalty payment in kind – that is, as a portion of the petroleum produced. A licensing regime is used in developed countries with stable political and legal systems (e.g. Norway and the UK) while a concessionary one is adopted in developing countries (e.g. Angola, Brazil, Kazakhstan). The difference between the

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488 Among rare exceptions to the rule, the most prominent is the U.S. regime for onshore natural resources vesting property rights in the land owner.

489 Sometimes state participation in the form of consortium, joint operating agreement or incorporated joint venture, is considered as a separate type of arrangement. However, state participation is complementary to one of the three arrangements and used when multiple parties are involved in the investment. In the case of incorporated joint ventures, the state owns participatory interest in the contractor. In the case of consortium or joint operating agreement, the state, as a rule, is represented by its NOC, which acts as one of the joint contractors liable before the state under concession, PSA or RSC.

490 This regime is sometimes called lease or tax-and-royalty regime.

491 The point of transfer of ownership may differ from one jurisdiction to another. For example, Bernard Taverne on the basis of an analysis of several jurisdictions employing licensing regime, concludes that ownership over petroleum passes to licensee at the moment petroleum enters its well. See Bernard Taverne, *Petroleum, industry, and governments: a study of the involvement of industry and governments in the production and use of petroleum* (The Hague: Kluwer Law International, 2008) at 124.

two regimes is that the license is viewed as an administrative instrument whereas a concession is a contractual instrument.[492] A license can be unilaterally revoked or amended while a concession necessitates consent of both parties; however, in the modern world both a license and concession are regarded as semi-contractual instruments with discretionary dominance of the state.[493] Moreover, due to the strong convergence of the modern licensing and concession regimes, their distinction is frequently neglected and the two are commonly referred to as a concession regime.

The PSA is the most widely used form of petroleum contract in developing countries.[494] Under a PSA, a state hires a contractor to perform, at its sole risk and own expense, exploration and production works within a contractual area for a defined period of time. In contrast to concessions, under the PSA regime petroleum both underground and at well-head remains in the ownership of the state.[495] Once commercial discovery is made, however, and production commenced, petroleum is divided into cost-oil and profit-oil. The contractor is entitled to recover its E&P costs from the cost-oil. In consideration of the work, the contractor is entitled to receive a share of the profit-oil. The title over the contractor's share of petroleum passes to him at the export point or to another delivery site specified by the parties.

The RSC is the least popular type of mainstream petroleum contract and was introduced in developing countries where petroleum was exclusively owned by the state (e.g. Iran, Mexico, Venezuela). It is legally very similar to the PSA. Under the RSC, the state remains the owner of petroleum at all times. The contractor performs E&P operations at its sole risk and at its own expense, meaning that the contractor will not be compensated if no commercial discovery is made. When there is commercial production, the contractor is reimbursed for the costs and paid

[492] For the difference between the modern license and concession regimes see Jubilee Easo "Licenses, concessions, production sharing agreements and service contracts," in Geoffrey Picton-Turbervill ed., *Oil and Gas: A Practical Handbook* (London: Business Publishing Ltd., 2009) at 29-34.

[493] Denis Babusiaux et al, *Oil and Gas Exploration and Production: Reserves, Costs, Contracts* (Paris: Editions Technip, 2004) at 193.

[494] IOCs also favor PSA because it allows them to book petroleum reserves as assets on their balance sheets and to thereby increase the value of their corporate shares at stock exchanges. See Amy Mayers Jaffe & Ronald Soligo's "State-Backed Financing in Oil and Gas Projects," in Goldthau & Witte, *supra* note 68, at 118.

[495] An excellent explanation of PSA's legal nature and its comparison with concession agreement is provided in Claude Duval et al, *International Petroleum Exploration and Exploitation Agreements: Legal, Economic & Policy Aspects*, 2nd ed., (New York: Barrows, 2009) at 69-84.

for the services and risks it has taken.[496] The main difference between the RSC and the PSA is in the mechanism of payment to the contractor. While costs are reimbursed out of petroleum proceeds or entitlement for cost-oil, the service fees are usually paid in cash, though payment in kind may also be used.[497]

In contrast to the concession/licensing regime, under which all facilities and equipment acquired for conducting E&P operations are owned by the concessionaire, under the PSA and the RSC the contractor generally transfers the facilities and equipment to the ownership of host state or its NOC.[498] The contractor is entitled to use the facilities and equipment free of charge and to recover all costs incurred in connection with the acquisition and installation of the assets from the cost-oil.[499] This is an important feature that has to be kept in mind for further analysis of the applicability of WTO rules to petroleum contracts.

It needs to be noted that "pure" concession, PSA or RSC are rarely observed in the modern world. Most existing petroleum contracts are of a mixed nature.[500] Moreover, countries tend to switch their petroleum regimes overtime, responding to changes in political and investment environments. Since petroleum E&P agreements are usually concluded with foreign IOCs, most of these agreements contain stabilization clauses that make them survive the changes. Hence, two or three of the observed types of agreements could be found in a state's industrial practice at a particular point in time. Furthermore, due to the geo-physical features of hydrocarbon deposits, the state may establish specific regimes for particular oilfields. For instance, the Sakhalin I, Sakhalin II, and Kharyaginskoye giant oilfields of Russia, which have

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[496] Some authors characterize the cost incurred by the contractor as a loan to the state that shall be repaid along with accrued interest if there is commercial production. See Easo, *supra* note 492, at 38.

[497] Duval, *supra* note 495, at 87.

[498] *Ibid*. at 158. The title over an asset may be transferred upon importation or installation of equipment, at such date when costs are recovered, or at the end of contract. Timing and procedure are stipulated in the contract and vary across jurisdictions.

[499] *Ibid*.

[500] Peter D. Cameron, *International Energy Investment Law. The Pursuit of Stability.* (Oxford: Oxford University Press, 2010) at 36.

severe environmental conditions, are exploited under PSA while the mainstream regime is of the concession type, i.e. two regimes co-exist simultaneously.[501]

Whether signed on behalf of the state by the government or the NOC, petroleum contracts, just as any other government contracts, have a dual legal nature in that they lie in the domain of both public and private law.[502] When entering a petroleum contract, a government administers public welfare; therefore, the contract's proprietary essence is much dependent on the government's duty of preserving public interest.[503] Expectations of the general public from petroleum contracts are broader than mere revenue from the sale of natural resources–these contracts are expected to contribute to the economic development of the country.[504] Hence, certain provisions in petroleum contracts–such as capacity of state party, amendment and termination, dispute resolution and governing law–may considerably depart from private contractual standards.

From an international investment law perspective, a petroleum contract signed by a host state with a foreign investor is usually regarded as an investment.[505] However, it is not clear how

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501 Easo, *supra* note 492, at 37.

502 Although some may argue in favor of the private or public nature of government contracts, advocates of the private commercial nature admit the presence of public law features in such contracts and vice-versa for public law advocates. However, the overwhelming majority argues in favor of a mixed legal nature of government contracts. This dual nature to a varying degree is admitted in a number of Common and Civil law jurisdictions. See Georges Langrod "Administrative Contracts. A Comparative Study," (1955) 4 Am. J. Comp. L. 325; Donald Frenzen "The Administrative Contract in the United States" (1968) 37 Geo. Wash. L. Rev. 270; Kenneth Carlston "International Role of Concession Agreements,", (1957) 52 Nw. U. L. Rev. 618; Colin Turpin, *Government Contracts* (Harmondsworth: Penguin, 1972).

503 Georges Langrod "Administrative Contracts. A Comparative Study," (1955) 4 Am. J. Comp. L. 325 at 329.

504 Maniruzzaman A.F.M. "The New Generation of Energy and Natural Resource Development Agreements: Some Reflections," (1993) 11 J. Energy & Nat. Resources L. 207 at 220.

505 For example, the ECT's definition of investment includes: "any right conferred by law or contract or by virtue of any licenses and permits granted pursuant to law to undertake any Economic Activity in the Energy Sector." Similar provisions could be found in BITs. For instance, the Agreement between the Government of Canada and the Government of the Republic of Venezuela for the Promotion and Protection of Investments (signed on July 1, 1996 entered into force January 28, 1998) names different investment forms including "rights, conferred by law or under contract, to undertake any economic and commercial activity, including any rights to search for, cultivate, extract or exploit natural resources". Many South Asian states' BITs include into investment: "business concessions conferred by law or under contract, including concessions to search for and extract oil and other minerals". See Prabhash Ranjan "Definition of Investment in Bilateral Investment Treaties of South Asian Countries and Regulatory Discretion," (2009) 26 Journal of International Arbitration 217. Art. 1139 of the NAFTA have a broad definition, which comprises, *inter alia*: "real estate or other property, tangible or intangible, acquired in the expectation or used for the purpose of economic benefit or other business purposes; and interests arising from the commitment of capital or other resources in the territory of a Party to economic activity in such territory, such as under (i) contracts involving the presence of an investor's property in the territory of the Party, including turnkey or construction

petroleum contracts should be treated from the WTO perspective. Neither the TRIMs Agreement nor other WTO instruments provide a definition for the term "investment." An interpretation of the term has not been given in the WTO jurisprudence either. Similar uncertainty surrounds the term "investment measure." In the absence of a multilateral investment treaty defining these terms, it is unlikely that WTO dispute settlement bodies would apply definitions provided in regional investment treaties or BITs, if investment law concepts could be applicable to trade issues at all.[506] Without attempting to define the terms "investment" and "investment measures" let us consider whether measures prescribed in petroleum contracts can be treated as TRIMs.

In *Canada–FIRA*, the U.S. questioned the legitimacy of undertakings submitted by foreign investors under the Canadian Foreign Investment Review Act. Under the Act, foreign investors seeking approval for investment projects in Canada had to assure the government that their investments were, or were likely to be, of significant benefit to Canada.[507] The Act did not require a submission of undertakings from foreign investors but such practice was established in the course of its implementation, perhaps due to a provision in the Act stating that foreign investors could provide written undertakings on the conduct of the project.[508] The Act did not provide any formula or prescription on the nature of undertakings; investors were free to choose the means to persuade authorities of the significance of benefits to Canada accruable as a result of their investment.[509] If the investment was allowed, the undertakings became legally binding

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contracts, or concessions, or (ii) contracts where remuneration depends substantially on the production, revenues or profits of an enterprise."

[506] There is no universally accepted definition of investment and every BIT or regional investment treaty has its own definition which, to a varying degree, is different from concepts used in other investment treaties. While some treaties use an enterprise-based narrow definition, others have a broader asset-based definition. WTO member states have never reached consensus on the scope and definition of investment. See Report of The Working Group on the Relationship between Trade and Investment to the General Council, WTO Doc. WT/WGTI/6 (December 9, 2002) at 3-7. Although international investment law and international trade law have many similarities, their concepts cannot be applied interchangeably because of a difference in the objectives, evolutionary history, scope of application, and institutional framework of the two fields of international law. An excellent comparative analysis on this issue using NT as an example is provided in Nicholas DiMascio & Joost Pauwelyn, "Non-Discrimination in Trade and Investment Treaties: Worlds Apart or Two Sides of the Same Coin?" (2008) 102 Am. J. Int'l L. 48.

[507] *Canada-FIRA*, *supra* note 404, at para 2.2.

[508] *Ibid*. para 2.4.

[509] *Ibid*.

and enforceable in court, though no application to the courts had been made within the period from the Act's enactment to the Panel proceedings.[510]

The Panel found undertakings that obliged foreign investors to buy Canadian goods in preference to imported goods inconsistent with the NT obligation of GATT Art. III:4.[511] In considering an argument brought by Canada that purchase undertakings constituted private contractual obligations rather than laws, regulations or requirements within the meaning of Art. III:4, the Panel found that:

> [t]he Panel recognized that investors might have an economic advantage in assuming purchase undertakings, taking into account the other conditions under which the investment was permitted. The Panel felt, however, that even if this was so, private contractual obligations entered into by investors should not adversely affect the rights which contracting parties, including contracting parties not involved in the dispute, possess under Article III:4 of the General Agreement and which they can exercise on behalf of their exporters. This applies in particular to the rights deriving from the national treatment principle, which – as stated in Article III:1 – is aimed at preventing the use of internal measures "so as to afford protection to domestic production."[512]

Later, in another GATT dispute, *EEC - Regulation on Imports of Parts and Components*, the Panel confirmed that private undertakings constitute "requirements" within the meaning of GATT Art. III:4. Moreover, in this case the Panel found that even voluntarily accepted private undertakings fall within the meaning of that provision.[513]

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[510] *Ibid*. para 2.10.

[511] *Ibid*. para 5.8.

[512] *Ibid*. para 5.6.

[513] *EEC – Regulation on Imports of Parts and Components*, BISD 37S/132, adopted on May 16, 1990, para. 5.21. In this case Japan claimed inconsistency of EEC Regulation No. 2176/84 with its obligations under GATT Articles I, II, and III. The regulation intended to prevent the circumvention of anti-dumping duties on finished products through the importation of parts or materials for use in the assembly or production of like finished products within the EEC. It included *inter alia*, provisions on anti-dumping investigation, which could be suspended upon acceptance by assemblers and producers of undertakings to limit the use of imported parts and materials. Para. 5.21 of the Report reads as follows,

> The Panel noted that Article III:4 refers to "all laws, regulations or requirements affecting (the) internal sale, offering for sale, purchase, transportation, distribution or use." The Panel considered that the comprehensive coverage of "all laws, regulations or requirements affecting" the internal sale, etc. of imported products suggests that not only requirements which an enterprise is legally bound to carry out, such as those examined by the "FIRA Panel" (BISD 30S/140, 158), but also those which an enterprise voluntarily accepts in order to obtain an advantage from the government, constitute "requirements" within the meaning of that provision. The Panel noted that the EEC made the grant of an advantage, namely the suspension of proceedings under the anti-circumvention provision, dependent on undertakings to limit the use of parts or materials of Japanese origin without imposing similar limitations on the use of like products of EEC or other origin; hence, dependent on undertakings to accord treatment to imported products less favorable than that accorded to like products of national origin in respect of their internal use. The Panel therefore concluded that the decisions of the EEC to suspend proceedings under Article 13:10 conditional on undertakings by enterprises in the EEC to limit the use of parts or materials originating in Japan in their assembly or production operations are inconsistent with Article III:4. [underlined emphasis is original].

See also WTO Panel Report, *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products*, adopted January 19, 2010 as modified by AB Report

Similar treatment for contractual obligations was provided in the WTO *India-Autos* case.[514] This dispute was raised over measures adopted by India under Public Notice No.60 of December 12, 1997, which required car manufacturers to sign memoranda of understanding (MOU) with the government in order to be eligible for a license to import restricted car parts and components. Public Notice No.60 laid down certain parameters for an MOU including those setting local content (product indigenization) and trade balancing requirements.[515]

Although India's import licensing regime was formally abolished on April 1, 2001, the manufacturers were not released from their legal obligations under MOUs signed before that date. India argued that after cessation of the requirements under Indian trade law the requirements under private contract law become discretionary measures (i.e. the government was free to enforce/waive them or not) and thus could not be challenged under the WTO rules.[516] The Panel did not accept this argument, stating that:

> [t]he fact that the Indian government may have some "discretion" in seeking the actual enforcement of the requirements, in that it could choose to pursue or not pursue its legal rights under the MOUs and enabling legislation, does not fundamentally alter the fact that the obligation already exists. The measure's status as a requirement as at the date of the Panel's establishment does not fundamentally alter, simply because a change has been made in the background circumstances which may then alter the potential means of enforcement.[517]
>
> A distinction must be made between the binding character and enforceability of the commitment, and its actual enforcement. As far as a manufacturer having entered into an MOU is concerned, the commitments already exist and affect commercial behavior, whether or not the Indian Government ultimately would choose to seek their enforcement through specific administrative or judicial action in the event of breach.[518]
>
> The Panel is supported in this view by the fact that the Illustrative List of the TRIMs agreement expressly refers to mere enforceability in the context of defining measures which may fall within the scope of Article III:4 as well as Article XI:1.[519]

WT/DS363/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on May 1, 2012, para. 7.1448.

514 WTO Panel Report, *India – Measures Affecting the Automotive Sector*, adopted April 5, 2002, WT/DS146/R, WT/DS175/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on May 1, 2012 [hereinafter: *India – Autos*].

515 Note the difference between the measures in *Canada-FIRA* and *India-Autos* cases. In the former case, unlike in the latter, investors were free to choose business measures that could produce significant benefits to the country, and undertakings were not expressly required under the law. In the latter case, an MOU was expressly required under legal act, and its parameters were clearly set out in detail.

516 *India-Autos*, *supra* note 514, para. 8.38.

517 *Ibid*. *para* 8.39

518 *Ibid*. *para* 8.40

519 *Ibid*. *para* 8.41.

The Panel, having concluded that local content and trade balancing requirements were in violation of the relevant GATT provisions, exercised the principle of judicial economy and found it unnecessary to consider whether the measures were consistent with provisions of the TRIMs Agreement.[520]

A variety of investment measures are used in the upstream petroleum industry. The most common among them are local content requirements, domestic sales obligations, investment incentives, and technology transfer requirements.[521] These requirements may be generally set in legislation and specified in each petroleum contract, or may appear in the petroleum contract only. If specified in legislation, the requirements become binding only after exploration and/or production rights are granted to the contractor; that is, after the signing of a petroleum contract or the issuing of a license. Hence, using the wording from the Illustrative List, these requirements are "measures mandatory or enforceable under domestic law or under administrative rulings". The Illustrative List also names measures "compliance with which is necessary to obtain an advantage". As the word "advantage" is neither explained nor qualified in the text, it seems that it refers the right to exploit petroleum deposits, as well.

Are these requirements trade-related (or TRIMs)? While investment incentives and technology transfer must be analyzed carefully, local content requirements and domestic supply obligations are often trade-related.[522] Hence, for ease of further study, we will focus on the local content requirements (LCR) and domestic supply obligations (DSO).

Do LCR and DSO fall into the list of measures prohibited under the TRIMs Agreement? According to section 1 of the Illustrative List, LCRs are inconsistent with the NT obligation as

[520] *Ibid*. para. 7.324.

[521] Perhaps more frequently than product-related investment measures, petroleum states use service-related measures such as local services, content requirements, equity requirements, and requirements to use local manpower.

[522] In *Indonesia – Autos* the Panel found that local content requirements are trade-related "because such requirements, by definition, always favor the use of domestic products over imported products, and therefore, affect trade." See *Indonesia – Autos*, *supra* note 480, at para. 14.82.

investment measures treating local goods more favorably than imported ones.[523] This has been confirmed in *Indonesia–Autos*.[524] Regarding DSO, the answer is not so evident and requires a more detailed analysis, which is discussed herein later.

Can petroleum contracts be treated similarly to the private contractual obligations disputed under the *Canada–FIRA* and *India–Autos* cases? Whether signed by the government or its NOC, petroleum contracts seem to be essentially identical in legal form to Canadian undertakings and Indian MOUs; however, their content is different. While the contested contractual obligations were raised in the exercise of state economic policy, petroleum contracts result from an exercise of state property rights over natural resources. The state grants certain proprietary rights to the contractor in exchange for certain assets (product or money) and may impose certain requirements as supplementary conditions.

The TRIMs Agreement does not distinguish measures applied in the exercise of economic policy from measures applied in the exercise of state property rights.[525] If there is no difference in these two types of measures, then petroleum contracts must be subject to trade rules like the aforementioned Canadian undertakings and Indian MOUs. Moreover, all public-private partnership agreements that have been proliferating worldwide through the last two decades must be subject to WTO rules as these agreements are viewed as a mixed exercise of economic policy

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523 To recall, Illustrative List section 1(a) prohibits TRIMs which require: "the purchase or use by an enterprise of products of domestic origin or from any domestic source, whether specified in terms of particular products, in terms of volume or value of products, or in terms of a proportion of volume or value of its local production."

524 The Panel stated "[a]n examination of whether these measures are covered by Item (1) of the Illustrative List of TRIMs annexed to the TRIMs Agreement, which refers amongst other situations to measures with local content requirements, will not only indicate whether they are trade-related but also whether they are inconsistent with Article III:4 and thus in violation of Article 2.1 of the TRIMs Agreement." See *Indonesia – Autos*, *supra* note 480, at para. 14.83.

525 In the first chapter of this work we reviewed the concept of state sovereignty. Two main constituents of the concept were discussed at the UN forum: sovereignty over natural resources and sovereignty over economic activity. As was shown in the first chapter by entering into an international treaty, such as an economic co-operation agreement, states voluntarily concede a "portion" of their sovereignty in exchange for benefits accruable from international relations regulated by the treaty. This "portion" corresponds to both sovereignty over natural resources and sovereignty over economic activity unless expressly reserved by the state in the treaty.

and state property rights.[526] Such a conclusion seems to be inconceivable or, at least, paradoxical.

On the one hand, jurisprudence confirms that private contracts concluded by states are subject to international trade rules inasmuch as they affect obligations related to the NT standard and the elimination of quantitative restrictions. On the other hand, WTO member states deliberately exempted the transactions of governments made in the course of public procurement from a number of core obligations: (i) under GATT Art. III:8(a) government purchases of goods are explicitly exempted from NT obligation; (ii) under GATS Art. XIII government procurement of services is exempted from NT, MFN and market access obligations. Moreover, this is further supported by the fact that the negotiating parties excluded the Agreement on Government Procurement from the core WTO package thereby making it non-binding on WTO member states except for those who signed it voluntarily.

Petroleum contracts are similar to government procurement agreements in that they govern the acquisition of certain benefits from private entities in consideration of monetary or in-kind remuneration. Therefore, it would seem logical for petroleum contracts to receive treatment similar to government procurement. In contrast, the Canadian undertakings and Indian MOUs reviewed above administratively required private parties to perform certain actions in exchange for formal permission, which cost nothing to the state in terms of assets. These contractual obligations are based on the administrative power of the state rather than on an equality of parties.

One may well assume that petroleum contracts can be covered by government procurement rules existing in the current WTO texts; however, this is not the case. From the wording of GATT Art. III:8(a) government procurement can be defined as the purchase of goods "for governmental purposes and not with a view to commercial resale or with a view to use in

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[526] For various definitions of public-private partnership see OECD, *Public-Private Partnerships: in Pursuit of Risk Sharing and Value for Money* (Paris: OECD Publications, 2008) at 17; for statistics of signed public-private agreements see *ibid*. at 28.

the production of goods for commercial sale."[527] Except for natural gas, which can be used for heating administrative buildings, petroleum is either sold or used as input in the production of other goods. Petroleum contracts, therefore, do not fit in the definition of a government procurement agreement.

Unfortunately, until some guidance is provided by official interpretation or jurisprudence it is difficult to judge whether investment measures contained in petroleum contracts are exempted from international trade obligations. In this respect, it is important to note some special commitments accepted by the Russian Federation during its recent accession to the WTO.

As observed earlier, hydrocarbon deposits in Russia are exploited through concessions and PSAs, the latter being regulated by the Federal Law of the Russian Federation No. 225-FZ of December 30, 1995 "On Production Sharing Agreements." The only three PSAs (Sakhalin I, Sakhalin II, and Kharyaginskoye) existing in Russia had been signed before adoption of the law and, as of the date of Russia's accession to the WTO, no other PSA was concluded in Russia after the law's enactment.[528] The law contains obligations on hiring local personnel and LCRs, as well as a provision stipulating that in case of accession of the Russian Federation to the WTO all provisions of the law that contradicted the principles of the WTO would become invalid or would be brought into accordance with WTO principles.[529] Nevertheless, it was requested that in the event that any of the three PSAs were renewed and/or extended, the Russian Federation commit to eliminating any provisions which were non-compliant with the TRIMs Agreement.[530] In response, the representative of the Russian Federation explained that any additional commitment was redundant since this was already covered by another more general obligation under which the Russian Federation committed not to conclude any new agreements with

[527] Similarly, GATS Art. XIII:1 defines it as "procurement by governmental agencies of services purchased for governmental purposes and not with a view to commercial resale or with a view to use in the supply of services for commercial sale."
[528] The Working Party Report on the Accession of the Russian Federation to the World Trade Organization, WT/ACC/RUS/70 (Nov. 17, 2011), paras. 1064-8.
[529] On August 22, 2012, when Russia became a member to the WTO, this provision automatically entered into force.
[530] *Ibid.* para. 1071.

investors in any sector that contained provisions contrary to the WTO Agreement, including the TRIMs Agreement.[531]

The Russian special commitments, with respect to the PSAs and agreements between the government and investors in general, indicate that the international trading community realizes that trade barriers can be created through agreements with investors, such as petroleum contracts. At the same time, given that these commitments are specific to Russia, it is not possible to conclude whether investment measures contained in petroleum contracts of other member states must be subjected to their WTO obligations. Further analysis should proceed under the assumption that there is no provision in the GATT or TRIMs Agreement that excludes petroleum contracts from the coverage of trading rules. Let us now try to apply the TRIMs Agreement to investment measures contained in the petroleum contracts.

4.5. Petroleum TRIMs

When applied to the upstream petroleum industry, the most apparent deficiency of the TRIMs Agreement or, in particular, its Illustrative List, lies in its bias towards the manufacturing industry. The extractive industry, unlike manufacturing, does not use imported raw materials, semi-finished products, parts or components as inputs in the production of goods to be exported.[532] Hence, TRIMs aimed at balancing the export-import of products or foreign exchange flows are rarely, if at all, exercised in the extractive industry.[533]

As far as the goods market is concerned, the upstream petroleum industry uses equipment, machinery, and chemical products as inputs in the petroleum production.[534] In the

[531] *Ibid.* paras. 1071 and 1090.
[532] In this sense, the agricultural sector is similar to the extractive industry.
[533] These are requirements limiting the importation of products in proportion to their export or exchange balancing requirements specified under sections 1(b), 2(a) and 2(b) of the Illustrative List of the TRIMs Agreement. In the past, foreign exchange restrictions were widely used in the upstream petroleum industry. Nowadays petroleum contracts usually either have express exemption from foreign exchange regulations or stipulate that the contractor shall freely use foreign exchange to acquire goods necessary for conducting E&P operations. See Duval, *supra* note 495, at 162-166.
[534] Chemicals are used heavily for enhancing oil recovery technique, stimulation of wells, and the initial treatment of oil. Besides equipment, machinery and chemicals, the upstream petroleum industry consumes mud additives and cement in enormous volumes for drilling and well cementing, as well as for other oilfield work. Steel products are

case of developing countries these inputs are usually imported.[535] TNCs, being the main foreign investors in extractive industries, tend to import equipment from their foreign affiliates or long-term business partners even when such equipment of comparable quality is available from local producers at competitive prices.[536] In order to integrate local producers into the value chain of TNCs and to facilitate the development of petroleum industrial clusters, states impose LCRs.

LCRs have been used to a varying degree in many petroleum exporting states. For instance, the Nigerian Oil and Gas Industry Content Development Bill of 2010 specifies minimum levels of Nigerian content for each type of goods and services.[537] A different approach is taken in Kazakhstan; its law does not specify minimum levels of domestic content but requires that in the procurements of goods and services the subsurface users and their contractors decrease notionally the value of the bids received from domestic suppliers by 20 per cent.[538]

The majority of petroleum exporting states which pursue local content policy, however, implement the policy through contractual rather than legislative instruments. States, where private contractors are only allowed to provide services to NOCs on the basis of PSAs or RSCs (e.g. Mexico, Malaysia, and Indonesia), implement local content through the NOCs' contracts with IOCs and service companies.[539] Norway and Brazil, which use a concession/licensing

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also in huge demand for the construction of pipelines and off-shore installations. For an analysis of the cost structure of petroleum E&P operations see Babusiaux, *supra* note 493, at 115-142.

[535] UNCTAD, *World Investment Report 2007: Transnational Corporations, Extractive Industries and Development* (Geneva: UN Publication, 2007) at 140.

[536] *Ibid.*

[537] Section 11 of the Nigerian Oil and Gas Industry Content Development Bill of 2010 (hereinafter: Nigerian Content Act). For example, according to the Schedule to the Nigerian Content Act local content for drilling modules shall be at least 75% (tonnage), for high voltages cables – 45% (length), for cement Portland and Hydraulic – 60% and 80% respectively (tonnage), for valves – 60% (number), for steel pipes and pipeline systems – 100% (tonnage).

[538] Art. 78 of the Law on Subsurface and Subsurface Use dated June 24, 2010. Instead of "domestic supplier" the law uses the term "Kazakhstan supplier." Kazakhstan suppliers of goods are defined in the law as citizens and/or legal entities of Kazakhstan manufacturing goods, which have certificates of Kazakhstani origin. Kazakhstan suppliers of works and services means the citizens of Kazakhstan and/or legal enities located in, and organized under the laws of, Kazakhstan who's personnel comprises not less than 95 per cent of citizens of Kazakhstan.

[539] Although PSA and RSC are essentially works and services agreements, NOCs require private contractors to comply with local content requirement in both goods and services used while conducting E&P under the contract.

regime, do not impose LCR explicitly; however, their petroleum authorities take into account commitments of bidders to acquire local goods and services in each licensing round.[540]

In the case of Nigeria, where LCRs are imposed by law, the policy can be contested under the TRIMs Agreement.[541] It is not the type of instrument by which the policy is implemented that suggests contestability of the requirement but the way it is imposed, i.e. leveling of the minimum local content for each specific product. As we have seen from the WTO jurisprudence, TRIMs imposed through contractual instruments are challengeable as if they were imposed by regulations.[542]

In the case of Kazakhstan, the 20 percent premium for local goods may be considered equivalent to a tariff on foreign products, and such a tariff is compliant with GATT if it does not exceed the tariff rate bound on the country.[543] Unfortunately, to date it is not possible to elaborate further on Kazakhstan's tariffs, as the country has not yet joined the WTO.

In the case of the countries implementing a local content policy through the PSAs and RSCs of their NOCs, the measures are likely to escape trade prosecution. While contracts between a government and an investor have been accepted as challengeable in *Canada–FIRA* and *India–Autos*, a contract between an NOC and a private contractor is completely different and highly commercial for both parties. The private contractor in exchange for consideration agrees to deliver services in the manner requested by the client. Moreover, while an NOC can be considered as an STE, purchases and sales of NOCs themselves do not cause discrimination of

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540 For a comparative study of local content policies of Brazil, Indonesia, Malaysia, Mexico, and Norway see: Hildegunn Nordås, Eirik Vatne & Per Heum, *The Upstream Petroleum Industry and Local Industrial Development: A Comparative Study* SNF Report, No. 08/03 (Bergen: SNF, 2003).

541 In fact, Nigerian authorities had been warned well before enactment of the law that LCRs in the form of specific proportions were inconsistent with the TRIMs Agreement. See Per Heum, Christian Quale, Jan Karlsen, Moses Kragha & George Osahon, *Enhancement of Local Content in the Upstream Oil and Gas Industry in Nigeria: A Comprehensive and Viable Policy Approach* SNF Report, No. 25/03 (Bergen: SNF, 2003) at 65. This study was commissioned by Norwegian petroleum authorities in co-operation with Nigerian petroleum authorities.

542 It has been stated that if Nigeria were to implement local content policy through PSA rather than through legislation it would comply with GATT obligations, see Emeka Nwaokoro, "Signed, sealed but will it deliver? Nigeria's local content bill and cross-sectoral growth," (2011) 4 Journal of World Energy Law and Business 40 at 67. Unfortunately, this statement was not further elaborated in the article, thus without knowing details of the proposal it is difficult to evaluate the actual consequences of such policy alteration. To this end, it has been confirmed in *Canada-FIRA* and *India-Autos* that a mere switch to contractual instruments does not imply incontestability of the impugned measures.

543 The idea of premium-tariff equivalence is drawn from Nordås, Vatne & Heum, *supra* note 540, at 80.

goods, as NOCs under PSAs and RSCs are buying *services* from contractors. It is private contractors who buy *goods* that are used in delivering services. Furthermore, as shown in the preceding section of this thesis, it is difficult to apply GATT's STE provisions to an NOC–for example, an NOC can be considered as acting in accordance with commercial considerations if it requires its contractor to use local goods for the sake of technological consistency and standardization with goods used by the NOC itself.

The practice established in Norway and Brazil, whereby private bidders include in their proposals local content commitments, is the closest to the *Canada-FIRA* scenario. The main difference is in the nature of advantages provided by the government in exchange for the undertakings. While in Canada foreign entities applied for permission to make an investment, in Norway and Brazil private entities, regardless of domicile, apply to get an investment from the government itself.[544] In other words, the Canadian government exercises state economic policy, whereas the governments of Norway and Brazil exercise property rights over natural resources. If this difference is neglected, then there seems to be nothing which would safeguard such local content undertakings in the WTO forum.[545]

Outlawing governmental measures in Norway and Brazil gives little assurance of complete abolition of local content policies because the main operators in their upstream petroleum industry – Statoil and PETROBRAS, respectively – are state controlled. As we have seen in the preceding chapter, Statoil and PETROBRAS cannot be considered as STEs but, nevertheless, the state as the controlling shareholder may implement its policy through these enterprises. Taking into account the large number of concessions held by these companies, as well as the extremely costly and technologically sophisticated environment they operate in, it is apparent that these NOCs procure goods and services from third parties in immense volumes. Thus, it would be irrational for the host state to neglect the opportunity of deriving additional

544 As stated previously, in international investment law a concession is usually regarded as an investment.

545 It must be recalled that neither the GATT nor the TRIMs Agreement distinguishes an exercise of state economic policy from an exercise by a state of property rights over natural resources.

economic benefits from such turnover of goods and services, especially given the inapplicability of trade rules to NOCs.[546]

It must be noted, however, that in the energy sector LCRs are used not only in the petroleum industry but in the renewable energy industry as well. Recently, several cases were brought to the WTO with respect to governmental advantages provided to producers of renewable energy contingent upon their use of equipment manufactured locally. The first case which was resolved by WTO DSB was initiated by Japan against Canada in September 2010. The case was concerned with LCRs set by the Government of Ontario for certain generators of electricity utilizing solar photovoltaic and wind power technology. In this case, the Panel upheld Japan's claims under Article 2.1 of the TRIMs Agreement and Article III:4 of the GATT 1994. The case was appealed and the AB affirmed the Panel's findings with respect to the Art. 2.1 of the TRIMs Agreement and Art. III:4 of the GATT.[547]

Other cases are currently in the process of consultations. In November 2012, China requested consultations with EU, Italy and Greece on measures supporting production of renewable energy allegedly in violation of GATT Art. III:4, as well as relevant provisions of the TRIMs Agreement and the Agreement on Subsidies and Countervailing Measures (ASCM).[548] In February 2013, the United States requested consultations with India concerning certain measures of relating to domestic content requirements under India's national program for solar cells and

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[546] As we have seen in Chapter III Statoil and PETROBRAS are the most unlikely candidates among NOCs regarding the applicability of the rules governing STEs. In fact, PETROBRAS imposes LCRs on its suppliers of goods and services. For example, in June 2010, PETROBRAS announced a tender for purchase of 9 rigs and procurement of drilling services that imply the exploitation of 19 other rigs. The drilling services' (or 19 rigs) tender was to be awarded to a drilling contractor who was to build its new rigs in Brazil using varying percentages of local content and through a Brazilian shipyard. It was suggested that this tender was more about upgrading the Brazilian shipbuilding industry than about tender for drilling rigs. See Derek Anchondo, "Local Content Requirements in the Oil and Gas Sector: a Way of Life or an Emerging Trend?" *Oil and Gas Law Newsletter*, October 2010, at 15.

[547] WTO Panels' Reports, *Canada - Certain Measures Affecting the Renewable Energy Generation Sector - Canada - Measures Relating to the Feed-in Tariff Program*, circulated on December 19, 2012, WT/DS412/R, WT/DS175/R, as modified by AB Reports WT/DS412/AB/R WT/DS426/AB/R of 6 May 2013, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 April 2014.

[548] See European Union and Certain Member States – Certain Measures Affecting the Renewable Energy Generation Sector, request for consultations by China, WTO Doc. WT/DS452/1, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 April 2014.

solar modules, allegedly violating GATT Art. III and the TRIMs Agreement.[549] In May 2013, Argentina requested consultations with EU and its member states on measures relating to trade in biodiesel, which in Argentina's opinion may violate GATT Art. III:4, as well as relevant provisions of the TRIMs, TBT and ASCM Agreements.[550] The use of LCRs in the renewable energy industry is widespread; therefore, it is expected that more disputes will arise in the WTO in connection with them.[551]

Now let us examine if domestic supply obligation – another measure frequently found in the petroleum industry – can be challenged under the TRIMs Agreement. DSO is a requirement imposed on a contractor to supply a certain amount of petroleum into a domestic market.[552] This requirement is implemented in various ways, though today it is usually translated into the priority right of the host state to acquire a certain portion of crude petroleum at the market price.[553] The DSO share may be marketed domestically by the contractor itself or may be purchased from it by the host government or NOC. In the latter case, the price for DSO share may correspond to the world market price, less transportation cost, or be substantially discounted. In the case of a discounted price, the difference between the price of petroleum

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[549] See India — Certain Measures Relating to Solar Cells and Solar Modules, Communication from the United States dated 6 February 2013 (WTO Doc. WT/DS456/1), online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 April 2014.

[550] European Union and Certain Member States – Certain Measures on the Importation and Marketing of Biodiesel and Measures Supporting the Biodiesel Industry, request for consultations by Argentina dated 15 May 2013, WTO Doc. WT/DS459/1, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 April 2014.

[551] Aaron Cosbey "Renewable energy subsidies and the WTO: the wrong law and the wrong venue," *Subsidy Watch*, Issue 44, June 2011, online Global Subsidies Initiative: <http://www.globalsubsidies.org/files/assets/subsidy_watch/sw44_jun_11.pdf> accessed on 4 July 2011.

It has to be noted that the use of requirements of mixing bio-fuel with conventional fuel is also widely spread among developed states. Although these LCRs usually represent trade measures rather than TRIMs, they may also be challenged under the GATT Art. III:5. These requirements can be justified under GATT Art. XX (b) as measures necessary to protect human, animal or plant life and health, and (g) relating to the conservation of exhaustible natural resources. However, as discussed in Chapter III, if there are alternative measures consistent with the GATT, or less inconsistent with it, that are available to the state, carve out would not be justifiable. For the use of mandatory blending requirements in the EU see Anna Jung et al, *Biofuels: At what cost? Government support for ethanol and biodiesel in the European Union – 2010 Update*, at 29, online: Global Subsidies Initiative: <http://www.globalsubsidies.org/files/assets/bf_eunion_2010update.pdf> accessed on July 15, 2011.

[552] Taverne, *supra* note 491, at 148.

[553] *Ibid*. An illustrative provision for the state priority right is contained in Art. 12 of Kazakhstan's Law On Subsurface and Subsurface Use dated June 24, 2010, which provides that the state shall have priority right to buy subsurface user's minerals at a price not exceeding the price prevailing in the subsurface user's sale transactions at the date of such priority purchase, less transportation and sales costs.

supplied under the DSO and the market price is a "deemed" tax on the contractor, imposed along with other elements of the fiscal package negotiated as part of the petroleum contract.[554]

For example, the Indonesian PSA of the 1970s required up to twenty-five percent of total crude oil production to be supplied within the domestic market at a fixed price of USD 0.20/barrel.[555] This obligation was shared by the parties to the PSA: Pertamina and a private contractor. In the 1980s, the requirement was changed to allow selling of the DSO share at the market price during the first five years of production.[556] Later, this requirement was further relaxed, stating that if required by the host state and if annual cost-oil is sufficient to recover operating costs, the private contractor must supply up to twenty-five percent of its profit-oil at the market price during the first five years of production and at fifteen per cent of the market price thereafter.[557]

Section 2 of the Illustrative List of the TRIMs Agreement specifies measures that are inconsistent with the obligation on the elimination of quantitative restrictions, including a measure requiring exports of goods specified in terms of particular products, their volume or value, or in terms of proportion to its local production.[558] A DSO requiring domestic sales specified as a proportion to local production can be theoretically challenged under this provision if it is argued that the effect of the DSO is the same as if it were an export supply obligation. However, a DSO requiring a fixed amount of domestic sales is hardly contestable because an enterprise, after selling the fixed amount under DSO, can export as much petroleum as technologically feasible or allowed under the contract's work program.

Section 2 of the Illustrative List, against which the DSO is reviewed, is concerned with the obligation on the elimination of quantitative restrictions. Hence, if a DSO is challenged, exceptions provided for the provisions of Art. XI of the GATT may be invoked by the host state.

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[554] Duval, *supra* note 495, at 168.
[555] Taverne, *supra* note 491, at 258.
[556] *Ibid*. at 260.
[557] Duval, *supra* note 495, at 169.
[558] To recall, Illustrative List section 2(c) prohibits TRIMs which require: "the exportation or sale for export by an enterprise of products, whether specified in terms of particular products, in terms of volume or value of products, or in terms of a proportion of volume or value of its local production".

The following exceptions may be applied to DSO: (i) export restrictions temporarily applied to prevent or relieve critical shortages of products essential to the exporting contracting party,[559] (ii) restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry during periods when the domestic price of such materials is held below the world price as part of a governmental stabilization plan,[560] and (iii) measures essential to the acquisition or distribution of products in general or local short supply.[561]

Clearly, none of these exceptions would validate a DSO applied on a permanent basis, as was the case of the early Indonesian PSAs; however, a DSO requested by the host state from time to time, as currently practiced in Indonesia, may be exempted from the discipline if it can be demonstrated that the DSO was necessary to relieve critical shortages of supply to a domestic industry or was implemented temporarily as part of a government stabilization plan.[562]

4.6. Why are petroleum TRIMs not contested?

The analysis of LCR and DSO against the provisions of the TRIMs Agreement illustrates that the applicability of the trade discipline within the existing legal framework depends largely on the modes in which the TRIMs are implemented. Hence, identical measures having similar trade effects may receive dramatically different treatment. Moreover, with respect to petroleum TRIMs, trade rules may raise inconsistency between the trade and investment regimes leading to trade liberalization at the expense of the promotion of investment or vice-versa, but most likely such inconsistency would debilitate both of them.

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[559] GATT Art. XI:2(a)

[560] GATT Art. XX(i). Although there is no definition for the term "materials" provided in the GATT's text, it can be suggested that the term embraces any commodity-input used in the production of goods, including crude oil and natural gas used in the production of petrochemicals. The delegation of New Zealand, which proposed this provision, justified its necessity in terms of counteracting "the problem that the world price for certain commodities, particularly raw materials which it exports, will be substantially higher than the stabilized domestic price for the like commodity." GATT Document, Report of the second session of the Preparatory Committee of the United Nations Conference on Trade and Employment (Geneva, August 12, 1947) E/PC/T/A/PV/36, at 22.

[561] GATT Art. XX(j).

[562] Application of these exceptions is discussed *infra* in Chapter VII.

If petroleum TRIMs such as LCR and DSO are found inconsistent with the WTO obligations of a host state, the measures would need to be brought into conformity with the host state's trade obligations. This would require revision of petroleum contracts containing trade distortive measures, many of which were concluded before the establishment of the WTO.

LCRs and DSOs are not accepted by investors merely in exchange for a right to develop and produce resources, but are negotiated within a whole contractual package, which includes further state "gives" such as VAT and other tax exemptions, as well as different investment incentives. Cancellation of these TRIMs within a petroleum contract would hardly be possible without other amendments aimed at rebalancing the positions of the parties to the contract, which is unlikely to be desirable for both the host state and the investor. Since international trade politics are, in most cases, driven by business, one may infer that the reluctance of investors to change the *status quo* in petroleum contracts is the main reason for the lack of trade debates over petroleum TRIMs in the WTO forum.

It is important to note that most of the petroleum contracts contain a stabilization clause which fixes the terms of investment throughout the life of the contract thereby securing the expectations of private investors.[563] As a rule, this clause obstructs any unilateral amendment to a petroleum contract by the host state other than amendments made for national security, public health, and environmental considerations.[564] Once the state is compelled to change the terms of the contract due to its international trade obligations, the state may find it a legitimate excuse to change other provisions of the contract in excess of what was needed for a mere rebalancing of the parties' interests.

Moreover, since most petroleum TRIMs are negotiated individually with each investor, it is unlikely that the cancellation of TRIMs and the subsequent revision of petroleum contracts

[563] On stabilization clauses in energy investment agreements see Cameron, *supra* note 500, at 68.

[564] On different grounds for renegotiation of petroleum contracts and problems associated with such renegotiation see Zeyad Al Qurashi "Renegotiation of International Petroleum Agreements," (2005) 22 Journal of International Arbitration 261.

would satisfy all investors within a host country. While for some investors petroleum TRIMs may significantly impair the contractual package, for others their effect could be negligible.

Furthermore, changes in the status quo may affect the competitive positions of investors. It has been observed that TRIMs can be viewed as an entry-fee/cost that effectively protects incumbent investors from new entrants to the host state's industry.[565] If investors are willing to liberalize trade, they would prefer liberalization on a bilateral or regional rather than multilateral scale because if fewer countries are given trade favors there is less competition for incumbent investors.[566]

Besides *status quo* considerations, other business factors may cause hesitation in petroleum investors wishing to initiate trade investigations. For example, a contractor under PSA or RSC may have little motivation in repealing LCRs because the fixed and movable assets it acquires for conducting E&P operations are, or will finally be, owned by the host state and because it recovers the costs of the assets out of the cost-oil.

It has been observed that the TRIMs Agreement is inefficient due to its procedural shortcomings.[567] In order for a TRIM to be prohibited, a complaining party has to demonstrate that the TRIM actually distorted trade in violation of a GATT obligation; otherwise, a TRIM is not actionable *per se*.[568] If the complainant's demonstration is successful and the TRIM is prohibited the finding will not affect identical TRIMs used by other states against whom no finding was made.[569] Hence, states may continue to use TRIMs until they are prohibited by the DSB. Although similar circumstances may reduce the cost of adjudication, making it easier to file a claim on the basis of a like case, a complaining party, who bears the burden of proof, would have to collect data sufficient for supporting his claim in each particular case. However, the issue of getting information on TRIMs from petroleum contracts is far more problematic.

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565 Kerry Chase, "From Protectionism to Regionalism: Multinational Firms and Trade-Related Investment Measures" (2004) 6 Business and Politics 1 at 14.
566 *Ibid*.
567 Morrissey & Rai, *supra* note 443, at 711.
568 *Ibid*.
569 *Ibid*.

Petroleum contracts usually contain confidentiality clauses which restrict disclosure of information to third parties. This existence of confidentiality provisions has two major effects on the probability of TRIM-related dispute initiation. On the one hand, investors may not disclose information, fearing that the host state may take action against them or that their relationship with the host government would worsen or irrevocably break down.[570] It needs to be noted that petroleum TRIMs are negotiated on an individual basis and the number of petroleum contracts within a country is usually low enough to allow the host state to identify the informer. On the other hand, the confidentiality provisions waive the host state's obligation to disclose information on TRIMs. Art. 5(1) of the TRIMs Agreement stipulates that member states shall notify TRIMs of general or specific application.[571] A footnote to this provision states that "information that would prejudice the legitimate commercial interests of particular enterprises need not be disclosed." Even if information is specifically requested by another member state under Art. 6(3) of the TRIMs Agreement, such information may be withheld under a similar exception set in that article.[572]

4.7. Conclusion

In sum, the TRIMs Agreement does not ensure the consistent application of trade discipline with respect to petroleum TRIMs. Its applicability to the petroleum TRIMs largely depends on how such measures are formally enacted. In effect, on the one hand TRIMs having similar economic effects are treated differently under WTO rules; on the other hand, contested measures can escape WTO scrutiny if they are properly redesigned. Moreover, an important

[570] Such action may include unilateral termination of a petroleum contract. Petroleum contracts may have provisions entitling the host state to terminate the contract if the contractor fails to comply with its obligations. Although the contract may provide an exhaustive list of contractor's default that may result in termination of the contract, confidentiality provisions may be included into the list, or be linked to or embraced in other defaults qualifying for unilateral termination. For example, under the Kazakhstan Law On Subsurface and Subsurface Use dated June 24, 2010, Art. 72(3), the Ministry of Oil and Gas has the right to terminate petroleum contracts if the contractor fails to remedy two breaches of its obligations within the period specified by the Ministry in its notification.

[571] Analogous provision is provided in Art. X of the GATT; however, it is concerned with publication of regulations of general application only.

[572] Art. 6(3) of the TRIMs Agreement obliges member state to "accord sympathetic consideration to requests for information" received from another member state, but authorizes the withholding of information the "disclosure of which […] would prejudice the legitimate commercial interests of particular enterprises, public or private." A similar exception is stipulated in Art. X of the GATT.

question as to whether WTO rules can be applied to measures implemented through petroleum contracts is left open. The answer to this question largely depends on how the WTO manages the regime. If the DSB treats contractual obligations resulting from an exercise of state property rights over natural resources similarly to those raised in the exercise of state economic policy (such as in *Canada-FIRA* and *India-Autos*), TRIMs under petroleum contracts would fall under the trade discipline. However, such an approach may escalate sovereignty concerns of WTO Members, which would impair further developments of the trade regime. At the same time, even if banned from using particular TRIMs in petroleum contracts, a host state may still effectively implement the TRIMs through its NOC which, if it does not escape the trade discipline itself, can assure non-disclosure of information to third parties. As it is difficult to apply STE rules to NOCs, a mere extension of the state's trade obligations to NOCs is not sufficient.

Hence it is questionable if there is a way the WTO can properly manage the TRIMs regime and improve it. A fully fledged trade discipline is required to address competition issues, including the restrictive business practices of both NOCs and IOCs. Keeping in mind that TRIMs are also common to the renewable energy industry, it is advisable that a new discipline is designed to cover the whole energy industry rather than specific sectors. A new discipline should be based on a thorough economic analysis of potential impacts of TRIMs on states' and global welfare. An outright ban of TRIMs without due concern for their potentially positive economic effects may produce undesirable long-term implications. It must be recognized that in the petroleum industry, the shortage of investment eventually leads to undersupply of oil and gas in the global market, which in the long run leads to a higher cost of production for most agricultural and manufactured goods. Prohibition of TRIMs in the renewable energy industry precludes the development of alternative energy and increases our dependency on the petroleum industry and sufficiency of investment into it.

CHAPTER V. PETROLEUM SUBSIDIES

5.1. Introduction

This chapter explores the compatibility of subsidies in the petroleum industry with WTO law. Similarly to the preceding chapter, the discussion begins with a description of the economic and legal backgrounds required for an analysis of the WTO rules applied to petroleum subsidies. In the course of the analysis we find that WTO rules are not fully applicable to subsidies provided in the downstream sector because such subsidies are, as a rule, not specific. Subsidies provided in the upstream sector are usually specific, and some of them are not compliant with WTO rules; however, most of the actionable subsidies in fact have a positive impact on the world's energy supply. Hence, similar to the case of TRIMs, as discussed in the previous chapter I argue that the prohibition of certain types of subsidies in the petroleum industry may have detrimental effects on the world market.

5.2. Economic background

Subsidies are another instrument of economic policy employed by governments along with TRIMs, tariffs, export duties and quotas.[573] A considerable body of literature has been

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573 Subsidies and TRIMs are closely related and overlapping concepts. The use of subsidies and TRIMs is justified by generally similar economic reasons. Moreover, some subsidies are used as investment incentives and therefore are considered to be TRIMs. Because of that, a number of WTO disputes have been concerned with claims that required examination of measures falling within the discipline of TRIMs and the discipline of subsidy simultaneously, e.g. *China – Measures Affecting Imports of Automobile Parts*, adopted 12 January 2009, WT/DS339/R, WT/DS340/R, WT/DS342/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012; and *Canada – Autos*, *infra* note 663. Perhaps the best illustration of the interrelationship is provided by the Panel in *Indonesia – Autos*, which stated:

> With respect to the nature of obligations, we consider that, with regard to local content requirements, the SCM Agreement and the TRIMs Agreement are concerned with different types of obligations and cover different subject matters. In the case of the SCM Agreement, what is prohibited is the grant of a subsidy contingent on use of domestic goods, not the requirement to use domestic goods as such. In the case of the TRIMs Agreement, what is prohibited are TRIMs in the form of local content requirements, not the grant of an advantage, such as a subsidy. A finding of inconsistency with Article 3.1(b) of the SCM Agreement can be remedied by removal of the subsidy, even if the local content requirement remains applicable. By contrast, a finding of inconsistency with the TRIMs Agreement can be remedied by a removal of the TRIM that is a local content requirement even if the subsidy continues to be granted. Conversely, for instance, if a Member were to apply a TRIM (in the form of local content requirement), as a condition for the receipt of a subsidy, the measure would continue to be a violation of the TRIMs Agreement if the subsidy element were replaced with some other form of incentive. By contrast, if the local content requirements were dropped, the subsidy would continue to be subject to the SCM Agreement, although the nature of the relevant discipline under the SCM Agreement might be affected. Clearly, the two agreements prohibit different measures.

Indonesia – Autos, *supra* note 480, paras. 14.50-14.51.

produced with respect to the political economy of subsidies.[574] An extensive examination of this literature is hardly feasible herein. Instead, let us pinpoint the economic issues most relevant to the WTO discipline on subsidies.

Any subsidy is an economic instrument in the hands of governments. As such, a subsidy, by default, represents a form of state intervention in the market. Like any other form of market interference, subsidies are unwelcome in the neoclassical trade theory. Supporters of the neoclassical trade theory assume that markets are perfectly competitive. On this basis, they believe that subsidies disguise the actual price of a good, which is otherwise fairly evolved in the market, and allows less-efficient producers to outperform more-efficient producers at the expense of overall welfare.[575]

In contrast, advocates of STP theory view a perfectly competitive market as the exception, rather than the rule. According to them, markets are inherently affected by powerful players, asymmetric information, externalities, and other market failures. Hence, they suggest that if there is a market failure, a careful targeting of subsidies to the source of the failure may increase national and/or global welfare without impairing trade flows.[576]

In principle, if a subsidy is available generally to consumers or producers without being contingent on specific products or marketing actions – in other words, if a subsidy is not specific – it represents a general social expenditure, which does not significantly redistribute or reallocate

[574] The following books provide a comprehensive analysis of the political economy of subsidies: Luca Rubini, *The Definition of Subsidy and State Aid: WTO and EC Law in Comparative Perspective* (Oxford: Oxford University Press, 2009); Gary Hufbauer & Joanna Shelton Erb, *Subsidies in International Trade* (Cambridge, Massachusetts: MIT Press, 1984); Marc Benitah, *The Law of Subsidies under the GATT/WTO System* (The Hague: Kluwer Law International, 2001); Rambod Behboodi, *Industrial Subsidies and Friction in World Trade: Trade Policy or Trade Politics?* (London, New York: Routledge, 1994); Luengo Hernandez de Madrid, *Regulation of Subsidies and State Aids in WTO and EC Law – Conflicts in International Trade Law* (Alphen aan den Rijn: Kluwer Law International, 2006). Each of these books contains a vast list of references to further literature on subsidy issues.

[575] A detailed discussion of the impact of subsidies from both neo-classical and strategic trade theory positions is provided in Alan Sykes, "Countervailing Duty Law: An Economic Perspective", (1989) 89 Colum. L. Rev. 199.

[576] Hart & Prakash, *supra* note 83 at 463. See also, Brander & Spencer, *supra* note 462; Avinash Dixit & Alan Kyle "The Use of Protection and Subsidies for Entry Promotion and Deterrence" (1982) 75 American Economic Review 139; Jonathan Eaton & Gene Grossman "Optimal Trade and Industrial Policy Under Oligopoly" (1986) 101 The Quarterly Journal of Economics 386.

resources.[577] Such non-specific subsidies comply with WTO rules and therefore are not considered herein, and any further reference to subsidies refers to specific subsidies alone.

Both consumption and production subsidies may have trade distortive effects. In a single state market, consumption subsidies artificially alter consumer preferences in favor of less efficient producers. Alternatively, a production subsidy favors the less efficient producer and protects it from more efficient competitors. Thus, in a single state market, subsidies reallocate resources according to non-market criteria, thereby producing inefficiency.

Now consider a more complicated market, comprising two states, where one state provides subsidies to its producers while the other does not. Other things being equal, the non-subsidized production would not be able to compete with the subsidized production within a common market. If the market is segmented by state borders, the subsidies in one state may be viewed as non-tariff barriers to the imports of non-subsidized goods from the other state. If the producers of the two states sell their products in the third market, the goods, the production of which was subsidized, would inherently infringe the marketing of non-subsidized like-products.[578]

Under certain conditions subsidies may be beneficial to trade flows and global welfare. Even export subsidies, which are unequivocally prohibited in the WTO rules, may bring substantial benefits to the international trading system.[579] Economists often note that subsidized imports improve the terms of trade for the importing nation, and thus confer a gain in national welfare.[580] Foreign consumers who buy subsidized goods at a cheaper price ultimately benefit

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[577] Rambod Behboodi, *Industrial Subsidies and Friction in World Trade: Trade Policy or Trade Politics?* (London, New York: Routledge, 1994), at 24. Internet resource <http://www.myilibrary.com?id=32386>.

[578] Subsidies for production of a commodity X provided by the government of country A create a barrier for imports of a non-subsidized like commodity Y from country B. Other things being constant and equal, consumption of the cheaper commodity X would increase at the expense of commodity Y in both A and B markets. If commodities X and Y are exported to country C, which does not have domestic production of like commodities, producers from country A gain higher returns than country B producers under equal market conditions. The national welfare of country C would gain from such subsidy, whereas country B would lose. The ultimate effect on the welfare of country A may be positive or negative depending on whether the subsidy was aimed at a particular market failure and how efficient the policy processed.

[579] Merit Janow & Robert Staiger, "United States Measures Treating Export Restraints as Subsidies" in Horn & Mavroidis eds. *The WTO Case Law of 2001* (Cambridge: Cambridge University Press, 2003) at 215.

[580] Alan Sykes "The Questionable Case for Subsidies Regulation: A Comparative Perspective" (2010) 2 Journal of Legal Analysis 473 at 476.

from the subsidies. However, if there is local production of a similar product in the importing country, the welfare gain could be offset by the loss suffered by local incumbent producers due to decreased sales of domestically produced goods. In the long run, a net welfare loss may occur if the local industry ceases to exist, being unable to compete with subsidized foreign producers.[581]

Many types of subsidies are not contingent upon export performance. Such subsidies, commonly referred to as domestic subsidies, may have no or little effect on cross-border trade flows. In most cases governments use domestic subsidies to deal with market failures, such as subsidies provided to waste collection companies; those provided to gain social benefits from positive externalities, attainable through R&D subsidies; those intended to alleviate the consequences of negative externalities, as is the case when assisting producers whose businesses have suffered from a natural disaster; or designed those to implement social programs, such as the provision of subsidized food to the poor.[582] Such subsidies are, by and large, considered legitimate and acceptable according to WTO rules.

Subsidies are considered to be the least trade distortive instrument when compared to tariffs, quotas, and export duties. This is because they affect only one party in a transaction – either the producer, if a production subsidy is considered, or the consumer, in the case of a consumption subsidy – while the other instruments affect both the producers and the consumers.[583] Nevertheless, as with any policy instrument, a subsidy must be used cautiously so that its effect does not extend beyond the legitimate reasons for its use, and so that it causes no

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[581] The welfare gain is still possible if local industry was not significant for the national economy and goods are kept imported at subsidized prices. However, if the ceasing industry was significant and had strong linkages with other economic sectors or formed a complex industrial cluster, then the cumulative negative effect from the closure of such a local industry could be much higher than the gains received on the consumption margin.

[582] Shwartz and Harper consider these types of subsidies as market correcting rather than distorting instruments:

> In fact, however, much (perhaps all) government support can be defended as being a "correction" rather than a "distortion" of the market process. The need for correction is said to derive from the existence of "externalities," that is, costs or benefits that are borne or reaped by nonparties to a transaction and are not therefore taken into account in the market process. As a result, the issue is not that of identifying and remedying "distortions" but rather of determining if a particular measure on balance "corrects" or "distorts" the market process, that is, whether it increases or decreases the efficiency with which resources are allocated.

Warren Schwartz & Eugene Harper, "The Regulation of Subsidies Affecting International Trade" (1972) 70 Mich. Law Rev. 831 at 833.

[583] Matsushita, Schoenbaum & Mavroidis, *supra* note 189, at 332.

negative effect on international trade. Once a subsidy is provided, it is not an easy task to control its effects. Besides potential unintentional wrongs of policy-makers, deliberate abuse of a subsidy policy may also be conducted by the subsidy recipients or rent-seeking officials.[584]

The plausible trade distortive effect of subsidies is not the only reason for the negative attitude of the international trade community towards subsidies.[585] Another important source of contradiction arises from a potential undermining effect of subsidies on market access. Such an effect may result if a subsidy is applied as a protectionist instrument in place of tariffs. The following quote from Rubini illustrates this problem:

> The main concern of the GATT is to eliminate or reduce through negotiation the most 'explicit and obvious governmentally imposed trade obstacles', that is tariffs, quotas and other border obstacles to market access. With respect to tariffs, better market access is achieved through negotiated reciprocal concessions. However, since the effects of reduced, or dismantled tariffs, can be easily replaced with other policy tools with an equal impact, the credibility, and viability, of the whole system requires a guarantee that concessions made do not become meaningless and that the degree of market access legitimately expected is not undermined, or 'nullified'. Failing this, the 'balance of rights and obligations' underlying the political and economic bargain of trade liberalization of the GATT would be compromised. Confidence in the value of offering concessions which can be easily circumvented by other policies producing similar effects would mean that, prospectively, fewer would be entered and eventually the whole process of liberalization of trade would risk being jeopardized.[586]

Thus, strengthening the discipline on subsidies is supposed to facilitate the liberalization of trade. However, drawing on an economic study conducted by Bagwell and Staiger,[587] Rubini concludes that the excessive disciplining of subsidies would also obstruct trade liberalization:

> While too few constraints on subsidies would deter tariff concessions…, too many constraints would also lead to the same result. The reduction of 'policy space' following stricter subsidy

[584] As an example, consider the R&D subsidies purported to finance a study on ethanol-gasoline substitution effects in a foreign market under a national "Support Clean Air" program. On the one hand, the subsidy is supposed to facilitate research on environmental problems; on the other hand, the results of the study may be used for commercial purposes, e.g. by ethanol producers against the interests of gasoline producers. Another example could be if a recipient of a subsidy provided for the reconstruction of its plant, which had been damaged in an earthquake, uses the funds for expanding capacities of another, export-oriented, plant which was not affected by the earthquake.
[585] The attitude is depicted as "negative" because the subsidies' discipline has been continuously tightening since GATT 1947, through the Tokyo Round's "Subsidies' Code" to the Uruguay Round's Agreement on Subsidies and Countervailing Measures. The Doha Round negotiations are aimed to further tighten the discipline. See Andrew Stoler, "The Evolution of Subsidies Disciplines in GATT and the WTO" (2010) 44 J. World Trade 797.
[586] Rubini, *supra* note 574, at 39.
[587] Bagwell and Staiger found that although GATT subsidy rules (before 1995) were considered weak and inadequate, they provided more flexibility for parties to achieve greater economic efficiency through the combination of tariff negotiations and the use of subsidies.[587] The scholars further state that the WTO subsidy rules (after 1995) significantly strengthened the discipline and thereby completely undermined that flexibility. The new rules, they conclude, may ultimately produce more harm than good to the multilateral trading system. See Bagwell K. & Staiger R., "Will International Rules on Subsidies Disrupt the World Trading System?" (2006) 96 Am. Econ. Rev. 877 at 879.

disciplines would make countries more redundant to relinquish their capacity to use tariffs as a policy tool. [588]

On the basis of the economic overview provided above, the following observations can be made. Governments use subsidies to pursue social and economic objectives which may or may not be relevant to trade. Depending on the details of each case, subsidies may have either a zero or negative effect on trade flows. However, a positive effect is also realizable, especially when a subsidy is carefully applied to cure a specific market failure. In many cases it may be difficult to evaluate all effects of a subsidy, and when the effect is not known, a countervailing measure or the prohibition of the subsidy may harm the economy as much as would the use of the subsidy itself.

The effective discipline of subsidies in the WTO is supposed to tackle distortive subsidies while allowing for trade-neutral or trade-expanding subsidies, provided that such expansion does not have an adverse effect on other states. The rigidity of the discipline imposed on subsidy policies has to be balanced, however; otherwise, at both extremes it may nullify or impair trade liberalization achievements acquired through tariff reduction. Bearing these points in mind, let us now provide a legal review of the discipline currently in force in the WTO trading system.

5.3. Legal background

The need for the regulation of subsidies has been discussed in the international community since the inception of the multilateral trading system.[589] The Havana Charter of the International Trade Organization (ITO) contained certain disciplines on subsidies.[590] Although the ITO was never established, two important provisions from the Havana Charter were transposed to the GATT 1947, albeit in a more relaxed form.[591] The first, currently reflected in Art. VI of the GATT 1994, contained basic rules on the use of countervailing measures. The

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[588] Rubini, *supra* note 574, at 41.

[589] On evolution of the subsidies disciplines in the early GATT system see Jackson, *World Trade and the Law of GATT*, *supra* note 405, at 365-399.

[590] Articles 25-28 of the Havana Charter contained general rules on subsidies as well as specific provisions for export subsidies and subsidies for primary goods.

[591] Stoler, *supra* note 585, at 798.

second provision, which now constitutes Art. XVI:1 of the GATT 1994, introduced notification obligations and some provisions for consultation among parties if their interests were affected by the subsidies.[592] Later, in 1955, Art. XVI was amended to restrict export subsidies and, in 1960, it was supplemented with an "illustrative list" of export subsidies.[593]

A more comprehensive regulatory regime for subsidies was established with the adoption of the Agreement on Interpretation and Application of Articles VI, XVI, and XXIII of the GATT, which resulted from the Tokyo Round of negotiations in 1979, and is therefore commonly known as the Tokyo Round Subsidies Code.[594] The Code laid down a comprehensive set of rules, both substantive and procedural. Besides setting general rules on the use of subsidies, it clarified and extended disciplines on countervailing measures. In short, the Code strengthened restrictions on the powers of governments to use the subsidies and, on the other side, to counteract the effects of foreign subsidy policies.

The regulatory regime for subsidies was further fortified during the Uruguay Round. The plurilateral Tokyo Round Subsidies Code was replaced by the Agreement on Subsidies and Countervailing Measures,[595] which is a multilateral instrument binding on all WTO Members. The ASCM deals with subsidies to primary and industrial products. Agricultural subsidies are regulated separately under the Agreement on Agriculture.[596]

The purpose of the Uruguay Round's regulatory framework on subsidies is twofold. On the one hand, it is designed to discourage trade distortive subsidies. On the other hand, it controls the scope, and prevents any abuse by states of unilateral countervailing measures. The ASCM accomplishes these objectives through many improvements to the Subsidies Code. For the first time in the history of the multilateral trading system, it provides a definition for the term

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[592] Terry Collins-Williams & Gerry Salembier, "International Discipline on Subsidies: The GATT, the WTO and the Future Agenda" (1996) 30 J. World Trade 5 at 6.
[593] Jackson, *World Trade and the Law of GATT*, *supra* note 405, at 371 and 385.
[594] Agreement on Interpretation and Application of Articles VI, XVI and XXIII of the General Agreement on Tariffs and Trade. GATT, BISD, 26th Supp. 56 (1980). The Tokyo Round Subsidies Code was binding only upon a dozen of developed countries who signed it. See Jackson, Davey & Sykes, *supra* note 190, at 850.
[595] Agreement on Subsidies and Countervailing Measures, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 14.
[596] Agreement on Agriculture, 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 410.

"subsidy". Moreover, it elaborates the trade effects standard embodied in the serious prejudice provision, which is now enforced through the multilateral mechanism rather than through unilateral countervailing measures.[597] It also further clarifies the disciplines on countervailing measures, especially with respect to countervailing investigations, making them more transparent and coherently organized. Finally, it establishes a multilateral dispute settlement system specific to the issues of subsidies and countervailing measures.

The ASCM defines the term "subsidy" as a financial contribution provided by a government or any public body that confers a benefit to a recipient.[598] A subsidy also exists if a government or a public body provides any form of income or price support that confers a benefit to a recipient.[599] A financial contribution or price support provided by the government would not constitute a subsidy if it did not confer a benefit to the recipient.[600] Alternatively, a benefit conferred to the recipient through a measure that is not a financial contribution or a price support would not constitute a subsidy either.[601]

A financial contribution to the recipient is considered to have occurred if the government (i) makes a direct transfer of funds or potential direct transfer of funds or liabilities; (ii) foregoes revenue that is otherwise due; or (iii) provides goods and services other than general infrastructure, or purchases goods from the recipient (at non-market considerations).[602] Financial contributions exist if these measures are taken through public bodies or private bodies entrusted or directed by the government.[603]

[597] Collins-Williams & Salembier, *supra* note 592, at 9.
[598] ASCM Art. 1.1 paras. (a)(1) and (b).
[599] ASCM Art. 1.1 paras. (a)(2) and (b).
[600] For instance, a government provides loans or sells goods to local producers at market prices and under arms-length terms.
[601] For instance, a government provides local producers with information on foreign market's customs regulations.
[602] ASCM Art. 1.1 (a)(1).
[603] In *Korea – Measures Affecting Trade in Commercial Vessels*, the Panel held that "an entity will constitute a "public body" if it is controlled by the government (or other public bodies)" (see WTO Panel Report *Korea – Measures Affecting Trade in Commercial Vessels*, adopted 11 April 2005, WT/DS273/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012, at para. 7.50). Similar view was expressed by the Panel in *United States – Definitive Anti-Dumping and Countervailing Duties on Certain Products from China*; however, the AB reversed such interpretation of the term stating that financial interest, state ownership or control is not sufficient to establish that an entity constitutes a public body, rather it must be established that an entity possesses, exercises or is vested with governmental authority. See *United States – Definitive Anti-Dumping and Countervailing Duties on Certain Products from China*, WT/DS379/R, adopted 25 March 2011, as modified by AB

Only specific subsidies are subject to the ASCM's rules.[604] A subsidy is specific if it is explicitly limited to an enterprise or industry, or a group of enterprises or industries ("certain enterprises") within the jurisdiction of the granting authority.[605] Specificity of a subsidy shall be established on the basis of objective criteria found in legislation or acts and documents of the granting authority, which implements the subsidy program. If, notwithstanding the official information, there is reason to believe that a subsidy is in fact specific, then other positive evidence may also be employed.[606]

The ASCM established so called "red", "yellow", and "green" light subsidies. The green light subsidies were permissible under the rules of Part IV of the ASCM. However, this regime is no longer in force, and subsidies that had been considered permissible now fall into the category of yellow light subsidies.[607]

The red light subsidies governed by Part II of the ASCM are prohibited subsidies, which are deemed specific notwithstanding their details.[608] Art. 3 of the ASCM prohibits subsidies contingent upon export performance (export subsidies) or upon the use of domestic over imported goods (import substitution subsidies). Annex 1 to the ASCM contains an Illustrative List of export subsidies. The prohibited subsidies may be challenged regardless of the actual effects of such subsidies on the interests of the complainant or any third party.

The yellow light regime depicts actionable subsidies which have to be identified in accordance with Part III of the ASCM. These subsidies, while not prohibited, may be challenged if they have "adverse effects" on the trade interests of other states. Adverse effects, according to Art. 5 of the ASCM, may take the following forms: (i) injury to the domestic industry of another Member; (ii) nullification or impairment of benefits accruing directly or indirectly to other

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Report WT/DS379/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012, at para 8.94 (Panel Report) and at paras. 317-320 (AB Report).

[604] ASCM Art. 1.2.

[605] ASCM Art. 2.1.

[606] *Ibid*.

[607] Art. 8 of the ASCM regulated subsidies that were non-actionable i.e. non-specific and certain types of specific subsidies such as R&D subsidies meeting pre-defined criteria, assistance to disadvantaged regions and assistance to enterprises to adapt to new environmental requirements. Art. 8 provisions lapsed on 1 January 2000 pursuant to Art. 31 of the ASCM.

[608] ASCM Art. 2.3.

Members under the GATT; (iii) serious prejudice to the interests of another Member. The concept of "serious prejudice" is elaborated in detail in Art. 6 of the ASCM. The rules on determination of injury and a definition of domestic industry are provided in Art. 15 and 16 of the ASCM respectively.

If subsidies cause or threaten to cause material injury to the domestic industry of a Member, that Member is entitled to apply a countervailing duty on the subsidized imported goods. The countervailing duty may be applied in parallel with dispute settlement measures (including preliminary consultations) specified for dealing with prohibited and actionable subsidies in Parts II and III of the ASCM respectively.[609] However, with regard to the effects of a particular subsidy in the domestic market of the importing Member, only one form of relief is allowed, that is, either a countervailing duty or dispute settlement measures.[610] Since in third markets a Member cannot impose a countervailing duty on subsidized goods, in export markets the Member may only address the issue through dispute settlement. Hence, the parallel use of two measures by a Member is only possible if its products compete with subsidized goods in both domestic and export markets.

The overview of the WTO subsidies discipline provided above should suffice to launch our legal analysis of petroleum subsidies. Further details of the ASCM's rules and their application in the WTO case law are revisited below where necessary.

5.4. Subsidies in the petroleum industry and market

In the past few years, the international trade community has paid increasing attention to the issue of energy subsidies. Key developments took place in autumn 2009 when the leaders of the G-20 states, followed by the leaders of the Asia-Pacific Economic Cooperation states, declared their commitment to reforming energy subsidies, recognizing that such subsidies may

[609] Art. 10 Note 35 of the ASCM.
[610] *Ibid*.

distort trade flows, impede investment in clean energy sources and undermine efforts to deal with climate change and sustainable development.[611]

There is no commonly accepted definition of energy subsidies, as states and organizations (international and non-governmental) tend to use their own definitions.[612] For instance, the International Energy Agency (IEA) defines an energy subsidy as "any government action directed primarily at the energy sector that lowers the cost of energy production, raises the price received by energy producers or lowers the price paid by energy consumers".[613] Apparently, if sector specificity is disregarded, this definition is substantially broader than the definition of a subsidy under the ASCM. This broader approach can be explained by the multidimensional concerns of the IEA and its member states about subsidies; the ASCM, on the other hand, considers international trade issues only. For ease of further reference, let us adopt *mutatis mutandis* the IEA's definition for such categories of energy subsidies as nuclear power, fossil fuel and renewable energy subsidies, and further for sub-categories of fossil fuel subsidies like petroleum and coal subsidies.

Depending on the product being promoted, energy subsidies may have different environmental impacts. In the course of normal exploitation, nuclear power is regarded as less polluting than fossil fuels. However, if a major accident occurs, it may have an immense effect on the environment and population. Sophisticated technology and strict health and safety regulations adopted by the nuclear power industry significantly lessen the probability of a major accident occurring. Thus, it is difficult to compare the ultimate environmental effects of the nuclear power industry with those of other energy sectors.

On the whole, the generation of energy obtained from fossil fuels is regarded as more polluting than energy obtained from renewable sources. Hence, renewable sources of energy are

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[611] IEA, *World Energy Outlook 2010*, *supra* note 61, at 575.
[612] IEA, OECD, World Bank and OPEC, *Analysis of the Scope of Energy Subsidies and Suggestions for the G-20 Initiative,* Joint Report prepared for submission to the G-20 Summit Meeting, Toronto (Canada), 26-27 June 2010, online: <www.worldenergyoutlook.org/docs/G20_Subsidy_Joint_Report.pdf> accessed on 23 May 2011 [hereinafter: IEA, OECD, World Bank & OPEC, *Analysis of the Scope of Energy Subsidies*], at 8.
[613] IEA, *World Energy Outlook 2010*, *supra* note 61, at 570.

better treated in terms of public opinion than fossil fuels. This is reflected in the G-20 leaders' statement made during the Pittsburgh Summit of 2009, which, *inter alia*, expresses its commitments:

> To phase out and rationalize over the medium term inefficient fossil fuel subsidies while providing targeted support for the poorest. Inefficient fossil fuel subsidies encourage wasteful consumption, reduce our energy security, impede investment in clean energy sources and undermine efforts to deal with the threat of climate change…
>
> Rationalize and phase out over the medium term inefficient fossil fuel subsidies that encourage wasteful consumption. As we do that, we recognize the importance of providing those in need with essential energy services, including through the use of targeted cash transfers and other appropriate mechanisms. This reform will not apply to our support for clean energy, renewables, and technologies that dramatically reduce greenhouse gas emissions.[614]

However, the WTO framework in certain cases may not accommodate environmental concerns, and trade rules may sometimes not distinguish policies on the basis of their environmental impacts.[615] Since the Pittsburgh Summit 2009, a number of cases have been brought to the WTO against subsidies provided to support renewable energy production.[616] The TRIMs agreement, as we have seen in the preceding chapter, poses obstacles to states providing support to investment into renewable energy infrastructure. The like-product test, which is essential for the GATT's NT standard and for the ASCM's serious prejudice provision, may require states to treat certain goods similarly even if they have different effects on the environment. As a result, other things being equal, subsidies to renewable and non-renewable energy sources are treated alike so that trade distortive subsidies are outlawed regardless of their ultimate effect on humanity's well-being. Unless the trade discipline is enriched with

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614 The G-20 Leaders' Statement, the Pittsburgh Summit, September 24-25, 2009, online: <http://www.g20.org/Documents/pittsburgh_summit_leaders_statement_250909.pdf> accessed on 11 June 2011.

615 See *infra* Chapter II where we discuss the rules established in the GATT/WTO jurisprudence with respect to identification of likeness and directly competitiveness of products.

616 See infra Chapter IV and *supra* notes **Ошибка! Закладка не определена.** and 547 for the disputes recently initiated under the WTO DSU on TRIMs in renewable energy industry. Beside the TRIMs Agreement, these disputes are also concerned with the ASCM because the subsidies are allegedly contingent upon the use of local goods. There was also a recently settled case which was based only on the GATT and the ASCM Agreement. In December 2010, the U.S. requested consultations with China on measures relevant to wind power equipment, and it was settled as a result of cancellation of the subsidies by China. See China – Measures Concerning Wind Power Equipment, Communication from the United States dated January 6, 2011 (WTO Doc. WT/DS419/1), online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 April 2014. See also "China ends wind power subsidies after US challenge," *BBC News*, June 7, 2011, online: <BBC News http://www.bbc.co.uk/news/business-13692255> accessed on June 8, 2011.

environmental indulgences, it would be difficult for the international community to accommodate environmental concerns simultaneously with the process of trade liberalization.

Before narrowing our analysis down to petroleum subsidies, it has to be noted that under certain circumstances, coal and petroleum, which are sub-categories of fossil fuel, may be regarded as directly competitive or substitutable products.[617] Hence, a subsidy provided to the consumption or production of coal may harm the competitive market position of certain types of petroleum goods and vice-versa.

Petroleum subsidies may take a variety of forms depending on the purpose of policy, the way it is implemented, the recipients of the subsidies, and other factors. Notionally, production subsidies are used in the upstream industry while consumption subsidies are directed to the downstream industry, the latter including the petroleum market. In the upstream petroleum industry, subsidies may be provided to conduct E&P operations or for the acquisition of machinery and equipment used in the course thereof. In the downstream sector, on its industrial side, governments support the refining of crude oil and the processing of natural gas to facilitate the production of engine fuels and other petrochemical products as well as agricultural fertilizers.[618] On the market side, to decrease the market prices of petroleum, governments may provide direct funding to consumers or fix the price administratively below market level. Since policy aims and implications may be different in the upstream and downstream sectors of the petroleum industry, it seems appropriate to analyze the potential subsidies in each sector separately.

5.4.1. Upstream sector

It may be expected that the support provided by governments for the upstream petroleum industry will increase over time. As existing oil and gas fields are depleted, the petroleum industry moves to new reserves, most of which are located in deep-waters and arctic and/or

[617] See *infra* Chapter II.

[618] Petrochemical products include a host of widely used materials, such as: asphalt, lubricants, plastics, synthetic rubber and fibre, paints, medical and cosmetic components, etc. Natural gas is the primary input in the production of ammonia, one of the most widely used fertilizers.

environmentally sensitive areas with severe climatic and/or difficult geophysical conditions.[619] Thus, as a rule, the development of new petroleum deposits has a higher cost compared to existing reserves. Moreover, the number of old petroleum deposits, whose residual value is insufficient to cover maintenance expenses, is continuously growing. Since petroleum prices may escalate in the future, there may well be an opportunity cost from the premature closure of such marginal deposits.[620]

To procure the stable future supply of petroleum resources, governments may subsidize producers who would not otherwise invest in the development of new high-cost deposits, or the maintenance of old reserves which have become unprofitable, until the price of petroleum rises to a level which ensures the profitability of such investments. Apart from supply stability, there is a host of arguments used by governments to justify providing subsidies to the petroleum industry.[621] Though in some instances such justifications may be fully legitimate based on accruable social and economic benefits, in many other cases such subsidies are politically driven.[622] Government policies are often criticized in the latter case because such subsidies result in the unfair social distribution of benefits and detrimental effects on the environment.

Though there is a surprisingly scarce amount of literature devoted to energy subsidies in the upstream sector, there has recently been increasing attention paid to this subject, especially by environmental NGOs that are trying to raise public concern for climate change, the efficient

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619 Peter Wooders & Kerryn Lang, *Tax and Royalty-Related Subsidies to Oil Extraction from High-Cost Fields: a Study of Brazil, Canada, Mexico, United Kingdom and the United States*, Global Subsidies Initiative of the International Institute for Sustainable Development. (Geneva: IISD, 2010) online: Global Subsidies Initiative <www.globalsubsidies.org> accessed on 20 July 2011, at 10.

620 *Ibid*. at 11

621 Wooders & Lang, *ibid*. at 28, list a dozen of general justifications commonly expressed by governments and pro-industry mass-media.

622 See *ibid.* at 10, where the authors state:

> A handful of arguments are regularly presented to justify this support. These include boosting oil-related revenues or energy security to the nation; mitigating the higher investment risk or capital cost for the more difficult fields; developing technologies that will eventually become cost-effective; and avoiding "premature" loss of older fields where production volumes are declining or production costs are increasing. None of this claims should looked at in isolation. For example, there are many ways to boost energy security – from more efficient use of fuels, to diversifying suppliers and increasing stockpiling. Long-term security can come through improved vehicle infrastructure, including electrification. The core point is that directed subsidies to oil extraction select winners politically, even though alternative strategies may offer more effective and lower cost long-term solutions.

use of natural resources and other ecological issues.[623] Most of the available studies do not focus on the oil and gas sector but on energy subsidies in general. However, these studies use the IEA's definition of "energy subsidies", which is, as we have observed above, substantially broader than the corresponding concept applied under the WTO rules. Moreover, most of these studies analyze state support measures against the problems with the unfair social distribution of benefits and detrimental effects on the environment. As a result, many types of governmental support are considered by those studies as subsidies that may not necessarily be recognized as such from the WTO perspective.

Among the studies produced by NGOs, the most remarkable are those conducted by the International Institute for Sustainable Development under its Global Subsidies Initiative (GSI) program.[624] To assist researchers in identifying and studying fossil-fuel subsidies, the GSI developed the Subsidy Data Review Table, which sets out the main types of transfer mechanisms supporting markets for the three main fossil fuels (oil, coal and natural gas). The Subsidy Data Review Table lists the following potential subsidy mechanisms:

[623] See, for example, Doug Koplow et al, *Mapping the Characteristics of Producer Subsidies: A Review of Pilot Country Studies,* Global Subsidies Initiative of the International Institute for Sustainable Development. (Geneva: IISD, 2010) online: Global Subsidies Initiative <www.globalsubsidies.org> accessed on 20 July 2011; and, Kerryn Lang & Peter Wooders, *A How-to-Guide: Measuring Subsidies to Fossil-Fuel Producers*, Global Subsidies Initiative of the International Institute for Sustainable Development. (Geneva: IISD, 2010) online: Global Subsidies Initiative <www.globalsubsidies.org> accessed on 20 July 2011.
[624] The results of the research projects are available on the designated website of the Global Subsidies Initiative: www.globalsubsidies.org

	Type of Subsidy Mechanism	Examples of Subsidy Measures
1	**General resources on energy policy, industry structure, prices**	not specified
2	**Government-owned energy minerals**	• Process for mineral leasing (auctions or grants) • Royalty relief or reductions in other taxes due on extraction • Problems with accurate payment or collection of royalties due
3	**Government ownership of energy-related Enterprises**	• Energy security-related enterprises (stockpiles, defense planning or policing) • Support to bulk fuels transport • Direct ownership of power generation, transmission or distribution assets
4	**Market price support and regulation**	• Consumption mandates or restrictions • Direct price controls • Border protection (often tariffs) or export restrictions • Regulatory loopholes
5	**Direct spending**	• Direct appropriations to government ministries • Government contracts to outside parties • Government support for research and development
6	**Tax breaks and special taxes**	• Tax expenditures • Aggregate measures of overall tax burden by industry • Excise taxes or special targeted taxes on energy industry
7	**Credit support**	• Government loans and loan guarantees • Subsidized credit to government-owned energy enterprises or infrastructure • Subsidized credit to energy-related exports via export credit agencies or multilateral development banks
8	**Insurance and indemnification**	• Government provision of risk management or risk shifting services • Statutory caps on commercial liability
9	**Health and safety oversight**	• Government oversight of existing extraction, transport, and beneficiation operations • Legacy health costs
10	**Environmental issues, site closure, and post closure Care**	• Legal structure governing financial and operational responsibility for closure and post-closure activities • Legal structure governing ability of injured parties to sue for compensation • Stringency and neutrality of environmental controls (as enforced, not as written)
11	**Emerging issues**	• Windfalls associated with carbon credit allocations or offset programs • Environmental damages from ground fracturing for natural gas extraction • Environmental damages associated with synthetic fuels production • Programs to underwrite the cost or risk of carbon capture and storage

Source: Earth Track Inc., and Global Subsidies Initiative[625]

In one study employing this table, the GSI found that China, Germany, Indonesia and the USA, to a varying degree, subsidize fossil-fuels markets. For instance, all of these states provide

[625] Adapted from the *Subsidy Data Review Table* in Koplow, *supra* note 623, at 14.

support in the form of government-owned minerals, tax breaks and special taxes (items 2 and 6 of the table).[626] Except for the USA, they may also subsidize the market through government ownership of energy-related enterprises (item 3).[627] Various forms of credit support (item 7) have been provided to most fossil-fuel producers of these countries except for Germany, where information was not readily available. Market price support (item 4) is identified as a subsidy in China and Indonesia.[628] Direct spending (item 5) in the form of agency appropriations and contracts was found in Indonesia and the USA. Some variations of state support measures were detected with respect to health, safety and environment as well as emerging issues (items 9-11).

Unfortunately, the study does not provide details on the measures necessary to analyze their impact on cross-border trade. Nonetheless, some of the forms of state support described in the table may be excluded from further analysis because of their explicit legitimacy within the WTO framework.[629] In particular, government ownership over minerals and energy-related enterprises does not imply trade distortion by itself. Similarly, insurance and indemnification measures are not contingent upon trade flows. Finally, any governmental support provided in relation to health, safety and environment as well as emerging issues, even if it produces detrimental effects on cross-border trade, falls into the category of general exceptions provided in Art. XX of the GATT.

Three more studies are worth noting because of their focus on subsidies in the upstream oil and gas industry. The first, conducted by the GSI, analyzes the upstream oil and gas sector of Indonesia.[630] It is different from the Indonesian section of the study reviewed above in that it excludes the coal industry and the downstream oil and gas sector. The second study resulted from the collaboration of two NGOs: the Pembina Institute and Climate Action Network Canada.

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[626] Koplow, *supra* note 623, at 41, 42, 53-55, 81-88, 112-20, 134-139.
[627] *Ibid*. at 43-46, 83, 115-117
[628] *Ibid*. at 47 and 118
[629] A measure provided under item 1 (i.e. general resources on energy policy, industry structure, prices) of the table should also be excluded from further analysis because it is not clear what types of subsidies are contemplated thereby. The reviewed GSI study also does not identify any subsidy of this type in China, Germany, Indonesia and the USA.
[630] David Braithwaite et al, *Fossil Fuels – At What Cost? Government Support for Upstream Oil and Gas Activities in Indonesia*, Global Subsidies Initiative of the International Institute for Sustainable Development. (Geneva: IISD, 2010) online: Global Subsidies Initiative <www.globalsubsidies.org> accessed on 20 July 2011.

It researched the governmental support provided to the Canadian upstream petroleum industry from 1996 to 2002.[631] The third study was also conducted by the GSI and only considered the Canadian upstream oil sector.[632] This study was chosen to supplement the second one, as it operated with data spanning the years 2008-2009 and makes projections up to 2020.

In the first study, researchers tried to identify and evaluate the Indonesian government's measures using the GSI's Subsidy Data Review Table. From the outset, they clarified the approach taken in the GSI studies, explaining that the mere identification of a subsidy does not necessarily suggest reforms to the policy underlying such subsidies.[633] A subsidy, once identified, has to be evaluated against its direct impacts and the degree to which it achieves policy objectives.[634]

The study identified and evaluated (for the year 2008) three types of subsidies: (i) investment credit allowances to the Indonesian upstream sector provided in the amount of USD 115 million; (ii) tax incentives for imported goods and services amounting to USD 130 million; and (iii) oil DSOs which are treated as a subsidy to Indonesia's NOC (Pertamina), and amounting to USD 1.15 billion.[635] The study concluded that the investment credit allowance and the tax incentives for imported goods and services positively contributed to the government's stated objectives of increasing exploration activities and, in particular, encouraging investments in new geological fields; but the study could not determine how efficient the subsidies were in

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[631] Amy Taylor, Matthew Bramley & Mark Winfield, *Government Spending on Canada's Oil and Gas Industry. Undermining Canada's Kyoto Commitment*, Climate Action Network Canada, online: <http://www.climateactionnetwork.ca/e/publications/public-money-oil-gas-sm.pdf> accessed on 20 July 2011.

[632] Dave Sawyer & Seton Stiebert, *Fossil Fuels – At What Cost? Government support for upstream oil activities in three Canadian provinces: Alberta, Saskatchewan, and Newfoundland and Labrador*, Global Subsidies Initiative of the International Institute for Sustainable Development. (Geneva: IISD, 2010) online: Global Subsidies Initiative <www.globalsubsidies.org> accessed on 20 July 2011. Although the study covers only three jurisdictions in Canada, the three provinces make over 97% of Canadian oil production.

[633] Braithwaite, *supra* note 630, at 11.

[634] *Ibid*. at 10.

[635] *Ibid*. It has to be noted that a number of measures were considered by the study as potentially having the effect of subsidies but the ultimate conclusion was not drawn because further research was needed. These measures include, Pertamina's Work Agreement (because of its difference from standard PSA), R&D support to industry, bank financing support, access (of Pertamina) to expired PSA, access to forested areas, preferential regime for royalty and equity shares comparing to international standards, gas DSO. The study also admits that no subsidy was found in the Indonesian government's measures related to restoration and rehabilitation of depleted oil and gas fields, reconciliation of overliftings and underliftings of petroleum, access to new acreage, farm-in to existing PSAs, and bonuses paid by the industry.

achieving the policy objectives or whether the aims could have been better met by alternative means.[636]

The other study analyzed governmental support given to the Canadian upstream oil and gas sector between 1996 and 2002, inclusive.[637] It also employed a broad definition of subsidies, corresponding to the IEA's definition.[638] All types of governmental support were grouped into three categories. The first category, direct government expenditure, includes expenditures for R&D, infrastructure support and direct state involvement in specific oil and gas projects. Subsidies of this category totaled CAD 166.2 million within the 1996-2002 timeframe.[639] The second category, called program expenditure, is represented by the budgets of various government departments whose work directly relates to the oil and gas sector. The researchers were unable to gather data on the budgets of several important government departments; however, data concerning the total budget of those departments was available, and showed that it exceeded CAD 227 million.[640] The third category comprised tax expenditures, including tax measures designed to reduce the taxes payable by the industry relative to what would be payable under a neutral tax system.[641] The tax expenditures were assessed in terms of foregone tax revenue.[642] The aggregate amount of such tax expenditures in the period under study was approximately CAD 8 billion, which makes this category the largest host of subsidies in the Canadian petroleum industry.[643]

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[636] *Ibid*.
[637] Taylor, Bramley & Winfield, *supra* note 631, at 18.
[638] Taylor, Bramley & Winfield define subsidies as "economic benefits conferred by governments upon individuals, companies or industries with the intent of encouraging certain behavior". See *ibid.* at 10.
[639] *Ibid*. at 26. All monetary estimates for subsidies in that subsidy are expressed in the year 2000 dollar terms.
[640] *Ibid*. at 28.
[641] A properly designed neutral tax system is assumed in the study to be one that does not favor one industry type over another and has the following characteristics: (i) investment tax credits are not provided, (ii) royalties are treated as a cost of production and are fully deductible, (iii) all activities are subject to the same tax rate, (iv) capital assets are written off over their useful life, (v) accelerated depreciations are eliminated. See *ibid*. at 20.
[642] *Ibid*. at 19.
[643] *Ibid*. at 30.

The third study confirms that in the Canadian oil industry, tax-related expenditures comprise the largest share of subsidies.[644] In the fiscal year 2008-09, the total value of estimated subsidies provided in the Canadian oil sector was approximately CAD 2.84 billion, of which a major part came from the federal government ($1.38 billion) and the government of Alberta ($1.05 billion).[645] This indicates that 54% of total subsidies are provided as tax breaks and special taxes, 30% as royalty relief of government-owned energy minerals, 15% as direct spending, and less than 2% are to provide credit support or for environmental costs.[646] If royalty relief were also considered as a tax expenditure, then tax-related subsidies would amount to 84% of total subsidies.

The study has interesting implications for current and projected (till 2020) subsidies. It finds, *inter alia*, that subsidies have a slight positive impact on economic activity, increase the level of oil production, in particular non-conventional production, and significantly raise net oil exports.[647] However, as subsidies drive production, they produce more emissions, albeit in smaller proportions compared to the dynamics of economic activity, oil production and oil exports.[648]

Going back to the GSI's Subsidy Data Review Table, out of the eleven types of measures identified, seven were put aside earlier because they were legitimate under, or excluded from the coverage of, the WTO rules. The three studies later justified such exclusion – among the eleven types of subsidies, only three were found in practice in the upstream petroleum industry: direct spending, tax breaks and special taxes, and credit support. A joint study prepared by the IEA, OECD, World Bank and OPEC in connection with the G-20 Pittsburgh Summit of 2009 also supports this finding, though only partially. A number of other studies have found that a major part of governmental support to fossil fuel producers comes in the form of tax

[644] Sawyer & Stiebert, *supra* note 632, at 11. Notably, Sawyer & Stiebert adopted the Agreement on Subsidies and Countervailing Measures' definition of subsidies for their study, recognizing is as a fair compromise between the broad definition used by environmentalists and the narrow concept used to justify subsidies for development needs.
[645] *Ibid*. at 29.
[646] *Ibid.* at 32.
[647] *Ibid*. at 65.
[648] *Ibid*. at 66.

expenditures and support to R&D.[649] The only measure which was not excluded earlier and was not identified by the two studies in the upstream sector is "market price support and regulation". This measure is rather a consumption subsidy associated with the downstream industry and, perhaps for that reason, was not identified in the upstream petroleum industry by the two studies.[650]

In the case of Canada, direct spending appeared in the form of (i) direct state involvement in specific petroleum projects, together with the budgets of governmental departments; (ii) infrastructure support; and (iii) government support to R&D. In general, none of these measures are considered to be red light subsidies prohibited under Art. 3 of the Agreement on Subsidies and Countervailing Measures, as they are neither export subsidies nor import substitution subsidies.[651] Moreover, the types of governmental support described under the first sub-category are not subject to the subsidies discipline because, *ceteris paribus*, state involvement in projects implies a commercial interest of the state either through equity or share in the production output, whereas budgets of governmental departments – as a form of governmental support – should be viewed as either non-specific or exempted from the general GATT discipline as a measure necessary to secure compliance with laws or regulations which are not inconsistent with the GATT.[652] Furthermore, direct state involvement in specific petroleum projects or the budgets of governmental departments may confer certain benefits to the industry but do not imply financial contribution to the recipients of such benefits. This does not satisfy the two-step analysis

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[649] IEA, OECD, World Bank & OPEC, *Analysis of the Scope of Energy Subsidies*, *supra* note 612, at 20. According to this source, total government expenditure on R&D related to fossil fuels in the world was around USD 1.7 billion in 2008. This includes expenditures made on R&D related to enhanced oil and gas production; un-conventional oil and gas production; refining, transport and storage of oil and gas; oil, gas and coal combustion; and oil, coal and gas conversion; as well as the capture and storage of carbon emissions from combustion.

[650] In this work, market price and regulation are reviewed later as a consumption subsidy in the section analyzing subsidies to the downstream sector.

[651] This is a generalized view because details of these measures are not provided in the studies.

[652] Art. XX(d) of the GATT. Otherwise, budgets of all industry specific governmental departments (including ministries of oil and gas or petroleum directorates existing in some countries) should be viewed as subsidies.

requirement established for the definition of a subsidy by the ASCM; in other words, no subsidy exists unless both financial contribution and benefits are conferred upon the recipient.[653]

The studies do not provide details of state support to R&D and infrastructure. It is not clear whether both benefits and financial contributions are provided to the beneficiary in these cases. The support may be presented in many forms, some of which may fall into the subsidies discipline, and others which may not. For example, if support is provided to general infrastructure, it is non-specific and, apart from that, is explicitly excluded from the ASCM's definition of a subsidy.[654] However, the construction of a pipeline on the account of the state budget may be regarded as a specific subsidy and therefore be subject to the ASCM's yellow light regime. Similarly, R&D support to the geological mapping of the province of Alberta would be regarded as non-specific, whereas funding provided from public sources to research enhanced petroleum production techniques would be considered as an actionable specific subsidy.[655]

After identifying an actionable subsidy, a challenging party must demonstrate that the subsidy causes adverse effects on its trade interests. This is not an easy task when support to infrastructure and R&D are examined, even if an oil pipeline was constructed from the inner lands of one state to the borders of another state or the subject of supported R&D was a cost benefits analysis of the construction of such a pipeline. Domestic producers of the challenging party may experience an injury in the very short term after crude oil from the new pipeline arrives at the border. However, very soon the local price of oil will adjust to the world price and excess volumes of crude will be absorbed by other locations.

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[653] The requirement for a two-step analysis stems from the relationship between paragraphs (a) and (b) of the ASCMs Art. 1.1. This requirement has been confirmed in the WTO Panel report, *United States – Measures Treating Export Restraints as Subsidies*, adopted 23 August 2001, WT/DS194/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: *US – Export Restraints*], at paras. 8.73–8.74.

[654] The definition of subsidy provided in the ASCM's Art. 1.1(a)1(iii) states *inter alia* that a subsidy shall be deemed to exist if a government provides goods or services other than general infrastructure, or purchases goods.

[655] It is not clear why environmentalists should oppose subsidies to support R&D in upstream oil and gas activity. Such activities usually produce more environmental benefits than harm because they aim to improve efficiency in certain operations or of certain tools and equipment from both economic and environmental perspectives. Moreover, much R&D is conducted to improve health, safety and environment aspects in the oil and gas industry. Other R&D, such as geological mapping, may be environmentally neutral but may reduce transaction and operations cost.

Moreover, since the majority of petroleum producing companies are vertically integrated, their downstream subsidiaries are likely to benefit from cheaper imported oil as much as their upstream subsidiaries may suffer. As the weight of independent oil producers, which do not have downstream arms, is usually small (in terms of production, revenue or personnel employed), it would be difficult to organize an effective lobby campaign. For example, in August 1999, the U.S. Commerce Department dismissed an antidumping and countervailing duty petition filed by a coalition of independent U.S. oil producers – the Committee to Save Domestic Oil – against Venezuela, Mexico, Iraq and Saudi Arabia, saying that there was not enough industry support for the petition to move forward because large oil companies such as Exxon Corp. and Texaco Inc. opposed the petition. These companies argued that if antidumping duties went forward, the four countries would be forced to sell oil normally sold to the U.S. on the world market, causing a glut in oil supply and driving prices down worldwide (including in the U.S.).[656]

In the case of the Indonesian study, the direct spending appeared in the form of oil DSO, which is deemed to be a subsidy to Pertamina's refineries.[657] The basic characteristics of Indonesian DSO were described earlier in Chapter IV.[658] To recall, the DSO is an obligation of both Pertamina and a private party under PSA to sell up to 25% of their profit-oil to the domestic market at market price during the first five years of production, and thereafter at fifteen per cent of the market price. In any case, DSO is exercisable only at the request of the host state if annual cost-oil is sufficient to recover operating costs. It has been stated by the Indonesian legislator that this measure is designed to procure a stable supply of petroleum to meet the domestic need for fuel.[659]

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[656] "U.S. Commerce Department rejects oil dumping case" *BRIDGES Weekly Trade News Digest* Vol. 3, No. 32, 16 August 1999, online: <http://ictsd.org/downloads/bridgesweekly/bridgesweekly3-32.pdf> accessed on 1 May 2012. For a detailed review of the case, see William C. Smith, *Save Domestic Oil, Inc.'s Crude Oil Market Dumping Petition: Domestic and International Political Considerations*, (2000-2001) 8 Tulsa J. Comp. & Int'l L. 147.

[657] As has been stated above Indonesian gas DSO may also represent a subsidy, but the relevant study could not come up with ultimate conclusion as further research was required. See Braithwaite, *supra* note 630, at 10.

[658] See *infra* Chapter IV.

[659] Basic provision is established in Art. 22(1) of the Indonesian Law No.22/2001 Concerning Petroleum and Natural Gas dated 23 November 2001, read in view of paragraph (b) of the Law's preamble. Official interpretation to this provision is provided in the Elucidation on Law No.22/2001 Concerning Petroleum and Natural Gas annexed to the law. See the Statute Book of the Republic of Indonesia of 2001 Number 136.

Indonesian refineries receive the DSO oil regardless of whether they are willing to export more petroleum products or use domestically extracted oil to substitute for imported oil. Incentives and operations of refineries do not, in principle, affect the amount of oil they get as part of the DSO obligations of oil producers. Since DSO is not contingent upon import substitution or increased export volume, it may not be considered as a red light subsidy to refineries.

From a tax perspective, the DSO share may be treated as a royalty or the government's stake, which is disposable under terms and conditions suiting the owner's needs. Nevertheless, if sold below market price, it may be considered as revenue foregone, and therefore shall represent a financial contribution to the relevant refineries.[660] In such a case, the benefits for domestic refineries are clearly conferred in terms of discounted inputs. Thus, it represents a subsidy and, since only domestic refineries receive it, it is an actionable subsidy.

However, a WTO Member wishing to challenge the Indonesian DSO has to overcome a handful of problems to prove injury to its domestic industry. Unlike land-locked oil producing states, Indonesia has a very diversified market for its oil exports, including such large consumers as the EC, China, India, Japan, Korea and the U.S. The portion of oil directed to these markets is relatively small compared to the aggregate supplies from different sources, but the portion that could be attributed to oil undelivered because of DSO would be even smaller. This is because DSO may come only from profit-oil (cost-oil supplies may be larger or smaller than profit-oil); it is limited to a maximum of 25% of profit-oil from each oil field; it is exercised only when the government so requests; and it is sold at a discounted price only after five years of production. Moreover, the government of Indonesia may seek justification of the DSO under the general exceptions provided in Art. XX of the GATT where the relevant conditions are met.[661]

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[660] Paragraph (ii) of Art. 1.1(a)1 of the ASCM.

[661] GATT Art. XX(i) exempts restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry during periods when the domestic price of such materials is held below the world price as part of a governmental stabilization plan. At the same time, GATT Art. XX(j) provides a safe harbor for measures essential to the acquisition or distribution of products in general or local short supply.

Whether in the case of Canadian support to R&D and infrastructure or Indonesian DSO, what is applicable to oil may not work in the same way for natural gas. Gas is not a global commodity like oil; its prices differ substantially regionally and its supplies are not easily absorbable by neighboring markets due to transportation issues and the less-integrated industry structure. Although a thorough economic analysis is required on a case-by-case basis, it may be expected that gas cases are relatively easier to challenge than oil cases from the WTO perspective.

As has been noted above, direct spending is not the largest category of potential subsidies. The most prevalent type, according to research, takes the form of preferential fiscal treatment, which includes tax breaks, special taxes, customs duty and royalty exemptions, as well as accelerated tax depreciation allowances for capital equipment. Whether preferential tax treatment can be considered as a subsidy has been analyzed in the WTO jurisprudence.

In the *United States – Tax Treatment For Foreign Sales Corporations*, the AB held that in finding a subsidy in the form of tax revenue foregone, it has to be established whether there was initial government entitlement to the general category of revenue and then whether exemption from this entitlement was provided.[662] In *Canada – Certain Measures Affecting the Automotive Industry*, the AB found that exemption from payment of import duty for automobiles that met the terms of the Motor Vehicles Tariff Order constituted revenue foregone.[663] Thus, both tax and custom duty reliefs may be considered as financial contributions in terms of revenue foregone. The resulting decrease in the taxpayer's expenses proportionally increases his income and, therefore, confers a benefit to the taxpayer, which implies the existence of a subsidy.

[662] AB Report, *United States – Tax Treatment for "Foreign Sales Corporations"*, adopted 20 March 2000, WT/DS108/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012, at para. 90.

[663] AB Report, *Canada – Certain Measures Affecting the Automotive Industry*, adopted 19 June 2000, WT/DS139/AB/R, WT/DS142/AB/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: *Canada – Autos*] at paras. 90–94.

In most cases the preferential fiscal treatment is designed to facilitate investment into the exploration and development of high-cost oil and gas fields.[664] The reasons for such state support are, in fact, tax-related. Investment in oil and gas is risky, capital intensive, and needs long-term certainty.[665] Indeed, why should a government provide preferential treatment for an industry which experiences no difficulties with returns on investment? If no state support is provided, the companies would not invest in the industry and petroleum production would decline. As a result, governments would not be able to collect taxes and royalties from the petroleum industry, an industry which generates more revenue for governments than any other.[666] This means that if a government does not provide subsidies it would forego more revenue than the cost of the subsidy. Should preferential tax treatment then be considered as revenue foregone for the purposes of defining a subsidy? One might suggest that the revenue which could theoretically arise from undeveloped oilfields may not be considered as accrued and is, therefore, foregone revenue. However, in most cases, preferential tax treatment is also provided before an oilfield is developed and therefore there is no certainty as to whether taxable income or royalties would ever appear in the accounts of the taxpayer.

Moving away from definitional problems, it is clear that preferential tax treatment for high-cost field development is specific to the oil and gas industry. Hence, tax subsidies are actionable. However, as was the case with direct spending subsidies, it is difficult to prove the adverse effect of the foreign tax-related subsidies on the domestic oil industry of a complaining party because tax breaks in one or several countries may have little or no effect on world oil prices.[667] Accordingly, the amount of injury caused by such foreign tax-related subsidies to the domestic industry is hardly ascertainable.

A similar problem is inherent to the other category of subsidies discovered in the studies reviewed – credit support subsidies, which are represented by government loans or loan

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[664] See, in general, Wooders & Lang, *supra* note 619.
[665] *Ibid*. at 29
[666] *Ibid*. at 28
[667] The neglectful effect of tax breaks on the world oil prices is acknowledged by Wooders & Lang, *ibid*. at 18.

guarantees, subsidized credit to government-owned energy enterprises or infrastructure, or subsidized credit to energy-related exports via export credit agencies or multilateral development banks. However, apart from the common problem of identifying the adverse effects of the measure, this category has distinct definitional complications because of the specifics of related financial transactions. Before explaining this, it should be noted that interest rates depend on the level of risk associated with the borrower's business and the competition among suppliers of financial services.

First of all, petroleum producers, thanks to stable cash flows generated by stable demand for their product, as a rule enjoy lower interest rates than most other industries. To assess the fair market value of credit provided to petroleum producers, one should compare it with other financial transactions within the petroleum industry, rather than with other sectors. Since IOCs and most NOCs are financially robust, they depress the median interest rate receivable in the industry's loan market.

Secondly, foreign state-owned banks may be used to procure a stable energy supply for importing states. For example, both the US Export-Import Bank and the China Development Bank provided PETROBRAS with cheap loans for developing Brazilian oil deposits in the pre-salt layer.[668] On the one hand, foreign credit from foreign development banks may not be considered as subsidies; on the other hand, they reduce the aforementioned median interest rate.

Thirdly, a lower interest rate set by a government or its financial institution for a loan to its NOC is justifiable under purely commercial reasons. The government controls the NOC and the risks associated with its business. Moreover, in the private market, shareholder companies customarily provide interest-free financial assistance to their subsidiaries. Why then can a government not do the same with its NOC? Alternatively, governments are unlikely to provide guarantees for private beneficiaries; instead, they do so for NOCs under similar reasoning, as

[668] *US Financial support for Brazil to develop massive offshore pre-salt oil deposits*. Mercopress, 7 August 2009. Online: Mercopress <http://en.mercopress.com/2009/08/07/us-financial-support-for-brazil-to-develop-massive-offshore-pre-salt-de> accessed on 10 July 2011.

private companies provide guarantees for the benefit of their subsidiaries free of charge, whereas they would not do so for unrelated companies.

Credit support may be viewed as a subsidy if it is provided under non-market terms. However, the terms used as the market benchmark in subsidy assessment should be comparable. If a petroleum company, compared to borrowers from the agricultural or textile sector, enjoys a considerably lower interest rate, it would not necessarily mean a subsidy. Even within the petroleum industry the variance between the interest rates of two oil companies may be very large for multiple reasons that have to be assessed on a case-by-case basis. As a result, a contested credit support would need to be analyzed against a range of low and high interest rates customarily applied in the industry. Since the benchmark range may be considerably wide, it is doubtful if the comparison-test would produce unequivocal results.

As has been shown above, it is difficult to challenge subsidies applied in the upstream petroleum industry under the ASCM rules. Although one study recorded growth in the net oil exports of Canada as a result of overall industrial subsidy policy, it is difficult to attribute export dynamics to a single or several measures; otherwise, such subsidies may be considered as red light subsidies prohibited by the ASCM. In fact, unless production is declining sharply or domestic consumption intensifies rapidly, any petroleum exporting state will experience export expansion as a result of governmental support in the upstream sector. Due to the uneven distribution of petroleum resources in the world, any restriction imposed on petroleum export promotion would lead to a shortage of the energy resources in importer states.

According to the IEA, the decline rates of oil and gas fields are likely to accelerate in the near future, which means that more upstream investment is needed now to offset the falling production from existing fields and to meet rising demand.[669] In the absence of governmental support, private companies would not be able to invest in the development of high-cost fields. A small shortage of petroleum in the market may raise its price disproportionately. Used as input in

[669] IEA, *World Energy Outlook 2008*, *supra* note 282, at 42.

the production of every commodity, expensive energy would boost prices for all commodities, thereby reducing global welfare.

5.4.2. Downstream sector

Downstream sector subsidies are included in this thesis because governmental support to the refining and processing of petroleum as well as consumption of its products may affect the market for crude oil, natural gas and basic petroleum products. Among the various types of support measures practiced in the downstream industry, we focus on consumption subsidies because of their direct effects on the petroleum market. Provision of petroleum inputs at subsidized prices, such as petroleum used in the production of electricity, fertilizers and fuels, is also considered herein as a consumption subsidy. It has to be noted that, unlike in the upstream sector where certain types of subsidies may be environmentally friendly (for example, R&D subsidies for enhanced oil recovery technique or subsidies for site closure), the downstream sector subsidies, as a rule, encourage the wasteful consumption of natural resources because the reduction of consumer prices below the full cost of supply leads to excessive use.

According to the IEA estimates, fossil-fuel consumption subsidies amounted to $312 billion worldwide in 2009, and comprised subsidies for fossil fuels used in final consumption and for fossil-fuel inputs to electric power generation.[670] Out of this amount, subsidies to oil products and natural gas totaled $126 billion and $85 billion respectively.[671]

The IEA estimates are based on the price-gap approach, which compares a final consumer price in a domestic market with a reference price.[672] The reference price is the international market price adjusted for the cost of transportation and distribution. The price-gap approach has been subjected to some criticism, especially by energy resource-rich countries who argue that, as far as their markets are concerned, the appropriate method should be based on the

[670] IEA, *World Energy Outlook 2010*, *supra* note 61, at 578. The fossil-fuel consumption subsidies amounted to $558 bln. in 2008 and $343 bln. in 2007. The magnitude of energy subsidies fluctuates due to changes in world prices, domestic pricing policy, exchange rates and demand. Declining world prices were the main reason for the sharp drop between 2008 and 2009. See *ibid*. at 580.
[671] *Ibid*. The rest was attributed to subsidies to electricity consumption ($95 bln.) and coal subsidies (6 bln.).
[672] *Ibid*. at 575.

cost-gap approach.[673] Moreover, the price-gap approach is difficult to apply to natural gas because, unlike crude oil, it does not have liquid markets and therefore, fair international market prices.[674]

Clearly, the choice between the two approaches is of crucial importance for the estimation of subsidies. Under the cost-gap approach, most of the subsidies estimated by the IEA for petroleum producing states would slip away from consideration. Since the WTO rules do not address the issue of reference price, there is no certainty as to which approach would be taken by the DSB if a subsidy policy were contested. The problem is that it is difficult to derive and justify any approach that could compromise the two extreme methodologies. A reference to prices used in neighboring states would hardly be justifiable as countries differ considerably in their economic structure, petroleum consumption and production patterns, and geophysical characteristics of oil and gas fields. Moreover, it would also require proof that a neighboring state's prices reflect the just economic value of petroleum. Hence, it is unlikely that a reference price derived by the DSB in the case of a dispute would be just or, at least, acceptable to all of the parties involved in the dispute.

Consumption subsidies are provided through various means: direct financial transfers to consumers, rebates on purchases of petroleum, tax concessions and administrative price regulation.[675] Depending on the recipients of the benefits, consumption subsidies can be broken down into two sub-categories: house-holding and industrial subsidies. The subsidies of these sub-categories may be provided through any of the aforementioned means; however, the direct

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[673] Ibid. at 578. According to the IEA, "the basis for this view typically is that these countries are using their natural resources in a way that effectively promotes their general economic development, and that this approach more than offsets the notional loss of value by selling the resource internally at a price below the international price. The counter-argument is that such an approach results in an economically inefficient allocation of resources and reduces economic growth in the longer term."

[674] Energy Charter Secretariat, *Putting a Price on Energy*, *supra* note 22, at 204.
Actually, this was one of the main arguments made by Russia in refusing the EC's demand on liberalization of domestic prices for natural gas during bilateral negotiations on Russia's accession to the WTO. Russia argued that there was no international market price for natural gas and that even within the EC prices varied substantially; therefore, its dual pricing policy should not be viewed as an actionable subsidy under the ASCM. See Sergey Ripinsky "The system of gas dual pricing in Russia: compatibility with WTO rules" (2004) 3 World Trade Review 463, at 464.

[675] IEA, OECD, & World Bank, *The Scope of Fossil-Fuel Subsidies in 2009 and a Roadmap for Phasing Out Fossil-Fuel Subsidies,* Joint Report prepared for the G-20 Summit Meeting, Seoul (Republic of Korea), 11-12 November 2010, online: < http://www.worldenergyoutlook.org/docs/second_joint_report.pdf> accessed on 23 May 2011, at 6.

financial transfers to consumers and the rebates on purchases of petroleum are mostly used to target house-holdings.

The house-holding subsidies are provided to the general population or can be targeted at specific social groups. In both cases, the recipients are the end-users of petroleum. According to Art. 2.1. of the ASCM, this type of subsidy should be treated as non-specific because specificity under the discipline must relate to either enterprises or industries. Although, if there is a large number of recipients, the house-holding subsidies may affect the domestic and regional prices for certain petroleum products; the consumers themselves do not cause alterations in trade flows.

Tax concessions, if viewed as consumption subsidies, are provided in the form of excise tax exemptions for fuel used in air, rail and water transport as well as for vehicles and machinery used in the agricultural sector.[676] Such subsidies are likely to be specific to certain types of enterprises or industries. However, in such a case, it is the final goods and services produced by subsidized enterprises that need to be examined under the WTO rules, rather than the petroleum products themselves. Moreover, in the case of agricultural producers, the tax concessions related to petroleum can be viewed as agricultural input subsidies, which are regulated not by the ASCM, but by the less stringent subsidies discipline laid down in the Agreement on Agriculture.[677]

Administrative price regulation, or what the GSI calls direct price control under the category "market price support and regulation", is probably the most widely used and sharply criticized means of providing consumption subsidies.[678] This type of governmental support may

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[676] *Ibid*. at 7.

[677] According to Art. 3 of the Agreement on Agriculture, a Member state may provide support (including export subsidies) to domestic producers within the levels specified in its schedules of commitments with respect to specified agricultural products. Although the Member states are obligated to reduce the specified levels of support, pursuant to Art. 6 of the Agreement on Agriculture, agricultural input subsidies of developing countries are not subject to the reduction commitments.

[678] Under the administrative price regulation the government sets the price for crude oil, natural gas, petroleum products below their fair value. Given the aforementioned controversy over the reference price and depending on each country's market conditions, the fair value may refer to the international market price (for states with no domestic petroleum production), the cost of production (for states with domestic production), the price of goods in the domestic private market (if there are private producers who are not involved in the provision of subsidized goods). The subsidizing government may fix or cap the wholesale and/or retail prices in the domestic market, or may use formulas for pricing of the domestic goods pegged to world market prices, or may apply other pricing techniques.

be exercised by both petroleum exporting and importing states. For example, Russia and Iran, the largest natural gas producers, and China and India, two of the largest energy consuming economies, all use or have recently used natural gas under-pricing in their domestic markets.[679] The bulk of the critique is directed at petroleum exporting states who sell petroleum in the domestic market at a considerably lower price than what they charge in export markets. This practice, also known as dual pricing, received much attention from the international trade community in the Tokyo and Uruguay Rounds.[680] During the Doha Round negotiations, dual pricing policies were revisited. The US delegation stated:

> Government measures and practices affecting natural resources and energy touch on issues of state sovereignty and normally involve difficult questions of fair market value prices, and thus, have been sensitive and controversial topics. While the principle that trade flows should be determined by comparative advantage is broadly accepted, it must also be accepted that preferential natural resource pricing has been and, if not addressed, will continue to be a source of considerable trade distortion and friction. Simply put, there is no difference between the government provision of a natural resource at less than fair market value and the government provision of a cash grant allowing the purchase of a natural resource at less than fair market value… The advantage provided to domestic producers in this situation unfairly magnifies the comparative advantage that would otherwise be determined by market forces and production efficiencies.[681]

The Doha Round's call for a revision of WTO law on natural resource input subsidies, and the fact that the petroleum dual pricing mechanism has not been tried in the WTO

The administrative price regulation may be viewed as a price support mechanism, which is listed as an element of subsidy in Art. 1.1(a)2 of the ASCM. The ASCM's provision requires that a price support must be in the sense of Art. 16 of the GATT 1994. According to the GATT's Art. 16.1 the price support falls into the subsidies discipline if it "operates directly or indirectly to increase exports of any product from, or to reduce imports of any product into, its territory". If discounted petroleum is used as an input in the production of other goods, the administrative price regulation reduces the cost of production of such goods, which potentially may lead to an increase in exports and a decrease in imports of the commodities. As a result of the reduced price, producers receive benefits in the form of discounted petroleum or, in other words, in terms of savings on input expenses. Hence, basic elements required by the definition of subsidy are present in the administrative price regulation.

It should be noted that administrative lowering of the price is not contingent upon the export volumes or the ratio of used domestic and imported goods. Thus, it cannot be considered as prohibitive subsidy. To be viewed as an actionable subsidy, it has to be tested whether the subsidy is specific and, if so, whether it causes detrimental effects on the countries concerned. As the two tests are highly dependent on the peculiarities of the industrial and market structures of each state, it is difficult to apply them apart from concrete realities.

According to the GSI's classification, the subcategories of the market price support and regulation include direct price controls, consumption mandates or restrictions, border protection or export restriction, and regulatory loopholes (see Koplow, *supra* note 623, at 14). Among them, administrative price regulation coincides with the direct price control subcategory.

[679] See IEA, *World Energy Outlook 2010*, *supra* note 61, at 597 for Iran, at 599 for Russia, at 604 for China, and at 608 for India. The dual pricing practice is widely used in the world, see generally Selivanova, *Energy dual pricing*, *supra* note 147.

[680] See Yulia Selivanova's article on the same issue published earlier (concurrently with Ripinsky's article, *supra* note 674) and Simonetta Zarrilli, "Dual Pricing Practice and WTO Law" (2005) 3 Oil, Gas, and Energy Law Intelligence (OGEL), online: OGEL <www.ogel.org> accessed on 23 July 2010.

[681] Communication of the United States to the Negotiating Group on Rules, WTO Doc. TN/RL/W/78, 19 March 2003.

jurisprudence, reflect the weakness of the subsidies discipline towards petroleum dual pricing.[682] Actually, there is a host of arguments presented in the relevant literature as to why the WTO subsidy discipline falls short of regulating the dual pricing mechanism. For example, based on a study of Russia's Gazprom's practice of charging different domestic and export prices for natural gas, two commentators conclude that the Russian practice does not constitute a prohibited subsidy because it is not contingent upon export performance or import substitution.[683] It does not represent an actionable subsidy either, because the natural gas is not supplied to specific enterprises or industries whether *de jure* or *de facto*.[684]

It is interesting to note that both commentators recognized that the Russian practice is likely to meet the criteria of financial contribution, as this concept is applied in the definition of a subsidy provided in Art. 1.1. of the ASCM.[685] Drawing on the findings made in *US – Export restraints*, they suggest that Gazprom may be considered as a private body which is entrusted or directed to carry out governmental functions related to conducting subsidy policy.[686] This suggestion is doubtful because, in fact, Gazprom is not entrusted or directed to carry out governmental functions but it is commanded to cap the price at a particular level under natural monopoly regulations. The Russian Federal Tariff Service, which is responsible for controlling the tariffs of natural monopolies, sets wholesale tariffs for natural gas destined for industrial and power sector use.[687]

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[682] The maximum price control measures are dealt with in the GATT Art. III(9), which states:

> The contracting parties recognize that internal maximum price control measures, even though conforming to the other provisions of this Article, can have effects prejudicial to the interests of contracting parties supplying imported products. Accordingly, contracting parties applying such measures shall take account of the interests of exporting contracting parties with a view to avoiding to the fullest practicable extent such prejudicial effects.

However, this provision is hardly applicable to petroleum exporting states with respect to the price control measures exercised in their domestic markets.

[683] Selivanova, *Energy dual pricing*, *supra* note 147, at 143; and Ripinsky, *supra* note 674, at 477.

[684] *Ibid*. Selivanova at 144, Ripinsky at 480.

[685] *Ibid*. Selivanova at 117, Ripinsky at 471.

[686] In *US – Export restraints* the Panel stated:

> "[t]o our minds, both the act of entrusting and that of directing therefore necessarily carry with them the following three elements: (i) an explicit and affirmative action, be it delegation or command; (ii) addressed to a particular party; and (iii) the object of which action is a particular task or duty. In other words, the ordinary meanings of the verbs "entrust" and "direct" comprise these elements – *something* is necessarily delegated, and it is necessarily delegated *to someone*; and, by the same token, *someone* is necessarily commanded, and he is necessarily commanded *to do something*." [emphasis original]

US – Export restraints, *supra* note 653, at para.8.29.

[687] IEA, *World Energy Outlook 2010*, *supra* note 61, at 599.

Natural monopolies are regulated in most, if not all, countries in the world. It is highly questionable if any national regulator sets the prices charged by natural monopolies for their goods and services with reference to international or any market prices. As a rule, the prices are capped on a cost-plus-profit basis, whereby a natural monopoly receives revenue sufficient to earn reasonable profit after covering its expenses, including those necessary to implement related investment programs. When the EC claimed unfairness of Russia's natural gas dual pricing mechanism during bilateral negotiations on the latter's accession to the WTO, Russian negotiators asserted that the prices were leveled to permit Gazprom to recoup economically justified expenses and sufficient profit.[688] This is confirmed by the fact that Gazprom was recognized as the world's most profitable company in 2009 despite ranking 50th in revenue.[689]

An undertaking to discontinue dual pricing measures was also requested by the EC from Saudi Arabia during its accession to the WTO.[690] It has been observed that initially Saudi Arabia reflected a commitment to eliminate dual pricing, but at the final stage of negotiations it withdrew the commitment, not least because the EC did not insist on elimination of dual-pricing of gas in the Russian case.[691] Saudi Arabia explained the reasons for maintaining dual pricing mechanism for natural gas as follows:

> Natural gas was not sold for export due to the high costs of liquefying, transporting and re-gasifying such gases, and therefore had no international reference price in the Gulf region. Previously, natural gas had been burnt as a waste product, but was later collected and made available to all interested users on a non-discriminatory basis (whether Saudi or non-Saudi)[...] This decision was taken based on a combination of commercial reasons and environmental concerns. Rather than burn valuable natural resources, Saudi Arabia had taken steps to conserve and exploit those resources consistent with WTO disciplines. Natural gas was used by many

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688 Ripinsky, *supra* note 674, at 464

689 "Gazprom most profitable firm on Fortune Global 500", *Reuters*, 8 July 2010, online: Reuters < http://www.reuters.com/article/2010/07/08/us-fortune500-global-idUSTRE6673LN20100708> accessed on 23 July 2010.

690 See EU Press Release of 30 August 2003 "Accession of Saudi Arabia to the WTO: Conclusion of the EU-Saudi Arabia Bilateral Market Access deal", online: EU Trade News <http://trade.ec.europa.eu/doclib/docs/2003/october/tradoc_114038.pdf> accessed on 14 April 2014. In this press release Pascal Lamy, then EU Trade Commissioner who led bilateral negotiations with Saudi Arabia on behalf of the EU, noted: "we particularly value the decision that Saudi Arabia has taken to comply with all WTO rules by the time of accession and to eliminate a number of obstacles to international trade like bans on the importation of certain food products and the dual-pricing of gas products." On negotiations over dual pricing in the process of accession of Saudi Arabia see generally Haghighi, *supra* note 147.

691 Reinhard Quick, "Further Liberalization of Trade in Chemicals – Can the DDA Deliver? A Summary of the Chemical Industry's Positions on the Doha Development Agenda" (2006) 1 Global Trade & Customs Journal 1 at 8.

sectors, including power companies, desalination plants, cement manufactures and petrochemical plants.[692]

It is true that the dual pricing policy for natural gas triggered the rapid development of the Saudi Arabian petrochemical industry.[693] State-owned Saudi Basic Industries Corporation is now one of the world's leading manufacturers of chemicals, fertilizers, plastics and metals. Currently, the national industry's capacities by far exceed the demand in the region, making Saudi Arabia one of the most powerful players in the world market for petrochemical products.[694] Nowadays, it is difficult to assess what the world would have gained if there was no dual pricing on natural gas in Saudi Arabia. Perhaps the world petrochemical market would have had less competition, the environment would have received thousands of tones of CO2 emissions due to flared associated gas, and millions of cubic meters of gas would have been wasted.

As has been discussed at the outset of this section, an uninformed decision to impose a countervailing measure or prohibit a subsidy may harm the economy as much as would the use of the subsidy itself. Some subsidies may be beneficial to trade flows and global welfare; perhaps Saudi Arabian dual pricing policy represents such a case. Unfortunately, the trade actions of states within the WTO framework are increasingly driven by the interests of business groups, rather than global welfare considerations. By accommodating powerful business groups, a government may take actions detrimental to the welfare not only of other states, but also of its own population and weaker industries as well. Thus, before addressing the issue of petroleum subsidies, WTO arbitrators, trade investigators, politicians, economists and lawyers do need to expand the scope of their inquiries into the nature and effect of subsidies. Apart from economic and environmental concerns related to petroleum consumption subsidies, a decision maker must take into account the implications of the subsidy policy for social stability. A government, which is compelled to eliminate such subsidies, may face social instability and lose electoral support. In

[692] Report of the Working Party on the Accession of the Kingdom of Saudi Arabia to the WTO, 1 November 2005, WTO Doc. WT/ACC/SAU/61, para 29.
[693] See Gray & Walter, *supra* note 451.
[694] Quick, *supra* note 691, at 8.

many cases where governments increased energy prices, common responses were social unrest, violence and protests.[695]

5.5. Conclusion

As has been shown above, it is difficult to challenge subsidies applied in the petroleum industry under the ASCM rules. Apart from the definitional problems inherent in the legal discipline, a WTO Member willing to challenge petroleum subsidies under the ASCM will have difficulty in proving that a subsidy is contingent upon export performance or upon the use of domestic over imported goods (in the case of red light subsidies), or that a subsidy negatively affected trade flows (in the case of yellow light subsidies). Moreover, many types of petroleum subsidies are not specific and, therefore, not actionable. However, the core problem lies neither in the burden of proof nor in the specificity of subsidies, but in the long lasting disagreement among WTO Members on the conceptual issues pertinent to petroleum subsidies, such as the limits of legitimacy regarding the fiscal policy of states, the limits of state ownership over natural resources, and the fair reference price for natural resources against which state measures must be evaluated. The WTO regime defines no clear borders within which the regime manager can freely address these conceptual issues.

The regime manager, whether through its DSB or other bodies, may approach the problematic conceptual issues from the neoclassical perspective and take a stricter attitude towards petroleum subsidies. However, if WTO Agreements are interpreted in a holistic way and no prevalence is assigned to the non-trade objectives of the WTO system, this would require the WTO bodies to take similarly strict attitudes towards renewable energy subsidies.

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[695] For example, rising energy prices as a result of elimination of governmental support lead to mass protests in Egypt (1977), Morocco (1981, 1984), Tunisia (1984), Jordan (1989, 1996), and Yemen (2005). In many cases (Tunisia 1983, Morocco 1981, Egypt 1977, Yemen 2005) due to social unrest price increases had to be reduced or rescinded (see IEA, OECD, World Bank & OPEC, *Analysis of the Scope of Energy Subsidies, supra* note 612, at 37). More recently, in January 2011, Bolivia reversed reductions in subsidies for gasoline, diesel and jet fuel due to mounting political pressure, strikes and demonstration. At the same time, in Chile, a planned reduction in subsidies for natural gas in the country's southernmost Magallanes region was revised due to ongoing protests. See IEA, *Recent Developments in Energy Subsidies* (2011) online: IEA <http://www.iea.org/weo/Files/ann_plans_phaseout.pdf> accessed on 26 August 2011.

If petroleum subsidies are prohibited, under constantly high prices for primary energy resources, renewable energy may, in the long-run, replace petroleum to a certain extent. However, since renewable energy subsidies will be also banned, a considerable time-span will be required for the development of renewable resources up to the replacement level. Within this time-span, the underproduction of energy is likely to occur because of a production shortage of both petroleum and renewable energy. Whether the global economy would gain or lose within such a gap is a question that needs to be answered before prohibiting energy subsidies.

A smooth replacement of petroleum with renewable energy sources may be envisaged if subsidies (both petroleum and renewable energy subsidies) that produce positive gains to trade and global welfare are allowed as contemplated by the STP theory. However, the evaluation of gains in such a case must properly assess the negative environmental externalities producible by certain subsidies, such as subsidies to environmentally unfriendly production of petroleum. This is difficult but doable, if not on the field-specific level then on the country level (the Kyoto Protocol commitments may be used as an analogy). Clearly, these issues cannot be addressed under the existing WTO Agreements. A new instrument is required for these purposes.

CHAPTER VI. TRANSIT OF PETROLEUM

6.1. Introduction

Internationally traded petroleum is transported between producer and consumer states mostly through direct connections by land (pipelines, railcars, trucks) and sea (crude oil and LNG tankers). However, petroleum is often transported through the territory of one or more transit states before reaching its final destination.[696] In this chapter we analyze trade issues pertaining to transit states. Given the importance of a stable supply of energy for both exporting and importing states, transit states play a crucial role in the energy market and in diplomacy. In spite of the importance of transit states, WTO law has only one article specific to transit issues – Art. V of the GATT, entitled "Freedom of Transit".

The concept of freedom of transit has long been discussed in international law, mainly with respect to international waterways and access to high seas for landlocked countries.[697] The principal point of discussion has been the conflict between territorial sovereignty of states and freedom of transit.[698] Two basic conclusions can be drawn from the literature. First, freedom of

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[696] Selivanova defines energy transit as "energy originating in one country (exporter), transiting at least one other country (transit country), and then entering the destination country (importer)". See Yulia Selivanova "Managing the Patchwork of Agreements in Trade and Investment" in Goldthau & Witte, *supra* note 68, at 55. A similar definition is given to the transit of petroleum in Art. 1 of the Agreement on Conduct of a Coordinated Policy in the Field of Transit of Oil and Oil Products Through Trunk Pipelines dated 12 April 1996 among the governments of CIS states (Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan).

[697] See G. Toulmin, "The Barcelona Conference on Communications and Transit and the Danube Statute" (1922-23) 3 Brit. Y. B. Int'l L. 167; E. Lauterpacht, "Freedom of Transit in International Law" (1958) 44 Transactions of the Grotius Society, 313; V. Ibler, "The Land-locked and Shelf-locked State and the Development of the Law of the Sea" (1973) 4 Annals of International Studies 178; K. Uprety, "Right of Access to the Sea of Land-Locked States: Retrospect and Prospect for Development" (1995)1 J. Int'l Legal Stud. 21; K. Uprety, *The Transit Regime for Landlocked States* (Washington D.C.: The World Bank, 2006).

[698] The following quotes from Lauterpacht's article may be viewed as a summary of the discussion. Lauterpacht, while analyzing various views, stated that:

> a strong *prima facie* case may be made out for the view that customary international law places no restrictions upon the sovereignty of a State over its own territory and that questions of transit are as much subject to the absolute discretion of the State as are questions of entry for purposes of sojourn or commerce.

At the same time he suggested that:

> there exists in customary international law a right to free or innocent passage for purposes of trade, travel and commerce over the territory of all States – a right which derives from the fact of the existence of the international community and which is a direct consequence of the interdependence of States.

However, in conclusion he stated:

> the evidence in support of the proposition that, as a matter of customary international law, there exists a principle of freedom of transit which can be stated in these terms is not entirely satisfactory. It must be recognized that direct authority on the question is scant. It is not a matter which has been the subject of judicial decision… The principle is to be extracted, if it is to be established at all, from the practice of States.

E. Lauterpacht, "Freedom of Transit in International Law" (1958) 44 Transactions of the Grotius Society, 313, at 318, 320, 322 & 323.

transit has not been established as a principle of international customary law. Second, the right of transit is subordinated to the territorial sovereignty of states, although such subordination is not absolute.[699] A transit state may not refrain from entering into transit agreement with a neighboring landlocked state if such transit is critical for the economic survival of the landlocked state and causes no significant impairment to the interests of the transit state.

The transit of goods through fixed infrastructure came to the attention of international law studies relatively recently.[700] Increased interest in transit through fixed infrastructure can be attributed to the conclusion of the ECT in December 1994,[701] which regulated the transit of energy goods more comprehensively than any antecedent multilateral treaty.[702] The available studies, taken together, offer a thorough legal analysis of the transit rules of the ECT and GATT, with historical inquiries into the Barcelona Convention and the Statute on Freedom of Transit (hereinafter: Barcelona Convention).[703] Although the literature pays considerable attention to the GATT, the ECT is its main focus, likely because of the difference between the GATT and ECT provisions in their coverage of transit issues.[704]

[699] The perspectives of transit demanding land-locked states (LLS) may be described using Uprety's statement as follows:

> Freedom of transit is thus not a "right" that any State can exercise in other transit States without their consent. To be eligible to claim this right, the demanding State must fulfill certain eligibility criteria. The criteria are considered fulfilled for LLS specifically due to their geographical position and economic dependence, which together create a presumption in their favor of a right of transit.

K. Uprety, *The Transit Regime for Landlocked States* (Washington D.C.: The World Bank, 2006) at 29.

[700] See M. Roggenkamp "Transit of Networkbound Energy: A New Phenomenon?" (1995-1996) 19 World Competition 119; Karl Waern, "Transit Provisions of the ECT and the Energy Charter Protocol on Transit" (2002) 20 (2) J. Energy Nat. Resources L. 172; Pascal Laffont, "An Energy Charter Protocol on Transit" (2003) 8 I.E.L.T.R. 239; A. Konoplyanik "Russia-EU Summit: The ECT and the Issue of Energy Transit" (2005) 2 I.E.L.T.R. 30; D. Azaria "Energy Transit under the Energy Charter Treaty and the General Agreement on Tariffs and Trade" (2009) 27 (4) J. Energy Nat. Resources L. 559; L. Ehring & Yu. Selivanova "Energy Transit" in Selivanova, *Regulation of Energy, supra* note 148.

[701] ECT, *supra* note 400.

[702] In addition to provisions on transit of energy goods, which are more comprehensive than corresponding provisions in the GATT and the 1921 Barcelona Convention on the Freedom of Transit, Art. 7 of the ECT contains special procedural rules for the settlement of transit disputes. Moreover, the contracting parties of the ECT are negotiating a Transit Protocol that will, if it enters into force, supplement, extend, and modify the ECT's existing provisions on the transit of energy. However, the future of Transit Protocol negotiations became dubious after Russia, the most important transit country in the ECT's geographical area, officially declared its withdrawal from these negotiations.

[703] Convention and Statute on Freedom of Transit, done in Barcelona on 20 April 1921, entered into force on 31 October 1922.

[704] Except for article of Ehring & Selivanova (*supra* note 700), which seems to be equally attentive to both the GATT and ECT.

This chapter contributes to this body of legal literature by assessing the practical applicability of trade rules related to the transit of petroleum. We focus on the transit of petroleum by pipelines but also cover other modes of transportation where appropriate.[705] For the purposes of this chapter we define a petroleum transit pipeline as an oil or gas pipeline originating in the producer state, crossing at least one other state (transit state), and entering the consumer state.[706]

6.2. Technical background

A typical petroleum pipeline system consists of several subsystems.[707] The first is the gathering subsystem, which collects petroleum from different fields to a common delivery point.[708] The second subsystem comprises the main pipeline, which transports petroleum over long distances, sometimes passing several transit countries. The main pipeline transports petroleum to either a final consumer (such as a refinery or gas-fired power plant) or to a common distribution point for further transportation by pipelines, sea tankers (oil or LNG), or railcars and trucks (oil).[709] If further transported by pipelines, petroleum enters a third subsystem, the distribution network of pipelines located in the consumer market.

Customarily, a producer delivering petroleum to the entry point of a pipeline will get the same amount of petroleum at the exit point, either immediately or after some time, depending on the contractual terms. Hence, petroleum transported in a pipeline is a fungible good, meaning

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[705] In the international market, petroleum is delivered by pipelines, sea tankers, trains and road transports. Sometimes delivery necessitates use of two or more modes of transportation, e.g. pipelines and sea tankers, or pipelines and railcars. Sea tankers and road transport do not normally enter transit states because tankers mainly use open seas, whereas long-distance road transportation is unacceptably costly.

[706] Stevens defines a transit pipeline "as an oil or gas pipeline which crosses another 'sovereign' territory to get its throughput to market". See Paul Stevens, Transit Troubles. Pipelines as a Source of Conflict (London: The Royal Institute of International Affairs, 2009) online: Chatham House <http://www.chathamhouse.org.uk> accessed on 1 May 2012, at 1.

[707] This description is relevant to crude oil and natural gas pipelines but not petroleum product pipelines. Petroleum product pipelines usually connect a refinery and a large consumer, like an airport in the case of jet fuel; therefore, they have a simpler system and shorter distance, and they rarely cross state borders. For detailed overview of pipeline systems see Thomas Miesner & William Leffler, *Oil and Gas Pipelines in Nontechnical Language* (Tulsa: Penn Well, 2006).

[708] At the common delivery point or before it (if each field has its own central processing unit) petroleum undergoes initial treatment so that it meets the quality requirements necessary for pipeline transportation. See Hyne, *supra* note 17, at 361-374.

[709] The main pipeline is also called transmission pipeline, in the case of natural gas, or trunk line, in the case of crude oil and, rarely, natural gas.

that unless a producer is the sole user of the pipeline, he is unlikely to get exactly the same commodity that he has dispatched through the pipeline.[710]

In many cases petroleum coming from different fields has different physical features and therefore different calorific content. In the main pipeline (and sometimes in the gathering pipeline) petroleum coming from different sources is mixed, in industrial parlance "commingled".[711] The commingled stream pipeline is usually used by multiple shippers of petroleum sourced from different fields, which means that it becomes impossible to distinguish the sources of petroleum after it is mixed in the pipeline.[712] If one or a small number of petroleum sources share common physical characteristics, transportation of such petroleum is processed through the so called "batch stream operation".[713] A batch stream pipeline is usually used by one shipper or a well-organized consortium of several shippers producing from a common location.

In the commingled stream pipeline, low quality petroleum shippers compensate shippers of high quality petroleum as a result of mixed output. Therefore, a commingled stream pipeline requires a more complicated quality measuring and control system, which entails higher operating costs for the pipeline operator who has to apportion (as a rule, on a daily basis) the commingled quantity of petroleum to each relevant shipper.[714] Moreover, the incumbent shippers would naturally refrain from providing third parties with access to the commingled pipeline.[715] The third party access problem is exacerbated in the case of batch stream pipelines, in which the shipper or the consortium restricts acceptance of other petroleum not only because of unwillingness to mix petroleum but also because such acceptance would increase the aforementioned operating costs.

[710] Lucille De Silva & Justyna Bremen, "Oil and Gas Transportation Agreements" in Anthony Jennings, ed., *Oil and Gas Production Contracts* (London: Sweet & Maxwell, 2008) at 155.
[711] *Ibid*. at 198.
[712] *Ibid*.
[713] Energy Charter Secretariat, *Oil Pipeline Tariffs*, *supra* note 26, at 20.
[714] De Silva & Bremen, *supra* note 710, at 198. For the apportionment arrangements see Peter Taff & Richard Tyler "Gas Allocation Agreements" in Geoffrey Picton-Turbervill, ed., *Oil and Gas: A Practical Handbook* (London: Business Publishing Ltd., 2009) at 187.
[715] De Silva & Bremen, *supra* note 710, at 199.

Except for rare cases in the gathering system, crude oil and natural gas are not mixed and are transported separately through different pipelines.[716] The gaseous nature of natural gas makes its transportation considerably more expensive than crude oil's transportation. Due to differing heating contents (or calorific values), oil pipelines transport several times as many kilocalories as gas pipelines of the same diameter.[717] If natural gas is subjected to high pressure, its volume decreases, allowing more kilocalories to be transported through the gas pipeline, though still less than what is transported by a comparable oil pipeline.[718] Therefore, as a rule, gas pipelines have larger diameters and more complex facilities along their distance than oil pipelines[719], and therefore require higher capital and operating costs.[720]

The construction of both oil and gas pipelines requires an enormous up-front investment. However, once a pipeline is built, the operating costs are much lower than the capital cost of its construction. For example, in 2006 the Energy Charter Secretariat surveyed an actual gas pipeline with the following characteristics: length – 1,500 km, diameter – 56 inches, annual throughput capacity – 31.7 billion of cubic meters.[721] The capital cost was estimated at USD 4.3 billion, of which USD 1.9 billion represented the cost of line pipes.[722] The annual operating costs were estimated at USD 63 million.

The high capital and relatively low operating costs result in a number of important consequences. Firstly, only producers of petroleum (or the governments of petroleum producing

[716] However, gas condensate may be mixed with crude oil in trunk pipelines, as in the Caspian Pipeline Consortium's system.
[717] De Silva & Bremen, *supra* note 710, at 150.
[718] *Ibid*.
[719] *Ibid*. at 151. All modern gas pipelines operate under high pressure. Compression stations and corresponding facilities are among the most costly items in the capital expenses of a pipeline. Compression stations are fuelled by natural gas, using around 3% of the pipeline's throughput capacity. Fuel gas accounts for the main part of the pipeline operating expenses. See Energy Charter Secretariat, *Gas Transit Tariffs, supra* note 283, at 35.
[720] It has been stated that, other things being constant, natural gas is five times as costly to transport as crude oil, see Babusiaux, *supra* note 493, at 98.
[721] Energy Charter Secretariat, *Gas Transit Tariffs, supra* note 283, at 35.
[722] *Ibid*. Capital costs of pipelines are difficult to compare because a variety of specific factors, such as landscape, climatic conditions, regulatory requirements, physical properties and chemical composition of oil and gas, influence the cost of construction. Each pipeline is unique. Nevertheless, to have an idea on the capital costs of oil pipeline it seems useful to provide at least one example. In 2006 Kazakh NOC KazMunaiGaz together with CNPC constructed the Atasu-Alashankou section of an oil pipeline, which was the second stage of the Kazakhstan-China pipeline project. The pipeline has the following characteristics: length – 962.2 km, diameter – 813 mm (32 inches), throughput capacity – 10 million tonnes a year. The cost was estimated at USD700 million. See Energy Charter Secretariat, *Oil Pipeline Tariffs*, *supra* note 26, at 29.

states) are interested in making a large upfront investment to construct a pipeline.[723] Hence petroleum producers (private companies or NOCs) intending to transport their own petroleum generally develop and operate the pipeline infrastructure,[724] which inevitably causes vertical integration. A leading energy economist, Stevens, summarizes this point as follows:

> [h]igh fixed costs in any operation make full-capacity operation vital to protect profitability. Below-capacity operation means that the high fixed costs are spread across a smaller throughput, causing average fixed costs to rise exponentially. Hence, independent pipeline operators are a very rare breed. The best guarantee for a full pipeline lies in owning both the production and the line. It is no accident that the Rockefeller Standard Oil Trust was based upon a pipeline network.[725]

Below-capacity operation also increases variable costs because transportation of petroleum through under-loaded pipelines requires higher pressure.[726] As a result, pipelines are constructed with no excess capacity and, once constructed, are utilized at the maximum capacity.[727] As pipeline operators are usually monopolists, to get the monopoly rent, they may design a pipeline below the capacity required for projected flows of petroleum.[728]

Secondly, it is often the case that private investors are unable to implement a pipeline project without governmental support. In such cases, the construction of pipelines may involve governmental loans as well as tax and investment preferences. Frequently, pipeline projects are implemented through special investment contracts whereby the government negotiates certain mutual concessions with private investors. The government may provide a relief from import

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[723] No investor would be interested in a pipeline if he could not procure sufficient loads of petroleum into the pipeline through a long-term period.

[724] As a rule, pipeline construction is done by a specialized construction contractor hired by the pipeline owner or operator. See John Kennedy, *Oil and Gas Pipeline Fundamentals* (Tulsa: Penn Well, 1993) at 10.

[725] Stevens, *supra* note 706, at 18.

[726] Also such pipelines generate less revenue because shippers pay for transportation services on a volume basis. Thus, transportation agreements frequently contain ship-or-pay provisions that require a shipper to pay for a certain agreed quantity of petroleum regardless whether it is transported or not.

[727] An empirical study of a dozen oil pipelines in the CIS conducted by the Energy Charter Secretariat in 2005 supports this observation. Among the studied pipelines only three operated below their throughput capacities, showing 95.8%, 89.5%, and 66.7% of utilization respectively. The last one was underused because oil producers showed little interest in transportation of oil by that pipeline. In fact, that pipeline had been initiated by the government of the transit state as a result of policy rather than commercial considerations. See Energy Charter Secretariat, *Oil Pipeline Tariffs*, *supra* note 26, at 25.

[728] In a joint study of the UNDP and World Bank it has been observed that:

> once the pipeline is built it is difficult to increase capacity, and the potential economies of scale are effectively used up. A monopolist supplier of pipeline services, equating marginal costs and marginal revenues, in theory would build a below-optimum-capacity line to restrict supply and to secure elements of monopoly profit.

See UNDP/World Bank, *Cross-Border Oil and Gas Pipelines: Problems and Prospects*, a Technical Paper of Joint UNDP/World Bank Energy Sector Management Assistance Programme (Washington, DC: UNDP/World Bank, 2003) at 16.

duties, taxes, and may provide land. Investors in turn may be required to give a share in the enterprise to the state's NOC or to transport a certain amount of state-owned petroleum through the pipeline at a discounted tariff or without any charge.[729]

Thirdly, once the pipeline is built and commissioned, bargaining power changes among concerned parties.[730] Stevens suggests that relative bargaining power switches from the investor to the government.[731] In the same vein, he argues that when a pipeline is constructed across a transit state, the transit state's bargaining power increases dramatically.[732] Since, as a rule, the government of a transit state bears no cost of construction and is not bound by petroleum supply contracts, it attains a powerful position to impose transit terms on the pipeline operator and petroleum traders, as well as on the governments of both petroleum exporting and importing states.[733] Stevens explains:

> …pipelines are by their nature inflexible. If they are closed for any reason, countries at both ends of the line suffer considerable problems …this is especially true of gas since alternative transport means are virtually non-existent in the short run. This puts the transit country in an extremely strong bargaining position to squeeze ever more from the operation.[734]

Transit states that are also net importers of petroleum would welcome the establishment of a transit line not only due to the revenue attainable from transit charges but also because the line may provide them with petroleum on favorable terms. Both petroleum exporting and

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[729] Note that when a project is financed through private bank loans, a pipeline operator may incur certain obligations to financing institutions. If the same financial institutions financed development of an oilfield whose petroleum is to be transported through the pipeline, the pipeline operator is often required to serve that oilfield preferentially. By the same token, if a state-owned bank finances the pipeline project, the state may require the pipeline operator to give preference to state-owned petroleum.
[730] UNDP/World Bank, *supra* note 728, at 17.
[731] Stevens, *supra* note 706, at 15.
[732] *Ibid*.
[733] It may reasonably be asked, why all terms in pipeline construction and operating agreements are not fixed in advance? Because a typical pipeline has a long operating life, it is hardly possible to foresee all changing circumstances for decades in advance. The UNDP/World Bank joint study expressed this problem as follows:

> The agreements that govern the building and operation of a line must be sustainable over a long period and through changing circumstances. This inevitably is problematic. The agreements must accommodate all foreseeable changes in circumstances, but by definition they cannot manage major unforeseen or unforeseeable changes. Problems may arise, for example, as changes in the price of the oil or gas conveyed make the throughput more or less valuable. When this occurs the role of the line in the value chain will alter, encouraging attempts to secure a greater share of the rent. The agreements also should address the alignment of interests: the longer the relationship must survive, the greater is the possibility that the interests of the parties concerned will diverge. Finally, the fundamental decision on pipeline capacity must be made up front, and the longer the life of the project, the greater is the chance that the pipe will mismatch this stated capacity.

UNDP/World Bank, *supra* note 728, at 17. Apart from economic reasons, cross-border pipelines are very sensitive to political changes both internal and external (geo-politics). For an extensive record of contractual terms overridden by political interests with respect to oil and gas pipelines see Rafael Kandiyoti, *Pipelines: Flowing Oil and Crude Politics* (London: I. B. Tauris, 2008).
[734] Stevens, *supra* note 706, at 17-18.

importing states are equally interested in securing predictable terms of transit, especially with respect to charges imposed by the transit state. The transit state, in contrast, is interested in retaining flexibility to adapt its policy to the circumstances changing over time. If all transit terms are not fixed before the construction of a pipeline, the transit state may likely change the terms afterwards, thereby jeopardizing the stability of petroleum supply.

Some transit states are also net exporters of petroleum.[735] The negotiating position of such a state, if it loads its own petroleum into the transit pipeline, is different from that of a purely transit country. A transit-cum-exporter state may be more interested in the construction of a pipeline and is likely to share the costs of construction. In such a case, the bargaining power will not change as dramatically as in the case of a purely transit country. However, a transit-cum-exporter state may favor local users of the transit pipeline over foreign shippers. In what follows, we try to assess the legitimacy of various measures taken by both purely transit and transit-cum-exporter states from the WTO law perspectives.

6.3. The scope of application of GATT Article V

GATT Art. V contains seven paragraphs designed to regulate freedom of transit. For ease of presentation, we divide these paragraphs notionally into those defining the scope of application of Art. V and those addressing specific legal obligations imposed on contracting parties to assure freedom of transit in international trade. This section examines the first group, paragraphs 1, 2, 6, and 7, which, in addition to defining the scope of obligation also set general obligations. The second group, which consists of paragraphs 3-5, will be analyzed in the subsequent sections.

The first paragraph of Art. V of the GATT explains the notion of transit using the term "traffic in transit". It states:

> Goods (including baggage), and also vessels and other means of transport, shall be deemed to be in transit across the territory of a contracting party when the passage across such territory, with or without trans-shipment, warehousing, breaking bulk, or change in the mode of transport, is only a

[735] For instance, Russia, a major petroleum exporter, also transports Central Asian petroleum to Europe.

> portion of a complete journey beginning and terminating beyond the frontier of the contracting party across whose territory the traffic passes. Traffic of this nature is termed in this article "traffic in transit".[736]

The term "traffic in transit" covers both goods and the means of transport carrying the goods. A means of transport transported as a commodity itself should also be covered by this provision; for example, automobiles, railcars, and ships sent for export. Inclusion of means of transport along with goods into the term "traffic in transit" is confusing. Such inclusion may have been designed to tackle trade-restrictive measures formally applying to means of transport but effectively discriminating the goods carried by such transport.[737] If this is the case, then within the WTO framework it seems unnecessary to include the means of transport into the scope of Art. V to regulate transit of goods.[738] However, unlike the WTO framework, in which trade measures falling outside of GATT 1994 coverage may be subject to the disciplines of GATS, Agreement on Technical Barriers to Trade and other instruments, the GATT 1947 was a stand alone agreement. Means of transport may have also been included because this provision was drawn from the corresponding provision of the Barcelona Convention.[739] To avoid any inconsistency between provisions of the GATT and the Barcelona Convention for countries that

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[736] Art. V:1 of the GATT.

[737] The author could not find any direct evidence in the negotiating history that could support this suggestion. However, issues of transportation and other services were originally allocated a separate chapter on restrictive business practices but were removed from negotiations because the matters of services were beyond the competence of the preparatory commission (see UN Doc. E/PC/T/A/PV/9 of 5 June 1947 at 25 *et seq.*) In the end, all references to transportation were deleted from the draft except for the reference to the modes of transportation in the article on transit. See Jackson, *World Trade and the Law of GATT*, *supra* note 405, at 508. For negotiating history of Art. V see WTO Secretariat Note, *Article V of GATT 1994 – Scope and Application*, WTO Doc. TN/TF/W/2 dated 12 January 2005, and documents referred to in the footnotes thereof.

[738] Note that the definition of "transit" given in Art. 7 of the ECT (*supra* note 400) does not mention means of transport. Transit is defined there as:

> (i) the carriage through the Area of a Contracting Party, or to or from port facilities in its Area for loading or unloading, of Energy Materials and Products originating in the Area of another state and destined for the Area of a third state, so long as either the other state or the third state is a Contracting Party; or
> (ii) the carriage through the Area of a Contracting Party of Energy Materials and Products originating in the Area of another Contracting Party and destined for the Area of that other Contracting Party, unless the two Contracting Parties concerned decide otherwise…

[739] Art. 1 of the Statute on the Freedom of Transit as appended to the Barcelona Convention states:

> Persons, baggage and goods, and also vessels, coaching and good stock, and other means of transport, shall be deemed to be in transit across territory under the sovereignty or authority of one of the Contracting States, when the passage across such territory, with or without transshipment, warehousing, breaking bulk, or change in the mode of transport, is only a portion of a complete journey, beginning and terminating beyond the frontier of the State across whose territory the transit takes place. Traffic of this nature is termed in this Statute "traffic in transit".

were contracting parties to both treaties, it was necessary to maintain harmony between the texts.[740]

Combining goods and means of transport under the term “traffic in transit” begs the question of whether pipelines, given their immobility, fall within the ambit of transit rules.[741] When Art. V of the GATT 1947 was drafted, the only operating petroleum transit pipeline in the world had been built in 1934 by the Iraq Petroleum Company.[742] This pipeline transported oil from Iraq through then French-mandated Syria and Lebanon to tanker terminals located near Tripoli (northern Lebanon).[743] Both Syria and Lebanon were contracting parties to the GATT 1947. However, the negotiating history of Art. V cannot affirm its applicability to transit of goods by pipelines. Because to date it has never dealt with transit through international network-bound infrastructure, GATT/WTO jurisprudence under Art. V is also of little help.[744] Therefore it is not surprising that during the Doha Round, several members proposed clarification of the term “traffic in transit” by explicit reference to “fixed infrastructure, *inter alia*, pipelines and electricity grids”.[745]

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[740] Jackson, *World Trade and the Law of GATT*, *supra* note 405, at 507. See also Report of the Technical Sub-Committee of the Preparatory Committee of the International Conference on Trade and Employment, dated 28 November 1946, UN.Doc.: E/PC/T/C.II/54/Rev.1, at 7-12.

[741] See Laffont, *supra* note 700, at 242; also Gabrielle Marceau “The WTO in the Emerging Energy Governance Debate”, (2010) 5 (3) Global Trade and Customs Journal 83 at 89.

[742] Stevens, *supra* note 706, at 17-18.

[743] Rafael Kandiyoti, *Pipelines: Flowing Oil and Crude Politics* (London: I. B. Tauris, 2008) at 54. In fact, Iraq Petroleum Company’s pipeline had two branches, the other one crossing Jordan and Palestine. However, the second line’s operation was disrupted in early 1948 (*ibid*. at 60). It is interesting to note that, according to arrangements made with Syria and Lebanon, the Iraq Petroleum Company was exempted from tax and customs duties and paid no government charges for transit of petroleum. Kandiyoti explains that such transit terms were possible because the arrangements were made “in deference” of the Barcelona Convention and because of economic benefits anticipated by the transit states from operation of the pipeline (*ibid*. at 54). Both Syria and Lebanon acceded to the Barcelona Convention on 7 February 1929. However, both were French-mandated territories at the time of their accession to the Convention and their approval of the transit terms with the Iraq Petroleum Company, in which Compagnie Française des Pétroles was a major shareholder.

[744] In fact, as of March 2012, only one case has been resolved under Art. V in the GATT/WTO history. In 2009, Panama successfully challenged discriminatory Colombian transit restrictions. See WTO Panel Report, *Colombia – Indicative Prices and Restrictions on Ports of Entry*, adopted 20 May 2009, WT/DS366/R, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012 [hereinafter: *Colombia – Ports of Entry*].

[745] WTO Negotiating Group on Trade Facilitation: Communication from the Former Yugoslav Republic of Macedonia, the Republic of Moldova, Rwanda, Switzerland and Swaziland (WTO Doc. TN/TF/W/133/Rev.3, 26 June 2009) at 1. Similar proposals can be found in Communication from the European Communities (WTO Doc. G/C/W/422, 30 September 2002); Communication from Armenia, the European Communities, the Former Yugoslav Republic of Macedonia, the Kyrgyz Republic, Mongolia, Paraguay, the Republic of Moldova, Rwanda and Switzerland (WTO Doc. TN/TF/W/133, 10 July 2006); Communications from Cuba, Georgia, Moldova, Paraguay and Turkey, (WTO Docs. TN/TF/W/146/Rev.2, 29 June 2009; TN/TF/W/146/Rev.2/Add.1, 30 June 2009; TN/TF/W/146/Rev.2/Add.2, 3 July 2009).

Nevertheless, several authors opined that the wording of Art. V already covered transit of petroleum via pipelines sufficiently. Azaria argues that Art. V regulates transit of goods, including petroleum, and that if the discipline is viewed in its context, "the means of transport is only relevant to the discussion to the extent that any impediment to the transport means would hinder the transit of goods".[746] Ehring and Selivanova support this view, adding that the definition of "traffic in transit" is broad enough and does not need to refer to all modes of transportation explicitly.[747] Indeed, to give full effect to the transit obligation, interpreters must ignore differences in mode of transportation.[748] If GATT contracting parties were willing to exclude pipelines or other modes of transportation, they could have made an explicit exception, as they did for aircraft. Art. V:7 of the GATT states**:** "the provisions of this Article shall not apply to the operation of aircraft in transit, but shall apply to air transit of goods (including baggage)."[749] In sum, although pipeline infrastructure cannot be considered "traffic in transit", GATT transit rules apply to petroleum goods transported through such infrastructure.

The phrase, "with or without trans-shipment, warehousing, breaking bulk, or change in the mode of transport", which appears in Art. V:1, is important in the case of petroleum transportation. In many cases, petroleum changes mode of transport while crossing a transit state, especially when pipelines deliver it to seaports where it is further loaded into tankers. Warehousing in port terminals is customary in the petroleum transportation. The "breaking bulk" process is also used in petroleum maritime transportation: when a supertanker is too large to enter a port, goods are unloaded at sea into smaller tankers, which completes delivery.

The second paragraph of Art. V states:

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[746] Azaria, *supra* note 700, at 576. Basically the same argument is forwarded by Roggenkamp, *supra* note 700, at 126. See also C. Valles, "Article V GATT" in R. Wolfrum, P. Stoll & H. Hestermeyer, eds., *WTO – Trade in Goods*, (Leiden: Martinus Hijhoff Publishers, 2011) at 187.
[747] Ehring & Selivanova, *supra* note 700, at 59-60.
[748] In *US – Gasoline* the AB stated: "[o]ne of the corollaries of the 'general rule of interpretation' in the VCLT is that 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". See AB Report *US – Gasoline*, *supra* note 1, at Section IV.
[749] Art. V:7 of the GATT. Aircraft were exempted from Art. V because it was a matter covered by the jurisdiction of the International Civil Air Organization, not because of technical or other features of this means of transport. See Report of the Technical Sub-Committee of the Preparatory Committee of the International Conference on Trade and Employment, dated 28 November 1946, UN.Doc.: E/PC/T/C.II/54/Rev.1, at 7.

> There shall be freedom of transit through the territory of each contracting party, via the routes most convenient for international transit, for traffic in transit to or from the territory of other contracting parties. No distinction shall be made which is based on the flag of vessels, the place of origin, departure, entry, exit or destination, or on any circumstances relating to the ownership of goods, of vessels or of other means of transport.[750]

This provision establishes that contracting parties are obligated to allow transit through their territories. In *Colombia – Ports of Entry*, the Panel expounded on the essence of the first sentence, saying that "freedom of transit"

> *requires* extending unrestricted access via the most convenient routes for the passage of goods in international transit [...] Accordingly, goods in international transit from any Member must be allowed entry whenever destined for the territory of a third country. Reasonably, in the Panel's view, a Member is not required to guarantee transport on necessarily any or all routes in its territory, but only on the ones 'most convenient' for transport through its territory.[751]

The Panel's interpretation implies that the words "most convenient" qualify the otherwise broad concept of freedom of transit.[752] In the case of petroleum transportation, a pipeline is both a means of transport and a route. Due to technical constraints, a given pipeline is usually the only available route for transit.[753] Thus, in these cases, freedom of transit merely implies free flow of petroleum through transit pipelines..[754] The second sentence of Art. V:2 prohibits dissimilar treatment of goods in transit, but does not mention varying modes of transport. Hence, unequal treatment of different modes of transport is not prohibited under Art. V. In fact, requiring equal

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[750] GATT Art. V:2.

[751] *Colombia – Ports of Entry*, *supra* note 744, at para. 7.401 [emphasis original].

[752] The Panel did not explain explicitly whether the government of the transit state, the shipper, or the transportation company should determine the convenience of a route. Its view that "a Member is not required to guarantee transport on necessarily any or all routes in its territory, but only on the ones 'most convenient' for transport through its territory" may be understood as implying that the transit state should determine the route. In contrast, Valles (*supra* note 746 at 188) suggested that the operator (shipper or transporting company) determines which route is the most convenient. This suggestion implies that "convenience" is a sense of comfort for the transporter of goods. However, it does not account for the views of other interested parties. What is convenient for one shipper may be inconvenient to other shippers. For example, a company shipping dangerous goods would prefer the shortest route. However, if the shortest route was highly trafficked, surrounded by a unique ecosystem, or heavily populated, the government would best decide the most convenient route for transportation of dangerous goods taking into account potential interests of the largest number of parties involved. Thus, the government of the transit state determines the most convenient route, whereas other WTO Members have a burden of proof that the route so determined is not the most convenient one.

[753] It can be argued that other modes of transportation should be considered in seeking the most convenient route. However, transportation by roads, inland waterways and railways is more expensive and usually requires changes in the modes of transport, adding to expense and inconvenience.

[754] The Panel's words "extending unrestricted access via the most convenient routes for the passage of goods" cannot apply to petroleum pipelines as it does to roads, waterways and railways. In the latter, an unrestricted access to routes must be provided to vehicles, ships and trains respectively. Apart from being both a route and a mode of transport, a transit pipeline of country B starts in country A and ends in country C. Country B is not in a position to provide access to the transit pipeline (in contrast to roads, waterways and railways) unless access is for its own petroleum producers, which would in turn qualify as exportation rather than transit.

treatment of all modes of transport would be impossible, given each mode's varying technical features. In the end, the treatment of goods matters under Art. V, not the treatment of means of transport carrying goods. Correspondingly, it must be stressed that the wording "with or without trans-shipment, warehousing, breaking bulk, or change in the mode of transport" used in the definition of the term "traffic in transit" in Art. V:1 constrains potential discriminatory treatment on the basis of different modes of transport. This constraint specifically applies to changing modes of transport during transportation of particular product. For example, consider a transit state with a port terminal to which petroleum is delivered from one country by railway and from another by pipeline for further transit by sea tankers. The transit state may impose differing requirements on transportation by railway and transportation by road through its territory. However, once petroleum is delivered to the port terminal, the transit state must treat petroleum similarly regardless of whether it was delivered by railway or pipeline.

In *Colombia – Ports of Entry*, the Panel elaborated on the relationship between the two sentences of Art. V:2 as follows:

> In spite of the absence of an explicit reference to traffic in transit in this second sentence of Article V:2, the Panel believes that it is sufficiently clear from its text that the MFN obligation in the second sentence is closely related to the obligation to extend freedom of transit, in the first sentence. In the Panel's view, the second sentence complements and expands upon the obligation to extend freedom of transit, stating additionally that *distinctions must not be made based on the nationality, or place of origin*, departure, entry, exit or destination of the vessel transporting goods. Moreover, both obligations form part of the same textual provision.[755]

The Panel made it clear that the second sentence represents an MFN obligation, though the words "nationality", "the place of origin", and "the ownership of goods" could have been more broadly interpreted, embracing the NT obligation as well. Ehring and Selivanova argue that a strict textual interpretation on the basis of these words would reveal a general NT obligation in this provision, though contextual reading is likely to confirm the absence thereof.[756] Nevertheless, they insist that the provision contains at least certain elements of the NT obligation

[755] *Colombia – Ports of Entry*, *supra* note 744, at para. 7.397 [emphasis added].
[756] Ehring & Selivanova, *supra* note 700, at 65.

that prohibit discrimination between, for example, foreign-owned and domestically-owned or foreign-originated and domestically-originated transiting goods.[757]

Certainly the NT standard, if contained in Art. V, would have strengthened transit rules and helped eliminate a number of trade-barriers arising out of such discrimination, such as Russian tariffs imposed on Central Asian oil transiting through its pipelines to Europe, which are considerably higher than tariffs charged for transportation of domestic oil.[758] However, individual words and phrases in Art. V must not be interpreted in isolation from the context and the purpose of the whole provision. The holistic interpretation must be preserved with respect to all provisions in WTO law. Neither the context and the purpose of Art. V, nor the definition of "traffic in transit" refer to domestic goods and measures protecting them. Thus, it should be concluded that transit rules do not contain the NT obligation or its elements.[759] Similarly, the core NT obligation set in GATT Art. III is not applicable to transit issues as it deals with imported products.[760] In this case, holistic interpretation procures that the text constrains extensive teleological interpretation.

Another important question that arises from Art. V is whether all countries involved in transit (that is, the country of origin, the transit state, and the country of destination of goods) have to be WTO Members for applicability of Art. V. One prominent GATT scholar assumes that all countries involved in transit must have the membership.[761] Another author suggests that the provision applies if both the country of origin and the transit country are WTO Members.[762] Several other scholars contest these views, arguing that the wording "*to or from* the territory of

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[757] *Ibid*.

[758] This information is taken from the Prospectus of OJSC AK Transneft (which is the monopolist trunk oil pipeline operator in Russia) dated 6 August 2008: *U.S.$600,000,000 7.70 per cent. Loan Participation Notes due 2013 (issued by TransCapitalInvest Limited) Prospectus*, at 39, online: Transneft <www. transneft.ru> accessed on 23 January 2012.

[759] It has to be noted that a proposal to amend Art. V made during the Doha Round of negotiations sought inclusion of the NT obligation. See WTO Negotiating Group on Trade Facilitation: Communication from Armenia, the European Communities, the Former Yugoslav Republic of Macedonia, the Kyrgyz Republic, Mongolia, Paraguay, the Republic of Moldova, Rwanda and Switzerland (WTO Doc. TN/TF/W/133, 10 July 2006) at 2.

[760] To recall, the NT standard of GATT Art. III prohibits states from discriminating against imported products, which results in the protection of domestic production of like-products.

[761] Bhala, *Modern GATT Law*, *supra* note 140, at 472.

[762] Azaria, *supra* note 700, at 569.

other contracting parties" in paragraphs 2, 3, 4, and 5 of Art. V indicates that the rules apply as long as, in addition to a transit state, there is another Member on the line regardless of whether it is a country of origin or destination.[763]

As can be illustrated by the Russia – Ukraine pipeline dispute of 2009, this finding is very important in the case of transit of petroleum. Russia (the country of origin) was not in the WTO, whereas Ukraine (the transit country) and the EC (the countries of destination) were. If Art. V were to apply only if Russia had been a Member, the EC, which was perhaps the most interested in stable transit flows, would have been unable to initiate a dispute against Ukraine but could have suffered from the impediment to transit immensely. Although this dispute was resolved through diplomatic means outside of the WTO's framework,[764] it shows the importance of transit for countries at both ends of the route and emphasizes that incorrect interpretation of transit provisions may deprive a WTO member from its right to invoke a remedy it is entitled to take under the WTO law.

The case above may also illustrate an important shortcoming of Art. V as applied to petroleum transportation. A transit state is obliged to provide MFN treatment to WTO Members but has no such obligation to third countries. Returning to our example, if Ukraine provides a certain treatment for goods from Russia, it has to give no less favorable treatment to goods from the EC. However, if the EC enjoyed more preferential treatment, Ukraine had no obligation to provide the same treatment to Russia. Since Russia (then a non-Member country) cannot invoke Art. V and Ukraine (a transit state) does not have a WTO non-discrimination obligation towards Russia, the EC cannot effectively compel Ukraine to provide full freedom of transit for Russian goods.[765] In other words, although a formal application of Art. V does not require all countries

[763] Ehring & Selivanova, *supra* note 700, at 56; Valles, *supra* note 746, at 186; see also Energy Charter Secretariat, *WTO Rules Applying under the Energy Charter Treaty* (Brussels: Energy Charter Secretariat 2001), at 34.
[764] See Azaria, *supra* note 700, at 583.
[765] The result would be different if the EC were the country of origin and Russia the country of destination. The EC shipping its goods through Ukraine may effectively invoke Art. V regardless of whether Russia has the WTO membership or not.

on the transit line to be WTO Members, its effectiveness requires that at least transit state and state of origin be WTO Members.[766]

The provisions of Art. V are relevant not only to goods that *are* in transit, but also to goods that *have been* in transit. The sixth paragraph of the article requires a contracting party to accord to "products which have been in transit through the territory of any other contracting party treatment no less favorable than that which would have been accorded to such products had they been transported" without transiting through the territory of any other contracting party. In other words, if oil is transported from Russia to Austria through the transit territories of Ukraine and Slovakia, then Slovakia must treat such oil as if it had come to its borders directly from Russia without passing Ukraine. It has been questioned whether in a situation like this one Slovakia must accord no less favorable treatment to oil that has transited through Ukraine if Slovakia is the final destination country, that is, if oil does not continue through to Austria.[767] The Panel in *Colombia – Port of Entry* answered this question affirmatively. In this case, the Colombian representative referring to the title of article (i.e. Freedom of Transit) and definition of the term "traffic in transit" argued that the scope of Art. V was limited to goods destined for sale outside of the country through which it was passing.[768] The Panel rejected this argument and after extensive deliberations concluded that the obligations in Article V:6 also apply to Members whose territory was the final destination for goods in international transit.[769]

Having reviewed the scope of application of Art. V and general obligations set in its paragraphs 1, 2, 6, and 7, we now turn to paragraphs 3-5 which specify legal obligations related to the freedom of transit. Within Art. V there are basically two types of specific obligations set to ensure compliance with the freedom of transit obligation and the MFN standard. The first requires transit states to prove that their customs regulations and measures do not result in unnecessary delays or restrictions impeding the freedom of transit. The second type of obligations concerns

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[767] See WTO Secretariat Note, *Article V of GATT 1994 – Scope and Application*, WTO Doc. TN/TF/W/2 dated 12 January 2005, *para* 25, where the Secretariat uses an example with abstract product and countries X, Y, V, and Z.
[768] *Colombia – Ports of Entry*, *supra* note 744, at para. 7.455.
[769] *Ibid.* para. 7.475.

financial issues; it requires that transit states do not impose unreasonable or discriminatory charges on goods in transit. We will evaluate both types of obligation through case studies related to transit of petroleum.

6.4. Unnecessary delays or restrictions

The third paragraph of Art. V confirms the right of Members to control traffic in transit by customs regulations, including requirements to enter the territory at a proper custom house. However, the transit state must ensure that the traffic in transit, "except in cases of failure to comply with applicable customs laws and regulations", is not subject to unnecessary delays or restrictions that may arise out of such customs measures.[770] All customs regulations designed to control traffic in transit must be reasonable, and must account for conditions of the traffic.[771] Each country must accord the MFN principle to all WTO Members with respect to its transit regulations and formalities.[772]

In early 2002, the WTO Council for Trade in Goods received a communication from the Republic of Slovenia complaining that the Republic of Croatia imposed a ban on the transit of oil and oil products transported through its territory by road.[773] Shortly after that, Slovenia modified the complaint because Croatia replaced the ban with a number of restrictive measures on road transit of oil and oil products, liquid natural gas, household paints, and a wide range of chemical products, internationally classified as dangerous goods.[774] Slovenia claimed that the restrictive measures included strictly controlled transit corridors and points of entry and exit which were defined regardless of obvious technical and logistical prerogatives.[775] As a result, the restrictions precluded direct access to customers, production facilities, and supply sources, greatly increasing the required travel distances.[776] Moreover, the new procedures introduced at points of entry and

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[770] GATT Art. V:3.
[771] GATT Art. V:4.
[772] GATT Art. V:5.
[773] Communication from the Republic of Slovenia, WTO Doc.: G/C/W/346 dated 5 February 2002
[774] Communication from the Republic of Slovenia, WTO Doc.: G/C/W/346/Add.1 dated 1 March 2002.
[775] *Ibid*. at 1.
[776] *Ibid*. at 2.

exit, allegedly not customary in the transit of goods, resulted in additional unreasonable costs and long delays at border crossings.[777] Slovenia claimed that the measures were in conflict with, *inter alia*, GATT Art. III:4 and Art.V.

Croatia responded to these claims arguing that the measures were introduced to prevent traffic accidents of vehicles transporting hazardous materials and to tackle deceptive practices connected with illicit trade of crude oil and oil products, and, as such, were justified under Art. XX of the GATT.[778] According to Croatia, the corridors defined for the transit of hazardous materials were the most convenient routes for international road transit in the sense propounded in Art. V:2, whereas the entry points were proper customs houses under Art. V:3.[779] It further stated that the measures were non-discriminatory and applied to all imports and exports to or from the country as well as transit through it, irrespective of the origin of goods or owner of the vehicle.[780] Finally, Croatia claimed that the measures caused neither significant delays nor decreases in the volume of transit flows.[781]

After this exchange of communications, the matter was finally settled in bilateral consultations.[782] Although it is difficult to evaluate the Croatian measures in the light of Art. V without knowledge of all details and circumstances, some important findings may be observed from this case.[783]

Initially, Croatia imposed a total ban on transit of oil and oil products through its territory. Unlike GATT Art. XIII, which may authorize a complete ban on exports or imports of certain

[777] *Ibid*.
[778] Communication from the Republic of Croatia, WTO Doc.: G/C/W/360 dated 15 March 2002, at 1. The GATS' Art. XIV(c)(i) contains a similar general exception for measures aimed to prevent deceptive and fraudulent practices.
[779] *Ibid*. at 2.
[780] *Ibid*.
[781] *Ibid*.
[782] Azaria, *supra* note 700, at 588, suggests that the matter was settled in bilateral consultations held pursuant to Art. 27(1) of the ECT, as both countries were parties to it, because the ECT was a more appropriate forum and its provisions were more effective to resolve transit issues than the WTO and GATT Art. V.
[783] The following findings are conceived on the sole basis of information provided in the Communications of Croatia and Slovenia without prejudice to either of the two states or their policies. Additional information on this dispute can be found on the Internet and other mass-media; however, it was difficult to verify whether such information was unbiased, and was therefore not used herein.

products, provided that such ban is non-discriminatory,[784] a complete ban on transit is not allowed under Art. V, unless justified by the general or security exceptions set in GATT Art. XX and XXI respectively. If the Croatian ban on oil and oil products was to be justified as a measure necessary to protect human, animal or plant life or health under Art. XX:(b), the ban would have to include not only oil and oil products but also products with similarly hazardous effects. By the same token, to prove that the ban was necessary to prevent deceptive practices under Art. XX:(d), Croatia had to prove that no reasonable alternative measure more consistent with its obligations under the GATT was available.[785] Since the initial ban concerned only oil and oil products and because an alternative measure likely existed, Croatia's chances of justifying its ban under Art. XX seemed low. Be that as it may, about two weeks after the introduction of the total ban, Croatia relaxed it and modified its measures as has been described above.

As a result of the modifications, Croatia cancelled the ban but restricted the routes of transit. The new restrictions applied not only to transit of goods but also to all imports and exports irrespective of the origin of goods or owner of the vehicle, bringing the restrictions in compliance with the Art. III and Art. V:2 obligations and the requirements set in the chapeau of Art. XX.[786] Moreover, the new restrictions covered not only oil and oil products but also liquid natural gas and other products that may have environmental hazardous effects. Hence, it may be assumed that the new measures were more justifiable under Art. XX(b) than the initial ban. Once a measure is found legitimate under Art. XX(b), it is not necessary to prove its compatibility with Art. XX(d) or any other exception.

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[784] GATT Art XIII:1 states:

> No prohibition or restriction shall be applied by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation of any product destined for the territory of any other contracting party, unless the importation of the like product of all third countries or the exportation of the like product to all third countries is similarly prohibited or restricted.

[785] This requirement stems from the interpretation of the term "necessary" used in Art. XX given in the GATT/WTO jurisprudence. See *supra* notes 239 and 279.

[786] To recall, the chapeau of Art. XX sets conditions that have to be met in order for a measure to be legitimate under one or more exceptions laid in the article. It states:

> Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:[…].

The Croatian case illustrates that Art. XX exceptions may be invoked with respect to transit restrictions (other than a total ban on transit) as effectively as in the case of measures affecting exports or imports, subject to conditions set in the chapeau and respective provisions of Art. XX. As has been suggested before, Art. V does not contain a NT obligation. However, if any measure restricting transit of goods is to be justified under Art. XX, it must apply equally to transiting and domestic products. The Art. XX exceptions, save for technical peculiarities, are likely to be applicable regardless of difference in the modes of transport. Whether in the case of road trucks, railcars, or pipeline, transportation of petroleum involves higher risks of accidents and potentially harmful effects on human health and the environment.[787]

In the case of railways, navigable rivers or pipelines, as a rule there are fewer, if any, alternative routes available for transit. If delays or physical restrictions occur on a more convenient transit route because one or more shippers failed "to comply with applicable customs laws and regulations", it would be difficult for other shippers to redirect transportation to other routes. By the same token, even if the most convenient routes were not restricted for transit, restriction on any other route would automatically add congestion to the unrestricted routes, thereby causing *de facto* delays and restrictions in the whole transit network.[788] In both cases freedom of transit is impaired but the transit state remains compliant with its obligations under Art. V. Moreover, railways, navigable rivers or pipelines, and related infrastructure are usually operated by natural monopolies. A disruption in operation of such a natural monopoly caused by a non-trade measure, would automatically affect transit flows. For instance, imagine two pipelines (or railways): X, which is purely a transit line, and Y, which also loads domestic oil to be delivered to the same market. The government may disrupt operations in X in favor of Y and vice-versa, as necessary.

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[787] Note that on 17 October 1998, a gas pipeline explosion in Jesse, Nigeria killed over one thousand people. See Benjamin K. Sovacool, "The costs of failure: A preliminary assessment of major energy accidents, 1907–2007" (2008) 36 Energy Policy 1802.

[788] The problem is worse in the case of pipelines. Firstly, because pipelines are not always connected, disruption in one pipeline would not allow redirection of flows to another pipeline. Secondly, even if pipelines are connected, they are usually fully loaded so that significant additional flows are impossible. Thirdly, if poor quality petroleum has to be redirected to another pipeline with higher quality petroleum, neither the pipeline operator nor the incumbent shippers would be willing to accept such additional petroleum to their pipeline.

Sea tankers deliver a major part of petroleum traded internationally. Except for a few cases, such as the Turkish straits, and the Suez and Panama Canals, sea tankers do not pass transit territories. Pipelines are the second mode of transportation in terms of volumes of petroleum carried in international markets. In many cases, pipelines are the only means of transport that cross transit states. Petroleum markets are more vulnerable to disruption in transit flows than any other market. If a case is brought to the WTO against a transit Member's measures that caused disruption in petroleum pipeline operations, the case will be reviewed according to standard WTO dispute settlement procedures. If the disruption completely blocked transit of petroleum, by the time of the DSB's decision and its implementation, the complainant's economy may suffer immensely. It is likely that, if feasible, the complainant would have arranged another way of petroleum delivery rendering the resolution of the case unnecessary. If this happens, petroleum flows established in the regional and/or international market may be disturbed. However, in many cases, at least in the short-term, such alternatives are not feasible. Given the importance of petroleum to any national economy, a petroleum transit conflict may escalate to a political or, worse, an armed conflict.[789]

Fortunately, except for the aforementioned Croatian and Ukrainian cases, WTO Members have refrained from the imposition of total bans or equivalent restrictions on the transit of petroleum. While in the Croatian case the disruption was caused by regulatory restrictions, the Ukrainian disruption in 2009 arose due to its dispute with Russia over financial terms of transit. In the next section we will analyze the provisions of Art. V regulating tariffs and charges with respect to the transit of petroleum.

6.5. Unreasonable or discriminatory charges

6.5.1. Legal obligations

The second type of obligation contained in Art. V concerns financial issues. The third paragraph of Art. V, in addition to customs regulations and formalities reviewed above, also

[789] Stevens suggests that in the case of disruption of petroleum flows by a transit state a rather extreme but possible solution would be an "actual or threatened military action by the countries damaged by the transit country's unilateral action. This might be overt military action or simply supporting political opposition elements within the transit country to create a variety of disruptions, peaceful or otherwise." Stevens, *supra* note 706, at 19.

concerns charges imposed on transit. In its relevant part it states that traffic in transit shall be exempt from "customs duties and from all transit duties or other charges imposed in respect of transit, except charges for transportation or those commensurate with administrative expenses entailed by transit or with the cost of services rendered". This provision is supplemented by the fourth paragraph of Art. V, which states that all charges related to traffic in transit "shall be reasonable, having regard to the conditions of the traffic". Further, the fifth paragraph obliges a transit state to accord any transit-bound Member treatment no less favorable than the treatment it accords to any transit-bound third country with respect to all charges in connection with transit. An interpretative note to the fifth paragraph states that the "no less favorable treatment" principle with respect to transportation charges refers to like products being transported on the same route under like conditions.[790] The monetary conditions set in the paragraphs 3-5 of Art. V have been summed up by the WTO Secretariat's commentary as follows:

> [t]here are only two kinds of charges a Member may legitimately impose on traffic in transit: charges for (i) transportation and for (ii) administrative expenses caused by transit or services rendered. And even here (as well as in the case of other permitted formalities and regulations), such charges have to be reasonable (paragraph 4) and non-discriminatory (paragraph 5). The general principle therefore is that transit traffic shall not be a source of fiscal revenue.[791]

This commentary, except for its last sentence, is based on the relevant legal provisions and uses the wording provided therein. The last sentence sets a "general principle" for transit charges, which was neither authorized by Members nor evident from Art. V.[792] It is not clear why the Secretariat refers to "a source of fiscal revenue", as this term may have a broad meaning encompassing all kinds of payments to a state budget, and as we shall see below it may obstruct the future development of the petroleum transit infrastructure. It is true that the WTO

[790] Interpretative Note Ad Article V, paragraph 5. The interpretative note refers to transportation charges, whereas paragraph 5 itself uses the word "charges" and has no word "transportation". Confusion may arise as "charges" may be understood to mean both transit charges payable to the government and payments for services payable to transportation companies, whereas "transportation charges" would mean the latter rather than the former.

[791] WTO Secretariat Note, *Article V of GATT 1994 – Scope and Application*, WTO Doc. TN/TF/W/2 dated 12 January 2005, *para* 31 [emphasis added, footnotes omitted].

[792] It seems that in rendering this opinion the Secretariat used an analogy with GATT Art. VIII which concerns the fees and formalities connected with importation and exportation, paragraph 1(a) which states:

> All fees and charges of whatever character (other than import and export duties and other than taxes within the purview of Article III) imposed by contracting parties on or in connection with importation or exportation shall be limited in amount to the approximate cost of services rendered and shall not represent an indirect protection to domestic products or a taxation of imports or exports for fiscal purposes.

Secretariat's commentary does not have the legal force of official interpretation and therefore is not binding upon the member states or WTO adjudicating bodies. Nevertheless, it is likely that the latter may be influenced to a certain degree by the Secretariat's views as long as such views are consistent with corresponding legal provisions.[793] With this in mind, we turn to the discussion of practical applicability of the paragraphs 3-5 rules regarding transit charges in the petroleum industry.

When petroleum is transited by modes of transport other than pipeline it is subject to customs charges payable for transit of any other goods. Usually, these charges go towards administration of the formalities necessary for transiting goods, trucks, drivers, etc., and are payable at the entry customhouse. This type of charges is legitimate under Art. V:3 as long as such charges are reasonable and non-discriminatory.[794] When petroleum is transited by pipelines, there are two types of payments questionable under WTO law. The first is a transit tariff payable to a pipeline operator for transportation services. The second is a government charge payable to the transit state.

6.5.2. Transit tariffs

It is difficult to challenge the transit tariffs under GATT transit rules because neither Art. V nor Art. XVII of the GATT are appropriately drafted to deal with pipeline operators, who are either private or state-owned companies. Although some assert that transit rules apply if a pipeline operator can be classified as an STE,[795] this argument lacks the necessary textual basis. Art. XVII requires STEs to conduct their purchases or sales involving either imports or exports

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[793] In *Colombia – Ports of Entry* the Panel, referring to the same document of the Secretariat, said:

> Though not binding on Members' rights and obligations, the Panel considers the Secretariat's commentary consistent with the view that the second sentence of Article V:6 is intended to clarify that, in complying with requirements of the first sentence of Article V:6, a Member is nevertheless permitted to maintain any direct consignment requirements that existed in 1947 (when commitments among Members were negotiated) without violating the obligation in the first sentence. In other words, Article V:6, first sentence requires Members to extend MFN treatment to all goods that have been in international transit, except with respect to specific, pre-existing direct consignment commitments.

Colombia – Ports of Entry, *supra* note 744, at para. 7.465.

[794] As charges "commensurate with administrative expenses entailed by transit or with the cost of services rendered" exempted in accordance with GATT Art. V:3.

[795] M. Roggenkamp "Implications of GATT and EEC on Networkbound Energy Trade in Europe" (1994) 12 J. Energy Nat. Resources L. 59 at 69.

consistently with the non-discrimination principle,[796] whereas a pipeline operator's tariffs do not relate to the goods it purchases or sells. Hence, it is highly doubtful that the legal obligations laid down in Art. XVII can be extended to transit matters.

In fact, a transit tariff is paid for transportation services provided by pipeline operators to traders of goods and as such may be subject to trade rules related to services. However, the GATS' rules are even less helpful than the GATT's disciplines. First, the MFN obligation in GATS refers to like services and service suppliers,[797] which is irrelevant to the transit pipelines' business because each pipeline is unique in its technological structure, mode of ownership, and other features. Secondly, GATS has no provision similar to the GATT's rules regulating STEs. An approximation to the GATT's STE provision is Art. VIII of the GATS, which requires that monopolist and exclusive service suppliers comply with the MFN obligation and specific commitments made by the member states.[798] However, its application to pipeline operators is senseless because it would imply that the pipeline operators must not discriminate against other pipeline operators. Similarly, GATS' specific commitments are concerned with the treatment of services and service suppliers rather than the treatment of goods, and therefore are not applicable to transit tariffs. However, Ukraine made one "extra-specific" commitment, which may link the GATS with GATT provisions to effectively deal with the transit of petroleum by pipelines. This unique commitment will be discussed later in this chapter. Meanwhile, it can be concluded that the GATS' rules are not suited to address the tariff policies of pipeline operators.

Returning to the GATT transit rules, some authors argue that Art. V itself must be applicable to private and state-controlled pipeline operators. According to them:

> even when private owners of transit infrastructure are involved, WTO Members are under the obligation to 'honour' the freedom of transit obligation through suitable arrangements. The opposite position could lead to the unacceptable result of turning WTO obligations ineffective

[796] GATT Art. XVII:1(a).

[797] The MFN obligation in GATS Art. II:1 requires that "each Member shall accord immediately and unconditionally to services and service suppliers of any other Member treatment no less favourable than that it accords to like services and service suppliers of any other country."

[798] GATS Art. VIII paragraph 1 states: "[e]ach Member shall ensure that any monopoly supplier of a service in its territory does not, in the supply of the monopoly service in the relevant market, act in a manner inconsistent with that Member's obligations under Article II and specific commitments." Paragraph 5 of the article extends these obligations to exclusive service suppliers.

where private operators are involved. Thus, although the WTO obligation to maintain the freedom of transit applies only to the WTO Member, the government can fail to meet its international transit obligation, which is an obligation of a *result*, if private owners block transit.[799]

To conform to this view, Art. V must be interpreted teleologically. If such an interpretation is allowed with respect to this treaty provision, then any other provision in the WTO law may be interpreted in the same way, so that all measures, practices, and actions of private business become challengeable under international trade law. Nevertheless, even if Art. V is assumed to be directly applicable to pipeline operators, its effectiveness would be doubtful given the peculiarities of the pipeline transit business.

Transit tariffs are permitted under Art. V as transportation charges provided they are reasonable and MFN compliant. A transit tariff covers the capital and operating costs of the pipeline operator and includes his profit margin as well as taxes he pays.[800] Capital and operating costs vary significantly from one pipeline to another, as do tariffs.[801] Moreover, no unified methodology exists for tariff calculation in this industry.[802] Thus, it is difficult to compare transit tariffs for any two pipelines.[803] Furthermore, when pipeline operators are natural monopolies, which is quite common in the industry, the tariffs for transit and/or transportation services are normally subject to approval by a regulatory authority. In some cases, such as pipelines built by

[799] Ehring & Selivanova, *supra* note 700, at 69 [emphasis original]. In the last sentence of the quote, the original text reads "international obligation transit", which is corrected herein to read "international transit obligation".
[800] Energy Charter Secretariat, *Oil Pipeline Tariffs*, *supra* note 26, at 67.
[801] Capital costs vary because of difference in the length and diameter of pipeline, the price of land, terrain, price fluctuations in the steel market, labor cost and many other parameters. Operating costs differ because of the physical features of the petroleum transported, the number of shippers in a commingled system, climate conditions, labor cost, tax difference, etc.
[802] There are essentially four types of tariff methodologies currently in use: (i) postal; (ii) distance-based; (iii) point-to-point; and (iv) entry/exit. In many cases various hybrid forms of these four types are used. See Energy Charter Secretariat, *Gas Transit Tariffs, supra* note 283, at 31.
[803] A comparison of tariffs for transit and domestic pipelines is also difficult because, as the Energy Charter Secretariat notes, "the transit lines are often not integrated with the domestic transport systems and design and other parameters tend to differ". In a few cases where transit and domestic transportation were comparable and tariffs were publicly available, the Energy Charter Secretariat found that transit tariffs tended to be higher than tariffs for comparable domestic transport. According to the Energy Charter Secretariat the differences between the two tariffs may be justified based on special technical and economic characteristics and different methodologies; however, it acknowledged that a thorough analysis was required to assess each case. (Energy Charter Secretariat, *Gas Transit Tariffs, supra* note 283, at 72). The Energy Charter Secretariat estimated that transit tariffs were cost-reflective, whereas domestic tariffs were below the full value of replacement costs (*ibid.*). If this estimation is correct, then from the WTO law's perspectives, transit tariffs are not challengeable under GATT Art. V, while domestic tariffs may be subject to the subsidies' disciplines of the ASCM Agreement.

petroleum producers/shippers especially to transport their products[804] or when competition exists between different modes of transportation,[805] the tariffs are stipulated on a contractual basis. In other cases, when pipeline operators in the transit state and the main users of the pipeline in the petroleum producing state are owned by their respective governments, the charge for transit of petroleum may be stipulated by an inter-governmental agreement.

A transit tariff agreed upon between private parties in a contract or set by governments in an inter-governmental agreement is presumed to be reasonable and is hardly challengeable. If a monopolist sets a transit tariff unilaterally, the tariff must receive approval from a monopoly regulator, who would hardly allow charging an unreasonable margin above the cost-covering value, at least in theory. Even in controversial cases, unreasonableness is difficult to prove because, as we have stated before, there is no commonly accepted methodology for their calculation and each pipeline is unique.[806] Finally, the MFN obligation rarely arises in the case of petroleum pipelines because a transit pipeline starts in the state of origin and continues through the transit state to the state of destination. Even if the transit state has several pipelines from different states of origin, as has been explained above, it is hardly possible to compare them and determine compliance with the MFN obligation.

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[804] For example, tariffs are set on a contractual basis in the Baku – Supsa pipeline and the Caspian Pipeline Consortium system. In both cases the pipeline belongs to a consortium; its users and their tariff policies are excluded from the coverage of applicable monopoly regulations. See Energy Charter Secretariat, *Oil Pipeline Tariffs*, *supra* note 26, at 57-58.

[805] For example, oil pipelines in the EU are not regarded as monopolies because oil pipelines face competition from other modes of transport such as trucks and barges. See Energy Charter Secretariat, *Oil Pipeline Tariffs*, *supra* note 26, at 32.

[806] The Energy Charter Secretariat's studies identified high discrepancies in the rates of transit tariffs across different states. These studies found that state monopolies such as Russian Transneft and Gazprom or Ukrainian Naftogas have considerably lower transit tariffs than private pipeline operators of both the CIS and EU. This finding is very surprising because Transneft, Gazprom, and Naftogas are frequently accused for charging unreasonably high tariffs. It is also astonishing that, according to the Energy Charter Secretariat's studies, pipelines built by private enterprises have some of the highest tariffs for petroleum transportation. See, for crude oil, Energy Charter Secretariat, *Oil Pipeline Tariffs*, *supra* note 26, at 63; and, for natural gas, Energy Charter Secretariat, *Gas Transit Tariffs*, *supra* note 283, at 65.

6.5.3. Government charges

While a transit tariff is a commercial fee that includes costs and profits, a government charge is not related to the cost of transportation.[807] The economic nature of a government charge is unclear. One study maintains that a government charge may be viewed as a fee payable to the transit state for passage through its territory, a compensation made by the pipeline operator to the transit state for taxes that were not levied by the government, or a fee payable for protection and other services rendered by the country.[808] Another study suggests viewing such charges as a reward for realization of added value in a cross-border oil or gas trade or as a fee that confers to the transit state a portion of the savings made by using the transit route versus the next lowest cost alternative.[809] To all these hypotheses, Stevens adds that a government charge can also be viewed as compensation for the negative impact of the pipeline on the transit country and for the state surrendering part of its sovereignty "by allowing the pipeline to operate on its territory, specifically by the treaty commitments it undertakes".[810] All of these views are relevant. In fact, government charges vary across transit states in their amounts, the methods of calculation and payment, their legal origins, and many other factors. The nature of government charges should therefore vary from one project to another. Let us examine three different transit arrangements that exemplify various issues related to government charges.

First we review the Maghreb-Europe Gas Pipeline, which delivers gas from Algeria to Spain via Morocco.[811] A private company constructed the pipeline in 1996, although the legal title belongs to a state-owned Moroccan company.[812] According to a joint UNDP and World Bank study:

> Morocco was to receive "royalty gas," defined as 7 percent of the gas actually transported, as payment of the transit fee. The transit fee in turn was defined as representing compensation for the tax exemption offered to the project by Morocco and for the use of the land over which the

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[807] Energy Charter Secretariat, *Oil Pipeline Tariffs*, *supra* note 26, at 68.
[808] Energy Charter Secretariat, *Oil Pipeline Tariffs*, *supra* note 26, at 67.
[809] UNDP/World Bank, *supra* note 728, at 21.
[810] Stevens, *supra* note 706, at 16.
[811] UNDP/World Bank, *supra* note 728, at 88.
[812] *Ibid*. at 89. The state-owned company and the private company that constructed it jointly own the pipeline.

line ran. Under the agreement, Morocco can choose on relatively short notice to receive its royalty gas in kind or in cash.[813]

The second project, the South Caucasus Pipeline, delivers natural gas from Azerbaijan through Georgia to Turkey. The pipeline was constructed, and is owned and operated by an incorporated joint venture. Georgia receives 5% of the gas transited either as a fee or in kind, at the annual choice of Georgia.[814] The charge is viewed as a minimum income from fixed taxation and as compensation for the transit state's obligation to secure the pipeline. In case of damage to the pipeline due to its own failure, Georgia is liable for damages up to the total of its revenues from the government transit charges.

The last example is the transit network of Ukraine, one of the most important petroleum transit states in the world. Ukraine sets the government charge (rent payment) in its Tax Code, according to Art. 253.1.1, in which the rent payment for transit of natural gas is established at the rate of UAH[815] 1.67[816] per 1000m3/100km.[817] The Tax Code of Ukraine explains that the rent payment for the transit of natural gas represents a national-level statutory fee paid for cargo transportation (movement) services by pipeline facilities across the territory of Ukraine.[818] However, this rent is distinct from the transit tariff charged to shippers by the monopolist gas pipeline operator – the state-owned company PJSC Naftogas of Ukraine (hereinafter: Naftogas).[819] Furthermore, the pipeline operator, not the shipper, provides rent payment.[820] Thus, the rent payment is actually embodied in the transit tariffs paid to Naftogas for transportation services.

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[813] *Ibid*.
[814] Energy Charter Secretariat, *Gas Transit Tariffs*, *supra* note 283, at 57.
[815] UAH – Ukrainian Hryvnia, the national currency of Ukraine.
[816] Around USD 0.20, using an approximately average conversion rate of March 2012: 1 USD = 8 UAH.
[817] Art. 253.1.1 of the Tax Code of Ukraine of 2 December 2010.
[818] Art. 14.1.217 of the Tax Code of Ukraine of 2 December 2010.
[819] The transit tariffs for Russian gas are set in an agreement between Naftogas and Gazprom. Right after the 2009 Russia-Ukraine transit dispute, on 19 January 2009, the companies concluded an agreement according to which the transit tariff for 2009 was set at USD 1.7 per 1000m3/100km, and from 2010 onwards the tariff was calculated using a special formula. As a result, the tariff for 2010 increased by 59% compared to 2009 and by 8% in 2011 compared to 2010. See Naftogas of Ukraine, *Consolidated Financial Statements of PJSC Naftogas of Ukraine for the Year Ended 31 December 2010*, at 12, online: Naftogas of Ukraine <http://www.naftogaz.com/files/Zvity/FS_Naftogaz-2010.pdf> accessed on 1 March 2012.
[820] Art. 251.2 of the Tax Code of Ukraine of 2 December 2010.

Although the government charge in the Ukrainian transit arrangement is viewed formally as a fee for transportation services, such fees may not represent transportation charges under Art.V:3, because the pipeline operator (the only direct payer of the rent payment) does not procure transportation services from the government, but provides such services itself to the shippers and receives transit tariffs for those services. Similarly, the Moroccan and Georgian government charges cannot be viewed as transportation charges because pipeline operators provide services.

Apart from transportation charges, Art.V:3 also permits charges commensurate with transit administrative expenses or with the cost of services rendered. Clearly this exception includes a customs office's administrative processing expenses, including customs clearance fees, issuance of certificates, registration of goods, as well as charges related to the cost of services rendered in connection with transit, such as warehousing services or services performed by the customs employees at out of office locations or during non-working hours. This exception would also cover government charges for security services provided along the pipeline, such as indicated in the Georgian arrangement. Although in Georgia's case the charge was equated with the minimum income taxation, the fact that its failure to procure due security for the pipeline would cost the Georgian government all revenue from government charges indicates that these charges are payments for services.

The Moroccan "royalty gas", being a tax compensation and a payment for the use of land, does not seem to be connected to the cost of services or administrative expenses and does not represent a charge for transportation. Art. V:3 prohibits all "other charges" and "transit duties". If one assumes, as the WTO Secretariat did, that government charges must not be a source of fiscal revenue, than the Moroccan charge is in breach of the GATT transit rules. However, this issue is far more complex than is first appears. A closer look at the Moroccan arrangement begs the question of whether the government charge is a transit-related charge *per se* or something else. In fact, this transit arrangement is an investment deal rather than a trade measure. The government of Morocco and investors agreed on transit terms before the pipeline's construction.

Much like the case of petroleum contracts described earlier herein,[821] in the Maghreb-Europe Gas Pipeline project the government and investors balanced their interests through contractual gives and takes. Thus, the whole project must be evaluated in its complexity without dissecting transit fees from underlying matters. Viewed as a whole the Maghreb-Europe Gas Pipeline project is an investment arrangement and therefore should not be subject to the GATT transit rules.[822] In fact, the same conclusion can be drawn with respect to the Georgian South Caucasus Pipeline project.

A formal application of GATT rules to investment-based transit arrangements like the Moroccan and Georgian cases can destruct corresponding trade flows rather than improve them. Neither Morocco nor Georgia would have allowed the construction of infrastructure through their territories not intended for transportation of their own goods and involving potentially harmful effects on the environment and public health, unless they would benefit. In these cases, the transit states had no obligation to enter into a transit agreement, as discussed at the beginning of this chapter with respect to landlocked states for which transit is critical for economic survival, even if such obligation had been firmly established in international law.[823] In the end, by allowing transit through their territories Morocco and Georgia contributed to the improvement of regional petroleum markets and therefore deserve the rewards reflected in the transit charges.

In contrast to the Moroccan and Georgian cases, except for a few short sections constructed after 1991, the Ukrainian transit network was inherited from the Soviet Union, which built a complex system of pipelines to deliver its petroleum from Siberia and Central Asia to Europe. Hence, it seems inappropriate to view the Ukrainian pipeline through the same lens. Nevertheless, the fact that the pipelines were built long ago does not imply that Ukraine did not invest in them.

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[821] See *infra* Chapter IV, where applicability of the TRIMs Agreement's rules is discussed with respect to petroleum E&P contracts.

[822] Neither the TRIMs Agreement nor the GATT Art. III and XI articles are applicable because Morocco does not produce domestic natural gas.

[823] Algeria is not a landlocked state and, although the option is more costly, could have constructed the pipeline directly from its territory. Moreover, Algeria has several other options including other pipelines and trade in LNG. Similarly, Azerbaijan has several alternatives for gas exports via other states through existing pipelines.

The value of pipeline infrastructure and maintenance investments as well as amortization of corresponding assets must be taken into account in the pricing of transportation services. However, the cost of these investments must be reflected in the transit tariffs of the pipeline operator, Naftogas, rather than in government charges (rent payment).

Ukrainian rent payment cannot be viewed as charges commensurate with administrative expenses provided by custom bodies because the rent is paid on an *ad valorem* basis, whereas administrative expenses, as a rule, are not volume dependent. Information on customs fees provided by Ukraine at its accession to the WTO reveals that all customs fees levied in the country are either fixed or capped.[824] A list of payable customs services found in the Customs Code of Ukraine does not refer to rent payment.[825] Since transportation services are actually provided by Naftogas under its own transit tariffs, rent payment cannot be viewed as commensurate with transportation services. On the basis of these features, it can be suggested that rent payment should be classified as a transit duty and condemned as a source of revenue by the WTO Secretariat in its commentary to GATT Art. V.[826] If one refers to the negotiating history of Art. V, one would find that the drafters intended to outlaw any charge similar to customs duties or transit duties, except for transportation charges.[827] Hence, the government charge levied by

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[824] Report of the Working Party on the Accession of Ukraine to the World Trade Organization, WTO Doc.: WT/ACC/UKR/152, 25 January 2008, paras. 137-148. Some WTO Members requested that Ukraine remove some fees estimated on an *ad valorem* basis though such fees had cap-ceilings. Ukraine also maintains supplemental fees for the use of highway estimated on a distance basis. A revised draft of Art. V proposed during the Doha Round explicitly prohibits the imposition of charges commensurate with administrative expenses on an *ad valorem* basis. See Communication from the Former Yugoslav Republic of Macedonia, the Republic of Moldova, Rwanda, Switzerland and Swaziland (WTO Doc. TN/TF/W/133/Rev.3, 26 June 2009) at 3.

[825] The Customs Code of Ukraine of 11 July 2002.

[826] The fact that rent payment is established by the Tax Code may also be interpreted as supporting this view. Rent payments for gas transits are frequently at the center of Ukrainian parliamentary and governmental discussions, especially in the light of fiscal revenues during discussions of annual states budgets. For example, the Ukrainian Cabinet of Ministers assumed fiscal revenue from gas transits in the amount of UAH 2.148 billion when it adopted the state budget for 2012. “Азаров хочет получить за транзит газа 2,2 миллиарда”, *Экономическая Правда (Ekonomicheskaya Pravda)*, 22 December 2011, [in Russian] online: Экономическая Правда <http://www.epravda.com.ua/news/2011/12/22/310726/> accessed on 23 January 2012.

[827] An earlier version of the Art.V:3 provision contained the following wording: “such traffic… shall be exempt from the payment of any transit duty, customs duty, or similar charge”. During the negotiations of this provision the drafters indicated that the words “or similar charge” meant “a charge imposed by the Government of the country which is similar to a transit duty or a customs duty, and not to a charge for transportation”. See Report of the Technical Sub-Committee of the Preparatory Committee of the International Conference on Trade and Employment, dated 28 November 1946, UN.Doc.: E/PC/T/C.II/54/Rev.1, at 9.

Ukraine on the transit of gas may be in conflict with Art.V:3. Therefore assessment of its MFN-compliance under the other paragraphs of the article would be unnecessary.

Suppose that rent payment is contested and eliminated from the Tax Code of Ukraine. To balance its budget the Ukrainian government may increase budget inflows through dividends from Naftogas or by imposing a specific tax on the pipeline operator. Thus, elimination of rent payment may result in a corresponding increase (sudden or gradual) in the transit tariffs imposed by Naftogas. Since the rent payment is a small portion of the transit tariff, it would not be difficult to justify an increase based on a variety of factors affecting pipeline costs.[828] As we have observed above, it is difficult to challenge state-owned pipeline operators under Art. V and even more difficult to challenge transit tariffs under that provision. As a result, while the transit conditions remain the same, Ukraine will still collect the rent as dividends, tax, or in any other form.

6.6. A special commitment of Ukraine

Unlike any other WTO Member, Ukraine has made a special commitment with regard to the transportation of fuels and other goods by pipelines:

> Ukraine commits itself to provide full transparency in the formulation, adoption and application of measures affecting access to and trade in services of pipeline transportation. Ukraine undertakes to ensure adherence to the principles of non-discriminatory treatment in access to and use of pipeline networks under its jurisdiction, within the technical capacities of these networks, with regard to the origin, destination or ownership of product transported, without imposing any unjustified delays, restrictions or charges, as well as without discriminatory pricing based on the differences in origin, destination or ownership.[829]

At first glance, this commitment rephrases the core obligations of GATT Art. V. However, its scope is broader than that of the transit rules. Note that the word "transit" does not appear in the commitment, making it applicable to all flows of products in the pipelines – exports, imports, transit and domestic flows. At the same time the phrases, "adherence to the principles of non-discriminatory treatment in access to and use of pipeline networks under its jurisdiction" and "without discriminatory pricing based on the differences in origin, destination or ownership"

[828] In 2011, rent payment comprised less than 10% of the transit tariff. See *supra* note 819.
[829] Report of the Working Party on the Accession of Ukraine, Addendum, Part II – Schedule of Specific Commitments on Trade in Services. WTO Doc.: WT/ACC/UKR/152/Add.2, 25 January 2008, at 33.

imply that the NT obligation is incorporated into the provision.[830] Since this provision appears in the Ukrainian Schedule of Specific Commitments on Trade in Services, it makes a critical link between the GATT and GATS, the absence of which left the pipeline operators practically out of the scope of the transit disciplines. This WTO-plus obligation in conjunction with Art. VIII of the GATS allows the application of the transit-like rule to Naftogas.[831]

Under this special commitment Naftogas is obliged not to practice discriminatory pricing based on differences in origin, destination or ownership. Other things being equal, tariffs for domestic transportation, export, import and transit must be similar. Unlike transit tariffs, which are set by the agreement between Naftogas and Gazprom and are distance-based, domestic tariffs for transportation of gas in Ukraine are set by a national regulator, the National Energy Regulatory Commission.[832] According to the Energy Charter Secretariat, domestic tariffs are imposed using a "postal" method and, though nominally cost-based, are set artificially low, often below full-costs.[833] If this is correct, then domestic tariffs are likely lower than transit tariffs.[834] However, if the transit tariff is cost-reflective while domestic tariffs are set below the full-cost, then the domestic not the transit tariff that becomes challengeable under WTO rules. In this case, domestic tariffs may be viewed as implicit subsidies and are then subject to the ASCM Agreement and the special commitment of Ukraine simultaneously. Under the ASCM

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830 Such a conclusion is based on the following reasoning: unlike GATT Art. V, this provision is not limited to matters of transit. Moreover, it requires non-discriminatory treatment in access to pipelines under its jurisdiction, which means that both domestic and foreign inflows into the pipeline are covered. Furthermore, the concept of non-discrimination includes both the MFN and NT obligations (see *infra* note 886).

831 To recall, Art. VIII:1 of the GATS requires, *inter alia*, each Member to ensure that any monopoly supplier of a service complies with specific commitments of that Member.

832 The most recent domestic tariffs became effective 1 January 2012 and were set by the Resolution of the National Energy Regulatory Commission #131 of 28 December 2011.

833 Energy Charter Secretariat, *Gas Transit Tariffs*, *supra* note 283, at 61. Postal tariffs use a single fixed fee for the transport of particular volume of gas within specific district. There are over 50 such districts in Ukraine. Each district has its own operator, which is a subsidiary of Naftogas. The postal tariff includes, apart from transportation services, fees payable for other services, such as quality control, metering, uploading, unloading, odorization, etc. For further information on Ukrainian domestic transportation gas tariffs consult the official web-site of JSC Ukrtransgas (Naftogas' subsidiary responsible for gas transportation): <http://www.utg.ua/ru/tariffs/ > accessed on 1 March 2012.

834 Due to lack of necessary data, the difference in methodology, and varying technical and economic features pertaining to the transit and domestic tariffs, we do not attempt to compare them.

Agreement, much like the dual pricing policies discussed in Chapter V,[835] such domestic tariffs may fail to meet the specificity test and might therefore be legitimate. In contrast, the special commitment has no reservations, conditions or trade effect tests, meaning the mere fact of difference in pricing is contestable.

The importance of the special commitment of Ukraine is not confined to matters relevant only to this country. It will affect all subsequent negotiations on accession of states to the WTO and is likely to affect the development of trade rules in the future. Acceding states may be compelled to provide similar commitments whether in the field of energy or other goods. Ukraine will likely lead such negotiations to ensure that newly acceding states join the club under terms no more favorable than its own. In fact, Ukraine has attempted to push Russia and other states to accept similar commitments on the transit of petroleum in accession negotiations.[836] Although Russia managed to avoid such an undertaking,[837] it is unlikely that other acceding states, which do not have the political power and economic leverages that Russia has, will be able to refuse the Members' demand to accept a WTO-plus obligation.

6.7. Freedom of transit and access to pipelines

While analyzing the scope of Art. V we submitted that freedom of transit in pipelines merely implies non-impediment of petroleum flows. However, some scholars argue that freedom of transit also includes an obligation to provide access to transit routes including access to the existing fixed infrastructure, and that, if there is congestion, a WTO Member must allocate scarce transport capacities so that transit is possible.[838] This idea is highly controversial.

First, freedom of transit requires that states do not interfere with the movement of goods, not that they create such movement. Secondly, transport infrastructure is owned by commercial

[835] See *infra* Chapter V, where I argue that dual pricing policies such as those practiced in Russia and Saudi Arabia are not effectively contestable under the ASCM Agreement because they do not meet the specificity test required for prohibitive subsidies.

[836] Peter Milthorp & David Christy "Energy Issues in Selected WTO Accessions" in Selivanova, *Regulation of Energy, supra* note 148, at 287; and Marceau, *supra* note 741, at 88.

[837] See Report of the Working Party on the Accession of the Russian Federation. WTO Doc.: WT/ACC/RUS/70, 17 November 2011, at para. 1363.

[838] Ehring & Selivanova, *supra* note 700, at 70-71.

entities whose freedom cannot be constrained for the sake of extending freedom to other commercial entities. Thirdly, in the case of transit via pipelines, such freedom of transit is hardly realizable in practice. Transit pipelines usually start in the state of origin rather than the country of transit. Transit rules do not apply to the state of origin, where access to a pipeline may only be considered from an export restrictions perspective. Since petroleum pipelines tend to operate at maximum capacities, denial of access to pipelines cannot be challenged based on rules of export restrictions (GATT Art. XI), because no decrease in export quantities occurs. Even in the rare cases of spare pipeline capacities, petroleum must meet the technical requirements of a particular pipeline. In fact, if there is spare capacity and the petroleum complies with technical requirements, it is in the interest of the pipeline operator to take such petroleum.

With respect to this discussion, it is interesting to note that the special commitment of Ukraine includes an undertaking "to ensure adherence to the principles of non-discriminatory treatment in access to and use of pipeline networks under its jurisdiction, within the technical capacities of these networks". As noted in the preceding section, this provision contains a NT obligation, which is not observed in GATT Art. V. However, it may not improve the transit of petroleum by pipelines. Non-discrimination in the special commitment does not call for giving preference to transit over domestic flows. In fact it requires an equal treatment for all flows: exports, imports, domestic and transit. If Ukrainian exporters/importers request access to a transit pipeline to export/import their goods, the quantity of goods transited would only diminish, unless the pipeline capacities had operated under full capacity. The reference to the technical capacity of networks confirms our earlier observation that the effectiveness of legal obligations is subject to technical constraints, which are prevalent in petroleum transportation. Therefore, technical capacities in the pipeline network, not the scope of legal obligations primarily, need extension.

6.8. Prospective transit rules

As part of the Doha Round mandate on trade facilitation[839] several Members forwarded their proposals on the improvement of GATT Art. V.[840] One of the most recent and comprehensive proposals (the so-called "Swiss proposal") offers a new text for the article that clarifies many ambiguities in the current text, extends the scope of transit rules, and precisely details legal obligations.[841] In general, the new transit rules improve Art. V in most of its current deficiencies reviewed above.

First, the proposal contains an explicit reference to transit of goods via fixed infrastructure such as pipelines and electricity grids, so that no doubts may remain as to the applicability of the transit rules to fixed transport infrastructure. Secondly, enterprises with exclusive rights and their charges for transportation are directly regulated in the provision, so that the operators of fixed infrastructure are bound by the respective Member's WTO obligations. Thirdly, a NT obligation is incorporated into the transit rules, thereby banning discriminatory treatment against domestic and cross-border flows of goods of the transit country. Fourthly, the new transit rules provide a comprehensive set of transparency obligations, including disclosure of information on all transit formalities and charges as well as information explaining the reasons for levying transit-related charges. Finally, the proposed transit rules address the issue of regional agreements and inter-governmental transit arrangements, to assure that arrangements do not constitute a disguised restriction on international trade or an arbitrary or unjustifiable discrimination against Members.

Unfortunately, the proposed transit rules do not contain an obligation against impediment of transit flows during disputes. As has been observed earlier, petroleum markets are affected quickly if transit through a pipeline is halted. At the same time, the WTO dispute settlement

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[839] See Annex D of the Doha Work Programme Decision adopted by the WTO General Council on 1 August 2004, WTO Doc.: WT/L/579, 2 August 2004.

[840] See documents listed in *supra* note 745.

[841] Communication from the Former Yugoslav Republic of Macedonia, the Republic of Moldova, Rwanda, Switzerland and Swaziland (WTO Doc. TN/TF/W/133/Rev.3, 26 June 2009). A more detailed discussion of the Doha Round proposals on transit matters is provided in Azaria, *supra* note 700, at 574.

system is too unwieldy to respond adequately to transit disputes. Regardless, whether the dispute settlement system is modified to introduce fast-track adjudication or other alternative means for transit dispute resolution, transit rules need a provision procuring unimpeded transit flows in the event of dispute. A starting point for drafting such a provision may be Art. 7(6) of the ECT, which states:

> A Contracting Party through whose Area Energy Materials and Products transit shall not, in the event of a dispute over any matter arising from that Transit, interrupt or reduce, permit any entity subject to its control to interrupt or reduce, or require any entity subject to its jurisdiction to interrupt or reduce the existing flow of Energy Materials and Products prior to the conclusion of the dispute resolution procedures set out in paragraph (7), except where this is specifically provided for in a contract or other agreement governing such Transit or permitted in accordance with the conciliator's decision.[842]

The ECT's provision has an exception, which may reduce its effectiveness under certain conditions. A petroleum transportation contract or an inter-governmental agreement that governs transit of petroleum is likely to include an extensive list of grounds upon which interruption of transit flow may be exercised. Some of the grounds, such as scheduled maintenance, safety precautions, and force-majeure are perfectly legitimate. However, other grounds such as non-payment and unauthorized lift of petroleum from the pipeline as well as defaults linked to events irrelevant to transit may also be provided in the contract. Thus, a prospective provision on non-impediment in the event of dispute should limit its exception to core legitimate reasons while taking into account general exceptions provided elsewhere. For example, the exception may explicitly mention interruption for scheduled maintenance or due to a force-majeure event, whereas interruption under safety reasons would be exempted under GATT Art. XX (b) and/or (d).

Neither the new transit rules proposed during the Doha Round nor the ECT impose an obligation on transit states to provide third party access to the pipeline infrastructure. Given technical constraints and other peculiarities in the transportation of petroleum by pipelines, third party access may not be important until spare capacities are created in the pipeline network. The

[842] Art. 7(6) of the ECT. Paragraph 7 of the article contains a special conciliation mechanism for resolution of transit disputes.

ECT attempts to deal with matters relevant to the expansion of transit capacities through a number of soft provisions embodied in Art. 7.[843] However, these provisions lay clearly in the domain of investment law. Therefore, similar provisions are unlikely to be incorporated in WTO law and, if incorporated, might not solve problems arising from a shortage of transit capacities.

6.9. Conclusion

GATT Art. V transit rules apply to petroleum goods transported through petroleum infrastructure, and so do GATT Art. XX exceptions. However, in the case of transit through petroleum pipelines the effectiveness of the GATT transit rules is limited due to technical specifics of petroleum infrastructure, absence of the NT obligation in the rules, and because most pipelines are operated by monopolies whether state or privately owned. The new transit rules proposed during the Doha Round address these issues but need to be complemented with an obligation not to impede transit flows during a dispute similar to the provision contained in Art. 7(6) of the ECT.

It must be kept in mind that, as far as transportation of petroleum by pipelines is concerned, trade rules cannot facilitate transit flows without necessary transit capacities. Thus, the expansion of transit capacities is key to both the facilitation of transit flows and the effectiveness of transit rules. However, apart from legal details discussed herein, the existing WTO law fails to address some conceptual features relevant to the transit of petroleum.

In fact, each party on the energy transit line is interested in the expansion of transit capacities. Exporters need to sell goods to importers, whereas transit states need additional revenue. The WTO does not allow transit states to collect transit rent (other than transportation

[843] According to Art. 7, states are required to “encourage relevant entities to co-operate” in modernization, development, operation and inter-connection of energy transporting infrastructure (paragraph 2). If private investors undertake construction of new transportation facilities, the relevant state “shall not place obstacles in the way of new capacity being established” (paragraph 4). However, a transit state is not obliged to permit modification of existing or new transit lines if it “would endanger the security or efficiency of its energy systems, including the security of supply” (paragraph 5). This implies that states may welcome the construction of new pipelines if prospective transit flows are well above existing transit capacities. Otherwise, since any below-capacity operation of pipelines reduces their economic efficiency, states will likely resist the construction of new pipelines. Transit states may also invoke general exceptions listed in Art. 24 including the GATT-like exception: “necessary to protect human, animal or plant life or health”.

charges).[844] If a transit state is not allowed to realize significant economic benefits from a transit pipeline, why should it allow its construction on its territory? Hence, whether upon application of existing transit rules or during the drafting of new rules, the interests of all parties involved and sector-specific features must be carefully taken into account.

The construction of new petroleum pipelines requires a large up-front investment. The economic attractiveness of a pipeline's construction decreases with reserves in the corresponding petroleum fields. Since the average size of newly discovered petroleum fields is diminishing, fewer pipeline projects pass economic feasibility tests. When private investors are unable to implement the pipeline project themselves, governmental support may be required. A government would be willing to provide such support in return for certain economic, social, or even political benefits. However, state support, depending on its form, may conflict with other transit rules of the WTO system, such as the ASCM Agreement or the TRIM Agreement. Because a pipeline project requires huge capital and lasts for decades, governments may refuse such support to private parties, as benefits may be nullified by WTO law.

[844] Since ideal transportation charges must be cost-reflective with reasonably fixed profit margins, the transit state receives little from income tax levied on the pipeline operator.

CHAPTER VII. EXPORT RESTRICTIONS

7.1. Introduction

It has been suggested that due to the unequal distribution of energy resources in the world and their crucial importance for the economy, trade barriers to energy products, unlike in other merchandise sectors, tend to be on the export rather than on the import side.[845] In this chapter we test the applicability of WTO rules to two major trade barriers associated with petroleum exports: quantitative export restrictions and export duties. The general rules on the prohibition of quantitative export restrictions laid down in GATT Art. XI, as well as exceptions to the rule, are examined in the first part of this chapter. As any analysis of petroleum exports in the world market unavoidably includes a review of OPEC activity, it seems necessary to pay some attention to this factor, and at the same time, to the fact that WTO trade rules apply to each state, regardless of whether its measures are taken alone or in concert with other states.[846] Hence, the first part of this chapter will also focus on the quantitative export restriction measures as they have been exercised by OPEC states.

The second part of this chapter analyses trade rules applicable to export duties. Export duties are allowed under GATT Art. XI to an extent compliant with the MFN principles, but some newly acceded WTO member states have accepted specific obligations with respect to such duties. Using the examples of China and Russia, we try to highlight the potential implications of export duty commitments for petroleum exporting states acceding to the WTO in the future.

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[845] Selivanova, supra note 6, at 5.; Melaku Geboye Desta, "The GATT/WTO System and International Trade in Petroleum: An Overview" (2003) 21 J. Energy Nat. Resources L. 385 at 394.

[846] Thus, for the purposes of this thesis a state action associated with OPEC is merely an individual state's measure.

7.2. Quantitative petroleum export restrictions and GATT Art. XI

GATT Art. XI:1 prohibits, with some exceptions, both export and import quantitative restrictions, including those made effective through state-trading operations.[847] Its first paragraph states:

> No 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.

Although the heading of the Article reads "General Elimination of Quantitative Restrictions", its scope is in fact not limited to quantitative restrictions; rather, it covers a broader set of measures. The GATT Panel in *Japan – Trade in Semi-conductors* noted that "this wording was comprehensive: it applied to all measures instituted or maintained by a contracting party prohibiting or restricting the importation, exportation or sale for export of products other than measures that take the form of duties, taxes or other charges" and that "Article XI:1, unlike other provisions of the General Agreement, did not refer to laws or regulations but more broadly to measures". This wording clearly indicates that any measure instituted or maintained by a contracting party which restricts the exportation or sale for export of products is covered by this provision, irrespective of the legal status of the measure.[848]

Hence, a decision by an energy exporting state to cut the production of petroleum, if such a state's petroleum is mainly exported, should be viewed as a measure *de facto* restricting exports, and as such be subject to the regime set by Art. XI. However, it is important to bear in mind that the restriction of production in the case of crude oil and natural gas basically entails halting the extraction of the energy resource from underground. On this basis, some commentators have suggested that petroleum in its natural underground state may not qualify as

[847] The Interpretative Note to Articles XI, XII, XIII, XIV and XVIII says: "Throughout Articles XI, XII, XIII, XIV and XVIII, the terms "import restrictions" or "export restrictions" include restrictions made effective through state-trading operations."
[848] GATT Panel Report, *Japan – Trade in Semi-Conductors*, adopted 4 May 1988, L/6309, BISD 35S/116, paras. 104 and 106.

a commodity, and therefore it should not be subject to trading rules.[849] Nevertheless, keeping in mind that the Panel in *Japan – Trade in Semi-conductors* allowed for a broad interpretation of the provisions of Art. XI, let us now try to analyze potential arguments that may be made in a plausible trade dispute over the restriction of petroleum production.

Since the first world oil crisis, which was caused by the concerted actions of the OPEC states in 1973, the stability of energy supply has been of great concern for the world trade community. Throughout its history, OPEC has employed different instruments to influence price levels in the world oil market.[850] Basically, OPEC states are allocated with certain production quotas that are adjusted by unanimous consent of the members according to market changes.[851] Hence, the restriction of oil production by an OPEC state may arguably be recognized as a measure prohibited by Art. XI:1. One of the earliest attempts to assess OPEC's actions from the perspective of multilateral trade rules was made shortly after the first oil crisis. Ibrahim Shihata analyzed the applicability of the GATT 1947 provisions to oil supply cutbacks resulting from the outbreak of Arab-Israeli hostilities in October 1973.[852] According to him, since Kuwait, being the only OPEC-cum-GATT member state at that time, participated in the October war, its measures were legitimate under the Art. XXI(b)(iii) security exception.[853] He also observed that oil supply restrictions had been viewed as necessary well before the October 1973 conflict because uncontrolled production kept prices so low that the depleting crude yielded a lower economic return than if it had been left in the ground.[854] Hence, according to Shihata, restrictions

[849] See Stephen Broom, "Conflicting Obligations for Oil Exporting Nations?: Satisfying Membership Requirement of both OPEC and the WTO" (2006) 38 Geo. Wash. Int'l L. Rev. 409 at 416, and Bashar H. Malkawi, "Disciplining the Oil Cartel: Limits of the WTO in a case against the Organization of Petroleum Exporting States" (2009) 20 European Business Law Review 931 at 941.

[850] See: Bassam Fattouh, *OPEC Pricing Power: The Need for a New Perspective*, WPM 31 (Oxford: Oxford Institute for Energy Studies, 2007); Robert Mabro, *The Netback Pricing System and the Price Collapse of 1986.* WPM 10 (Oxford: Oxford Institute for Energy Studies, 1986); and, Linghui Tang & Shawkat Hammoudeh, "An empirical exploration of the world oil price under the target zone model" (2001) 24 *Energy Economics* 577.

[851] Although, due to lack of effective enforcement mechanism in the OPEC, its members frequently abuse their production limits impairing the effectiveness of co-operation. See J. L. Smith, "Inscrutable OPEC? Behavioral Tests of the Cartel Hypothesis." (2005) 26 (1) *The Energy Journal* 51.

[852] Ibrahim F. I. Shihata, "Destination Embargo of Arab Oil: Its Legality Under International Law" (1974) 68 (4) Am. J. Int'l L. 591.

[853] *Ibid.* at 623. GATT Art. XXI(b)(iii) provides exception for measures, taken in time of war or other emergency in international relations, necessary for the protection of its essential security interests.

[854] *Ibid.* at 591.

on oil exports are also justifiable as measures relating to the conservation of exhaustible natural resources under Art. XX(g) of the GATT.[855]

It has to be acknowledged that even after the October 1973 crisis, OPEC oil cutbacks were exercised in peaceful times, when prices for oil were deemed below the levels desirable by its member states. In 2004, the U.S. Senator Frank Lautenberg urged the U.S. government to bring a case against WTO-cum-OPEC members. He argued that the national security exception under Art. XXI could not be justified by OPEC because "crude oil is arguably considered essential to the economic security of many of the OPEC countries"[856] and the OPEC has never cited the national security argument while cutting its cumulative production. Conservation of exhaustible natural resources as an exception provided under Art. XX(g), according to Senator Lautenberg, also cannot be invoked because OPEC never cited or relied upon this reason to justify oil cutbacks.[857]

The national security exception is analyzed in detail in the next chapter of this work. In the meantime, it should be stated that the security exception is hardly disputable in the case of the 1973 oil cutbacks by the states involved in the conflict. Art. XXI(b)(iii) vests a state with the right to take 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". Although a panel may judge the merits of invoking the exception, Art. XXI accords the sanctioning state a wide margin of appreciation in "considering" the necessity of actions and determining its "essential

[855] *Ibid.* at 622.
[856] Report by Senator Frank R. Lautenberg, "Busting the Cartel: The WTO case against OPEC" (2004) at 6, online: the U.S. Senate <http://lautenberg.senate.gov/documents/foreign/OPEC%20Memo.pdf> accessed on 1 May 2012. This statement seems to reflect only security issues of an importing state; however, economic security covers not only supply of energy to means of production but also, *inter alia*, balance of payment, which is based on a state's exports and imports. As the economy of all OPEC members and of most other developing energy exporting states primarily depends on proceeds from oil exports it can be argued that petroleum is essential to the economic security of these states as much as it is essential to that of other states.
[857] *Ibid.* at 11. The report also envisages the possibility of invocation by OPEC states of Art. XX(h), which provides an exception for measures undertaken in pursuance of obligations under intergovernmental commodity agreements which conform to certain criteria. He argues that the exception will not be applicable as OPEC has never submitted its founding documents for approval by the WTO and because OPEC does not include importing countries and therefore cannot qualify as a commodity agreement for WTO purposes.

security interests", so that in cases similar to the Arab oil embargo, the panel would hardly be able to rule against the invoking party.[858]

The second argument used to justify OPEC practices in peaceful times is based on the economic features of petroleum: that it is a non-recoverable exhaustible natural resource. Art. XX(g) of the GATT provides an exception 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".[859] The chapeau of the article requires that "such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries, or a disguised restriction on international trade".[860] Hence, a party invoking the exception has the burden of satisfying three requirements, namely, that: (i) the policy in respect of the measures and the measures themselves were related to the conservation of exhaustible natural resources; (ii) the measures were made effective in conjunction with restrictions on domestic production or consumption; and, (iii) the measures were applied in conformity with the requirements laid in the chapeau of Art. XX.[861]

Since OPEC adjusts production in response to world oil prices, in satisfaction of the first requirement, Dr. Hussein suggests that "if and when oil prices fall below what an oil exporter considers an acceptable target price, it would be free to curb oil production as a means of conserving this exhaustible natural resource and avoiding wastage under eroded prices".[862] The second requirement, according to him, is also fulfilled because the production ceiling applies equally to both exports and domestic consumption.[863] The individual states' quotas do not

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[858] The concept of national security, which is itself vague, embraces many other ambiguous notions: economic security, energy security, ecological security, and so on. As we will see in the last chapter of this work, the Art. XXI national security exception can be invoked in both peacetime and wartime, regardless of whether the party invoking the exception actively takes part in the conflict or not. See, *contra*, Abdallah, *supra* note 7, at 279, arguing that under normal trading conditions (in peacetime) this exception may only be used to give priority to the needs of the domestic market in the case of a direct threat to national security.
[859] The term "relating to" has been interpreted in the GATT/WTO jurisprudence as having broader coverage than "necessary" or "essential". See GATT Panel Report, *Canada – Measures Affecting Exports of Unprocessed Herring and Salmon*, adopted 22 March 1988, L/6268, BISD 35S/98 [hereinafter: *Canada – Unprocessed Herring and Salmon*] *para* 4.6; and, AB Report, *US – Gasoline*, *supra* note 1, section III (B).
[860] For discussion of the chapeau's provisions see AB Report, *US – Gasoline*, *supra* note 1, section IV.
[861] WTO Panel Report, *US – Gasoline*, *supra* note 1, para. 6.35.
[862] Abdallah, *supra* note 7, at 276.
[863] *Ibid.* at 277.

distinguish among oil importers. Finally, in response to the third requirement, he submits that the production ceiling does not discriminate among the buyers, any of whom can buy the product at market prices determined "by aggregate demand and aggregate supply, of which OPEC's is only part, as well as by other market fundamentals, such as oil stock movements, economic growth, speculation at commodity exchange markets and so forth."[864]

In his argument that the OPEC measures do not constitute "arbitrary or unjustifiable discrimination between countries", Dr. Hussein omits the following wording of the chapeau: "or a disguised restriction on international trade". This wording has been analyzed in the GATT jurisprudence with the focus on the word "disguised". The panels held that a trade measure which is publicly announced does not constitute a "disguised restriction on international trade".[865] OPEC publicly announces its decisions on production cutbacks; otherwise, as we shall see below, it would hardly be able to influence the market. The remaining part of the wording, i.e. "restriction on international trade", has a general scope and could arbitrarily be viewed as prohibitive regardless of whether the restriction is disguised or evident. However, such a conclusion would render all exceptions under Art. XX ineffective, and thus would contradict the very purpose of the article. Perhaps, for the purposes of identifying "disguised restriction on international trade", it is not important whether the measure was publicly announced or not, but rather emphasis should be placed on whether the measure had a trade restrictive effect not contemplated by its purpose.[866] In such a case, if the cut down of an OPEC states' oil production has a trade restrictive effect, it would not fall under any of the exceptions provided in Art. XX.

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[864] *Ibid.* at 278.

[865] See GATT Panel Reports: *United States – Prohibition of Imports of Tuna and Tuna Products from Canada*, L/5198, adopted 22 February 1982, BISD 29S/91 para. 4.8; and, *United States – Imports of Certain Automotive Spring Assemblies*, L/5333, adopted 26 May 1983, BISD 30S/107 para. 56.

[866] This is not to propose adoption of the "aims and effects" test but to identify what the term "disguised" should actually mean. Public announcement of the measure contemplates a declaration of the aim of its adoption; however, it is not the aim but the effect of the measure that matters for the trade rules. Hence, if the purpose of the measure is discriminatory or the purpose is not identified, regardless of whether information on the discriminatory measure was made public or not, it may fall under "arbitrary or unjustifiable discrimination"; if the purpose of the measure was not trade-restrictive or discriminatory but actually had such an effect, it may fall under the term "disguised restriction on international trade". An essentially similar conclusion was drawn by the AB in the *US – Gasoline*, which did not mention the "public announcement" criterion:

> "We consider that "disguised restriction", whatever else it covers, may properly be read as embracing restrictions amounting to arbitrary or unjustifiable discrimination in international trade taken under the guise of a measure formally

Well before OPEC's establishment, the GATT Working Party produced a report analyzing various forms of quantitative restrictions. Its findings can be used as examples of measures constituting "disguised restriction on international trade", although not named as such therein:

> [t]he Working Party discussed a wide variety of circumstances in which exportation may be restricted in order to maintain the export price. The cases discussed included a commodity whose value might be greatly reduced if its supply to the world market were not controlled and a commodity whose world price was liable to be impaired by the collusive action of importers. The Working Party concluded that where export restrictions were in fact intended for the purpose of avoiding competition among exporters and not for the purposes set out in the exception provisions of Articles XI and XX, such restrictions were inconsistent with the provisions of the Agreement.[867]

In the light of these statements, one could argue that the ultimate goal of OPEC's reduction of production has nothing to do with the conservation of exhaustible natural resources, but is rather designed to influence the world market. This argument may be largely true, but not entirely. A leading OPEC observer echoes Dr. Hussein's assertion that the international organization is only part of the pricing mechanism. Prof. Robert Mabro states that:

> [t]he reference prices for oil in international trade are determined in New York and London in the futures exchanges for WTI and Brent respectively. Any attempt to understand why oil prices have moved in one direction or another, or why they are high or low must take its starting point in the futures market…Since OPEC does not fix the oil price but is always very concerned about its level and movements, it can only attempt to steer their course by sending signals to the futures markets where reference prices are determined. The signaling device is announcements about production policy. A decision about a quota reduction essentially means that OPEC is worried about bearish sentiments in the market which may eventually cause prices to fall.[868]

Another prominent OPEC researcher supports this observation:

> OPEC's influence on prices is now dependent on the expectations of participants in the futures markets. In principle, quota decisions can be viewed as signals to the market about OPEC's preferred range of prices. It is important to stress that this signaling mechanism may or may not succeed, depending on how the market interprets these signals. Specifically, the effectiveness of

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> within the terms of an exception listed in Article XX. Put in a somewhat different manner, the kinds of considerations pertinent in deciding whether the application of a particular measure amounts to "arbitrary or unjustifiable discrimination", may also be taken into account in determining the presence of a "disguised restriction" on international trade. The fundamental theme is to be found in the purpose and object of avoiding abuse or illegitimate use of the exceptions to substantive rules available in Article XX."

See AB Report, *US – Gasoline*, *supra* note 1, section IV. Thus, the "aims and effects" test is, again, neglected for these purposes.

[867] GATT Document Report of the Working Party "On Quantitative Restrictions" GATT/CP.4/33 (March 28, 1950), paras. 14 and 15.

[868] Robert Mabro, "On The Futures Markets And The Price Of Oil" Vol. XLVII No.22, Middle East Economic Survey, May 31, 2004.

> the signal will depend on whether the market believes that OPEC is able to undertake the necessary output adjustment in different market conditions.[869]

The futures market traders receive and analyze signals not only from OPEC and other energy exporting states, but also from other international organizations (e.g. forecasts by IEA), governments (e.g. announcement by the U.S. Government about changes in the national oil security reserve stock or the EC's data on energy consumption) and powerful private entities which, under proper coordination with the mass-media, are able to influence the market as effectively as OPEC. Moreover, in the time-lag between futures and spot markets, any trade distortion caused by the signals is absorbed and the market gradually adjusts to actual supply and demand. This has led some economists to conclude that:

> [d]espite the media attention which is drawn to the OPEC Conference, the decisions of OPEC have not destabilized either the oil spot markets or the US and UK stock markets. These markets appear to be efficient and well able to anticipate and absorb changes in production quotas without any significant increase in volatility.[870]

Finally, the WTO rules apply to individual state measures; as such, a measure by a single OPEC member (with Saudi Arabia as a possible exception) cannot influence the world oil market.[871]

It has to be noted that with regard to Art. XX(g), the AB in *US – Gasoline* ruled that unless it becomes "clear that realistically, a specific measure cannot in any possible situation have any positive effect on conservation goals" there is no need for the party invoking the exception to establish that the measure caused or is actually capable of causing the conservation of the natural resource.[872] Nevertheless, it is clear that by curtailing the production of oil, a state conserves the natural resource; to the contrary, it is hardly provable that an individual state's

[869] Fattouh, *supra* note 850, at 6.
[870] Marco Guidi, Alexander Russell & Heather Tarbert, "The effect of OPEC policy decisions on oil and stock prices" OPEC Review, March 2006, at 16.
[871] If economic analysis cited above is correct.
[872] AB Report, *US – Gasoline*, *supra* note 1, section III (C). However, note that in *Canada – Unprocessed Herring and Salmon*, the GATT Panel concluded that

> "while a trade measure did not have to be necessary or essential to the conservation of an exhaustible natural resource, it had to be primarily aimed at the conservation of an exhaustible natural resource to be considered as 'relating to' conservation within the meaning of Article XX(g). The Panel, similarly, considered that the terms 'in conjunction with' in Article XX(g) had to be interpreted in a way that ensures that the scope of possible actions under that provision corresponds to the purpose for which it was included in the General Agreement. A trade measure could therefore in the view of the Panel only be considered to be made effective 'in conjunction with' production restrictions if it was primarily aimed at rendering effective these restrictions."

Canada – Unprocessed Herring and Salmon, *supra* note 859, *para* 4.6

measure can distort the world market. Hence, save for the peculiarities of each particular case, it can be concluded that production restriction by oil exporting states is justifiable under the exception in Art. XX(g) as long as the measures are taken consistently. Here, consistency implies that the state cuts production whenever prices fall below a certain level, which would make economic return from residual oil so conserved higher than the marginal price incurred by the increase of production by the corresponding volume. Historical data of price dynamics and production cutbacks by the state may reveal inconsistencies in its measures, provided that all other economic factors peculiar to the relevant periods are duly taken into account.

OPEC states may potentially try to invoke the exception provided in paragraph (h) of GATT Art. XX, which allows measures "undertaken in pursuance of obligations under any intergovernmental commodity agreement which conforms to criteria submitted to the Contracting Parties and not disapproved by them or which is itself so submitted and not so disapproved". Although this exception has been in the original text of the GATT, neither criteria for such commodity agreement nor any intergovernmental commodity agreement itself has been submitted to the GATT Contracting Parties or the WTO since 1947.[873] According to GATT Ad Art. XX(h) this exception "extends to any commodity agreement which conforms to the principles approved by the Economic and Social Council in its resolution 30 (IV) of 28 March 1947".[874]

The only GATT Panel which dealt with Art. XX(h) exception noted that the Resolution of Economic and Social Council of 28 March 1947 "required, inter alia, that the negotiation of, and participation in, an international commodity agreement must be open to all interested countries and must avoid, as also stipulated in the requirements set out at the beginning of Article XX of the General Agreement, unjustifiable discrimination between countries."[875] The Panel further implied that an intergovernmental commodity agreement which conforms to the

[873] As of 1 January 2014, according to the information available on the official WTO web site, online: WTO < http://www.wto.org > accessed on 15 April 2014.
[874] GATT Ad. Art. XX(h).
[875] GATT Panel Report *EEC – Import Regime for Bananas*, DS38/R, 11 February 1994, para. 166.

requirements of Art. XX(h) has to be open to all consumer and producer states of that commodity.[876] In contrast, membership in the OPEC is open only to net petroleum-exporting countries.[877] Hence, the OPEC Statute will not qualify as an intergovernmental commodity agreement, and OPEC practice cannot be justified under Art. XX(h) exception.

Dr. Hussein mentions Art. XX(i) as another possible justification for production cutdowns.[878] The article allows a contracting party to adopt measures

> involving restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry during periods when the domestic price of such materials is held below the world price as part of a governmental stabilization plan; *Provided* that such restrictions shall not operate to increase the exports of or the protection afforded to such domestic industry, and shall not depart from the provisions of this Agreement relating to non-discrimination.

The purpose of this exception can be traced to the drafting history of the GATT. Proposing the addition of this exception, the delegation of New Zealand expressed its understanding that the trade rules do not aim to completely abandon price stabilization schemes effected through export control.[879] They suggested that although domestic price stabilization for certain commodities was achievable through export taxes, the world market for primary goods was subject to high fluctuations so that tax rates would have to be adjusted too frequently, making the tax policy impractical.[880] Consequently, the effectiveness of the stabilization plan would be impaired when the difference between the domestic and world prices becomes so high that domestic producers of raw materials would export the products without leaving sufficient supply for the domestic processing industry. Accepting New Zealand's proposal, a delegate from South Africa "pointed out that the provision only applied in cases where a general scheme of internal price stabilization was in operation, and it could not be used to afford protection to

[876] *Ibid.* stating that "the Panel, noting the limited membership of the Lomé Convention and noting further that the EEC had never claimed the Lomé Convention to be a non- discriminatory commodity agreement open to all banana producer and consumer countries, found that the criteria of the ECOSOC Resolution 30(IV) had not been met."
[877] See Art. 7 of the Statute of the Organization of the Petroleum Exporting Countries, 443 UNTS 247, as last amended in December 2011 (the 2012 edition), online: OPEC <http://www.opec.org/opec_web/static_files_project/media/downloads/publications/OPEC_Statute.pdf>, accessed on 15 April 2014.
[878] Abdallah, *supra* note 7, at 278.
[879] Report of the second session of the Preparatory Committee of the United Nations Conference on Trade and Employment (Geneva, 12 August 1947) E/PC/T/A/PV/36, at 22.
[880] *Ibid*. at 23.

national industry by a country which had no such plan".[881] This assertion was not contested by the other members of the GATT preparatory committee.

In its report produced in 1950, the GATT Working Party noted that the Art. XX(i) exception refers to the export restrictions associated with a governmental stabilization plan, and not to the plan itself; therefore, the various provisos listed in the article apply to the restrictions and not to other aspects of the plan.[882] The same report concluded that

> [t]he Agreement does not permit the imposition of restrictions upon the export of a raw material in order to protect or promote a domestic industry, whether by affording a price advantage to that industry for the purchase of its materials, or by reducing the supply of such materials available to foreign competitors, or by other means. However, it was agreed that the question of the objective of any given export restriction would have to be determined on the basis of the facts in each individual case.[883]

Let us examine the applicability of Art. XX(i) to individual cases that may arise in the world petroleum market. Would the production cutbacks by an OPEC state be exempted under Art. XX(i) as suggested by Dr. Hussein? Probably not, because OPEC states restrict oil production rather than exports, and the domestic processing industry, in such cases, experiences the same interruption of oil supply as the outer market. Restricting exports without cutting production for a long period of time and in significant volumes is hardly feasible in the petroleum industry because of limited storage and refining capacities (local and international). Nevertheless, in the unlikely event of such export restrictions, measures must be prescribed in a stabilization plan. No OPEC state, to the best of our knowledge, has such a plan.

Some petroleum exporting states may need to stabilize domestic prices for petroleum products during seasonal demand raises, e.g. for gas and heating oil during winter in cold climate states and/or for gasoline and diesel during sowing and harvesting campaigns in countries with a

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[881] Report of the second session of the Preparatory Committee of the United Nations Conference on Trade and Employment (Geneva, 15 August 1947) E/PC/T/A/SR/40(2), at 13.

[882] Report of the GATT Working Party, *supra* note 867, para. 11. That measures under a stabilization plan, shall not be used to protect the domestic industry was acknowledged by the delegation of New Zealand while introducing this exception to the article. On this as well as on other arguments with respect to limitation of use of the exemption discussed during drafting the article, see the Reports E/PC/T/A/PV/36 and E/PC/T/A/SR/40(2), *supra* notes 879 and 881.

[883] *Ibid*. para. 12.

large agricultural sector.[884] To qualify as a legitimate exception under the GATT, such measures should not: (i) operate to increase exports; (ii) increase the level of protection afforded to such domestic industry; and, (iii) violate provisions on non-discrimination. It is difficult, if at all possible, to meet the three conditions in the petroleum market, or even in other markets as well. First, it has been stated that exports will increase anyway when, as a result of stabilizing measures, the domestic processing industry receives a sufficient supply of materials, i.e. once the needs of the domestic market are met, the excess volumes will be increasingly exported.[885] Secondly, the measures *de facto* protect the national industry since, on the one hand, the domestic price being kept lower than the world price precludes other states from exporting to this market and, on the other hand, a price so stabilized provides a comparative advantage to the domestic processing industry. Thirdly, with regard to the non-discrimination requirement (which includes both the NT and the MFN standards),[886] it is difficult to realize how the NT obligation can be applied to export restrictions. In the case of exports, unlike the regime established for imports, it seems reasonable to limit non-discrimination provision to MFN. When adding these qualifications to the exception, the negotiators did not provide practical examples nor have the qualifications been tested in the GATT/WTO jurisprudence.[887]

Given the stated arguments, it seems as though Art. XX(i) misses important provisions – it does not impose a time limit for the measures, without which any stabilizing measure would not survive the three conditions. If stabilization must be temporary, then, taking into account the purpose of the exception, it can be argued that the conditions should not apply to the measures during the stabilization period. Under such a scenario, one has to analyze changes in export

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[884] This statement is not applicable to states located in tropical and sub-tropical zones because, as a rule, they do not have seasonal fluctuations of activity in the agricultural sector.

[885] See statement by Australian delegate in the Report E/PC/T/A/SR/40(2), *supra* note 881, at 14.

[886] The non-discrimination principle embraces both MFN and NT. See M. Trebilcock & R. Howse, *The Regulation of International Trade* (London: Routledge, 1995) at 26; Specifically in the context of Art. XX(i) exception see Bhala, *Modern GATT Law*, *supra* note 140, at 549. See also Panel Reports, *Korea – Beef, supra* note 291, at para. 753 and *Canada – Renewable Energy*, *supra* note 547, at para. 7.143.

[887] The Australian delegate (in the Report E/PC/T/A/SR/40(2), *supra* note 881, at 14) used the example initially provided by New Zealand to say that export of leather in New Zealand would increase after satisfaction of demand of domestic processing industry under stabilization scheme. However, the other two qualifications were not tested by practical examples.

volumes and in the level of protection of the domestic industry using data for three periods: normal trade before the events where the restrictive measures take effect under the stabilization plan; trade under the stabilizing measures; and the period after the stabilizing measures are lifted. Comparing data on export volumes, the level of domestic industry protection, and export directions of the pre- and post-stabilization periods, one could ascertain whether or not the three conditions are violated by the measure. Here, export directions analysis can apply only to the MFN and not to the NT obligation.

Art. XI:2 embodies exceptions allowing export restrictions, one of which, as far as trade in petroleum is concerned, is similar to the Art. XX(i) exemption. Art. XI:2(a) allows "export prohibitions or restrictions temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to the exporting contracting party".[888] This exemption, unlike Art. XX(i), does not require the existence of a stabilization plan or a similar regulatory document, and can be applied on an *ad hoc* basis. Again, the measures need to be analyzed on a case-by-case basis, employing historical economic data on the volume of trade in particular goods in a given market, which in the case of petroleum is not a difficult task.

A crucial question is whether petroleum can be included in "other products essential to the exporting contracting party". On goods in general, Professor Bhala states:

> [w]hether a particular good qualifies as an "other product" and, therefore, its exports can be restricted would seem to depend on the Member concerned, and probably – at least initially – is self-judging… The foodstuff or other product must be "essential" to the exporting country. Still, the key terms – particularly critical and essential – are self-judging, at least in the first instance.[889]

It can be suggested, at least, that the term "other products" does not exclude petroleum. It is clear that the word "essential" necessitates an assessment of the importance of a product for the relevant economy. However, there is another question which arises with this term: Should the products be essential for the exporting state in terms of consumption or essential in terms of export revenues? The purpose of the restriction, i.e. to prevent critical shortage, implies that

[888] Art. XI:2(a).
[889] Bhala, *Modern GATT Law*, *supra* note 140, at 370.

essentiality should be viewed from the domestic consumption perspective.[890] Petroleum, particularly oil, is essential for any modern economy regardless of whether a state exports or imports it; the only difference is that exporting states feel its "essentiality" less frequently because of a stable domestic supply. Since crude oil and, to a lesser extent, natural gas, are mainly consumed as inputs in other industries, the exception in Art. XI:2(a), as far as trade in petroleum is concerned, is similar to that of the purpose of Art. XX(i) – to secure the domestic processing industry with essential materials. Consequently, export restrictions that are operated through production cutbacks, as in the case of OPEC, cannot be justified under this exemption. As for the measures operated through different methods, it has to be established in each particular case that the shortage is critical, which in turn should also necessitate proof that the shortage cannot be relieved through other means such as an increase in domestic production.

The provision emphasizes the temporary character of the measures, meaning that the exception can no longer be justified when the critical shortage is relieved or the threat of its occurrence has ceased to exist.[891] The word "prevent" has an undesirable impact in the petroleum market, where short term supply disruptions may raise the price for products.[892] Any analysis of the potential threat of supply shortage is insurmountably complicated, whereas a *post factum* analysis is worthless from a WTO rules perspective. The measure exempted under Art. XI:2(a) does not have to meet the conditions set for the Art. XX(i) exception (except for the MFN obligation, which will be discussed in the next paragraph), and being applicable *ad hoc* is unpredictable in the sensitive market. Hence, if abused, the Art. XI:2(a) exception may become

[890] At first sight it is hard to see how the domestic industry of a petroleum exporting state may experience a critical shortage of these products. However, exporting countries that do not have a state monopoly over the petroleum industry are not different from importing states in this respect. Even in the exporting state that has completely nationalized the industry, a shortage is possible due to technical disruptions, poor planning, overestimation of reserve-production factors, and seasonal raises of domestic demand for petroleum products, particularly in cases where the exporter has accepted long-term contractual obligations to supply specified volumes of goods to its foreign partners.

[891] In *China – Raw Materials* the AB disagreed with the Panel's interpretation of the word "temporary" in Art. XI:2(a), which in Panel's view meant that measures had to be applied within a time limit fixed in advance. Instead, the AB thought considered the word "temporary" in Art. XI:2(a) meant the "measures applied for a limited duration, adopted in order to bridge a passing need, irrespective of whether or not the temporal scope of the measure is fixed in advance." See AB Report *China – Raw Materials*, *supra* note 148, at para. 331.

[892] Relatively to intensity of their consumption oil and gas have very little buffer stock that could absorb short-term supply disruption. Therefore, supply price elasticity is very high in the world petroleum market.

troublesome for the world petroleum market. This problem of abuse may potentially be prevented if extensive short-term (weekly or monthly) data is available on national and international petroleum markets (i.e. data on reserves, production, consumption, refining flows, buffer stocks, exports and imports, etc.) so that shortages can be properly foreseen and/or evaluated by any interested party. Fortunately, a worldwide statistics reporting system which would potentially be able to meet such requirements is being developed by the International Energy Forum under the Joint Organizations Data Initiative (JODI).[893] A freely accessible online database for oil, called JODI Oil, has been launched and is constantly improving. A similar database for natural gas, called JODI Gas, was launched as a beta-test in January 2013.[894]

A country imposing export restrictions justifiable under Art. XI:2(a) is bound by Art. XIII:1, which states:

> [n]o prohibition or restriction shall be applied by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation of any product destined for the territory of any other contracting party, unless the importation of the like product of all third countries or the exportation of the like product to all third countries is similarly prohibited or restricted.

Art. XIII:2 lays down "hard" and "soft" obligations for states in applying import restrictions for the sake of the fair distribution of the restrictions' burden among states (through licenses, quotas or permits) *pro rata* their trade shares as they existed before application of the measures. The principles of Art. XIII governing import restrictions, in so far as applicable, are extended to export restrictions.[895] However, it is difficult to apply the "like-product" non-

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[893] The JODI was launched at the 8th International Energy Forum in Osaka in 2002 by the joined effort of six international organizations, namely, APEC, Eurostat, IEA, OLADE, OPEC and UNSD. The Internet-based database is freely accessible to the general public. Currently, it contains data of more than 90 participating countries representing over 90 percent of the world oil market, on seven product categories: crude oil, LPG, gasoline, kerosene, diesel oil, fuel oil and total oil; six flows: production, demand, refinery intake and output, closing stock levels and stock change. The work on improvement of the scope and quality of the data is constantly progressing. Other data already collected through the JODI questionnaire, including imports and exports, will become accessible soon. The database is updated on a monthly basis; a shorter period (e.g. weekly) would certainly be more useful for the purposes of adequate response to sudden shortages. See JODI official website: www.jodidata.org.

It should also be noted that co-operation of states under the Framework Agreement on Enhancing ASEAN Economic Cooperation (Singapore, 1992) could also facilitate data sharing in the petroleum market. This treaty includes soft commitments among members to enhance cooperation in energy, including energy planning, information exchanges, research and development and the exploration, production and supply of energy resources.

[894] See JODI Gas <http://www.jodigas.org> accessed on 1 April 2014.

[895] Section 5 of Art. XIII states: "[t]he provisions of this Article shall apply to any tariff quota instituted or maintained by any contracting party, and, in so far as applicable, the principles of this Article shall also extend to export restrictions."

discrimination provision because, in contrast to the case of import, it is not possible to identify the end use of goods to determine their "likeness" when they are exported. The exporting states, if driven solely by commercial considerations, may hardly have any incentive to discriminate among importing states.

A state wishing to justify export restrictions might also invoke Art. XX(j), which basically represents a combination of provisions of Art. XI:2(a) and XIII. Subject to the requirements set in the chapeau of Art. XX, it allows restrictive measures:

> essential to the acquisition or distribution of products in general or local short supply; Provided that any such measures shall be consistent with the principle that all contracting parties are entitled to an equitable share of the international supply of such products, and that any such measures, which are inconsistent with the other provisions of the Agreement shall be discontinued as soon as the conditions giving rise to them have ceased to exist. The CONTRACTING PARTIES shall review the need for this sub-paragraph not later than 30 June 1960.

This exception was initiated to liquidate shortages or surpluses of commodities carried over from the World War II period. Designed to stabilize trade in this specific transitional period, the exemption was retained to enable contracting parties to manage emergency situations that could occur in the future.[896] The terms "general or local supply" and "equitable share" were not clarified by contracting parties during negotiations of the GATT, nor have they been elaborated upon by adjudicating bodies.[897] Given the fact that the drafting history of this sub-paragraph shows several amendments, whereby references to "shortages subsequent to the war" and "the

[896] After several reviews of the need for this exemption the GATT Contracting Parties decided to retain it with no provision for further review. See the Decision of 20 February 1970, GATT Doc. L/3361 (25 February 1970).

[897] The U.S. delegate, who introduced this exception, stated without further elaboration: "local short supply was understood to include cases where a product, although in international short supply, was not necessarily in short supply in all markets throughout the world. It was not used in the sense that every country importing a commodity was in short supply otherwise it would not be importing it." Cited in the Report E/PC/T/A/SR/40(2), *supra* note 881, at 14-15.

In 1950, the Report of the GATT Working Party (*supra* note 867, at para. 9) provided some examples for the term "equitable share" used in the then Art. XX:II(a). It states:

> [a]lthough the requirement of Article XX:II(a) relates to the total international supply and not the supply of an individual contracting party, nevertheless if a contracting party divert an excessive share of its own supply to individual countries (which may or may not be contracting parties) this may well defeat the principle that all contracting parties are entitled to an equitable share of the international supply of such a product. What would not be regarded as an equitable share if it were the result of a unilateral allotment by a contracting party could not appropriately be defended as equitable within the meaning of Article XX:II(a) simply because it had been the consequence of an agreement between two contracting parties. The determination of what is 'equitable' to all the contracting parties in any given set of circumstances will depend upon the facts in those circumstances.

It is still not clear whether allocation shall be "equitable" among all states or among only those who were importing partners *pro rata* their trade volumes existed before the measures.

exigencies of war" were explicitly eliminated, it could be argued that the current wording of the exemption is not contingent upon war or other hardship.[898]

The petroleum market, whether global or local, is very sensitive to any supply disruptions. Unlike the Art. XI:2(a) exception, which is qualified by the terms "critical shortages" and "products essential to the exporting contracting party", Art. XX(j) uses general terms that could be interpreted very broadly as one wishes.[899] Without an adjudicative ruling, it is hard to predict the circumstances that might trigger the exemption. To this end, it can be expected that adjudicators would assess the materiality of impacts from international or local supply to the state invoking this provision. If so, then basically the same conclusions we drew with respect to Art. XI:2(a) could be restated in relation to Art. XX(j).

7.3. Export Duties

Many petroleum exporting states impose customs duties on petroleum exports. Although export duties may be used to achieve a wide range of policy objectives, there are three main reasons underlying their use with respect to trade in petroleum. Firstly, proceeds from export duties increase the state's budgetary revenue. Secondly, export duties are used to protect the environment and conserve natural resources. Thirdly, export duties are used as a fiscal instrument to procure a sufficient quantity of petroleum for the domestic market, and to provide domestic processing industries with relatively cheap raw materials. Thus, similar to import tariffs, export duties may be used to improve the performance of domestic producers *vis-à-vis* their foreign competitors.

Both import tariffs and export duties are legitimate under WTO law as long as they are imposed on a non-discriminatory basis within the binding rate agreed upon by the respective WTO members. The binding rates agreed upon by these members differ from one to another and

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[898] For a historical account of the metamorphosis of this provision see Jackson, *World Trade and the Law of GATT*, *supra* note 405, at 746.

[899] In *China – Raw Materials* the AB, noting that Art. XX(j) contrary to Art. XI:2(a) does not include the word "critical", suggested that "the kinds of shortages that fall within Art. XI:2(a) are more narrowly circumscribed than those falling within the scope of Art. XX(j)." See AB Report *China – Raw Materials*, *supra* note 148, at para. 325.

are laid down in their respective schedules of concessions. However, the scope of GATT Art. II, which sets the rules for schedules of concessions, is limited to imports of goods and makes no reference to exports. As a result, schedules of concessions submitted by WTO members before 1995, except for Australia, contained no binding rates on export duties.[900] This supports the proposition that the focus of the GATT rules has been the access of domestic products to foreign markets and that therefore they have been primarily designed to eliminate import rather than export barriers.[901]

In the first part of this chapter we analyzed the applicability of GATT Art. XI to non-fiscal measures that reduce the quantity of petroleum exports. By using fiscal measures, such as export duties, states can achieve results similar to quantitative export restrictions. If the rate of export duties is prohibitively high, all exports can effectively be stopped. This raises the question of whether export duties can be disciplined by GATT Art. XI. Some prominent scholars have proposed that Art. XI should be construed to apply where an export duty is effectively an export ban.[902] This view is condemned by other authors who refer to the text of Art. XI, which explicitly excludes duties, taxes or other charges from its coverage.[903] Indeed, the general rule of treaty interpretation does not allow giving effect to the object and purpose of a legal provision if it would result in a contradiction with the text of that provision. Thus, export duties, regardless of their levels, cannot be disciplined under GATT Art. XI.

The majority of member states who acceded to the WTO after 1995 have included in their schedules of concessions obligations regarding export duties. Given the textual limitations of the scope of GATT Art. II, as well as the peculiarities of the WTO accession procedures discussed in Chapter I, the inclusion of export duty commitments into the schedule of concessions is regarded

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900 See Lothar Ehring & Gian Franco Chianale, "Export Restrictions in the Field of Energy" in Selivanova, *Regulation of Energy, supra* note 148, at 112-117.
901 See Selivanova, *supra* note 6, at 5.
902 Matsushita, Schoenbaum & Mavroidis, *supra* note 189, at 220.
903 Ehring & Chianale, *supra* note 900 at 119.

by some scholars as a "WTO-plus" obligation.[904] However, in contrast to this view, other authors argue that the reduction or elimination of export duties is not a WTO-plus obligation conceptually, although it may formally appear to be.[905] According to them, an obligation not to impose export duties is equivalent to binding export duties at zero in the GATT schedule of concessions.[906]

The debate on whether export duty commitments should be considered as WTO-plus obligations or not is not as important as the legal, political and economic consequences of such commitments. In terms of the availability of legitimate fiscal instruments to regulate their economies, members who accepted export duty commitments are not equal to those who did not. For China, Latvia, Mongolia, Montenegro, and Saudi Arabia, the problem of export duty commitments is even worse because the general exceptions provided in GATT Art. XX and XXI do not apply to their export duty commitments, due to textual omissions made in respective accession protocols.[907]

In *China – Raw Materials*, the AB confirmed that the GATT's general exceptions do not apply to export duty commitments provided in accession protocols of acceding states unless there is an explicit textual reference to such exceptions.[908] In this case the AB was widely criticized for using a strictly textual approach in interpreting China's obligations.[909] Had the AB accepted universal applicability of the GATT's general exceptions regardless of the existence of formal references to them, it would have saved the balance of related rights and obligations of WTO members who accepted export duty commitments, but missed textual references to the general exceptions. It is highly doubtful whether the decision made by the AB in *China – Raw*

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[904] See generally Julia Ya Qin ""WTO-Plus" Obligations and Their Implications for the World Trade Organization Legal System: An Appraisal of the China Accession Protocol" (2003) 37 Journal of World Trade 483.
[905] Ehring & Chianale, *supra* note 900 at 121.
[906] *Ibid*.
[907] Julia Ya Qin "Reforming WTO Discipline on Export Duties: Sovereignty over Natural Resources, Economic Development and Environmental Protection" (2012) 46 (5) Journal of World Trade 1147 at 1155.
[908] AB Report China – Raw Materials, *supra* note 148, at para. 291.
[909] See, for example, Yulia Ya Qin, *supra* note 907, Bin Gu, "Applicability of GATT Article XX in *China – Raw Materials*: A Clash within the WTO Agreement" (2012) 15 (4) Journal of International Economic Law 1007, and Ilaria Espa, "The Appellate Body Approach to the Applicability of Article XX GATT In the Light of *China – Raw Materials:* A Missed Opportunity?" (2012) 46 (6) Journal of World Trade 1039.

Materials improved the WTO regime. More likely, in the long-run it will deteriorate the regime. It has been suggested that to avoid WTO challenges, China is likely to introduce other measures which would have export restraining effects but appear to be formally compliant with WTO rules, for example, by increasing participation of less transparent STEs in the export of raw materials.[910]

Undoubtedly, after the ruling in *China – Raw Materials*, acceding states will pay more attention to their accession negotiations and try to ensure that the GATT general exceptions are carefully referenced with respect to all commitments. Given the peculiarities of WTO accession rules and the differing bargaining powers of acceding states, it is expected that some acceding states may not be successful in ensuring a proper balance of their rights and obligations. If so, then inequalities within the WTO regime will proliferate and negate its legitimacy. However, the problem should be noted but not exacerbated. In the following example we review export duty commitments accepted by the Russian Federation with respect to petroleum, and observe how a petroleum exporting state may succeed in negotiating such commitments.

Russia accepted export duty commitments with respect to products listed in more than 700 tariff lines. Its concessions and commitments with respect to export duties are listed in Part V of the Schedule of Concessions and Commitments on Goods of the Russian Federation, which formed Annex 1 to the Protocol on the Accession of the Russian Federation.[911] The opening text of Part V of the Schedule of Concessions states that:

> The Russian Federation undertakes not to increase export duties, or to reduce or to eliminate them, in accordance with the following schedule, and not to reintroduce or increase them beyond the levels indicated in this schedule, *except in accordance with the provisions with GATT 1994*.[912]

This wording provides an important textual link to the general exceptions provided in the GATT. Hence, if Russia increases export duties on the grounds of national security or due to

[910] Yulia Ya Qin, *supra* note 907, at 1176.
[911] Protocol on the Accession of the Russian Federation to the World Trade Organization, WT/MIN(11)/24, WT/L/839, 17 December 2011 [hereinafter – Russian Protocol].
[912] Part V of the Schedule of Concessions and Commitments on Goods of the Russian Federation, Russian Protocol [emphasis added].

legitimate environmental concerns, it could rely on the GATT exceptions in the case of a WTO dispute.

Russia accepted different binding rates of export duties for petroleum and petroleum products. Export duty for natural gas is fixed at 30 percent of sale price (DAF, Belarus-Poland border at Brest),[913] which is the rate which existed before Russia's accession to the WTO. The duty for crude oil fluctuates depending on the price of Urals blend in the world market and is calculated according to the following formulas:[914]

if the world price (W.p.) on crude oil is:	the export duty (ED) is:
<= 109,5 USD/t	ED= 0
> 109,5, but <= 146 USD/t	ED= 0,35 (W.p. – 109,5) USD/t
> 146, but <= 182,5 USD/t	ED= 12,78 USD/t + 0,45 (W.p. – 146) USD/t
> 182,5 USD/t	ED= 29,2 USD/t + 0,65 (W.p. – 182,5) USD/t

Russia bases the crude oil export duty rates on the average Urals blend price in the Mediterranean and Rotterdam markets from the 15th day of one month to the 14th of the next.[915] A conversion factor of 7.3 is applied to convert crude oil prices set per barrels into prices reflecting tonnes.[916] Export duties are calculated and established by the Russian Ministry of Economic Development on a monthly basis and are posted on its official Internet site (www.economy.gov.ru).[917] The methodology currently applied by the Ministry of Economic Development uses the same formulas as provided in the Russian Protocol (see table above) except for one difference in the formula for crude oil traded at world market prices higher than 182,5 USD/t. Given the world market prices, it is the only applicable formula at present. Under the current methodology, export duty for crude oil in Russia is calculated as ED = 29,2 USD/t + 0,60 (W.p. – 182,5) USD/t. Export duties calculated under this formula will always be below the binding rate accepted by Russia.

[913] The Russian Protocol has no provisions regulating the pricing methodology. Such methodology is established in the legislation of the Russian Federation, currently by the Decree of the Government of Russian Federation #276 dated 29 March 2013.
[914] See Part V of the Schedule of Concessions and Commitments on Goods of the Russian Federation, Russian Protocol.
[915] Methodology of Calculation of Export Duty Rates for Crude Oil approved by the Decree of the Government of Russian Federation #276 dated 29 March 2013.
[916] *Ibid*.
[917] *Ibid*.

For May 2013, the export duty was set at the rate of 378.4 USD/t at applicable reference price 764.6 USD/t or around 104.7 USD/bbl of Urals crude oil[918] The May 2013 rate can be compared with annual average rates of export which duties existed before the accession of Russia to the WTO. The comparison table below shows that Russia successfully negotiated its export duty rates for petroleum during its accession to the WTO.[919]

Annual average	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Urals price USD/bbl	50.8	61.2	69.4	94.5	61.0	78.3	109.1
Export duty USD/t	130.3	196.8	206.5	355.2	179.3	281.5	408.9
Export duty USD/bbl	17.8	27.0	28.3	48.7	24.6	38.6	56.0

Export duties for petroleum products are imposed in Russia at rates lower than, and pegged to, the rates set for crude oil. They range from 66 to 90 percent of the crude oil export duty rate depending on the characteristics of the respective oil products. The lower rates can be explained by the Russian petroleum policy, which aims to develop the national downstream industry.

7.4. Conclusion

The analysis provided above demonstrates that WTO rules are not suited to effectively regulate export restrictions exercised in the world petroleum market. Similar to the issues discussed in previous chapters, in the case of export restrictions, the present WTO framework, due to both textual deficiencies of the rules and institutional imperfections, impedes the development of an efficient world petroleum market. The general exceptions provided in the

[918] Информация о вывозных таможенных пошлинах на нефть и отдельные категории товаров, выработанных из нефти, на период с 1 по 31 мая 2013г. (Information About Export Duties on Crude Oil and Certain Categories of Oil Products for the Period of 1 – 31 May 2013) [in Russian], online: Ministry of Economic Development of the Russian Federation <http://www.economy.gov.ru/wps/wcm/connect/21dac8804f454e45924cb7c460f220f0/05.pdf> accessed on 20 April 2013.
[919] Adapted from Yuri N. Bobylev, Georgy I. Idrisov, Sergey G. Sinelnikov-Murylev, *Exportnye Poshliny na Neft i Nefteprodukty: Neobohodimost Otmeny i Scenarnyi Analiz Posledstviy*, [in Russian] (*Export Duties on Oil and Oil Products: Cancel Expediency and Scenario Analysis*) (Moscow: Gaidar Institute Publishing, 2012), at 18, online: Gaidar Institute for Economic Policy <http://www.iep.ru/ru/eksportnye-poshliny-na-neft-i-nefteprodukty-neobodimost-otmeny-i-scenarnyi-analiz-posledstvii-nauchnye-trudy-161.html> accessed on 20 April 2013.

GATT legalize the use of quantitative restrictions in the form of production restrictions exercised by OPEC states. Besides production restrictions, due to the GATT's textual shortcomings, export duties may also be used to effectively restrict the volumes of petroleum exports.

Attempts by incumbent WTO members to control the potential abuse of export restrictions by acceding states have resulted in the imbalance of the rights and obligations of several members (such as China, Montenegro, Latvia), while keeping a relatively adequate balance for other states (such as Russia). In *China – Raw Materials* the AB had the chance to cure the institutional deficiencies resulting from inadequate accession procedures and textual or technical errors, but failed to use that opportunity.

CHAPTER VIII. ENERGY SECURITY & THE GATT NATIONAL SECURITY EXCEPTION

8.1. Introduction

Several WTO Agreements contain security exceptions.[920] This chapter explores the national security exception provided in the GATT Art. XXI (*Security Exceptions*) and its potential impact on trade in petroleum. A number of self-explanatory metaphors have been used by scholars to describe Art. XXI: "a license to be a cowboy",[921] "Achilles' heel of international law",[922] and "a sword of Damocles hanging over the future of international trade".[923] As we shall see, the metaphors provide a fairly accurate characterization for the GATT security exceptions, especially when they are applied with respect to the matters of energy security.

This chapter is structured as follows: the next section briefly describes the tension between free trade theory and state security concerns. It is followed by a general analysis of the GATT Art. XXI, in which we establish that the national security exception does not provide jurisdictional defense for the party invoking it but authorizes such party to exercise a broad discretion in determining the key matters relevant to the GATT Art. XXI. These findings will then be compared with analogous security exceptions in other international trade treaties. The final section revisits the GATT Art. XXI to assess the applicability of the national security exception to energy security measures, and to infer potential implications of such application for the world trading system.

8.2. National security and free trade

In economic parlance, national security is a public good. There is no market for state security, though market forces may to a certain extent contribute to the security of a nation. National security is a complex concept with a great variety of constituent elements. Although it

[920] GATT Art. XXI, TRIMs Agreement Art. 3 (incorporating by reference all GATT exceptions), Agreement on Technical Barriers to Trade Art. 2.5, GATS Art. XIV(bis), TRIPS Agreement Art. 73.
[921] Bhala, *Modern GATT Law*, *supra* note 140, at 558.
[922] Hannes Schloemann & Stefan Ohlhoff, "'Constitutionalization' and Dispute Settlement in the WTO: National Security as an Issue of Competence", (1999) 93 Am. J. Int'l L. 424 at 426.
[923] David Shapiro, "Be Careful What You Wish For: U.S. Politics and the Future of the National Security Exception to the GATT" (1997-98) 31 Geo. Wash. J. Int'l L. & Econ. 97 at 118.

is hardly possible to define precisely what national security means, it is clear that a modern state's national security is not limited to its ability to protect the nation from external military threats but also has *inter alia* economic and energy components.[924] In strengthening its economic and energy security, every state inevitably interferes with the market.

The petroleum market is highly liquid and has therefore become substantially a global market. A government intervention in its national market for energy security purposes inevitably affects other markets and states; and the other way around, the deficiencies of the global market transmit to national markets, thereby affecting the energy security of states. In a recent book on energy security Andreas Goldthau wrote:

> Energy markets, and particularly oil, have globalized. Energy production, processing, transmission, and marketing have become highly complex and nowadays are truly transnational processes. As a consequence, energy security has become more than a national affair. In fact, it would be outright dangerous for policy prescriptions to narrow energy matters down to national security concerns. Most of the risks modern economies face by far exceed both the regulatory and interventionist capacity of individual national governments. Risks stemming from oil price volatility, a lack in transport infrastructure, or insufficient upstream investments certainly are of truly transnational or global scope. These risks can best be conceptionalized as classical market failure. In that, they require and justify public intervention. Energy security therefore, first and foremost, has strong public policy characteristics, whether from the perspective of a consuming nation aiming at securing its supply of vital energy input; or from the perspective of producing nation, aiming at securing demand for its energy export and products.[925]

Clearly, advocates of the STP theory would justify government intervention in the market for national security purposes. Supporters of the neoclassical theory, at least those who take Adam Smith's writings seriously, would also accept such market intervention. The founder of the free trade theory unequivocally supported limitation of the freedom of trade when it was necessary for defense purposes. Smith wrote, "it will generally be advantageous to lay some burden upon foreign, for the encouragement of domestic industry… when some particular sort of industry is necessary for the defence of the country".[926] He elaborated this view using an

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[924] Energy security may be viewed as a component of economic security; however, energy security is also essential for the non-economic component of national security, for example, as fuel for weapons and military transports, and heating energy for population during cold seasons, etc.

[925] Andreas Goldthau, "The Public Policy Dimension of Energy Security" in Benjamin K. Sovacool, ed., *The Routledge Handbook of Energy Security*, (London: Routledge, 2011) at 129.

[926] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, (electronic edition Pennsylvania State University, Electronic Classics Series, online: <http://www2.hn.psu.edu/faculty/jmanis/adam-smith/Wealth-Nations.pdf> accessed on 1 May 2012, at 369.

example of the act of navigation that was then in force in Great Britain.[927] The act of navigation contained a variety of what we now call trade-restrictive measures designed to strengthen the British navy and impede the development of any rival navy, especially the Dutch fleet, which then was "the only naval power which could endanger the security of England".[928] It is worth noting that the measures were taken in peacetime and were primarily concerned with sea transportation services and fishery, which in turn contributed to the strength of the British navy.[929] Smith concluded that:

> The act of navigation is not favourable to foreign commerce, or to the growth of that opulence which can arise from it… As defence, however, is of much more importance than opulence, the act of navigation is, perhaps, the wisest of all the commercial regulations of England.[930]

As important as national security considerations may have been at the time of Adam Smith's writings, they remain important in the 21st century. National security lies at the core of state sovereignty. While states may give up certain sovereign powers in exchange for benefits realizable from a freer international trade, they are firm in preserving their right and duty of self-protection. Hence, any successful international economic agreement authorizes the contracting parties to derogate from their treaty obligations when such derogation is necessary to preserve their national security.[931] No state would be willing to sign an international trade treaty that did not confer such a right to its signatories.[932]

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[927] He wrote (i*bid*):

> The defence of Great Britain… depends very much upon the number of its sailors and shipping. The act of navigation, therefore, very properly endeavours to give the sailors and shipping of Great Britain the monopoly of the trade of their own country, in some cases, by absolute prohibitions, and in others, by heavy burdens upon the shipping of foreign countries.

[928] *Ibid*. at 370.

[929] Smith describes the measures in detail. They included, *inter alia*, prohibition of carriage of goods to the British coast and colonies by ships "of which the owners, masters, and three-fourths of the mariners" were not British subjects, imposition of double duty for certain goods that were allowed to be carried to England by ships of exporting states, forfeiture of ships and cargo in the case when goods were carried to England by ships of third countries, total ban for goods from particular states even if carried by British ships, and levying a double import duty on whale products and salt fish "not caught by and cured on board British vessels". See *ibid*. at 369-370.

[930] *Ibid*. at 371.

[931] For example, national security or similar exceptions may be found in Arts 30 and 296 of the Treaty Establishing the European Community, Arts 607 and 2102 of the NAFTA, Art. 24(3) of the ECT.

[932] One scholar stated in this regard with respect to the WTO Agreements:

> States are induced, and justify, entering the regime believing their 'essential security interests', which demand great domestic political responsibility, will be protected. Conceptually, therefore, security exceptions are the necessary 'escape clause' used to expedite the conclusion of Agreements, while binding members to their WTO obligations. Pragmatism requires the appearance of the WTO circumscribing its decision-making authority, while the states' political power seemingly exists 'despite [the] institution's rules or norms'. Therefore, by including security exceptions, states are encouraged to consent to WTO membership, underpinning the WTO's negotiated legitimacy.

The main problem posed by the national security exception in international trade agreements is that it may be abused to conceal illegitimate measures that are effected for purposes other than security. As such, the exception may be viewed as a loophole to the treaty obligations, which may debilitate the trade regime established by such a treaty. Therefore it is of critical importance for the WTO, and any other international economic regime, to maintain a fine balance between the effectiveness of trade rules and the security prerogatives of its Members.

8.3. General analysis of GATT Article XXI

Article XXI of the GATT reads:

> Nothing in this Agreement shall be construed
> (*a*) to require any contracting party to furnish any information the disclosure of which it considers contrary to its essential security interests; or
> (*b*) to prevent any contracting party from taking any action which it considers necessary for the protection of its essential security interests
> (i) relating to fissionable materials or the materials from which they are derived;
> (ii) relating to the traffic in arms, ammunition and implements of war and to such traffic in other goods and materials as is carried on directly or indirectly for the purpose of supplying a military establishment;
> (iii) taken in time of war or other emergency in international relations; or
> (*c*) to prevent any contracting party from taking any action in pursuance of its obligations under the United Nations Charter for the maintenance of international peace and security.

It must be noted at the outset that paragraph (c), unlike the other two paragraphs, lacks the wording "it considers" and therefore does not provide a considerable margin of appreciation for the invoking party. The prerequisites for invocation of the paragraph (c) exception are objectively determinable – an invoking party must take the measures pursuant to the binding decisions of the UN Security Council.[933] Hence, we avoid discussion of this provision herein, and focus on the rules laid down in paragraphs (a) and (b).

The opening wording "nothing in this agreement" means that the exceptions apply against any provision contained in the GATT. While paragraph (a) is truly all embracing, the

See Andrew Emmerson, "Conceptualizing Security Exceptions: Legal Doctrine or Political Excuse?" (2008) 11 (2) J.I.E.L. 135 at 140 (footnotes omitted).

[933] For the relationship between Art. XXI(c) and the UN Charter see H. Hestermeyer, "Article XXI GATT" in R. Wolfrum, P. Stoll & H. Hestermeyer, eds., *WTO – Trade in Goods*, (Leiden: Martinus Hijhoff Publishers, 2011) at 589.

other two paragraphs reflect an attempt to define specific scopes of application. The drafters intended to strike a balance between rigidity and flexibility for the provision; one of them stated:

> we thought it well to draft provisions which would take care of real security interests and, at the same time, so far as we could, to limit the exception so as to prevent the adoption of protection for maintaining industries under every conceivable circumstance... It is really a question of balance… We cannot make it too tight, because we cannot prohibit measures which are needed purely for security reasons. On the other hand, we cannot make it so broad that, under the guise of security, countries will put on measures which really have a commercial purpose. We have given considerable thought to it and this is the best we could produce to preserve that proper balance.[934]

As a result, the provision appears vague and ambiguous. Because of this, and due to the importance of the national security exception in international trade, it is not surprising that the issue has been studied extensively in international legal scholarship. Yet the issue remains highly controversial.[935] There are two inter-related conceptual questions that have been emphasized in the literature with respect to GATT Art. XXI. The first is whether Art. XXI confers a jurisdictional defense to a contracting party, that is, whether the GATT/WTO panel is competent to decide a dispute when the contracting party invokes the national security exception. If the panel is competent to rule over national security measures, then the second question is whether, given the words "it considers" in the first two paragraphs of the article, the GATT/WTO panel can rule on the merits of the invoked exception. Clearly, if any of these questions is answered in the negative, then commercial protectionist measures can easily be concealed as national security measures. Let us review the two questions in turn.

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[934] UN Doc. E/PC/T/A/PV/33 (24 July 1947), at 20-21.

[935] See, for example (in the chronological order of publications), David D. Knoll, "The Impact of Security Concerns upon International Economic Law" (1984) 11 Syracuse J. Int'l L. & Com. 567; Richard Whitt, "The Politics of Procedure: An Examination of the GATT Dispute Settlement Panel and the Article XXI Defense in the Context of the U.S. Embargo of Nicaragua" (1987) 19 Law & Pol'y Int'l Bus. 604; Michael Hahn, "Vital Interests and the Law of GATT: An analysis of GATT's Security Exception" (1990-91) 12 Mich. J. Int'l L. 558; Markus Reiterer, "Article XXI GATT – Does the National Security Exception Permit "Anything Under the Sun"?" (1997) 2 Austrian Rev. Int'l. & Eur. L. 191; Klinton Alexander, "The Helms-Burton Act and the WTO Challenge: Making a Case for the United States Under the GATT National Security Exception", (1997) 11 Fla. J. Iint'l L. 559; Rene Browne, "Revisiting 'National Security' in an Interdependent World: The GATT Article XXI Defense After Helms-Burton" (1997-98) 86 Geo. L.J. 405; Shapiro, *supra* note 923; Schloemann & Ohlhoff, *supra* note 922; Todd Piczak, Comment, "The Helms-Burton Act: U.S. Foreign Policy Toward Cuba, the National Security Exception to the GATT and the Political Question Doctrine", (1999) 61 U. Pitt. L. Rev. 287; Wesley A. Cann Jr, "Creating Standards of Accountability for the Use of the WTO Security Exception: Reducing the Role of Power Based Relations and Establishing a New Balance between Sovereignty and Multilaterialism" (2001) 26 Yale J. Int'l L. 413; Peter Lindsay, "The Ambiguity of GATT Article XXI: Subtle Success or Rampant Failure?" (2002-03) 52 Duke L.J. 1277; Dapo Akande & Sope Williams, "International Adjudication on National Security Issues: What Role for the WTO?", (2002-03) 43 Va J. Int'l L. 365.

8.3.1. Jurisdictional defense

A. GATT 1947

There was a reasonable doubt on the GATT panel's competence during the pre-WTO period. Basically, there were legal and political reasons for the doubt. From the legal side the doubt could be eliminated depending on the approach taken by the interpreter of Art. XXI. Under the GATT 1947, if a party's benefits were nullified or impaired, it could refer the matter to the panel's consideration pursuant to its Art. XXIII; however, the opening wording of Art. XXI "nothing in this Agreement" meant that Art. XXIII was also covered by the exception. Hence, if a textual approach is used for interpretation of Art. XXI, then the party invoking the exception could not be subject to any ruling under the GATT 1947.

A contextual interpretation, however, could lead to the conclusion that the measures taken under Art. XXI were reviewable by the GATT panel; and such conclusion could have been reinforced if interpretation was supplemented by evidence from the preparatory work.[936] In fact, the drafting history has recorded that negotiators faced this question and agreed that Art. XXIII was applicable to any article of the GATT, including Art. XXI, without exception, and they thought it unnecessary to add a note clarifying the applicability of Art. XXIII to matters arising under Art. XXI.[937] Moreover, in 1982, the GATT Contracting Parties adopted the "Decision Concerning Article XXI of the General Agreement", which confirmed that "when action is taken under Article XXI, all contracting parties affected by such action retain their full rights under the General Agreement".[938] There is little doubt that the right to call a panel according to Art. XXIII was covered by this decision.

[936] Hahn, *supra* note 935, at 610-7, argues on the basis of general principles of international law, evidence from preparatory work, and analysis of "nullification and impairment" provisions of Art. XXIII that all matters under the GATT including Art. XXI fall under the competence of the GATT panel. See also Knoll, *supra* note 935, at 587. Professor Jackson also implies applicability of Art. XXIII to such matters; see Jackson, *World Trade and the Law of GATT*, *supra* note 405, at 748 & 752.
[937] WTO, *Analytical Index: Guide to GATT Law and Practice* (updated 6th ed. 1995) at 607 quoting UN Doc.: E/PC/T/A/PV/33, at 26-27.
[938] GATT Contracting Parties "Decision Concerning Article XXI of the General Agreement", dated 30 November 1982, GATT Doc.: L/5426.

As to the political reason, since national security is inevitably a political issue, it was questioned whether GATT was a proper forum for the resolution of such disputes.[939] If a responding party considered that its measures could not be subject to trade rules, then the practical importance of legal rules providing a panel with competence over Art. XXI matters was low because panel decisions under the GATT 1947 could be easily blocked by any contracting party.[940] Indeed, in the only GATT 1947 national security case, under which a panel was established and produced a report,[941] the panel was not authorized to rule on the Art. XXI matters (due to restricted terms of reference prescribed to it), much to the dissatisfaction of the complaining party, which therefore blocked adoption of the report.[942]

B. GATT 1994

Nowadays, with the establishment of the WTO and its distinct dispute settlement system, the answer to this question seems to be clearer; fewer doubts were left in the scholarship as to the WTO panel's competence over trade issues in the politically driven disputes.[943] From the legal point of view, the GATT 1994 Art. XXI does not exempt its matters from the DSU's coverage, and conversely the DSU does not have a security exception. From the political point of view,

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[939] For example, during the GATT Council discussion in 1982 of trade restrictions applied for non-economic reasons by the EC states, Canada and Australia, against imports from Argentina as a result of the Falkland conflict, the Canadian representative stated that "the GATT had neither the competence nor the responsibility to deal with the political issue". Delegates from the U.S., and New Zealand expressed similar views. GATT Council, minutes of meeting of 7 May 1982, GATT Doc: C/M/157, 22 June 1982, at 8-10.

[940] Akande & Williams, *supra* note 935, at 374-375. For a detailed analysis of this issue see Whitt, *supra* note 935.

[941] GATT Panel Report *United States – Trade Measures Affecting Nicaragua* dated 13 October 1986 (unadopted) GATT Doc.: L/6053. In this case, Nicaragua requested establishment of a panel to decide on its complaint against U.S. measures banning all exports and imports between the two states. The U.S. opposed establishment of the panel arguing that the measures were taken to protect its national security and therefore were not reviewable by the panel. Later it agreed to set up the panel but under strict terms of reference that precluded the panel from judging the validity of or motivation for the invocation of Article XXI(b)(iii) by the U.S. As a corollary to these constraints, the panel decided not to propose a ruling on nullification and impairment (*ibid*. paras. 1.2-1.4, & 5.11). Nicaragua blocked the adoption of the report.

[942] There are two more cases in which a party invoked Art. XXI of the GATT 1947 that reached formal level of dispute resolution under Art. XXIII. In 1949 the Contracting Parties (panels had not been introduced to the GATT system by that time) dismissed a Czechoslovakian complaint against the U.S. measures because the U.S. justified them as essential for its security interests. In 1992, a panel was established at Yugoslavia's request to review trade measures imposed against it by the EC under national security considerations. However, it did not proceed with the review because none of the states formed after dissolution of the Socialist Federal Republic of Yugoslavia succeeded it in its rights in the GATT. For more information on GATT 1947 cases with respect to this matter see Schloemann & Ohlhoff, *supra* note 922, at 432-7; and WTO, *Analytical Index, supra* note 937, at 601-8.

[943] See s*upra* note 935, Alexander, at 579-582, Browne at 420; Cann at 420; Piczak at 310-11; and, Schloemann & Ohlhoff *supra* note 922, at 426-7. See also Shapiro, *supra* note 923, at 104-6; and, Antonio Perez, "To Judge Between the Nations: Post Cold War Transformations in National Security and Separation of Powers-Beating Nuclear Swords into Plowshares in an Imperfectly Competitive World" (1997) 20 Hastings Int'l & Comp. L. Rev. 331, at 408-10.

with the establishment of the WTO, the international trading system switched from a consensus-based, politically-driven regime to a rule-based one, therefore at least trade-related constituents of political decisions are subject to legal rules established by the regime.[944] Moreover, a single Member is no longer able to block unilaterally the WTO panel's or AB's decision. The ultimate answer should be delivered by the WTO itself, whether in the form of official interpretation or acceptance of jurisdiction over such disputes by the DSB. In fact, WTO panels were set up on two occasions when the national security exception was invoked; however, none of the disputes actually reached the panel proceedings.

The first case took place in 1996-1997. The EC attempted to challenge the U.S.-Cuban Liberty and Democratic Solidarity Act (also called, after its initiators, "Helms-Burton Act") that introduced various trade and investment measures to tighten the economic embargo over Cuba.[945] Failing to reach an acceptable solution through consultations, the EC requested the DSB to establish a panel.[946] The U.S. argued that the measures were taken due to security concerns. The U.S. continued that the WTO had been established to manage trade relations rather than diplomatic or security relations that might have incidental trade or investment effects, therefore it was not a proper forum for discussing this matter.[947] In the same year, the U.S. enacted the Iran-Libya Sanctions Act that empowered the U.S. president to take certain economic sanctions against Iran and Libya as a means of preventing terrorism.[948] Similarly to the Helms-Burton Act, this law was also intended by the EC to be considered under the WTO rules.[949] In the end, the parties to the dispute had reached a mutually acceptable compromise through diplomatic means before the WTO panel commenced the proceeding.[950]

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[944] This point is discussed in greater detail by Browne, *supra* note 935, at 414-20.
[945] A more detailed analysis of this case can be found in the articles of the following authors: Shapiro, *supra* note 923, Alexander, Browne, Piczak, Lindsay, Akande & Williams, all *supra* note 935.
[946] Request for the Establishment of a Panel by the European Communities on the Cuban Liberty and Democratic Solidarity Act, WTO Doc.: WT/DS38/2 dated 8 October 1996.
[947] WTO DSB, Minutes of Meetings Held on 16 October 1996 (WTO Doc.: WT/DSB/M/24 dated 26 November 1996) and on 20 November 2006 (WTO Doc.: WT/DSB/M/26 dated 15 January 1997).
[948] Shapiro, *supra* note 923, at 109.
[949] *Ibid*.
[950] On 11 April 1997 the states signed a Memorandum of Understanding with respect to the two U.S. acts. As a result, EC companies were exempted from certain sanctions contemplated by the act and in return EC consented to

The second case was initiated in 2000. Colombia requested the establishment of a panel to review Nicaraguan regulations enacted in 1999, whereby Nicaragua introduced a 35% tax over goods originated in Colombia and Honduras and cancelled the fishing licenses of vessels operated under the flags of the two states.[951] Nicaragua replied that the measures were taken to safeguard the country's essential security interests in response to the ratification by Colombia and Honduras of a treaty delimitating the Caribbean maritime borders between the two states, which allegedly violated Nicaraguan sovereign rights.[952] Nicaragua justified its measures under the national security exception and expressed its view that "the very nature of the provisions of Article XXI of the GATT 1994… cannot be subjected to an examination by a panel".[953] Finally, Nicaragua requested that, before setting up the panel, the WTO General Council should opine on WTO panel's competence on political issues and provide an authoritative interpretation of GATT Art. XXI.[954]

At its meeting of 18 May 2000, the DSB decided to establish a panel.[955] During the meeting the delegates from Japan and Canada urged the WTO Members to be "extremely cautious" with issues related to national security and called upon the parties to resolve the matter in other fora outside of the WTO because "a dispute of political nature could seriously compromise the credibility of the dispute settlement system".[956] At the same time, the EC, while acknowledging the sensitivity of national security matters, referred to the establishment of a

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decrease the level of its participation in Cuban economics. See Lindsay, at 1306-07; and Browne, at 408-9 both *supra* note 935.

[951] See *Nicaragua – Measures Affecting Imports from Honduras and Colombia*, Request for the Establishment of a Panel by Colombia, WTO Doc.: WT/DS188/2 of 28 March 2000; and Statement by Nicaragua WTO Doc.: WT/DSB/COM/5 of 26 May 2000, online: WTO Documents Online <http://docsonline.wto.org/> accessed on 1 May 2012.

[952] *Nicaragua – Measures Affecting Imports from Honduras and Colombia*, Statement by Nicaragua WTO Doc.: WT/DSB/COM/5 of 26 May 2000.

[953] *Ibid*.

[954] *Ibid*.

[955] See WTO DSB, Minutes of Meeting Held on May 18, 2000 (WTO Doc.: WT/DSB/M/80 dated 26 June 2000) paras. 39-40.

In the Nicaraguan case the DSB followed the Helms-Burton Act's case scenario in which, as one commentator submitted "the WTO delayed naming arbitrators in hopes that the dispute could be worked out bilaterally" (Browne, *supra* note 935, at 407). In the first chapter we observed that the textual approach to treaty interpretation protected the WTO from external criticism during the early period of its operation. In a similar vein, the reluctance in deciding on the establishment and composition of panels may be explained as the desire of the WTO to avoid controversial matters that may impair the legitimacy of the WTO trading system.

[956] *Ibid*. paras. 32 & 33.

WTO panel under the Helms-Burton Act dispute, and noted that "there was nothing in the DSU to the effect that such issues were exempt from dispute settlement proceedings".[957] In addition, the EC expressed its view that the panel could examine the facts and determine whether the matter was justified under the national security exception. More than a decade elapsed after DSB took the decision to establish a panel; however, the panel has not yet been composed, nor has any notification on the settlement been sent to the WTO.[958]

8.3.2. Judicial review

The question of whether the GATT/WTO panel can rule on the merits of the national security exception invoked by a Member under Art. XXI is a more problematic one. A variety of views have been expressed in the literature with respect to this question. No GATT/WTO jurisprudence has appeared yet to clarify this issue. In the unadopted report *United States – Trade Measures Affecting Nicaragua* the GATT Panel (perhaps being frustrated by the limits imposed on it by respective terms of reference) voiced:

> If it were accepted that the interpretation of Article XXI was reserved entirely to the contracting party invoking it, how could the CONTRACTING PARTIES ensure that this general exception to all obligations under the General Agreement is not invoked excessively or for purposes other than those set out in this provision? If the CONTRACTING PARTIES give a panel the task of examining a case involving an Article XXI invocation without authorizing it to examine the justification of that invocation, do they limit the adversely affected contracting party's right to have its complaint investigated in accordance with Article XXIII:2?[959]

In other words, if a panel is not competent to undertake substantive assessment of the invocation, then Art. XXI *de facto* provides a jurisdictional defense for the government invoking it. Indeed some authors, who accept that the WTO panel may be established with respect to the Art. XXI dispute, argue that it has no power to judge political decisions of states, and therefore ultimately lacks jurisdiction over corresponding disputes.[960] Professor Bhala is also skeptical on the question of WTO competence, saying that:

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[957] *Ibid*. para. 35.
[958] As of 24 February 2010, according to the information provided on the dispute's WTO web page, online: WTO <http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds188_e.htm> last accessed on 1 April 2014.
[959] See *supra* note 942 and accompanying text.
[960] Piczak (s*upra* note 935, at 324) submits that an international judicial body, staffed by foreign nationals, should not be permitted to review a decision of the U.S. President and Congress that any nation is a threat to the U.S.

> [t]he answer is almost assuredly negative. As the textual analysis of Art. XXI(b)… indicates, invocation of the national security exception is a matter left to the discretion of a sanctioning Member. Moreover, *realpolitik* demands that Members retain sovereign prerogative, even if additional multilateral checks against abuse are adopted in the future. One of the surest ways to damage the WTO in the eyes of national legislators would be for it to attempt to encroach on this prerogative. Accordingly, as a practical matter it is likely that a WTO panel… would interpret its terms of reference narrowly to exclude a ruling on the substantive Article XXI arguments.[961]

Indeed, a textual interpretation clearly speaks in favor of the party invoking the exception. Under the paragraphs (a) and (b) of Art. XXI, a Member may refuse to disclose any information that "*it considers* contrary to *its* essential security interests", and may take any measures that "*it considers* necessary for the protection of *its* essential security interests". The context is of little help as no commonly accepted international instrument, which would have explicitly addressed this issue, has appeared since 1947. As to the teleology, Art. XXI is an exception from the rule and therefore its *telos* should be interpreted accordingly without strict subordination to the objects and purposes of the GATT and the Agreement Establishing the WTO.[962] Although there was no definitely persuasive GATT jurisprudence with respect to the subject matter, in various discussions several contracting parties opined that "every country must be the judge in the last resort on questions relating to its own security".[963] In the two WTO cases reviewed above, the responding parties maintained this position, the complainants had the opposite view, whereas the third parties' opinions were divided between the two camps.[964] If the preparatory work is

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national security. Likewise, Cann (s*upra* note 935, at 431-432) argues that the WTO lacks jurisdiction to review the political decision of signatories to invoke the security exception. Moreover, he maintains that the essential security interests are self-defining because of both their mere nature and the wording "it considers" used in Art XXI, and thus are not reviewable by adjudicating bodies.

961 Bhala, *Modern GATT Law*, *supra* note 140 at 564-5. See also Whitt, *supra* note 935, at 616.

962 In this sense Art. XXI may be viewed as an "exceptional exception" because its chapeau ultimately states "[n]othing in this Agreement shall be construed", whereas all other exceptions, including the general exceptions of Art. XX, are subject to certain qualifications that, in turn, necessitate subordination of their object and purpose to that of the GATT and the Agreement Establishing the WTO. For an opposite view see Kees Jan Kuilwijk, "Castro's Cuba and the U.S. Helms-Burton Act: An Interpretation of the GATT Security Exception" (1997) 31 (3) Journal of World Trade 49 at 56 (arguing that Art. XXI has to be subjected to the object and purpose of the world trading system and that if only unilateral interpretation is allowed under Art. XXI it would undermine freedom of trade, which is the fundamental purpose of the world trading system).

963 WTO, *Analytical Index, supra* note 937, at 600-1, 604.

964 See WTO DSB, Minutes of Meetings, WTO Docs: WT/DSB/M/24; WT/DSB/M/26; and, WT/DSB/M/80. Although in the case brought against the U.S. under GATT 1947 Nicaragua requested the panel to assess legitimacy of the U.S. measures taken under Art. XXI, later in the WTO case brought against itself it took the view that panels are not competent to rule on the national security matters.

consulted, it would arguably be interpreted to support the view that the security exception was intended to be self-judging.[965]

On balance, the facts provided above seem to support the view that the WTO panels cannot judge the merits of invocation of the exception. However, this view has been disputed by many commentators on various grounds. In general, they admit the self-judging nature of the exception but pose certain limits on the sanctioning state's discretion that, in turn, provides possibility of its review by the panel. Also, the commentators agree that different provisions of Art. XXI provide different margins of appreciation for the invoking party – paragraph (a) being the most self-judging, while paragraph (b) having some limitations on the party's discretion. Let us sketch their arguments.

Akande & Williams, recalling that GATT cannot be read "in clinical isolation from public international law",[966] argue that the discretion of a state invoking the exception is not completely unfettered but is limited by the principle of good faith and the corresponding concept of abuse of rights (*abus de droit*).[967] The workability of the good faith argument, the authors admit, may be constrained by the difficulty of proving the motives of measures.[968] However, they argue, referring to the practice of other international institutions, that this problem may be eliminated by presenting satisfactory evidence supporting or refuting a good faith invocation.[969] As to the WTO, the AB has

[965] During discussions in the Geneva session of the Preparatory Committee, a delegate of the Netherlands voiced his concern about the ambiguity of the wording "taken in time of war or other emergency in international relations", which he thought could become "a very big loophole". In response, one of the drafters, a delegate of the U.S., stated: "I think no one would question the need of a Member, or the right of a Member, to take action relating to its security interests *and to determine for itself* – which I think we cannot deny – what its security interests are." The chairman of the meeting stated: "in defence of the text, we might remember that it is a paragraph of the Charter of the ITO and when the ITO is in operation I think the atmosphere inside the ITO will be the only efficient guarantee against abuses of the kind to which the Netherlands Delegate has drawn our attention." See UN Doc. E/PC/T/A/PV/33 (24 July 1947), at 19-21 [emphasis added].

[966] See AB Report, *US – Gasoline*, *supra* note 1, at section III(B).

[967] Akande & Williams, *supra* note 935, at 389-96. Similar view expressed Hahn with respect to Art. XXI of the GATT 1947, *supra* note 935, at 599-601. Akande & Williams explain (*ibid*.):

> …a good faith test means that the member invoking Article XXI(b) must genuinely – or "in fact" or subjectively – consider that there is some threat to its security interests which needs protecting. A panel may therefore seek to ensure that the State is not using Article XXI as a cloak for taking protectionist action or for pursuing other aims.
>
> …abuse of rights is the notion that a State may not misuse its right to take certain action by taking such action for purposes which go beyond the purpose for which the right exists

[968] *Ibid*. at 392-3.

[969] *Ibid*. at 393 (referring to the rules of the International Monetary Fund and the European Community).

confirmed its readiness to apply the general principles of law. In the *US – Shrimp*, it elaborated on the use of the principle of good faith while interpreting the chapeau of GATT Art. XX:

> This principle, at once a general principle of law and a general principle of international law, controls the exercise of rights by states. One application of this general principle, the application widely known as the doctrine of *abus de droit*, prohibits the abusive exercise of a state's rights and enjoins that whenever the assertion of a right "impinges on the field covered by [a] treaty obligation, it must be exercised bona fide, that is to say, reasonably." An abusive exercise by a Member of its own treaty right thus results in a breach of the treaty rights of the other Members and, as well, a violation of the treaty obligation of the Member so acting. Having said this, our task here is to interpret the language of the chapeau, seeking additional interpretative guidance, as appropriate, from the general principles of international law. [970]

Although the exceptions provided in Art. XX are different from the exceptions to Art XXI, it can be expected that WTO panels and AB will apply the good faith and other general principles of international law in interpreting Art XXI.[971]

Schloemann & Ohlhoff also endorse the good faith argument and suggest that the motives behind invocation may be assessed using a proportionality test. They submitted that:

> "Security interests" that are "essential" must be defined in good faith by the state invoking them. Whatever their exact reach, it seems clear that not just any noneconomic political or military motive can satisfy the condition of essentiality. A requirement of a minimum degree of proportionality between the threatened individual security interest and the impact of the measure taken on the common interest in the functioning of the multilateral system can be deduced from both the term "essential" and, more generally, the function of Article XXI in the WTO system as a remedy for serious hardships emanating from outside the WTO's immediate regulatory realm. The test for proportionality, here as in other areas of the law, is the reasonableness of the measure in the context. While a state is relatively free to define its security interests, their classification in part as "essential" must meet some higher standard in relation to other, "normal" security interests. Again, there is no inherent reason why a panel should not review that determination, sorting out cases of clear unreasonableness, without otherwise interfering with the state's definitional prerogative.[972]

Schloemann & Ohlhoff further suggest that Art. XXI(b) contains objective and additional prerequisites for the exercise of the rights provided by the exception, which are therefore judicially reviewable.[973] In a similar vein, Hahn argues that the objectives prerequisites listed in paragraph (b) have a distinct purpose "to restrict the broad discretion granted by the introductory

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[970] *US – Shrimp*, *supra* note 93, para 158 (quoting B. Cheng, *General Principles of Law as applied by International Courts and Tribunals* (Stevens and Sons, Ltd., 1953) at 125).

[971] The good faith principle is used in five provisions of the VCLT, three of which are worth mentioning. First, it is used in the preamble whereby parties note that the principle of good faith is "universally recognized". Secondly, it is embodied in the *pacta sunt servanda* rule expressed in Art. 26 requiring states to perform their treaties in good faith. Thirdly, it is a part of the general rule of interpretation provided in Art. 31(1), according to which "a treaty shall be interpreted in good faith".

[972] Schloemann & Ohlhoff, *supra* note 922, at 444-5.

[973] *Ibid*. at 446 (referring to the terms "fissionable materials", "arms, ammunition and implements of war", "war", and "emergency in international relations").

sentence" of the paragraph.[974] He notes that paragraph (a), which concerns information disclosure, does not have such qualifying terms, and implies that if paragraph (b) was intended to be free from judicial determination, it would have been worded similarly to paragraph (a).[975]

As to paragraph (a), Hahn infers that abuses related to information disclosure obligations have comparatively less importance for the functioning of the trading system and thus the provision was drafted to allow unfettered discretion of the state withholding information for security purposes.[976] Schloemann & Ohlhoff also admit that paragraph (a) provides vast discretion for a state which refuses to disclose security-sensitive information, because in such a case it is almost impossible to prove that the state acted in bad faith.[977]

Finally, some authors argue that if Art. XXI is interpreted as an entirely self-judging provision, then GATT in its entirety would not have the force of an international legal instrument.[978] This view is based on the opinion of Judge Lauterpacht rendered in the *Norwegian Loans* of the International Court of Justice, who stated:

> [a]n instrument in which a party is entitled to determine the existence of its obligation is not a valid and enforceable legal instrument of which a court of law can take cognizance. It is not a legal instrument. It is a declaration of a political principle and purpose.[979]

Apart from being used as a basis for assessing whether Art. XXI is an entirely self-judging provision, this statement can lead to a different and broader implication. If we recall that in a strict legal sense, GATT 1947 had never entered into force but was applied by its Contracting Parties provisionally, then Sir Lauterpacht's statement may serve as the key to understanding the pre-WTO Art. XXI discussions. It can be suggested that in the international trading system, which was

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[974] Hahn, *supra* note 935, at 590. See also Kuilwijk, *supra* note 962, at 55-56.
[975] *Ibid.* at 591.
[976] *Ibid.*
[977] Schloemann & Ohlhoff, *supra* note 922, at 444-5.
[978] See Reiterer, *supra* note 935, at 199-200; see also Akande & Williams, *supra* note 935, at 383-4 who submit that:

> To construe Article XXI as entirely self-judging would in effect mean that a WTO member is entitled to determine the scope and existence of its obligations under the GATT as it would be up to the member to unilaterally determine… when it was obliged to comply with GATT obligations and when national security interests precluded such obligations.

An essentially similar finding was made by the AB with respect to exceptions of GATT Art. XX:

> To permit one Member to abuse or misuse its right to invoke an exception would be effectively to allow that Member to degrade its own treaty obligations as well as to devalue the treaty rights of other Members. If the abuse or misuse is sufficiently grave or extensive, the Member, in effect, reduces its treaty obligation to a merely facultative one and dissolves its juridical character, and, in so doing, negates altogether the treaty rights of other Members.

US – Shrimp, *supra* note 93, at para. 156.
[979] *Case of Certain Norwegian Loans (France v. Norway)*, separate opinion by Judge Lauterpacht, 1957 ICJ Rep. 9 (Judgment of 6 July, 1957) at 48.

provisionally established by GATT 1947, the substantive rights of states declared in Art. XXI (rather than the article itself) prevailed over all other provisions of GATT 1947. In other words, GATT 1947 was not an instrument whose legal status would allow judgement of state action taken under security considerations. If Sir Lauterpacht's statement and the deductions inferred from it are correct, then national security measures taken by states under Art. XXI of the GATT 1994 are subject to judicial review.

On the basis of the findings made above it can be assumed that Art. XXI of the GATT 1994 does not provide a jurisdictional defense to the party invoking the national security exception. It can also be assumed that a state invoking the Art. XXI exception has a wide margin of appreciation to determine what constitutes its essential security interests and what measures are necessary for their protection; however, the state's discretion is not completely unfettered but can be reviewed by a WTO panel to prevent gross abuse of the right by the invoking Member. On the basis of these assumptions, we will analyze the potential invocation of the GATT national security exception in the petroleum-related cases in later sections of this chapter. Meanwhile, let us now look beyond the WTO framework to see how the issue of national security is dealt with in other international economic agreements.[980]

8.4. Security exceptions in the ECT, NAFTA, and TFEU

Three international economic agreements, which can provide some useful insights on trade and security concerns associated with petroleum, are of particular interest for our discussion: the

[980] It is notable that there is no standard national security exception clause in international investment law. Moreover, some BITs do not have such a clause at all. For example, Argentina in its BIT with the United Kingdom BIT does not have the national security exception clause, whereas in the United States – Argentina BIT such exception is provided in Art. XI, which states: "[t]his Treaty shall not preclude the application by either Party of measures necessary for the maintenance of public order, the fulfillment of its obligations with respect to the maintenance or restoration of international peace or security, or the protection of its own essential security interests." In a series of investment disputes brought against Argentina by U.S. companies from 2003 until 2008, Argentina invoked the Art. XI exception. In all these cases the tribunal held that the national security exception provided in Art. XI of the U.S. – Argentina BIT is not self-judging and is subject to judicial review. See, UNCTAD, *The Protection of National Security Interests in IIAs* (Geneva: UNCTAD, 2008) UNCTAD/DIAE/IA/2008/5 at 60, referring to: *CMS Gas Transmission Company v The Argentine Republic*, ICSID case no. ARB/01/08, award of 12 May 2005; *LG&E v The Argentine Republic*, ICSID case no. ARB/02/1, award of 3 October 2006; *Enron v The Argentine Republic*, ICSID case no. ARB/01/03, award of 22 May 2007; *Sempra v The Argentine Republic*, ICSID case no. ARB/02/16, award of 28 September 2007; *Continental Casualty Company v The Argentine Republic*, ICSID case no. ARB/03/9A, award of 5 September 2008.

ECT, NAFTA, and the Treaty on the Functioning of the European Union (TFEU).[981] The three treaties are chosen because, respectively, the ECT is an energy-specific treaty, the NAFTA has special rules on energy, and the TFEU provides interesting case-law on security exceptions by the European Court of Justice (ECJ).

8.4.1. Security exceptions under the ECT

Art. 24 of the ECT contains a handful of general exceptions, two of which are of specific interest to our discussion. Paragraph (a) of section (3) of Art. 24 establishes the national security exception, which together with the relevant part of the article's introductory text reads as follows:

> The provisions of this Treaty… shall not be construed to prevent any Contracting Party from taking any measure which *it considers necessary*:
> (a) for the protection of its essential security interests *including those*
> (i) relating to the supply of Energy Materials and Products to a military establishment; or
> (ii) taken in time of war, armed conflict or other emergency in international relations.[982]

Like the GATT Art. XXI(b), the ECT's provision has a self-judging feature dictated by the wording "it considers necessary". The crucial difference between the GATT's and ECT's exceptions appears in the words "including those", which make the ECT's provision even broader than that of the GATT, making the objectively determinable notions provided in sub-paragraphs (i) and (ii) practically meaningless. In other words, it is an open-ended exception empowering the invoking state to exercise almost unlimited discretion.

Paragraph (c) of the ECT's Art. 24(3) provides another important exception, which also has a self-judging feature.[983] It authorises a state to derogate from its obligations for the maintenance of public order. The term "public order" is not defined in the ECT. Therefore, in the case of a dispute, adjudicators are likely to consult the international law, which in turn also offers no precise and universally accepted definition for the term. In other words, if in an ECT dispute a party faces a

[981] The Treaty on the Functioning of the European Union, Official Journal of the European Union C 83/47 of 30 March 2010. The TFEU is formerly the Treaty Establishing the European Economic Community of 25 March 1957 entered into force on 1 January 1958 (Treaty of Rome) as amended by the Maastricht Treaty (i.e. the Treaty on European Union) of 7 February 1992, the Treaty of Amsterdam of 2 October 1997, the Treaty of Nice of 28 February 2001, and the Treaty of Lisbon of 13 December 2007.
[982] Art. 24(3)(a) of the ECT [emphasis added].
[983] Paragraph (b) of Art. 24(3) of the ECT exempts the measures taken for the purposes of non-proliferation of nuclear weapons. We omit its discussion herein.

(hardly imaginable) difficulty with justifying its measures under the security exception, it may well try to justify it under the public order exception.

In addition to the otherwise open-ended exceptions, Art. 24 sets specific limitations on their invocation. Section (1) of Art. 24 states that the exceptions provided in the article do not apply to certain provisions of the ECT including its Art. 29,[984] which, *inter alia*, obliges a contracting party to "endeavour not to increase any customs duty or charge of any kind imposed on or in connection with importation or exportation" of energy materials, products and related equipment above the levels determined according to the ECT rules.[985] Hence, the national security and public order exceptions in the ECT cannot be invoked with respect to unauthorized increases of customs duties and other charges levied on export or import of energy.[986] Moreover, the closing sentence of Art. 24(3) states that the measures exercised under the security and public order considerations shall not constitute a disguised restriction on transit.[987] This provision, by definition, is limited to measures exercisable by a transit country.[988]

In sum, the ECT exceptions allow contracting parties to exercise a broad discretion at their invocation, broader than that which may safely be assumed under the GATT. At the same time, the ECT explicitly prohibits invocation of the exceptions in the case of customs duties on exports and imports of energy, and if measures are taken by a transit state, they must not result in a disguised restriction on transit. These specific limitations can be explained as an attempt to prevent abuse of the right to invoke the exception at least in the cases that are obviously non-relevant to pure

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[984] Section (1) of Art. 24 of the ECT states: "[t]his Article shall not apply to Articles 12, 13 and 29". Arts 12 and 13 set investment specific rules in the cases of expropriation and other causes of losses of investment.

[985] Art. 29(4) of the ECT as amended by the Final Act of the International Conference and Decision of the Energy Charter Conference on 24 April 1998. Art. 29 provides interim provisions for trade-related matters arising between parties at least one of whom is not a member of the WTO. Art. 29 contains a number of rules of both procedural and substantive character. Among substantive rules the most important and relevant to our discussion are sections 3-5 of the article, which deal with tariffs and other charges on importation or exportation of energy products.

[986] It must be noted that the rules on TRIMs contained in Art. 5 of the ECT are not excluded from the general exceptions listed in Art. 24 of the ECT, which means that the national security exception may potentially be invoked for the measures otherwise prohibited by Art. 5.

[987] Art. 24(3) of the ECT. The key term "disguised restriction" is left undefined. Using a textual interpretation it may arguably be concluded that not all but only disguised restrictions are prohibited. For example, if Ukraine openly lifts some natural gas destined to the EC to calm down social protests that had escalated by the shortage of gas supply, it would unlikely be qualified as "disguised restriction on transit".

[988] The definition of the term "transit" provided in Art. 7(10)(a) of the ECT uses wording "the carriage through the Area of a Contracting Party of Energy Materials and Products…".

security or public order considerations. A panel established under the ECT's dispute settlement rules is competent to review the measures taken by the party invoking the national security or public order exception, at least in order to establish their compliance with the aforementioned limitations.[989]

8.4.2. Security exceptions under the NAFTA

There are three articles in the NAFTA dealing primarily with national security issues. Art. 2102 sets the general rule on the national security exception, which substantially resembles the text of Art XXI of the GATT. The main distinct feature of Art. 2012 is that the general rule is subordinated to specific rules established for security exceptions with respect to trade in energy goods and government procurement under Arts 607 and 1018, respectively.

Art. 607 prohibits measures restricting imports or exports of energy and basic petrochemical goods,[990] which are otherwise excusable under Art. XXI of the GATT or Art. 2102 of the NAFTA, "except to the extent necessary to":

> (a) supply a military establishment of a Party or enable fulfillment of a critical defense contract of a Party;
> (b) respond to a situation of armed conflict involving the Party taking the measure;
> (c) implement national policies or international agreements relating to the non-proliferation of nuclear weapons or other nuclear explosive devices; or
> (d) respond to direct threats of disruption in the supply of nuclear materials for defense purposes.[991]

Apparently, the purpose of Art. 607 is to squeeze the scope of the general national security exception with respect to cross-border trade in energy goods. The article lists well-defined and objectively determinable prerequisites for invocation of the security exception.[992] Moreover, it

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[989] Annex D of the ECT sets a special dispute settlement procedure for trade disputes arising in connection with Arts 5 and 29. According to its paragraph 1(b), any trade measure that may be incompliant with Arts 5 and 29 can be challenged under the Annex D procedures. Moreover, paragraph 3(b) of Annex D of the ECT states:

> A panel shall determine its jurisdiction; such determination shall be final and binding. Any objection by a disputing Contracting Party that a dispute is not within the jurisdiction of the panel shall be considered by the panel, which shall decide whether to deal with the objection as a preliminary question or to join it to the merits of the dispute.

[990] Art. 609 of the NAFTA defines "restriction" as "any limitation, whether made effective through quotas, licenses, permits, minimum or maximum price requirements or any other means".

[991] Art. 607 of the NAFTA. Pursuant to Annex 607 of the NAFTA, this provision does not apply to Mexico.

[992] The key concepts used in Art. 607 are explicitly qualified, e.g. "a *critical* defense contract" or "armed conflict *involving the Party taking the measure"*, "respond to *direct* threats". It is also worth noting that except for paragraph (c), which deals with non-proliferation of nuclear weapons and explosive devices, the text of Art. 607 does not use wording "relating to".

does not contain the wording "it considers" commonly used in security exceptions, and therefore it significantly limits an invoking party's discretion. Further, Art. 607 allows only measures "necessary" for the purposes determined in paragraphs (a) through (d). Although it is not clear how a NAFTA panel would interpret the term "necessary", it is likely that the panel would see it as an additional qualification for invoking the exception. It is worth recalling in this respect that in the GATT Art. XX jurisprudence a "necessary" measure has been consistently interpreted as a measure adopted in the absence of other reasonable alternatives that would have been more consistent with GATT obligations.[993]

Art. 1018 also prevails over Art. 2102 if their scopes overlap. The first paragraph of Art. 1018 authorises a contracting party to deviate from the treaty's government procurement rules by taking measures "which it considers necessary for the protection of its essential security interests relating to the procurement of arms, ammunition or war materials, or to procurement indispensable for national security or for national defense purposes".[994] Putting aside the qualifying word "indispensable", this provision – similarly to Art. 2102, but in contrast to Art. 607 – allows a broad interpretation of the exception and wide margin of appreciation for the sanctioning party. Nevertheless, the scope of this provision is limited to government procurement and therefore it also restricts the potential for abuse of right in the invocation of the security exception in case of measures unrelated to government procurement.

Given that no subordination rule is provided in the texts of Arts 607 and 1018 with respect to each other, it is not clear which of them would prevail in a conflicting situation. Two points can be made regarding this. First, paragraph (a) of Art. 607 directly deals with certain types of government procurement of energy goods imposing more restrictions on invocation of exception than under Art. 1018.[995] Second, Art. 1018 applies only with respect to matters regulated by

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[993] See *supra* notes 239 and 279. Similar interpretation is used under EC Law within the context of security exceptions; see *infra* discussion in the next section [*Security exceptions under the TFEU*].
[994] Art. 1018(1) of the NAFTA. We omit discussion of the second paragraph of Art. 1018 because it deals with exceptions that are not directly concerned with national security considerations.
[995] Paragraph (a) of Art. 607 deals with measures necessary to "supply a military establishment of a Party or enable fulfillment of a critical defense contract of a Party".

Chapter 10 (*Government Procurement*), whereas Art. 607 is applicable to any measure regulated by NAFTA if it deals with energy goods. Hence, if a measure restricting exports or imports of energy goods falls under the scope of both Art. 607 and Art. 1018, it is suggested that the former should prevail over the latter.

In sum, the scope of the general rule on national security exceptions provided in Art. 2102 of NAFTA is similar to that of the GATT Art. XXI. At the same time, Art. 607 of NAFTA, similarly to the ECT, contains specific rules with respect to measures restricting exports and imports of energy goods.[996] These specific rules are designed to procure stability in the cross-border flow of energy and prevent potential abuse of the right to invoke the national security exception that can disrupt the stability of such energy flows.

8.4.3. Security exceptions under the TFEU

The national security exception in the TFEU is provided in its Art. 346, which states:

> 1. The provisions of this Treaty shall not preclude the application of the following rules:
> (a) no Member State shall be obliged to supply information the disclosure of which it considers contrary to the essential interests of its security;
> (b) any Member State may take such measures as it considers necessary for the protection of the essential interests of its security which are connected with the production of or trade in arms, munitions and war material; such measures shall not adversely affect the conditions of competition in the common market regarding products which are not intended for specifically military purposes.
> 2. The Council may, acting unanimously on a proposal from the Commission, make changes to the list, which it drew up on 15 April 1958, of the products to which the provisions of paragraph 1(b) apply.

The TFEU's national security exception is less vulnerable to potential abuse of right than the corresponding provisions of international agreements reviewed above. Paragraph 1 of Art. 346 resembles key wording, such as "it considers" and "essential interests of its security", of the GATT Art. XXI. Therefore, it also provides an invoking state with a certain margin of discretion to determine what it considers to be its essential security interests, especially when it is concerned with disclosure of security-sensitive information under sub-paragraph (a). However, it is different from the GATT's national security exception in that it explicitly bans measures

[996] It has to be noted that the Art. 607 of NAFTA has a broader scope than the corresponding energy-specific rules of the ECT, because "measures restricting exports and imports" that are dealt with under NAFTA include both tariff and non-tariff measures, whereas Art. 29 of the ECT deals with tariff measures only.

harming competition in the EC's market of products that "are not intended for specifically military purposes". This additional trade-related prerequisite is an important tool to prevent potential abuse of the right to invoke the national security exception. Moreover, another protection from abusive acts comes from paragraph 2 of Art. 346. The list of products mentioned in that paragraph was adopted on 15 April 1958 as Council Decision 255/58 and has never been officially published.[997] The list "includes only equipment which is of *purely military nature and purpose*".[998] The European Court of Justice (ECJ) has held that the Art. 346 exception cannot be invoked with respect to products not mentioned in the list.[999] Hence, it is most likely that discriminatory measures affecting trade in petroleum products will not be justifiable under Art 346. Furthermore, Art. 348 of the TFEU unambiguously empowers the ECJ to judge the merits of the invocation of the exception.[1000] This power of the ECJ can be viewed as the most important guarantee against abuse of the rights provided to the EC members under Art. 346 of the TFEU.

Art. 36 of the TFEU has another exception based on security grounds. It authorizes a member state to impose a prohibition or restriction on imports, exports and transit of goods if such measures are justified on grounds, *inter alia*, of public policy and public security, provided that the measures do not "constitute a means of arbitrary discrimination or a disguised restriction on trade".[1001] Unlike Art. 346, which is a general exception applicable with respect to any provision of the TFEU, the scope of Art. 36 is limited to derogations from obligations related to the free movement of goods. The Art. 36 exception is not as self-judging as national security

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[997] M. Trybus, "The List on Hard Defence Materials under Art. 296 EC" (2003) 12 Public Procurement Law Review, NA15. This article provides some information on the products included in the list that has been disclosed by the EC Council.

[998] EC Commission, Interpretative Communication on the application of Article 296 of the Treaty in the field of defence procurement, COM(2006) 779 final (English version), 7 December 2006, at 5 [emphasis original].

[999] *Fiocchi Munizioni v. Commission*, Case T-26/01, Judgment of 30 September 2003, online: EUR-Lex <http://eur-lex.europa.eu/> accessed on 1 May 2012, at para. 61.

[1000] The court has already exercised its jurisdiction with respect to trade-related national security measures in *Commission v. Spain*, Case C-414/97, Judgment of 16 September 1999, online: EUR-Lex <http://eur-lex.europa.eu/> accessed on 1 May 2012.

[1001] Art. 36 of the TFEU. Public security clauses can also be found in Arts 45, 52, and 65 of the TFEU. Due to their minor importance to the subject matter of this work, we avoid their analysis herein. For further information on these clauses see M. Trybus, "The Limits of European Community Competence for Defence", (2004) 9 European Foreign Affairs Review 189, particularly at 195-199.

exceptions we have reviewed so far in other international treaties, though some degree of self-determination stems from the notion of public security itself. Yet, even this margin of appreciation can be judicially scrutinized under the TFEU.

The concept of public security is not defined in the TFEU and its relationship with the concept of national security (or essential interests of member state's security) is not clear. One commentator submitted that public security in the context of the EC law is "a wide concept covering all aspects of security, internal and external, including the concept of national security".[1002] In a similar vein, the ECJ has held that the concept of public security within the meaning of Art. 36 covers both external and internal security of member states.[1003] Moreover, the court admitted that it is difficult to distinguish foreign policy from security policy considerations as the former is closely linked to the security of international community, so that any serious disturbance in foreign relations may affect security of a member state.[1004]

Since the line between public security and national security cannot be clearly defined and given the fact that the GATT national security exceptions accord a wider margin of appreciation for states invoking them than is provided in the TFEU, it may be suggested that a larger share, if not all, of public security measures is likely to be found legitimate under the GATT. Hence, let us briefly review two petroleum-related cases resolved by the ECJ where the responding party invoked the Art. 36 public security exception.

A. *Campus Oil*[1005]

The *Campus Oil* case arose from a national court proceeding initiated before the High Court of Ireland by a group of plaintiffs led by Campus Oil Ltd. against the Irish Government. The High Court of Ireland referred to the ECJ certain questions on the interpretation of

[1002] M. Trybus, "The EC Treaty as an Instrument of European Defence Integration: Judicial Scrutiny of Defence and Security Exceptions" (2002) 39 Common Market Law Review 1347, at 1350.

[1003] *Criminal Proceedings against Aimé Richardt and Les Accessoires Scientifiques SNC*, Case C-367/89, Judgment of 4 October 1991, online: EUR-Lex <http://eur-lex.europa.eu/> accessed on 1 May 2012, at para. 22. See also the Opinion of the Advocate General Sir Gordon Slynn in *Campus Oil, Ltd. v. Minister of Industry and Energy*, Case 72/83, Judgment of 10 July 1984, online: EUR-Lex <http://eur-lex.europa.eu/> accessed on 1 May 2012 [hereinafter: *Campus Oil*].

[1004] *Fritz Werner Industrie-Ausrustungen GmbH v. Germany*, Case C-70/94, Judgment of 17 October 1995, online: EUR-Lex <http://eur-lex.europa.eu/> accessed on 1 May 2012, at paras. 26-27.

[1005] *Campus Oil*, *supra* note 1003.

Community law. The background to the dispute, the arguments of the parties', and the ECJ's interpretation in response to referred questions are presented below.

In August 1981, the private owners of Whitegate refinery, which was the only refinery in Ireland, notified the Irish Government of their intention to halt refining operations permanently. In the view of the Government the retention of the refinery was necessary in the interests of security of supplies. It bought the refinery from the private parties. Under the market conditions prevailing at that time in Ireland, the refinery could not sustain economically feasible operations. Thus, in 1982, the Government adopted a regulation which stated that importers were obliged to procure up to 35 per cent of their total requirements of petroleum products and up to 40 per cent of their requirements of each type of petroleum product from the state-owned refinery. The regulation was challenged under Art. 34 of the TFEU (then Art. 30) as a measure imposing quantitative restrictions on imports or having equivalent effect and therefore restricting trade between EC states. The Irish Government invoked the Art. 36 public security exception. It reasoned that:

> Ireland's heavy dependence for its oil supplies on imports from other countries and the importance of oil for the life of the country make it indispensable to maintain refining capacity on the national territory, thereby enabling the national authorities to enter into long-term delivery contracts with the countries producing crude oil.[1006]

The claimants argued that the measure was designed predominantly to attain economic objectives to ensure that the refinery did not operate at a loss and therefore could not be covered by the concepts of public security or public policy. The EC Commission also thought that the measure pursued economic interests, was inadequate and ineffective for the purpose of securing supplies to the Irish market, and was not justified under Art. 36. Moreover, the Commission pointed out that the Community, on its level, had adopted measures necessary to ensure supplies of petroleum in the event of a crisis.[1007]

[1006] *Ibid*. para. 22.

[1007] The Community-level measures then in force included the requirements for each member state to keep a reserve of 90 days average consumption stocks, a system of export licenses and restrictions on consumption, priority supply obligations for particular groups of consumers, arrangements purported to distribute the burden of supply deficits fairly among the member-states and so on. See *ibid*. at para. 28; see also *infra* discussion of the case *Re Emergency Stocks of Petroleum Products* in the next section.

The ECJ accepted that supply of petroleum products is a matter of public security for Ireland, given its heavy reliance on imported oil. The court stated:

> petroleum products, because of their exceptional importance as an energy source in the modern economy, are of fundamental importance for a country's existence since not only its economy but above all its institutions, its essential public services and even the survival of its inhabitants depend upon them. An interruption of supplies of petroleum products, with the resultant dangers for the country's existence, could therefore seriously affect the public security that Article 36 allows States to protect.
>
> …in the light of the seriousness of the consequences that an interruption in supplies of petroleum products may have for a country's existence, the aim of ensuring a minimum supply of petroleum products at all times is to be regarded as transcending purely economic considerations and thus as capable of constituting an objective covered by the concept of public security.[1008]

The court concluded that although in the event of a serious crisis the measure in question could not ensure stable supplies of petroleum products to the Irish market, it nevertheless reduced certain types of risks and contributed to improving the security of supply for Ireland.[1009] With respect to the argument of unnecessary duplication of measures that already existed on the Community level, the ECJ held that "the possibility for a member-State to rely on Article 36 to justify appropriate complementary measures at the national level cannot be excluded, even where there exist Community rules on the matter".[1010] As to the economic interests allegedly aimed at by the measure, the ECJ ruled that if a measure is justified under public security considerations, attainment of other objectives of an economic nature does not exclude the application of Art. 36.[1011] The ECJ left it to the High Court of Ireland to judge whether the measure was necessary or not; though it elucidated the characteristics of a necessary measure as follows:

> [t]he quantities of petroleum products covered by such a system must not exceed the minimum supply requirements without which the public security of the State concerned would be affected or the level of production necessary to keep the refinery's production capacity available in the event of a crisis and to enable it to continue to refine at all times the crude oil for the supply of which the State has entered into long-term contracts.[1012]

[1008] *Ibid*. paras. 34-35
[1009] *Ibid*. para. 41
[1010] *Ibid.* para. 31
[1011] *Ibid*. para. 36
[1012] *Ibid*. Order of the Court.

B. *Re Emergency Stocks of Petroleum Products*[1013]

The second case was brought directly to the ECJ by the EC Commission against the Greek Government. It concerned Greek regulations adopted as a part of the Community-level measures to ensure stability of petroleum supply referred to by the Commission in the *Campus Oil* case.

Under the EC law each member state is required to maintain minimum stocks of crude oil and/or petroleum products at level equivalent to at least 90 days' average daily internal consumption.[1014] A member state had to decide for itself whether to maintain the stocks in their territory or in the territory of another member state, and which enterprises to oblige to store those reserves. Original Greek laws adopted with respect to these requirements obliged petroleum marketing companies to store the emergency stocks in Greece, in their own tanks or in leased tanks outside refineries. However, since January 1996, the marketing companies became entitled to transfer their obligation to refineries in Greece from which they had bought products during the preceding year. The amount of transferable obligation depended on the volume of petroleum products purchased by the marketing company from a particular refinery.

The EC Commission argued that making the storage obligation conditional upon the purchase of petroleum products from Greek refineries constituted discrimination against the products of refineries of other member states, because it made their marketing more difficult; therefore it constituted a measure having equivalent effect to a quantitative restriction on imports prohibited by Art. 34 of the TFEU (then Art. 30). The Greek government responded that the measure treated local and imported products alike, and explained that the marketing companies purchased petroleum products from local refineries due to market conditions and not due to the legislation. It further stated that even if the measure did impede the free movement of goods, it was justified under the public security exception of Art. 36 as a measure necessary for security of supply of petroleum products. The EC Commission contended that the measure could not be

[1013] *Re Emergency Stocks of Petroleum Products: Commission v. Greece*, Case C-398/98, Judgment of 25 October 2001, online: EUR-Lex <http://eur-lex.europa.eu/> accessed on 1 May 2012.
[1014] *Ibid*. para. A5.

considered necessary as there were available other means which would have impeded the free movement of goods less while achieving the desired level of the security of supply.

Having reviewed the arguments of the parties, the ECJ held that the measure in question violated Art. 34 of the TFEU (then Art. 30). The court, referring to the Campus Oil case, confirmed that maintenance on national territory of emergency stocks of petroleum products constituted a public security objective within the meaning of Art. 36. However, it held that the measure was not justified by the Art. 36 exception because “the objective of public security could have been achieved by less restrictive measures without it being necessary to make the transfer of the storage obligation to refineries established in Greece conditional upon the obligation to obtain supplies of petroleum products from those refineries”.

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It has been shown above that although the textual origin of national security clauses of all the ECT, NAFTA, and TFEU can be traced back to the GATT Art. XXI, the regimes established for invocation of the exception diverge considerably. This divergence results from a variety of reasons stemming from the difference in the institutional organization, membership of the treaties, and the degree of economic integration among their members. The EC is a highly integrated community in both political and economic terms. Therefore, compared to any other treaty, the TFEU imposes more restrictions on the sovereign powers of its member states, provides fewer grounds for invocation of the national security exception and more means to control potential abusive actions by the party invoking it.

In contrast, the ECT, which was originally designed to advance trade in energy between capitalist Europe and former socialist countries of the East block, accords largely unfettered discretion for the contracting parties to derogate from the treaty obligations under security concerns. Nevertheless, to ensure a stable flow of energy between its contracting parties, the ECT prevents abusive invocation of the exception in situations plainly irrelevant to security concerns. However, the effectiveness of the ECT’s specific “anti-exception” provisions is limited to restrictions arising out of increased customs duties and charges and transit matters leaving "non-monetary" restrictions to the unfettered discretion of a sanctioning party.

The general national security exception of NAFTA is comparable to that of GATT. At the same time, much like in the case of ECT, the energy-specific rules of NAFTA are designed to secure the free flow of energy against dubious invocations of the security exception. The energy-specific "anti-exception" provision of NAFTA is textually more effective than that of ECT because it applies to all measures restricting exports and import. However, in reality, since Mexico opted out from the energy specific rule, it applies only between Canada and the U.S., which had established identical rules for trade in energy in their earlier bilateral treaty.[1015]

After all, it must be noted that the means to control abuse of rights in invoking security exceptions in the ECT and NAFTA are established only with respect to the free movement of energy goods. It is unlikely that these means can effectively be exercised to tackle measures that do not expressly impede the free movement of energy goods, for example, certain types of subsidies and TRIMs.

8.5. Energy Security under the GATT Article XXI

At the end of our review of Art. XXI of the GATT 1994 above we stated two hypotheses: (i) that the article confers no jurisdictional defense to the party invoking the national security exception, and (ii) that the state invoking the exception has a wide margin of discretion to decide what is its essential security interests and what measures are necessary for their protection, and that this discretion can be reviewed by a WTO panel to prevent gross abuse of the right. Our analysis of corresponding provisions of the ECT, NAFTA, and TFEU generally confirms the validity of these hypotheses, at least when trade in energy is considered. In this section we revisit Art. XXI of the GATT 1994 to assess whether and to what extent the exception can be invoked

[1015] Art. 607 of the NAFTA resembles Art. 907 of the Canada – United States Free Trade Agreement (dated 10 December 1987, entered into force on 1 January 1989, 27 I.L.M. 281). For analysis of energy-specific rules of the latter treaty see Albert Hudec & John Quinn "Energy Aspects of the Canada-Unites States Free Trade Agreement" (1989) 2 Can. Pet. Tax. J. 1; and J. Owen Saunders, "Energy, Natural Resources and the Canada-Unites States Free Trade Agreement" (1990) 8 J.E.R.L. 1.

under the energy security considerations. First, we study whether energy security falls within the scope of the essential security interests of a state. Then we try to analyze the problems the DSB may potentially face in adjudicating disputes related of trade in petroleum and energy in general under the GATT Art. XXI.

8.5.1. Energy security as an "essential security interest" of a state

There is little doubt that energy security is an essential security interest for any state. On the one hand, energy is required for armed forces in both peacetime and wartime.[1016] On the other hand, energy is vital for any modern economy; therefore, energy security, as much as economic security, is essential for the national security of states.[1017] To illustrate, let us look at one trade policy aspect of the U.S. – currently the world's leading economic and military power.

Pursuant to Section 232 of the Trade Expansion Act of 1962 the U.S. Department of Commerce, upon initiative of an interested party or of its own, conducts investigations to determine effects on national security of imports of any products.[1018] The Department of Commerce submits the results of such investigations along with appropriate recommendations to the U.S. President, who determines the measures to be taken to adjust the importation of such products so that it will not threaten to impair national security.[1019] In the forty years since the inception of the law, around twenty-five investigations were conducted with respect to various

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[1016] For an analysis of energy consumption for military purposes see Vaclav Smil "War and Energy" in Cutler Cleveland, ed., *Encyclopedia of Energy*, vol. 2 (New York: Elsevier, 2004). For example, Smil estimates that the "average direct annual consumption of primary energy by the U.S. armed services in peacetime during the 1990s was roughly equivalent to the amount of primary energy consumed annually by such states as Switzerland and Austria" (*ibid*. at 368).

[1017] Paul Kennedy, a leading authority on the history of international relations and foreign policy, addressing the definition of national security before the U.S. Congress said:

> the definition of national security cannot refer simply to military policies or to military spending alone. I think it ought to refer instead to those sources, those underpinnings of long-term national strength in the state and power of our manufacturing, investment in science and technology, of educational skills, all of which ultimately the Armed Forces and defence policy of this country have to rest upon.

Paul Kennedy, *American Economic Power: Redefining National Security for the 1990s*, Hearings before the Joint Economic Committee, U.S. Congress, 101st Session, 9 November 1989 at 23 as quoted in Zillman, *supra* note 5, at 126.

[1018] 19 U.S.C. § 1862 (1988). For detailed analysis of this legislative act and its impact on the U.S. oil imports see Jeffrey P. Bialos, "Oil Imports and National Security: The Legal and Policy Framework for Ensuring United States Access to Strategic Resources", (1989) 11 U. Pa. J. Int'l Bus. L. 243.

[1019] 19 U.S.C. § 1862(b)(c) (1988).

products.[1020] In said period, imports of petroleum were investigated eight times, and in each case the Department of Commerce found and the U.S. President confirmed that petroleum imports threatened to impair national security.[1021] No other product (including uranium) that came under the scrutiny of these investigations was found to threaten U.S. national security.

In determining whether petroleum imports threaten to impair national security, the Department of Commerce looked far beyond military consumption of petroleum. It has been estimated that the direct peacetime use of fuels and electricity by the U.S. military accounts for less than 1% of the country's total energy supply.[1022] In terms of oil, in 2010 the U.S. produced about 40% of its annual consumption.[1023] Clearly, the U.S. military's needs can be more than satisfied by domestic petroleum production. In fact, in a petroleum-related investigation conducted by the Department of Commerce in 1999, the U.S. Department of Defense reported sufficiency of petroleum to meet both direct and indirect military requirements in the event of major peacetime supply disruption or two simultaneous major regional conflicts.[1024] Nonetheless, in that investigation petroleum imports were found to threaten U.S. national security.[1025]

Energy security concerns dictate not only trade but also investment aspects of the U.S. policy. In 2005, the U.S. Congress blocked the acquisition of the Unocal Corporation, an American oil company based in California, by a Chinese oil company on the ground that such acquisition could threaten U.S. energy security.[1026] Moreover, the risks associated with

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[1020] See U.S. Department of Commerce, "The Effect of Imports on the National Security: Investigations Conducted Under the Trade Expansion Act of 1962, As Amended" September 2004, online: U.S. Department of Commerce, Bureau of Industry and Security <http//www.bis.doc.gov.> accessed on 1 May 2012.
[1021] *Ibid*. at 13-20.
[1022] Smil, *supra* note 1016, at 368.
[1023] In 2010 the U.S. domestic oil production amounted to 339 mln bbl whereas total consumption was 850 mln. bbl. of oil. See BP, *Statistical Review of World Energy*, June 2011, at 10-11, online: <http://www.bp.com.statisticalreview> accessed on 1 May 2012.
[1024] U.S. Department of Commerce, "The Effect on the National Security of Imports of Crude Oil and Refined Petroleum Products: An Investigation Conducted Under Section 232 of the Trade Expansion Act of 1962 As Amended", November 1999, at ES 6, online: U.S. Department of Commerce, Bureau of Industry and Security <http//www.bis.doc.gov.> accessed on 1 May 2012.
[1025] *Ibid*. at ES-8.
[1026] For details of the case see Thomas P. Holt, "CNOOC-UNOCAL and the WTO: Discriminatory Rules in the China Protocol are a Latent Threat to the Rule of Law in the Dispute Settlement Understanding" (2006) 15 Pac. Rim

petroleum imports are such a high-level concern for the U.S. that diversification of sources of energy became one of the priorities of the state's National Security Strategy, which in relevant part reads:

> As long as we are dependent on fossil fuels, we need to ensure the security and free flow of global energy resources. But without significant and timely adjustments, our energy dependence will continue to undermine our security and prosperity. This will leave us vulnerable to energy supply disruptions and manipulation… We must continue to transform our energy economy, leveraging private capital to accelerate deployment of clean energy technologies that will cut greenhouse emissions, improve energy efficiency, increase use of renewable and nuclear power, reduce the dependence of vehicles on oil, and diversify energy sources and suppliers.[1027]

The U.S. policy reviewed above is not unique in the contemporary world; energy security should be of similar concern to other countries. For instance, the U.K., a net energy-importing state since 2005 which is still able to supply most of its energy needs domestically, in its National Security Strategy names among major security threats "disruption of oil or gas supplies to the UK, or price instability, as a result of war, accident, major political upheaval or deliberate manipulation of supply by producers".[1028] Many countries, including China and India, have a much lower proportion of domestic production to consumption than does the U.S. and the U.K.; therefore, energy security should be of no less importance to such states. But what about states with abundant energy resources? Are they vulnerable to energy risks? And what does energy security mean after all? Let use try to address these questions briefly.

Like "national security" and "essential security interest", the term "energy security" can hardly be clearly defined. Indeed, a wide variety of definitions have been offered for the term "energy security" in the literature. In a recent book on energy security, Benjamin Sovacool cites 45 definitions of the term.[1029] While their particularities differ, all of these definitions concern four main concepts: availability in sufficient quantities, stability of supply, reasonable price, and

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L. & Pol'y J. 457; see also UNCTAD, *The Protection of National Security Interests in IIAs* (Geneva: UNCTAD, 2008) UNCTAD/DIAE/IA/2008/5 at 11.

[1027] *The National Security Strategy of the United States* (Washington, DC: The White House, 2010), online: The White House <http://www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf> accessed on 1 May 2012, at 30. It is not surprising therefore that the U.S. Energy Policy Act of 2005 provides numerous tax and investment incentives for energy companies, many of which are likely to be in conflict with WTO rules.

[1028] *A Strong Britain in an Age of Uncertainty: The National Security Strategy*, October 2010, online: the UK Government <http://www.direct.gov.uk> accessed on 1 May 2012, at 27.

[1029] Benjamin K. Sovacool, "Introduction: Defining, measuring, and exploring energy security" in Sovacool, *supra* note 925, at 3.

sustainable development. Another common feature of these definitions is that they all have a noticeable bias towards energy-importing states. In this regard, it can be questioned whether energy security matters for energy-exporting states. It is true that sufficiency of a state's own production eliminates the risk of supply disruption for energy-exporting states whether we consider energy as economic input or fuel for armed forces. Thus, it can be argued that energy security is of less concern for energy-exporting states than it is for energy-importing states.

Now let us consider energy as a constituent of economic security and assume that the purpose of economic security is to prevent devastation of the existing economic welfare of a state. Energy is an input in the production of goods and services that in turn contribute to economic growth.[1030] At the same time, energy can serve as a commodity exchangeable on the market for other commodities or money. In this way it also contributes to the economic growth and economic security of a nation. Correspondingly, for a state whose economy is strongly dependent on earnings from petroleum exports (which is quite common among petroleum-exporting states) energy security, albeit in different terms, is also of essential interest. Such a state can claim that although availability and affordability of energy is of less importance for it, the other factors of energy security, such as stability of supply/demand and sustainable development, are as important for it as for energy-importing states.[1031] In other words, dependence on petroleum exports undermines the security of such a state as much as dependence on external energy resources undermines the security of importing states.[1032]

From the WTO rules perspectives it is not important if energy security is an independent concept or is a part of economic or military security. Suffice it to say that energy security can be considered an essential security interest by both exporting and importing states for the purpose of

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[1030] If energy is not used as economic input, it would not be considered as a constituent of economic security, as was the case of medieval states.

[1031] It is not by accident that the U.S. demanded that the EC discontinue procurement of oil from Iran. Although the EC is highly dependent on imported oil and is in permanent search for diversified sources of oil imports, it stopped all purchases of Iranian oil in 2012.

[1032] A bulk of economic literature has been written on the Dutch disease and other problems of states dependent on exports of petroleum and other natural resources. See, for example, Peter Neary & Sweder van Wijnbergen, ed., *Natural Resources and the Macroeconomy* (Cambridge, MA: MIT Press, 1986); Alan Gelb, *Oil Windfalls: Blessing or Curse?* (New York: Oxford University Press, 1988), Terry Lynn Karl, *The Paradox of Plenty: Oil Booms and Petro-States* (Berkeley, CA: University of California Press, 1997).

invoking the national security exception. As one scholar stated, "[e]nergy security is like a Rorschach inkblot test – you can see whatever you want to see in it".[1033] Thus, given the wide margin of appreciation provided to the invoking party under the GATT Art. XXI, it is highly unlikely that the WTO panels or AB would question whether energy security is of essential interest for the invoking party regardless of whether it is an energy-exporting or -importing state.

8.5.2. Adjudication of energy security issues

Although energy security is of essential interest for a WTO Member invoking the Art. XXI exception, the WTO panels, as has been argued earlier, have the competence to determine whether the invocation amounted to abuse of the right by that Member. Two qualifications provided in Art. XXI(b) are of particular interest with respect to trade in petroleum.[1034] The first one, contained in sub-paragraph (ii), concerns military goods and traffic in goods relating "directly or indirectly for the purpose of supplying a military establishment".[1035] The second qualification is stipulated in sub-paragraph (iii) and authorizes measures "taken in time of war or other emergency in international relations".

The first qualification seems to be relatively open for a panel's deliberation in determining the legitimacy of the invocation. The variety of measures that relate to trade in military goods or supply of goods for military establishment is narrower than the variety of measures that can be associated with war or emergency in international relations. Excessive customs duties and charges imposed on exports, imports or transit of petroleum allegedly for military purposes are likely to be considered abusive. Quantitative restrictions imposed in breach of the MFN obligation, unless there is a growing tension between the sanctioning and targeted states, may also lose the Art. XXI(b)(ii) protection. Provision of subsidized petroleum to farmers and industries, which produce primarily non-military goods (steel, auto-manufacturers, textile,

[1033] David Victor as quoted in Sovacool, *supra* note 1029, at 3.
[1034] The Art. XXI(b)(i) qualification concerns with fissionable materials and therefore is not relevant to trade in petroleum. Due to the reasons stated at the outset of this chapter we omit analysis of paragraphs (a) and (c) of Art. XXI.
[1035] GATT Art. XXI(b)(ii).

etc.), would also not be justified under the "military security" exception.[1036] TRIMs implemented to support production of biofuels or electricity from alternative sources of energy can hardly be associated with military security.

Truly, the Art. XXI(b)(ii) qualification is not as strong as analogous qualifications provided in Art.346.1(b) of the TFEU and Art. 607(a) of the NAFTA. Nonetheless, it sets definable limits for invocation of the "military security" exception, albeit broad ones. Notwithstanding the handful of purely economic measures that may be concealed under the legitimate limits, the qualification prevents gross abuses that would have been possible otherwise.

The second qualification, given the subjective element in the introductory sentence of Art. XXI(b) and the vagueness of the wording "taken in time of war or other emergency in international relations", was described as "the most troubling and open-ended provision", which "is so broad as to allow almost any measure as an exception to the GATT".[1037] What constitutes a "war", or inversely what does not constitute a war, can be clearly found in certain circumstances. For instance, measures taken by a WTO-cum-NATO Member against another such Member, unless either of them is actively at war with other states, cannot be covered by this exception. However, determination of "war" is of little practical importance in the face of the existence of a broader notion, the "other emergency in international relations", in the same provision.

Some commentators attempted to establish criteria that would facilitate the definition of "other emergency in international relations". Hahn, noting that "at the time the GATT was drafted the era of 'undeclared wars' had not yet fully begun", argues that "emergency" is limited to hostile interactions between states as well as situations where use of force is legal under

[1036] If such subsidies are challenged under Art. XVI of the GATT. It must be noted that the ASCM Agreement has no national security or equivalent exception.
[1037] Zillman, *supra* note 5, at 118.

international law.[1038] Such a restrictive approach does make sense if one analyzes the rationale for co-existence of subsections (ii) and (iii) in Art. XXI(b). It can therefore be suggested that subsection (ii) should be interpreted as an exception that can be invoked in peacetime, while subsection (iii) should be construed more narrowly to limit applicability of the exception only in the case of actual or evident conflict in international relations. It must be noted that there is no direct evidence in the context and preparatory work of Art. XXI(b) that would either support or exclude such an approach. However, Piczak condemns this view, stating that emergency cannot be confined to situations involving the use of force but also covers threats to the essential security of states taking other forms such as, for example, "a wave of crime unleashed by a massive influx of refugees".[1039] Moreover, Piczak implies that even security threats based on ideological conflict, such as the one underlying the U.S.-Cuba tension, are covered by the term "emergency in international relations".[1040] Kuilwijk offers an alternative view, considering that the term:

> refers to situations which are serious enough to permit States under general international law to resort to the use of economic reprisals. Such reprisals are generally considered legitimate if taken in response to a breach of a fundamental norm of international law, i.e. an international wrong (internationally illegal act or internationally wrongful act).[1041]

Since Art. XXI(b)(iii) leaves it to the Member invoking the exception to decide in good faith what constitutes an emergency in international relations, let us briefly sketch the circumstances under which the exception was invoked in GATT history. The U.S. acted in its essential security interests when it exercised measures against Nicaragua and Cuba.[1042] One may doubt that these states either could threaten the U.S. security or had committed illegal acts that could entail the use of force or economic reprisals. In 1961, Ghana boycotted Portuguese goods because Portugal had a conflict with Angola. In justification Ghana stated:

> It might be observed that a country's security interests might be threatened by a potential as well as an actual danger. The Ghanaian Government's view was that the situation in Angola was a constant

[1038] Hahn, *supra* note 935, at 588-9. However, he also admits without elaborating the details that other situations that do not necessarily involve use of force can be covered by the term.
[1039] Piczak, s*upra* note 935, at 324.
[1040] *Ibid.* at 323.
[1041] Kuilwijk, *supra* note 962, at 54.
[1042] See *supra* notes 942 and 947 respectively.

> threat to the peace of the African continent and that any action which, by bringing pressure to bear on the Portuguese Government, might lead to a lessening of this danger, was therefore justified in the essential security interests of Ghana.[1043]

In the same vein, at its accession to the GATT in 1970, Egypt (then the United Arab Republic) justified its participation in the Arab League boycott against Israel and firms having relations with Israel "by extraordinary circumstances to which the Middle East area had been exposed".[1044] On analogous grounds, in 1982, Australia, Canada, and the EC states exercised economic sanctions against Argentina following its conflict with the U.K. over the Falkland-Malvinas islands.[1045] In 1991, the EC, followed by a group of other states, withdrew preferential benefits from Yugoslavia, because the Yugoslavian civil war was viewed as an emergency in international relations.[1046]

In all these cases economic sanctions were imposed against particular states following allegedly wrongful acts conducted by them.[1047] It is also notable that some of the sanctioning parties in these cases neither suffered directly from the wrongful act nor took immediate part in the conflict with the targeted state.

In Chapter VII we discussed oil supply restrictions concerted by OPEC states. It was suggested that oil supply cutbacks exercised by then OPEC-cum-GATT member Arab states due to the outbreak of Arab-Israeli hostilities in October 1973 were justified under, *inter alia*, the Art. XXI(b)(iii) security exception.[1048] The Arab-Israeli tension has not disappeared since then and will seemingly continue at least into the near future. Given the subjective element in Art.

[1043] WTO, *Analytical Index, supra* note 937, at 600 quoting GATT Doc.: SR.19/12, at 196.
[1044] *Ibid*. at 603, quoting GATT Doc.: L/3362.
[1045] See *supra* note 939.
[1046] WTO, *Analytical Index, supra* note 937, at 604 quoting GATT Doc.: L/6948.
[1047] The GATT 1947 history also records a distinct case where a party justified its trade restrictive measures on the national security ground in the absence of any external emergency situation. In 1975, Sweden notified the GATT contracting parties of its intention to introduce a temporary global quota system for imports of certain leather and plastic shoes as well as rubber boots. In justification of the measure Sweden submitted that the domestic production of shoes decreased to 25% of total supply which caused "a critical threat to the emergency planning of Sweden's economic defence as an integral part of the country's security policy". Sweden argued that the maintenance of minimum domestic production capacity of shoes was "necessary to meet basic needs in case of war or other emergency in international relations". Although the GATT contracting parties expressed doubts as to the justification of measures under the GATT, it seems that the matter was not brought to the panel's consideration under GATT Art. XXIII. The global quota system was introduced on 5 November 1975 and was terminated on 1 July 1977 (see WTO, *Analytical Index, supra* note 937, at 603 quoting GATT Docs: C/M/109, L/4250, and L/4250/Add.1). We omit further discussion of this case because, on the one hand, such justifications would hardly be viable under the WTO rules, and on the other hand, it does not facilitate understanding of the term "emergency in international relations".
[1048] Shihata, *supra* note 852, at 623.

XXI(b)(iii) and the evidence from GATT practice presented above, it can be assuredly stated that the WTO panels and AB will not take responsibility to resolve an economic dispute between an Arab state and Israel.[1049] However, as we learned from the 1973 oil crisis, trade measures that result from the Arab-Israel conflict may immediately affect states that are not involved in the conflict. What if Arab oil exporting states halt oil exports to countries that trade with Israel in military or any other goods?[1050] Such a scenario would be of the kind we observed in the U.S. Helms-Burton Act. Yet, the Arab-Israel conflict is far more complex than the U.S.-Cuba tension. Many more states and much larger economic interests surround the conflict. It would be premature to state that the WTO panels or AB would deny their jurisdiction in such a case. Nonetheless, it can be predicted that, if the jurisdiction were exercised, the sanctioning party would be accorded a wide margin of appreciation in deciding whether the situation with the third country was covered by the emergency.

Even if the self-judging nature of the national security exception is disregarded, a great variety of circumstances can be viewed as emergencies in international relations in the modern world. One must keep in mind in this regard that the WTO panels and AB have to take into account the current dynamics of international law and adopt an evolutionary interpretation of emergency in international relations.[1051] Terrorism, violation of human rights, ethnic and religious clashes, social instability – all these can now be labeled as emergencies in international relations or are capable of causing such.[1052] Correspondingly, it may be suggested that an oil crisis akin to the 1973 crisis and/or sharp increases in petroleum prices can be considered an

[1049] It is worth noting that Saudi Arabia agreed to drop its secondary boycott measures against Israel, otherwise Israel could block the accession of Saudi Arabia to the WTO. See Raj Bhala, "Saudi Arabia, the WTO, and American Trade Law and Policy" (2004) 38 Int'l Law 741, at 754.

[1050] Such scenarios are far from being purely theoretical. For example the U.A.E. bans imports of all goods from Israel and goods bearing Israeli marks or logos even if they are produced in third states. WTO, *Trade Policy Review: United Arab Emirates*, Report by the Secretariat, WTO Doc.: WT/TPR/S/162 (20 March 2006), at 28.

[1051] See *infra* Chapter I, and *US – Shrimp*, *supra* note 93, at paras. 127-134.

[1052] A more relaxed interpretation of the term "emergency in international relations" would embrace an even broader list of circumstances, such as, for example, preservation of wildlife, construction of a nuclear power facility that, in the case of accident, may affect neighboring states, environmental pollution, and so on.

emergency in international relations.[1053] If so, then a global financial crisis similar to the 2008 crisis can also be considered by strongly affected states as a legitimate ground for invocation of the Art. XXI(b)(iii) exception.[1054] However, the textual meaning of the provision may constrain such a broad interpretation.[1055]

The word "emergency" is defined as "a serious, unexpected, and often dangerous situation requiring immediate action".[1056] The emergency must be in international relations. On the one hand, it can be argued that the emergency situation must affect two or more states, thereby excluding internal ethnic and religious clashes, social instability, terrorist attacks and similar circumstances.[1057] On the other hand, emergency in international relations can be interpreted as a political tension between two or more states, which may be caused by the said internal events or other circumstances. Given the subjective element in the introductory sentence of Art. XXI(b), the state invoking the exception is free to choose any of the two reasonable meanings, or others; therefore it is not practical to judge which of them is more appropriate. However, it does not mean that states are completely free to decide what circumstances constitute an emergency in international relations. A decrease in the domestic footwear

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[1053] It is notable that in a series of investor–state arbitration cases based on the U.S. – Argentina BIT the tribunal found that the national security exception provided in Art. XI of the BIT encompassed economic crisis suffered by Argentina in early 2000s. See *infra* note 980.

[1054] It may be assumed that an OPEC state cannot legitimately refer to an oil crisis partially resulting from its actions (when we talk about only OPEC-caused crises). However, the case is different for a non-OPEC state that does not co-operate with the organization and who is not capable of causing global oil crisis itself (presumably, any other state except, possibly, Russia). If such an assumption is correct, then in the case of global financial crisis capital exporting states should also be denied the Art. XXI(b)(iii) protection. In fact, both oil and capital have become globally liquid assets. Nowadays, with the possible exception of Saudi Arabia and Russia in the case of oil crisis, the U.S. and EC in the case of financial crisis, it is impossible to accuse any single WTO member of causing a global oil or financial crisis.

[1055] The context and the drafting history of the provision are of little help. The object and purpose of the provision is to enable states to derogate from its obligations under the treaty in the case of security threats. The opening words "nothing in this Agreement shall be construed" mean that the exception was intended to override any provision of the GATT. Therefore, the object and purpose of the national security exception cannot be put into strict subordination to the object and purpose of the GATT and/or the Agreement Establishing the WTO, otherwise the whole GATT Art. XXI would be in contradiction with the Agreement Establishing the WTO.

[1056] "emergency *noun*" *Oxford Dictionary of English*. Edited by Angus Stevenson. Oxford University Press, 2010. *Oxford Reference Online*. Oxford University Press. McGill University. 11 May 2012 <http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t140.e0262750>

[1057] The text of Art. XXI(b)(iii) states "taken in time of war or other emergency in international relations". If one argues that internal events cannot be considered as emergency in international relations, then he would have to accept that civil wars are not covered by the term "war".

production to 25% of the total supply will not constitute an emergency.[1058] A 5% price fluctuation in the global oil market would not be considered an emergency either, because such fluctuations have become customary in this market. The WTO panel will be competent to render an appropriate decision in such cases.

If emergency is considered to be an unexpected (sudden) situation requiring immediate (adequate in time) action, then such an action is supposed to have a temporary nature. The words "taken in time of" at the beginning of the phrase also support the supposition. Hence, once the threats or effects of the emergency are mitigated, the measure adopted under the Art. XXI(b)(iii) exception has to be removed. Moreover, these "time-related" characteristics imply that the measure must be taken in response to an emergency situation, which means either after the rise of harmful circumstances or as a preventive measure in advance of such contingencies, when their occurrence becomes clearly inevitable. If this correct, then the WTO panel should be competent to determine whether the state invoking the exception abused its right by adopting a measure that has no causal link with emergency it referred to. However, it would be difficult for the panel to make such determination because the very nature of the state of national security requires permanent readiness of a nation to respond to security threats. In this regard, Schloemann & Ohlhoff assert that:

> [i]n determining an "emergency in international relations", as well as in considering whether an action is "necessary" for the protection of security interests, a party may exercise, in good faith, its "right to be cautious" as part of its sovereign right to protect its national security. The same applies to the determination, or "consideration" of the necessity of an action to protect "essential security interests". The determination of these interests falls within the definitional prerogative of the WTO member. Its valid exercise, however, requires good faith, which, in principle, may be subject to review.[1059]

The "right to be cautious" should mean that a WTO Member does not have to wait until the emergency event happens or its future occurrence becomes evident to implement measures it considers necessary to mitigate the causes and/or effects of the event. It should also mean that the effect of adopted measures could be in excess of what is actually needed to alleviate the

[1058] See *supra* note 1047.
[1059] Schloemann & Ohlhoff, *supra* note 922, at 446-7.

harmful effects of the emergency event.[1060] Moreover, since the causes and effects of an emergency situation are usually difficult to evaluate in advance, the measures preventively taken by a state do not necessarily have to be effective, proportionate or adequate. After all, it is the state taking the measures that decides what is necessary for its security. Unless there is a manifest abuse of the right, a WTO panel is unable to contest the merits of measures adopted by that state. However, it seems that cases in which responding parties manifestly abuse the right to invoke the exception are rare; and if one arises, it would likely be resolved through consultations without ever reaching the WTO panel.

Let us now return to energy security and review it in the light of the discussion above. After the 1973 oil crisis most of the states dependent on petroleum imports adopted individual and/or collective measures to strengthen their energy security. The variety of such measures is increasing due to peaking petroleum production and rising demand for energy resources. Some measures are aimed to enhance domestic production, others to diversify the sources of energy. The measures may take various forms, such as regulatory interventions, state enterprises, tax-incentives, subsidies, and TRIMs. As has been shown in this work, depending on the particularities of individual cases, some such measures can be in conflict with WTO rules, while others (often having similar economic effect) formally comply with the rules. Hence, there is a considerable likelihood that energy security measures will be challenged under the WTO rules in the near future. If any such dispute arises, the responding state may invoke the Art. XXI(b)(iii) exception.

Whether it is a subsidy for the development of a residual oil field or an obligation to mix biofuel with gasoline, energy security measures are not adopted in response to a war or an emergency in international relations, within the strict meaning of these concepts. Energy security measures are long-term oriented and can be considered preventive measures to alleviate the effects of a foreseeable energy crisis. If petroleum markets are considered, the probability of

[1060] In this respect, Bialos (*supra* note 1018, at 258) noted: “it must be recognized that national security is a relative concept […] it is impossible to quantify what level of risk is acceptable”.

crisis is substantial. It must be kept in mind that the main petroleum reserves are located in the MENA and CIS regions, both of which are frequently exposed to political conflicts. The Arab spring riots, the Iran nuclear issue, the Arab-Israeli hostilities, the CIS color revolutions and similar or related events may cause petroleum supply disruption at any time. A major supply disruption in these regions can escalate to a global energy crisis affecting each and every state, regardless of how far it is located from these regions. Moreover, the petroleum infrastructure of any country is vulnerable to terrorist attacks, technological, and natural disasters. Furthermore, in international politics, petroleum has become a powerful tool to manipulate foreign governments – the largest petroleum exporting states or an alliance of states can deliberately cause disruption in the global market in response to economic or non-economic acts of other states. Hence, it might be unreasonable to limit the grounds for taking energy security measures to hostile interaction between states or international alliances.

Nonetheless, if in the case of energy security the term “emergency in international relations” is interpreted broadly to allow preventive measures in the case of plausible energy or economic crisis, then trade-restrictive measures in all other industries would be justified under the same probable grounds. It is true that energy security can be viewed as a unique case and that the consequences of an energy crisis for some states can be worse than the results of an armed conflict. At the same time, as we have seen from the corresponding provisions of the ECT and NAFTA, the unimpeded international flow of energy goods could prevail over secondary security interests. The WTO rules do not differentiate energy from other products. Thus, once we allow a broad interpretation of the term “emergency in international relations” for energy matters, it would become applicable to other goods, thereby making the trade rules ineffective.

A WTO Member willing to challenge energy security measures of another Member would favor restrictive textual interpretation of the Art. XXI(b). It may argue that the scope of subsection (iii) is limited to situations of war or actual emergency in international relations reflected in a hostile interaction between two or more states, whereas peacetime preventive measures are only allowed under subsection (ii). Such an argument would suggest that the ability of a state to protect the supplies carried directly or indirectly for military purposes and the right to adopt preventive measures in this regard are preserved by subsection (ii). However, it would essentially reduce the margin of appreciation an invoking party may have under subsection (iii). It would prohibit preventive measures taken by states in realization of their "right to be cautious" if they are not compliant with WTO rules. Thus, global energy and economic crises will not be considered legitimate grounds for precautionary measures.[1061]

In turn, the responding WTO Member would rely upon the subjective element and argue that it is entitled to consider for itself what constitutes its essential interests, which measures are necessary to protect them, and what represents an emergency in international relations in its view. Such Member may assert that the text of Art. XXI does not allow the panel to pose strict limits on its self-judging competence.

As has been stated earlier, the argument that Art. XXI provides a jurisdictional defence for the Member invoking it lacks any textual basis in the WTO Agreements. Thus, the WTO panel would not be able to abstain from exercising its jurisdiction over the dispute; otherwise, it would open a Pandora's box of unrestricted violations of GATT obligations. Once the jurisdiction is exercised, it would hardly be possible for the panel to resolve the case without being exposed to fierce criticism no matter who wins the dispute. On the one hand, if the "time-related" characteristics of the wording of Art. XXI(b)(iii) and textual meaning of the term "emergency" are emphasized, the panel may find that energy security measures are not justifiable under the national security exception. On the other hand, it may give full effect to the subjective element of the exception and refrain from judging the merits of its invocation. In either case, the decision will have very important future implications for the whole WTO regime.

[1061] It can also be argued that if such a crisis seriously affects states, they may request that the WTO (individually or collectively) temporarily waive their obligations. Similarly, the WTO Council may render a decision temporarily freezing application of certain rules for all Members to alleviate the consequences of the crisis. At last, if there is a serious urgency, an affected Member may always take the measures it considers necessary to cure the problem and justify them through consultations with interested Members. Even if such measures are challenged under the DSU, the necessity of urgent measures would likely cease to exist by the time of resolution or implementation of DSB's decision. After all, if preventive measures are necessary for the maintenance of energy security they could be designed in a WTO-compliant way.

Put simply, the WTO panel and AB will have to choose between Scylla and Charybdis. If the decision is made against the party invoking the exception, the government of such Member will be accused home of giving up the core of state sovereignty, which may also affect the continuity of the state's membership in the WTO. If the decision confirms the invoking party's broad discretion in energy security matters, it would open the door for a proliferation of trade-restrictive measures not only in the energy-related but also in other markets.

So far no measure associated with energy security has been challenged in the WTO dispute settlement system. The first case breaking the *status quo* would most likely have far-reaching effects on the WTO system. An official and unequivocal interpretation of the GATT Art. XXI from the WTO Council could prevent a host of potential problems associated with the national security exception and save the panels and AB from heavy criticism. Because of the sensitivity of issues related to the national security and the highly diverging interests of states in energy matters, there is little hope that such interpretation would be adopted before the first case is brought to the panel. For the same reasons, it can be expected that if the DSB renders a decision on the matters of energy security, its adoption will not be blocked. Thus, in the absence of official interpretative guidance, the strength of the WTO system will largely depend on how its panel and AB manage to find the delicate balance between the effectiveness of trade rules and the sovereignty concerns of WTO Members.

8.6. Conclusion

On the basis of the analysis of issues pertaining to the national security exception, three interesting analogies can be drawn between the problems related to the GATT Art. XXI and the problems of applicability of WTO rules to trade in petroleum in general. First, there are more questions than answers as to the applicability of WTO rules to various trade measures exercisable in the petroleum industry and whether their application would improve or reduce economic wealth. By the same token, it cannot be said, ultimately, whether and to what extent the WTO regime should interfere with the security matters of its Members, and whether such interference or non-interference would produce beneficial outcome for the world trading system.

Secondly, it has been stated that the constructive ambiguity of Article XXI does not represent a failure of the trading system: rather, it should be viewed "as a success because it encourages nations to resolve disputes without resorting to a third-party adjudicator, and it affords states an appropriate amount of flexibility to deal with sensitive issues of national security."[1062] Similarly, the ambiguity of WTO law with respect to trade in petroleum may be beneficial to WTO Members, who can resolve petroleum disputes through diplomatic measures ultimately using energy and non-energy leverages rather than legal rules.

Finally, the *status quo* established in both national security matters and, generally, in the regulation of trade in petroleum is a fragile equilibrium, which may easily be destroyed. It is difficult to predict the outcomes for the world trading system that would result from the equilibrium's destruction. At best, the world trading system would keep operating as it is; at worst, it would collapse. In this sense, although the final fate of the WTO is in the hands of its Members, the future of the organization is largely dependent on how effectively it plays the role of regime manager.

[1062] Lindsay, *supra* note 935, at 1279. Lindsay concludes (*ibid*. at 1312) that:

> [r]ather than hindering trade, nations may appreciate certain virtues in the ambiguous interpretation of Article XXI. WTO members may prefer to address the national security exception with less formal methods. These informal methods permit greater flexibility in timing and response, protect real and perceived concerns over national sovereignty, and provide the necessary checks against abusive overuse of Article XXI claims.

GENERAL CONCLUSION

This thesis aimed primarily to analyze the effectiveness of WTO legal rules in the regulation of international trade in petroleum. It was hypothesized that WTO rules are not properly designed to address the specific issues raised by trade in petroleum. If applied without taking into account the peculiarities of the petroleum industry, the rules may have a detrimental effect on national and global welfare. This hypothesis was tested through analysis of major WTO rules against measures and practices commonly exercised in the petroleum industry. In the results of this analysis it was found that WTO rules, due to their conceptual and textual shortcomings, are not adequately designed to ensure the effective regulation of international trade in petroleum.

WTO rules regulating operations of STEs, if applied to NOCs, disregard potential economic benefits resulting from the vertical integration of petroleum corporations. Moreover, such rules are not applicable to privately owned IOCs, which, similarly to NOCs, may cause impediments to the functionality of petroleum markets. This failure of the WTO regime can only be rectified through the introduction of effective competition rules that would address the restrictive business practices of dominant market players, whether state-owned, like NOCs, or privately owned, like IOCs. Furthermore, the STE rules need improvement to clean up textual shortcomings in both the definition of an STE and the legal obligations imposed on it. The ECT's approach to the regulation of activities of state and privileged enterprises may serve as a starting point for such improvement.

WTO rules applicable to petroleum TRIMs neglect the specifics of the petroleum industry and, if applied, may obscure the development of petroleum resources, which would ultimately lead to the undersupply of petroleum in the world market. The economic and legal nature of TRIMs in the petroleum industry needs to be thoroughly analyzed before applying WTO rules or amending them. It must be borne in mind that TRIMs in the form of investment incentives are an economic policy instrument usually applied to correct a market failure; hence, their prohibition would intensify market failures. TRIMs in the form of performance requirements, though by and large obstructive to free trade, are contractually negotiated between host states and investors. Prohibition of performance requirements may destroy the balance of interests reached by the parties in the petroleum contract. Moreover, whether obligations taken by investors in petroleum contracts represent governmental measures is a question that still needs to be answered by WTO bodies.

Similar to TRIMs, the legal and economic nature of subsidies in the petroleum industry needs careful analysis. The ASCM rules, when applied to the petroleum industry, are poorly designed for the purposes of defining subsidies and their prohibition. On the one hand, application of the ASCM rules to petroleum subsidies may result in the prohibition of subsidies that may produce positive impacts on global welfare. On the other hand, the rules are not effective for disciplining subsidies that produce negative effects on the world economy.

In the case of transit through petroleum pipelines, the effectiveness of the GATT transit rules is limited due to the technical and economic specifics of pipeline infrastructure. The rules do not facilitate transit flows unless there are sufficient transit capacities. At the same time, prohibition of governmental charges, TRIMs and subsidies by the WTO rules impede the expansion of transit capacities.

Like the rules applicable to NOCs, petroleum TRIMs, subsidies, and transit, the rules prohibiting quantitative export restrictions are not effective in regulating petroleum export restrictions because, on the one hand, they disregard the specifics of the industry, and, on the other hand, exemptions from the rules are easily applicable. It is doubtful whether petroleum in its natural underground state may be qualified as a commodity. If not, then trade rules cannot be applied to petroleum export restrictions exercised in the form of production cuts. Even if the trade rules are applicable, such state measures may escape prohibition under one or several exemptions available under GATT Art. XI, XX and XXI.

Finally, petroleum is vital for the economic security of every modern state. The importance of petroleum and the constructive ambiguity of the national security exception provided in GATT Art. XXI have been saving petroleum issues from being brought before WTO panels. At the same time, both the importance of petroleum for every state and the constructive ambiguity of the exception may provide incentives for states to initiate a petroleum dispute which may ultimately break the taboo about the applicability of the national security exception to petroleum disputes.

Another objective of this thesis was to address the potential relationship between competing energy resources from the WTO regime's perspective. The hypothesis was that WTO rules may obstruct the development of alternative sources of energy by requiring states to treat different sources of energy similarly. The second chapter of this thesis analyzed the potential impacts of petroleum disputes with the environmental policies of states based on the likeness and substitutability criteria of petroleum products and their renewable alternatives. The national treatment obligation set in GATT Art. III is likely to raise trade conflicts between petroleum exporting states and states developing renewable energy. It was concluded that unless the WTO prioritizes environmental over trade policies, which is hardly possible due to the trade focus of the organization, both the development of renewable energy and environmental policies of states are likely to be constrained by WTO rules.

The conflict between environmental and trade policies may also arise out of other trade obligations. Given the large investments made by NOCs into the development of renewable energy, especially by NOCs of petroleum importing states, it may be envisaged that such NOCs' trade with renewable energy will conflict with STE obligations established in GATT Art. XVII. By the same token, state support to the development of renewable energy in the form of TRIMs and subsidies would likely be in breach of international obligations arising out of the TRIMs Agreement and ASCM discussed in Chapters IV and V of this thesis.

The challenges at this intersection of trade in petroleum and renewable resources of energy indicate that the regulation of trade in petroleum may not be viewed separately from the regulation of trade in energy in general. Clearly, regulation of trade in petroleum will have implications for other sources of energy, such as coal and renewable resources. Hence, any attempt to improve trade discipline needs to be aimed at the energy market rather than the petroleum market alone.

What has also been argued in this thesis is that any effective WTO law should pay due attention to the environmental concerns related to trade in energy. This argument supports the idea that a holistic approach is required to address the triangle of trade, energy and the environment in the international regulatory framework.[1063]

In this thesis, the conflict between environmental and trade policies was analyzed through the prisms of a proposed economic model, a modified Hotelling's rule, which states that the social optimum of intergenerational use of energy resources is achieved when the cost of energy generated from the non-renewable resource is equal to the cost of energy generated from the alternative renewable resource. Given the difference between the prices of energy generated by petroleum and renewable sources, it was suggested that sustainable development (including the longer availability of petroleum and a cleaner environment) is dependent on how soon humanity achieves equality in the energy input costs from non-renewable and renewable resources. However, this study finds that WTO rules obstruct the convergence of such input costs not only due to the textual deficiencies of legal rules, but also because the normative ideology of the WTO trading system is still heavily informed by the neoclassical trade theory.

The neoclassical trade theory assumes that markets are perfectly competitive, no externalities exist and therefore state interventions in markets are undesirable. However, due to comparatively low prices of petroleum it is hardly possible without state support to sufficiently

[1063] See, generally, Joost Pauwelyn, ed. *Global Challenges at the Intersection of Trade, Energy and the Environment* (Geneva: Graduate Institute, Centre for Trade and Economic Integration, 2010) [hereinafter: Pauwelyn, *Global Challenges*]. This book is a collection of presentations, essays and discussions resulting from the Trade, Energy and Environment's conference on "Global Challenges at the Intersection of Trade, Energy and the Environment", which took place at the WTO on 22-23 October 2009.

develop renewable energy resources to replace the substantial part of energy produced from petroleum. Moreover, in the development of renewable energy resources, economies of scale do matter – increasing returns to scale may expand production of renewable energy so that state support would likely become unnecessary at the later stages of development. Thus, if construed in the context of the neoclassical trade theory, the WTO rules would constrain the development of renewable energy resources and therefore impede the world's sustainable development.

As a better alternative to the neoclassical trade theory, this thesis proposes the STP theory, which is more adapted to the real world and allows for state intervention when it is necessary to cure a market failure, when such intervention produces a zero-sum or positive effect on global welfare. Cautious state support is necessary for the development of renewable energy to speed up the convergence of energy input costs from renewable and nonrenewable resources. However, any intervention into the market must be viewed as only the second-best solution when the first-best – neoclassical non-intervention – does not produce positive results. Thus, it is argued that the introduction of the STP theory into the normative framework of the WTO trading system would make the regime more flexible to adapt to the contemporary challenges of the scarcity of energy resources and environmental pollution.

Having summarized the major findings of the thesis, and based on the conclusion that trade in petroleum cannot be regulated separately from general trade in energy, I now review potential solutions to the problems of regulating trade in energy under the WTO regime.

Several options have been proposed in recent scholarship for improving global energy governance within the world trading system. Firstly, it has been proposed that the ECT should be used as the energy-specific multilateral treaty to regulate trade in energy, by expanding the membership of the treaty.[1064] Secondly, it was suggested that specific energy problems should be addressed upon accession of new members to the WTO.[1065] Thirdly, it was proposed that WTO

[1064] Selivanova, *Regulation of Energy*, *supra* note 148, at 400.
[1065] Pauwelyn, *Global Challenges*, *supra* note 1063, at 7.

rules can be tailored to trade in energy through interpretative practice of the WTO bodies.[1066] Finally, some scholars have favored negotiation of a new energy specific treaty, the so-called General Agreement on Trade in Energy or GATE.[1067]

Considering the first option, it is true that the ECT, as an energy-specific treaty, is more suitable for regulating certain aspects of international trade in energy, such as the transit of energy, investment measures, as well as the regulation of state and privileged enterprises. However, the ECT's trade discipline merely incorporates WTO rules and therefore is subject to similar defects. Moreover, the ECT has a much smaller membership than the WTO. Only forty-seven states and the EC have ratified the treaty as of June 2013, and only one country (Afghanistan) has ratified the treaty in the past decade.[1068] It is highly doubtful if membership in the ECT can be expanded further as its significance devaluated immensely after the official withdrawal of Russia in 2009. Therefore, I doubt whether the ECT can be a better forum for regulating international trade in energy than the WTO.

As for addressing specific energy problems upon accession of new members to the WTO, I do not see how this option can improve the regulation of trade in energy. Within existing accession procedures it is possible to impose on acceding states WTO-plus and WTO-minus obligations; however, the rules created by such extra-obligations will not be applicable to incumbent members and therefore the regulation of trade in energy would improve only partially, if at all. Even among acceding members, as it was shown in the thesis, there is no consistency in the extra-obligations imposed on joining members. Russia did not accept special commitments with respect to transit that were accepted by Ukraine; China's export duty commitments are different from those of Russia, and so on. As was shown in Chapter I, the ill-designed WTO accession procedures create inequality among member states, raise unfairness in the trading system, and undermine the loyalty of its members. The negative effects on the WTO regime

[1066] *Ibid*.
[1067] *Ibid*.
[1068] Energy Charter Secretariat, Status of the Ratification of the Energy Charter Treaty, online: <http://www.encharter.org/fileadmin/user_upload/document/ECT_ratification_status.pdf> accessed on 15 July 2013.

from imposing extra-obligations on acceding states would most likely outweigh its positive effects.

With respect to the third option, regulation of trade in energy within the WTO regime can be improved through interpretative practices of the WTO bodies. However, such improvement would be of limited value because interpretation is constrained by various factors such as the textual basis of original rules, the mandate of interpreting bodies, the general rules of treaty interpretation, as well as all relevant preceding interpretations. Moreover, due to sovereignty concerns of states, it is likely that any extensive interpretative activity of the DSB will not be welcomed by WTO members. As for the official interpretation by the Ministerial Conference and General Council under Art. IX of the Agreement Establishing the WTO, it is less vulnerable to legitimacy complaints from member states, but is not easily attainable due to problems arising from the negotiation of the interpretation. It must be borne in mind that interpretation, however extensive it may be, cannot cancel existing rules or create new rules for the improvement of regulation of international trade in energy. After all, the interpretation of trade rules alone is not enough to change the normative ideology of the WTO regime.

As for the final option, I believe that the problems in regulating trade in energy discussed in this thesis can only be resolved through negotiation of a new energy specific treaty, the GATE. Introduction of the STP theory to the normative ideology of the WTO regime would require major reforms, which are not implementable under the other options. The changes in the normative ideology and the ineffectiveness of existing rules with respect to trade in energy have made it clear that a new framework is needed for the effective regulation of international trade in energy. The new framework would create a level playing field for all states, which should be equally maintained for all acceding states.

From a practical perspective, incorporation of STP theory into the normative ideology of the WTO regime seems feasible. The constitutional idea of STP theory may be established in the preamble to the GATE on the basis of which legal aspects will be drafted in the substantive text of the treaty. The GATE's preamble should recognize that states may intervene in the energy market if such intervention is temporary, aimed at correcting a particular market failure, and would not cause significant impairments to the trade interests of other members as well as substantially negative environmental impacts. Legal provisions in the substantive text of the treaty will establish the rights of states to intervene in the energy market under certain circumstances, whether through TRIMs, subsidies or export restrictions, subject to the obligations agreed upon in the treaty. For example, legal obligations may stipulate that any market intervention must be made transparent and should be subject to preliminary disclosure of information and consultation with other members. A member willing to apply an intervention should send to the WTO Energy Committee (which should be established by the new treaty) all information about the measure and its justification in advance (three to six months) before the measure is launched. Within a certain period (one to three months), other members may raise their concerns and provide their recommendations as to how the measure may be changed to alleviate significant detrimental effects. However, the consulting members should not be vested with power to block the measure - it is the implementing state who should decide whether to proceed with, modify or cancel the measure. Once the measure is implemented and if there is any impairment to the trade interests of another state, the affected party may initiate a dispute within the WTO dispute settlement system. In this sense, the procedure would be similar to the currently existing procedure for implementing antidumping and countervailing measures.

The preliminary stage has multiple purposes. First, it provides an opportunity for interested parties to seek a better solution to correcting a market failure and lessening potential harmful effects. Second, if it is informed of the concerns of other states, a member may be less willing to proceed with the measure or voluntarily refrain from its adoption at the early stages, perhaps thereby saving the costs of implementation. Third, an affected party is better prepared to initiate an early dispute if another member has intervened in the market without taking into account the concerns raised by other parties. Timely resolution of the dispute would lessen the harmful effects of the measure.

It is important to allow government interventions in both the petroleum and renewable energy industries in order to procure a smooth switch from one source of energy to another. If only renewable energy is supported, the under-investment in petroleum industry may result in the shortage of global supply, which may cause social unrest, armed conflict and war.

It is also important that the rules allowing governmental intervention in the energy market be balanced with the environmental obligations of states. Otherwise, trade rules may produce harmful effects on the world's sustainable development. For example, state support to the development of coal-fired power plants and the production of unconventional petroleum may increase air, water, and land pollution. Similarly, production of renewable energy is also not immune from negative environmental impacts on wildlife and habitats. Therefore, any state intervention in the energy market allowed under the GATE must require the absence of substantially negative environmental impacts from such intervention, regardless of the countries affected by such an impact. Prospectively, environmental obligations in the GATE could be reconciled with international obligations of states provided in the United Nations Framework Convention on Climate Change and the Kyoto Protocol, and those that will be stipulated in the treaties to be developed under the Durban Platform for Enhanced Action as well as other future international environmental treaties.[1069]

I realize that the negotiation of any international treaty is a thorny process which, if completed, does not guarantee achievement of the desired outcomes. Keeping in mind the difficulties faced by the international community in the negotiation of the Doha round instruments and the second period commitments under the Kyoto Protocol, one may presume that any prospective treaty purported to regulate the triangle of trade, energy and environment

[1069] It is notable that during the conference on "Global Challenges at the Intersection of Trade, Energy and the Environment", which took place at the WTO on 22-23 October 2009, Pascal Lamy, then WTO Director General, suggested a sequencing proposal whereby priority is given to the conclusion of the post-Kyoto agreement to which then WTO would adjust its trade rules. See, Pauwelyn, *Global Challenges*, *supra* note 1063, at 6.

would be highly unlikely to succeed. However, I believe that if a proper strategy is implemented and all parties are well informed on the benefits of such a treaty, its conclusion can be realizable.

To make the strategy successful, I think it is important to move issues relevant to trade in energy to a different negotiating table. This means, one the one hand, that trade in energy issues should be discussed and negotiated separately from all other WTO issues so that negotiation failures in other sectors would not affect negotiations in the energy sector. This problem was evident during the Doha Round, when agricultural negotiations were affected by non-agricultural market access negotiations, and resulted in the failure of negotiations in both sectors. On the other hand, a different negotiating table means a different forum for negotiation; in other words, discussion and negotiation of the draft GATE should be conducted outside the WTO.

I suggest a different forum due to several reasons. Firstly, if left in the WTO, negotiation of the GATE will inevitably be spoiled by unresolved trade negotiations irrelevant to energy. By the same token, if energy negotiations are unsuccessful, it may negatively affect negotiations in other sectors. Secondly, due to the well established normative framework of the WTO it will be difficult to introduce STP theory into a framework dominated by the neoclassical trade ideology. Thirdly, energy issues require discussions and negotiations by energy specialists rather than by trade diplomats. Finally, due to the importance of energy issues, any failure in their negotiations may detrimentally affect the future of the WTO trading system.

Perhaps, the International Energy Forum (IEF) is the most suitable alternative forum for discussions and drafting of the GATE. The IEF's mission is to serve "as a neutral facilitator of informal, open, informed and continuing global energy dialogue among its membership of energy producing and energy consuming states, including transit states".[1070] The IEF's Charter does not create any legally binding rights or obligations between or among its members.[1071] In effect, the IEF is an intergovernmental arrangement, rather than an international organization, and therefore is less vulnerable to the regime management problems associated with international

[1070] International Energy Forum Charter, 51 ILM 201 (2012), dated 22 February 2011, Section I (2).
[1071] *Ibid*., Section I (3).

organizations.[1072] Although membership in the IEF is limited to states, its platform is open for participation to international organizations and business entities such as IOCs and NOCs.[1073] Prospectively, representatives of non-governmental organizations may be invited to participate in the forum or its conferences. The more parties involved in the discussion and negotiation, the more informed they will be, and thus the more credibility will be gained by the future GATE.

Although I suggest a different forum for the negotiation of the GATE, it by no means should undermine the role of the WTO in regulating trade in world energy. First of all, as the regime manager, the WTO has to propose a new equilibrium and maintain existing ones until the new equilibrium is set by its member states. I believe that the WTO should be the initiator of the GATE's discussion and negotiation at the IEF. As such, it must guide the parties through existing trade rules and propose new trade rules. Moreover, the WTO's role will be to ensure the coherence of prospective GATE rules with other WTO treaties. To make it clear, I see the GATE as a WTO agreement that should be discussed and negotiated at the IEF but then incorporated into the WTO framework, whether as a WTO agreement from the outset or later through references in the GATE, as was done in the ECT, subject to certain clauses setting up *lex specialis* priority.

As has been said above, another important role of the regime manager is to maintain the existing equilibrium until a new one is established. In light of the proposed GATE, this means ensuring a smooth transition from existing trade rules to new trade rules until they are formally adopted. This role is to be performed primarily by interpretative activity of the WTO bodies discussed above. Their main task is to avoid any interpretation of existing rules that may put

[1072] According to one author: "[i]t is, finally, this very lack of organizational structure that has proven to be the true strength of the IEF: the dialogue has initiated the end of producer-consumer antagonism, and the informality allows all issues to be discussed." See Enno Harks "The International Energy Forum and the Mitigation of Oil Markets Risks" in Andreas Goldthau & Jan Martin Witte, eds. *Global Energy Governance: The New Rules of the Game* (Washington DC: Brookings Press, 2010) at 257.

[1073] Energy companies participate in the International Energy Business Forum and the NOC-IOC Forum organized under auspices of the IEF. Moreover, the IEF's Industry Advisory Committee is comprised of representatives of business enterprises and industry entities. As to co-operation of the IEF with other international organizations, its International Support Group includes representatives from the IEA and OPEC Secretariats. According to Section VIII of the IEF Charter, other international organizations may be invited to the International Support Group by the Chair of Executive Board and Secretary-General of the IEF.

trade rules in conflict with the sustainable development goals of the international community. An evolutionary interpretation guided by the object and purpose of the Agreement Establishing the WTO would be instrumental in performing this task.

In the introduction to this thesis I cited a number of reasons for the lack of attention to trade in petroleum in the WTO dispute settlement system.[1074] Each and all of them seem to have contributed to this lack of attention. However, based on the findings forwarded in this thesis, it is expected that petroleum and energy trade disputes will become more frequent in the future. To avoid detrimental effect on national welfare, on WTO members and on global welfare in general, which may result from disputes resolved under existing WTO rules and subsequently adapted national economic policies, it has now become important to initiate a new framework for the regulation of international trade in energy that would be free of the GATT/WTO system's birth-defects.

Although there might be opponents to the GATE who argue that energy should not be considered as a special product because all goods have specific characteristics[1075], this thesis, I believe, has showed on the basis of the petroleum industry and its relationship with the renewable energy industry, that energy is so specific as to require a different regulating framework. I believe that specific agreements for any goods, if they improve international trade and welfare, should only be welcomed. The world trading system should not be cemented with the state of international economic affairs which existed in 1995; it must evolve.

[1074] See *infra* Introduction at p. 1. The reasons include: 1) the strategic importance of petroleum and willingness to avoid political disputes has resulted in the exclusion of petroleum issues from international trade rules by a "gentlemen's agreement"; 2) major petroleum exporting countries were not GATT members until the 1980s; 3) perception that the exceptions provided in the GATT were very vague, so much so that a defending party could easily defend its petroleum trade measures; 4) the focus of the GATT rules has been the access of domestic products to foreign markets, which is not pertinent for trade in petroleum; and 5) due to the importance of energy inputs for production growth, states were willing to enter into trade disputes that may cause unnecessary oil supply disruptions. In the course of this work I also suggested that another contribution to this lack of attention was the oligopolistic market and highly networked pattern of the petroleum industry.

[1075] Pauwelyn, *Global Challenges*, *supra* note 1063, at 7.

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