Doctoral Dissertation

NATURAL RESOURCES UNDER THE GATT/WTO SUBSIDY REGIME AND IMPLICATIONS FOR NATURAL RESOURCE CONSERVATION

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LIST OF ABBREVIATIONS

AB	Appellate Body
CCAMLR	Commission for the Conservation of Antarctic Marine Living Resources
CCSBT	Commission for the Conservation of Southern Bluefin Tuna
CDS	Catch Documentation Scheme
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CUSFTA	Canada–United States Free Trade Agreement
CVDs	Countervailing Duties
DSB	Dispute Settlement Body
DSU	Understanding on Rules and Procedures Governing the Settlement of Disputes
ECC	European Economic Community
EU	European Union
EEZ	Exclusive Economic Zone
FAO	Food and Agriculture Organization
GATT	General Agreement on Tariffs and Trade
ICCAT	International Commission for the Conservation of Atlantic Tunas
IEA	International Energy Agency
IMF	International Monetary Fund
ISO	International Organization for Standardization
IUU	Illegal, Unregulated, Unreported
MNEs	Multinational Enterprises
NAFTA	North America Free Trade Agreement
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
RFMO	Regional Fisheries Management Organization

SCMA	Subsidies and Countervailing Measures Agreement (in short: the Subsidy Agreement)
SOEs	State-owned Enterprises
UN	United Nations
UNCLOS	United Nations Convention on Law of the Sea
UNCTAD	The United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme
UNGA	United Nations General Assembly
U.S.	United States of America
USCIT	United States Court of International Trade
USDOC	United States Department of Commerce
USITC	United States International Trade Commission
USTR	United States Trade Representative
WTO	World Trade Organization

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1949	Draft Declaration on Rights and Duties of States, Report to the General Assembly (1949), International Law Commission.
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INTRODUCTION

Policy Background and Literature Review

The world economy has recently struggled along a rocky path. The strategic conflicts between the United States and China reached their peak under the Trump Administration's "America First" policies. A "trade war" might be the favorite catchword in international media and policy discussions to describe the current situation. The world economy is facing an unprecedented crisis due to the COVID-19 pandemic.[1] Unfair trade allegations are an essential component of the overarching attack of the United States against China's economic policies and trading practices.[2]

Partly to deal with hostile U.S. pressure, China brought its trade concerns to WTO dispute settlement, seeking a legitimate stand under the likely uncontrolled economic conflict.[3] However, the U.S. pursuit of "aggressive unilateralism"[4] was meant to diminish the WTO as a chief supervisory organ of world trade relations. Indeed, President Trump even threatened to withdraw from this multilateral trade organization to counter the unfairness of China more effectively.[5] It seems that the former president overestimated the WTO's capacity; in fact, this international institution has its own institutional and legal limits.[6]

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[1] Nicolás Albertoni and Carol Wise, 'International Trade Norms in the Age of Covid-19 Nationalism on the Rise?', 14(1) Fudan Journal of the Humanities and Social Sciences 41 (2021), at 41–66.

[2] Peterson Institute for International Economics, 'Trump's Trade War Timeline: An Up-to-Date Guide', 4 October 2021, https://www.piie.com/blogs/trade-investment-policy-watch/trump-trade-war-china-date-guide (visited November 2, 2021).

[3] Among other trade concerns, China has used the WTO dispute settlement mechanism to challenge three U.S. tariff measures (DS543, DS565, DS587) in the middle of the trade war. See WTO, Map of Disputes Between WTO Members – China, https://www.wto.org/english/tratop_e/dispu_e/dispu_maps_e.htm?country_selected=CHN&sense=e (visited October 14, 2021).

[4] Professor Jagdish Bhagwati used the term to describe the realpolitik of U.S. Section 301 sanctions (under the U.S. 1988 Omnibus Trade and Competitiveness Act) against foreign trading partners. This rhetoric harshly resurged under the Trump Administration. See Jagdish Bhagwati, 'Departures from Multilateralism: Regionalism and Aggressive Unilateralism', 100(403) The Economic Journal 1304 (1990), at 1312–16.

[5] Financial Times, 'Donald Trump Threatens to Pull US out of the WTO, 31 August 2018, https://www.ft.com/content/32e17984-aca2-11e8-89a1-e5de165fa619 (visited November 2, 2021).

[6] Pascal Lamy, 'WTO Reform and Globalization', posted by China European International Business School (CEIBS), 13 December 2018, https://www.youtube.com/watch?v=t_1_QdZ_E5c (visited November 2, 2021).

As a legal move to denounce the multilateral trade organization, the United States Trade Representative (USTR) issued for the first time a "report of prosecution" against the WTO Appellate Body (AB) in February 2020.[7] Although neutrality should not be expected in the USTR's report, it is a warning to the multilateral trade judiciary. The report highlights an array of interpretative errors made by the Appellate Body which supposedly diminished U.S. abilities to counteract China's market-distortive practices. The USTR reiterated that the dispute settlement mechanism's core function is to resolve trade disputes rather than to make new laws. It then identified plentiful evidence of this trade tribunal's judicial activism. The USTR asserts:[8]

> The Appellate Body's persistent overreaching has also taken away rights and imposed new obligations through erroneous interpretations of WTO agreements. The Appellate Body has attempted to fill in "gaps" in those agreements, reading into them rights or obligations to which the United States and other WTO Members never agreed. These errors have favored non-market economies at the expense of market economies, rendered trade remedy laws ineffective, and infringed on Members' legitimate policy space.

A substantive element of these accusations relates to the AB's interpretations of the WTO Subsidy Agreement.[9] Concurrently with the USTR report in 2020, the subsidy problem was the main target of the Trilateral Joint Statement between the United States, the European Union, and Japan. The three economic giants expressed that there was an urgent need to modify

[7] United States Trade Representative (USTR), Report on the Appellate Body of the World Trade Organization, February 2020, https://ustr.gov/sites/default/files/Report_on_the_Appellate_Body_of_the_World_Trade_Organization.pdf (visited November 2, 2021).
[8] Ibid, at 2–3.
[9] Ibid, at 82–89, 105–109.

the existing WTO subsidy rules.[10] Both the USTR report and the Trilateral Joint Statement were indirectly aimed at pressuring China's market-distortive practices which included actions such as providing cheap inputs to its domestic production. The current multilateral subsidy regime might be ineffective in addressing China's state-led economy. The government's market predominance problem is an intricate topic in the WTO subsidy regime.

Another legacy from President Trump's trade policy is the U.S. emphasis on the new "level-the-playing field" proposal put before the WTO in December 2020.[11] The Draft Ministerial Decision proposed by the United States is premised on one objective of the WTO Agreement: optimal use of world resources in the light of sustainable development. The document suggests that environmental standards below "a threshold of fundamental standards" should be considered a type of actionable (countervailable) subsidy. As a result, countervailing duties can be invoked to counteract disproportionate benefits bestowed by such below-standard environmental policies. The United States indicates that this anti-environmental subsidy demand would[12] "promote stronger environmental standards and enforcement, would encourage the proper internalization of environmental costs into the calculations of production costs, and would correct policies that create transaction-specific market inefficiencies which thereby distort trade."

The primary concern of the United States is the impact of weak environmental policies on international competitiveness. However, this "fair trade" proposal is not new as it was raised in the trade and environment debates in the WTO formative period. Virtually all aspects of the U.S. proposal were comprehensively discussed at that time (see section (v) of this Part).

[10] United States Trade Representative (USTR), Joint Statement of the Trilateral Meeting of the Trade Ministers of Japan, the United States and the European Union, 14 January 2020, https://ustr.gov/about-us/policy-offices/press-office/press-releases/2020/january/joint-statement-trilateral-meeting-trade-ministers-japan-united-states-and-european-union (visited November 2, 2021).
[11] WTO, Advancing Sustainability Goals through Trade Rules to the Level the Playing Field (Draft Ministerial Decision), WT/GC/W/814, 17 December 2020.
[12] Ibid.

Whether other WTO members will accept this sustainable trade proposal is as of yet unknown; however, the U.S. proposal might mark a return to the past environment–competitiveness debate.

These trade legacies of the Trump Administration formulate the policy background of this dissertation: (1) the subsidy concern with respect to governmental predominance in domestic markets as discussed in China's subsidy context; and (2) the proposal to use the anti-subsidy instrument to challenge weak environmental policies.

Discussions of natural resources in the international trade context perfectly fit into this policy discourse. As essential inputs used in industrial production, natural resources could be the main target of a subsidy dispute through the mechanism of governmental provision of below-market goods. Governmental predominance in the natural resource sector typically means the governmental use of natural resources to support domestic industries. The government's predominance in the natural resource sector is likely a natural phenomenon as compared to the government's "artificial" predominance in China's political economy.[13] As will be subsequently shown, the market predominance problem in the subsidy context was initially investigated in subsidy disputes concerning natural resources, not with respect to China's economic situation.

In addition to the economic function, natural resources are a component of the natural environment which is part of human life. Resource economists indicate that the governmental provision of below-market natural resources and/or below-market rights to exploit natural resources (inadequacy of rent recovery) is an ill-advised environmental policy.[14] These natural resource underpricing practices are considered harmful environmental subsidies that should be

[13] Professor Mark Wu (the USTR senior advisor under the Biden Administration) wrote an influential article to describe the uniqueness of China's political economic structure. See Mark Wu, 'The "China, Inc." Challenge to Global Trade Governance', 57(2) Harvard International Law Journal 261 (2016), at 269–84.

[14] OECD, *Natural Resources and Pro-Poor Growth - The Economics and Politics* (OECD Publishing, 2009), 50–51.

eliminated.[15] In summary, the policy questions of how natural resources are being put into the subsidy context of the multilateral trading system and the implications of this on the green anti-subsidy proposal recently put forward by the United States will be considered in this dissertation.

However, as the subsidy question is further explored, the inclusion of a "pure" legal analysis in the dissertation cannot be escaped, and the technical issues related to the subsidy rules might discourage an interested reader. WTO laws are not limited to the rules enshrined in the legal text. They are gradually supplemented by voluminous legal interpretations generated in the dispute settlement mechanism. Governmental aid programs provided through the natural resource factor are treated no differently from other programs in the WTO subsidy regime. However, natural resources might not possess the same characteristics as other goods. Therefore, the natural resource factor under the subsidy context will be investigated through legal reasoning, contradictory arguments, and even recourse to language to separate the specific from the general.

As legal language experts, the logic of law professors and trade lawyers sitting at the WTO Appellate Body hearings might complicate the underlying problem. Thus, their reasoning will be simplified to produce a more readable version. However, this dissertation is not just a subsidy law report specifically on international trade expertise. Chapters 4 and 5 will provide policy discussions to add perspectives to the underlying legal debates. The following sections of this Introduction further explain the trade and policy context of the research before proceeding through subsequent chapters with substantial legal analysis.

[15] Gareth Porter, 'Subsidies and the Environment: An Overview of the State of Knowledge', in OECD, *Environmentally Harmful Subsidies: Policy Issues and Challenges* (OECD Publishing, 2003), at 31–100.

(i) Natural resources and international trade

Humans have exploited the natural environment for their existence and development. As a component of the natural environment brought into human economic activities, natural resources account for approximately one-fifth of world commerce. They are crucial for most manufacturing industries, and approximately thirty economies heavily depend on exports from the natural resource sector.[16] In several developing countries (mainly in Africa and the Middle East), the natural resource sector's revenue share is over one-fourth of the country's GDP. At the same time, the world average is approximately 2.5 percent.[17] According to the 2020 Chatham Resource Trade Database, the world trade value of natural resources was at a peak in 2013 with 7.2 trillion USD (including agricultural products), followed by a slight reduction due to the recent economic recession.[18]

If the past world trade pattern of natural resources reflected the peripheral–center model (the United States, European Union as centers), the current trend is more balanced.[19] The incorporation of China into the world trading system as a hub of resource demand and supply has facilitated a boom in natural resource trade in the twenty-first century. The surge of industrialization waves around the world have also sped up current natural resource exploitation and consumption. Developing countries are still the leading providers of natural resource inputs. However, the increasing South–South natural resource trade geographically stretches the supply and demand picture.[20]

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[16] Michele Ruta and Anthony J. Venables, 'International Trade in Natural Resources: Practice and Policy', 4 Annual Review of Resource Economics 331 (2012), at 332–35.

[17] World Bank, Total Natural Resources Rents (% GDP – 2018) https://data.worldbank.org/indicator/NY.GDP.TOTL.RT.ZS?view=map (visited November 2, 2021).

[18] Chatham House (2020), resourcetrade.earth, https://resourcetrade.earth/ (visited November 2, 2021).

[19] Marina Fischer-Kowalski and others, *International Trade in Resources: A Biophysical Assessment – Report of the International Resource Panel,* (UNEP, 2015), 13, 29.

[20] Bernice Lee and others, *Resources Futures,* (Chatham House, 2012), 32–35.

International trade is supposed to promote a fair and efficient distribution of economic resources in the expanding trade-liberalizing world.[21] However, this tenet of the global economic system might not work perfectly in the natural resource sector. Natural resources are a unique good. Professors Paul Collier and Anthony J. Venables identified three main distinctive features of natural resources that come into international trade: uneven distribution across countries, resource rents, and exhaustibility.[22]

Unequal natural resource distribution is a source of comparative advantages as well as a source of conflict with regard to the access problem. Resource rents are essentially derived from natural resource scarcity or exhaustibility. When and how a country should collect natural resource rents might be the subject of foreign concerns in the international trade context.[23] These are the main reasons why OPEC countries continue their cartel operations while the rest of the world increases trade liberalization.[24] Therefore, the main concern in natural resource trade is the access problem rather than domestic producers' competitive losses. It could be argued that domestic resource producers in the importing countries could suffer from a surge of cheaper imported inputs. However, a smart government should find ways to exploit its imported fortune instead of setting up barriers against raw material imports.

Natural resource-endowed countries tend to keep their resources for domestic consumption and strategic economic development in order to exploit the trade advantage that derives from unequal distribution and scarcity.[25] Especially when a natural resource is

[21] Council of Economic Advisers, *The Economic Report to the Presiden*t, (Washington, DC, 2019), 130–32.
[22] Paul Collier and Anthony J. Venables, 'International Rules for Trade in Natural Resources', 1(1) Journal of Globalization and Development 1 (2010), at 1.
[23] Ibid, at 3.
[24] Tim Carey, 'Cartel Price Controls *vs.* Free Trade: A Study of Proposals to Challenge OPEC's Influence in the Oil Market Through WTO Dispute Settlement', 24(5) American University International Law Review 785 (2009), at 786–88.
[25] Peter Kaznacheev, 'Resource Rents and Economic Growth: Economic and Institutional Development in Countrieswith a High Share of Income from the Sale of Natural Resources', Russian Presidential Academy of National Economy and Public Administration (RANEPA) (Moscow, 2013), at 18–19.

indispensable to a strategic economic sector (e.g., rare earth), there are high stakes with respect to the geo-economic dimension of the resource.[26] As a result, the domestic preference, exaggeratedly known as "resource nationalism," is another controversy in international trade relations. Direct governmental intervention in the natural resource sector has gradually lessened since the 1980s, which has coincided with the tendency toward market-based economic development.[27] Nevertheless, an entire market-based natural resource sector should not be expected because most countries still uphold state ownership over natural resources as a strategic national policy. Indeed, public policy characteristics are a distinct feature of natural resources as compared to other traded goods.

Another aspect of natural resources in the international trade context is their exhaustibility. Although we have both nonrenewable (e.g., minerals) and renewable natural resources (e.g., fish, forest), current exploitation and consumption patterns might push the renewable group toward depletion. A big question is whether more open trade would promote or hinder natural resources sustainability. It is impossible to reach an exact answer because the conclusion depends on secondary issues: property rights regimes and institutional quality of the natural resource-endowed country.[28] Professor Graciela Chichilnisky investigated the relationship between international trade and natural resources and underscored the property rights factor as a means to facilitate more sustainable natural resources trade.[29] We will come back to this theory in Chapter 4 when discussing the relationship between international trade and natural resources conservation.

[26] Bert Chapman, 'The Geopolitics of Rare Earth Elements: Emerging Challenge for U.S. National Security and Economics', 6(2) Journal of Self-Governance and Management Economics 50 (2018), at 50–91.
[27] WTO, *World Trade Report 2010 Trade in Natural Resources*, (WTO, 2010), 64–65.
[28] Carolyn Fischer, 'Does Trade Help or Hinder the Conservation of Natural Resources?', 4(1) Review of Environmental Economics and Policy 103 (2009), at 118.
[29] Graciela Chichilnisky, 'North–South Trade and the Global Environment', 84(4) The American Economic Review 851 (1994), at 851–74.

In the international trade context, the term "natural resources" typically indicates a group of trading commodities that are exploited from the natural environment, but this is not always the case. The blurred distinction between an agricultural product and a "real" natural resource (e.g., farmed fish *versus* harvested fish) allows the former to frequently be classified as a natural resource. In fact, there is no universal definition of natural resources. According to the International Monetary Fund's (IMF) National Accounts Guide, "natural resources" mean "nonproduced naturally occurring assets, where nonproduced means that the assets are not created by an economic production process."[30] The term comprises both renewable resources, such as uncultivated fish stocks and non-renewable resources like mineral deposits. The Guide further defines "natural resource product" as natural resources which are extracted and sold with minor or even more extensive secondary processing.[31] In other words, to be a natural resource product, a natural resource has to be "taken out" of its natural state to become a usable/tradable material by an economic process.

In a comprehensive report on natural resource trade, the World Trade Organization (WTO) defined natural resources that are supposedly used in the international trade context. According to this report, natural resources are "stocks of materials that exist in the natural environment that are both scarce and economically useful in production or consumption, either in their raw state or after a minimal amount of processing."[32]

This definition contains two economic elements that are necessary for qualification as a natural resource: the material's scarcity and its economic value. These economic characteristics might be equivalent to the word "assets" in the IMF's definition. This means that some genuine natural resources, like air or saltwater, might lose the economic

[30] Chris Hinchcliffe, Marshall Reinsdorf, and Michael Stanger, *Guide To Analyze Natural Resources in National Accounts*, (IMF, 2017), 6.
[31] Ibid.
[32] WTO, above n 27, at 46.

characteristics necessary to be considered natural resources. Nevertheless, the WTO's definition appears not to distinguish between a natural resource (in its natural state) and a natural resource product (as compared to the IMF Guide). As a result, this definition tends to describe natural resources as they are ready for trading (in raw state or after minimal processing) rather than in their natural existence. Put differently, the WTO's definition equalizes "natural resources" with "natural resource products" instead of adhering strictly to the term's literal meaning.

The WTO definition of "natural resources" will be relied on in this dissertation. However, the IMF's distinction between natural resources *versus* natural resource products will be referenced in order to recognize the distinct features of natural resources in the subsidy context. For this purpose, the term "natural resources in their natural state" is understood to mean natural materials in their natural existence (unexploited), such as forests, fish stocks, or mineral deposits. The term "exploited natural resources" means natural resources that are exploited from their natural state and/or are passed through minor processing, such as fish (harvested), timber (harvested), or iron ore (extracted) but excluding cultivated products. As a result, the term "natural resource" used in this dissertation combines the two definitions: unexploited natural resources (in their natural state) and exploited natural resources.

In short, natural resources are unique products in international trade. They are not made but exploited from the natural environment. Natural resources are scarce in an economic sense and thus contain the economic rent element. Natural resources are also unevenly distributed across countries. All countries need them as vital inputs for production and consumption. Therefore, the leading trade concern related to natural resources is how secure and possible it is to access these natural inputs from foreign markets. Another concern is foreign manipulation of the natural resource sector to strengthen trade advantages. These trade concerns certainly

have been brought into international trade law negotiations. However, natural resources are not only discussed in the trade realm; their sovereignty is a topic in international law.

(ii) Natural resources in international law: the principle of permanent sovereignty over natural resources

Natural resources might naturally contain the sovereign characteristic. If natural resources under their nascent state are regarded as a component of a state's territory, they are inherent in this statehood element.[33] One of the basic principles of international law is territorial sovereignty, including sovereignty over natural resources. Sovereignty is the general power of a nation-state over its internal affairs and is recognized by international law. It is distinct from the ownership concept *under* a nation-state's realm.[34] Even though natural resources legally belong to the government, communities, or private entities, they are also all submitted to state sovereignty. However, this does not mean the principle of permanent sovereignty over natural resources simply borrows its legal substance from this sacrosanct concept of international law. Natural resource sovereignty has its own legal foundation as a recognized principle of international law.[35] Although natural resource sovereignty has been reiterated in many international instruments, the hallmark document that conceptually describes this principle is the 1962 Resolution 1803(XVII) of the United Nations General Assembly (UNGA). The Resolution declares: "The right of **peoples and nations** to permanent sovereignty over their natural wealth and resources must be exercised in the interest of their national development and of the well-being of the people of the State concerned" (emphasis added).

[33] Montevideo Convention on the Rights and Duties of States (1933), Article 1.

[34] James Crawford, *Brownlie's Principles of Public International Law*, 8th ed. (Oxford University Press, 2013), 204.

[35] Stephan Hobe, 'Evolution of the Principle on Permanent Sovereignty Over Natural Resources From Soft Law to a Customary Law Principle?', in Marc Bungenberg and Stephan Hobe (eds), *Permanent Sovereignty over Natural Resoruces* (Springer, 2015), at 10–12.

The principle originated from pressing discussions in the previous decade about the right to self-determination.[36] As a result, the permanent sovereignty over natural resources in the 1962 Resolution was initially vested in peoples and nations as compared to subsequent UNGA documents which reveal a state-centric shift.[37] For example, Article 2 of the Charter of Economic Rights and Duties of States 1974 states: "Every State has and shall freely exercise full permanent sovereignty […] its wealth and natural resources." Although this state-centric movement appears to be consistent with the interstate nature of international law, it is unlikely to be associated with diversity in natural resource management. The natural resource sovereignty principle has not been fossilized since its formal inception. The contents of this principle have gradually evolved to accompany the world of increasing economic and environmental interdependence. According to Professor Nico Schrijver, the principle presently embraces basic ideas of the right to development – the youngest in the human rights family.[38]

In terms of its content, the principle includes both rights and duties in accordance with the 1962 Resolution. The rights toward natural resources include freedom of exploration, deposition, and development in conjunction with the rights to manage and conserve these national natural assets. The rights regarding economic activities toward natural resources include freedom to determine and control foreign investments in accordance with national legislation and international law. This principle even permits the government to enforce expropriation against foreign investments but with appropriate compensation.

[36] United Nations Audiovisual Library of International Law, Permanent Sovereignty over Natural Resources General Assembly Resolution 1803 (XVII) - New York, 14 December 1962, Procedural History, https://legal.un.org/avl/ha/ga_1803/ga_1803.html (visited November 2, 2021).

[37] Nico J. Schrijver, *Sovereignty over Natural Resources – Balancing Rights and Duties,* (Cambridge University Press, 1997), 370.

[38] Nico J. Schrijver, 'Self-Determination of Peoples and Sovereignty over Natural Wealth and Resources', in United Nations Human Rights Office of the High Commissioner, *Realizing the Right to Development* (United Nations, 2013), at 95–102.

The government must observe two essential duties in exercising sovereign rights over its natural resources. First and foremost, natural resource sovereignty must be exercised based on the interests of national development and the wellbeing of the people. Second, the government has to pay mutual respect to other nations' sovereignty and other rules of international law. Professor Schrijver proposed the addition of two more duties to this principle: the duty of taking due care of the environment and the duty to recognize collative rights among sovereignties over shared natural resources.[39] His idea might reflect recent international norms toward the relationship between the environment and development which aim to promote a more sustainable world.[40]

Natural resources in the international trade context appear not to be relevant to the foreign investment issue, although many "heavy" natural resources, such as offshore oil wells, might need foreign capital and technology in order to be available for trade.[41] In fact, the genuine trade concern in the natural resource sector is the use of sovereign powers to improve trade advantages. In other words, sovereignty over national natural resources as upheld by general international law can shelter trade advantages based on the natural resource factor against any "intrusive" foreign concerns.

While the trade advantage or comparative advantage concept is a divine product in the international trade area[42], sovereignty itself is a fundamental principle of international law. It supposedly retains the status of *jus cogens* – a peremptory norm of general international law.[43] It may be argued that sovereignty's peremptory power can extend to the natural resource

[39] See Nico J. Schrijver, above n 37, at 391–92.
[40] United Nations General Assembly (UNGA), Report of the United Nations Conference on Environment and Development, Annex I - Rio Declaration on Environment and Development, A/COF.151/26 (Vol.1), 12 August 1992.
[41] United Nations Conference on Trade and Development (UNCTAD), World Investment Report 2007: Transnational Corporations, Extractive Industries and Development, (UNCTAD, 2007), 83–96.
[42] Farhad Rassekh, 'Comparative Advantage in Smith's Wealth of Nations and Ricardo's Principles: A Brief History of Its Early Development', 23(1) History of Economic Ideas 59 (2015), at 59–75.
[43] Mark W. Janis, 'The Nature of Jus Cogens', 3(2) Connecticut Journal of International Law 359 (1988), at 362.

domain to supersede any legal conflicts.[44] Natural resources are thus "protected" by two insuperable pillars of international trade and international law. Consequently, if a trade negotiation regarding natural resources has passed the comparative advantage debate, it is likely to proceed with the natural resource sovereignty debate and *vice versa*. We should keep in mind this distinctive feature of the natural resource factor because subsequent discussions on the topic of natural resource subsidy do not escape from the sovereignty debate.

(iii) Natural resources in world trade law: the export concern

In section (i), we discussed that natural resources come into international trade primarily with the access concern rather than with worry over domestic competition. This concern has undoubtedly been brought to international trade law to secure the world's natural resource supplies. The uneven distribution and scarcity of natural resources now enter into the trade law controversy.

Natural resources are essential to all economies, but the demand for these resources might vary across countries, natural resource types, and times. Poor economies might use such natural materials mainly for subsistence and export income, and the "already there" resources, such as fish stocks or forests, are quickly exploited. When economies move onto the industrialization stage, they may demand more extractive resources like oil or minerals for their production and consumption.[45] They might think more about the opportunity costs between selling their industrial inputs to foreign countries or keeping them inside to support their downstream industries. When the industrialization demand exceeds their own supplies, they

[44] Vienna Convention on the Law of Treaties (1969), Article 53 – Treaties conflicting with a peremptory norm of general international law ("jus cogens"): "A treaty is void if, at the time of its conclusion, it conflicts with a peremptory norm of general international law. For the purposes of the present Convention, a peremptory norm of general international law is a norm accepted and recognized by the international community of States as a whole as a norm from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character."

[45] Evelyn Dietsche, 'Political Eonomy and Governance', in Tony Addison and Alan Roe (eds), *Extractive Industries The Management of Resources as a Driver of Sustainable Development* (Oxford University Press, 2018), 149–50.

willingly seek to import such vital industrial inputs. China's productivity transformation and resource needs over the past four decades are clear evidence of this trend.[46]

By contrast, industrialized countries rarely deindustrialize themselves. These machines of natural resource consumption are and will be thirsty for raw materials. They used their own natural capital to grow up, and most of them are now seeking foreign supplies. In Japan's case, that is, the case of the industrial giant with scarce natural resources, access to foreign raw materials is likely the foremost priority in its international trade strategy.[47] Technology development in the natural resource sector can to some extent alleviate resource competition, but it seems to fall far behind world resource demand. Therefore, current international resource competition has gone down a risky path.[48]

Apart from the macro scenario, the complexity and interdependency of world supply chains underscores the importance of natural resource inputs. Nowadays, it is likely that a "pure" domestic-made industrial product does not exist. The world supply chains presently embrace, either directly or indirectly, the world resources to produce the world products.[49] Natural resources are supposedly the first bricks of such domino production strings: the remaining may fall altogether when they collapse. Natural resources must also be exploited to be available to trade. The exploitation processes are certainly not free nor immediate, especially in the extractive industry. Therefore, a sudden disruption in natural resource supplies likely causes devastating consequences on downstream production chains.

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[46] The Brenthurst Foundation, 'Fuelling the Dragon: Natural Resources and China's Development', August 2012, https://www.thebrenthurstfoundation.org/downloads/special-report-fuelling-the-dragon.pdf (visited November 2, 2021).

[47] Mireya Solís and Shujiro Urata, 'Japan's New Foreign Economic Policy: A Shift Toward a Strategic and Activist Model?', 2(2) Asian Economic Policy Review 227 (2007), at 232.

[48] Andrew L. Gulley, Nedal T. Nassar, and Sean Xun, 'China, the United States, and Competition for Resources That Enable Emerging Technologies', Proceedings of the National Academy of Sciences of the United States of America (2018), at 4111–15.

[49] David Dollar, 'Invisible Links: Value Chains Transform Manufacturing and Distort the Globalization Debate', 56(2) Finance and Development 50 (2019).

Moreover, natural resource prices are highly volatile. When a country maintains a dominant position in world resource supplies (e.g., China in the case of rare earth), an access restraint in the upstream is likely to hasten the world price of the involved resources in the downstream. Such a higher world price could subsequently increase the price of foreign downstream products exported back to the resource-restraint country. As a result, the resource-restraint policy might indirectly impede the imported downstream products' competitiveness. Economists call this phenomenon "reverse dumping."[50] The access or supply concern of downstream industries turns into an export concern under the eyes of trading nations. In other words, resource-importing countries may pay closer attention to the export policies of resource-supplying countries with regard to the natural resources in question.

Debates on export control over natural resources appeared in world trade law as early as *Canada-Herring* (1987) in the GATT period.[51] In 2009, the issue of natural resource export control reemerged in WTO law, and the target country was China – the leading exporter of mineral inputs at that time (*China – Raw Materials*). Up until now, China has been the sole respondent in all trade disputes at the WTO concerning natural resource export control.[52] At least one scholar is worried that export control disputes against China may continuously persist because of the Chinese mining industry's political economy.[53]

The resource export control commonly takes the form of export duties and/or export quantitative restrictions. In *China – Raw Materials,* China imposed these export control

[50] Jacob Viner, 'Dumping as a Method of Competition in International Trade', 1(1) University Journal of Business 182 (1922), at 182.

[51] The Panel (1987) concluded: "For the reasons set out in paragraphs 4.2-4.7 above, the Panel found that the export prohibitions on certain unprocessed salmon and unprocessed herring were contrary to Article XI:1 and were justified neither by Article XI:2(b) nor by Article XX(g). The Panel therefore suggests that the CONTRACTING PARTIES recommend that Canada bring its measures affecting exports of certain unprocessed salmon and unprocessed herring into conformity with the General Agreement" (para 5.1 of the Panel Report).

[52] There are two other cases concerning China's export controls: *China – Rare Earth* (the appellate rulings in 2014) and *China – Raw Materials II* (now in the panel stage).

[53] Ilaria Espa, 'Chinese Natural Resources Disputes: A Never-Ending Story?', in Marc Bungenberg and others (eds), *European Yearbook of International Economic Law 2018* (Springer Nature Switzerland, 2019), at 39–60.

measures upon a dozen mineral inputs which were of interest to the complaining countries (United States, European Union, and Mexico). In general, multilateral trade law prohibits export restrictions (regardless of natural resources) except for export duties.[54] This means that export duties are currently the sole legitimate trade tool to directly intervene in the natural resource trade. Unfortunately for China, this free hand was substantially tied by its commitments in the Accession Protocol to the WTO.[55] Scholars like to call these additional commitments "WTO-plus" obligations which are the cost of being a late runner. Undoubtedly, such additional export obligations were the "negotiated" intervention of resource-importing economies to secure resource supplies.[56]

However, the episode was not all negative for China. The multilateral trade law still preserves an array of "escape valves" to uphold its policy spaces on export.[57] In the case of natural resources, the export-restraint country can invoke environmental exceptions (GATT Article XX[b] and [g]) to defend its natural resource sovereignty. In other words, it can argue that such a resource export control measure, even if found to violate the trade law obligations, could be permissible by reason of environmental protection or for the sake of natural resource conservation. These 'environmental excuses' were actually China's main legal frontline. Here, the natural resource sovereignty and the industrial policy were on the same front to "fight" against world trade disciplines.

Nevertheless, China might be unhappy with the final adjudicating results in *China – Raw Materials.* The WTO judiciary demanded that export control measures go along with

[54] GATT Article XI:1.

[55] WTO, Accession Protocol of The People's Republic of China (Decision of 10 November 2001), WT/L/432, 23 November 2001, at Article 11.3 and Annex 6.

[56] Y. Qin, 'Reforming WTO Discipline on Export Duties: Sovereignty over Natural Resources, Economic Development and Environmental Protection', 46(5) Journal of World Trade 1147 (2012), 1160–62.

[57] According to Professor Mitsuo Matsushita, there are eight exceptions which a respondent can invoke to defend its quantitative export restrictions on natural resources: GATT 1994 – Article XI:2(a); Article XI:2(b); Article XX(b); Article XX(f); Article XX(g); Article XX(i); Article XX(j); and Article XX(b). Mitsuo Matsushita, 'Export Controls of Natural Resources and the WTO/GATT Disciplines', 6(2) Asian Journal of WTO & International Health Law and Policy 281 (2011), at 285–88.

production or consumption controls of the natural resources at issue.[58] This means that a trading country cannot solely premise on its natural resource sovereignty as an environmental excuse in order to destabilize world supplies. For this reason, Professor Mark Wu observed that the world trade law attempts to maintain a delicate balance between the interests of resource-importing countries and the global economy, on the one hand, and resource-supplying countries with the power of natural resource sovereignty on the other.[59] In short, under the current legal landscape, using export controls to intervene in natural resource trade flows is legally quite risky, except for the export duty instrument.

(iv) Limiting the scope: natural resources in the subsidy context

a. Setting the scope for the research

Natural resources are essential goods for industrial productivity; therefore, the government may provide these natural inputs at below-market prices to support its downstream industries. For example, the government can provide cheap coal input to its steel industry or low-priced oil for its manufacturing activities. This practice might not cause trade frictions if the government also supplies such cheap coal or oil for export at the same prices. In fact, the government tends to sell at higher prices for foreign consumption due to the rent-seeking motivation.[60] Such a price discrimination scheme might go against the nondiscrimination principle of the world trade law. However, while the GATT recognizes this price discrimination's prejudicial effects, it does not prohibit this practice.[61]

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[58] Mitsuo Matsushita, 'A Note on the Appellate Body Report in the Chinese Minerals Export Restrictions Case', 4(2) Trade, Law and Development 267 (2011), at 419.

[59] Mark Wu, 'China's Export Restrictions and the Limits of WTO Law', 16(4) World Trade Review 673 (2017), at 675.

[60] Christopher Beaton and Kieran Clark, *One Fuel, Two Prices: International Experiences with Dual Pricing of Fuel*, (ITCSD, 2016).

[61] GATT, Article III:9 provides: "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."

Nevertheless, the practice can be a subsidy concern. It is labeled as "dual pricing" or "two-tier pricing" – an unfair trade practice that resource-importing countries might find objectionable. This is the main reason the natural resource sector has become a hot topic on the road to the WTO for some natural resource-endowed countries.[62] In fact, before the Uruguay Round which established the WTO (1986–1994), the natural resource dual-pricing problem was intensely debated in U.S. trade politics (see Chapter 1, at 1.2). This controversy continues to exist under the current Doha trade agenda.

However, subsidy is a term that is widely used but hard to define. Most scholars accept that the attempt to define a subsidy is elusive.[63] Two common features of the subsidy concept are that the government plays the provider's role (donor) and that private entities are the recipient (beneficiary) of such provision. For example, the government can provide discounted goods or grant a monetary transfer in favor of domestic producers. The subsidy concept's intricacy is inherent in the functions of the government in the economy. Therefore, discussing the subsidy issue is likely to touch on the sovereignty of a nation. In interstate relations, we may all know the supreme principle that no state is permitted to intervene in the internal affairs of others[64], which certainly includes economic affairs.

However, governmental intervention in the domestic economy can cause trade distortions or "beggar-thy-neighbor" effects[65]. This is the reason international trade law should take on "supervision." A subsidy could be granted directly by the government (or its agencies)

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[62] International Trade Center, Russia's Accession to the WTO: Major Commitments, Possible Implications, September 2012, https://www.intracen.org/uploadedFiles/Russia%20WTO%20Accession%20English.pdf (visited November 2, 2021).

[63] Alan O Sykes, 'The Economics of WTO Rules on Subsidies and Countervailing Measures', John M. Olin Program in Law and Economics Working Paper No.186, The University of Chicago 1 (2003), at 5.

[64] Charter of the United Nations 1945, Article 2.7.

[65] For a simple definition of this term, Oxford Reference states: "A policy that seeks benefits for one country at the expense of others, or tries to cure an economic problem in one country by means which tend to worsen the problems of other countries." https://www.oxfordreference.com/view/10.1093/oi/authority.20110803095455931 (visited November 2, 2021).

or indirectly by entrusted entities (e.g., a private bank entrusted by the government to lend money to customers that lack capacity). The marketplace is accepted as a benchmark to identify the subsidy conferred by a governmental transaction.[66] All of these features provide a glance at this complex phenomenon; to go further into the legal context could result in getting stuck in plenty of technicalities (see Chapter 1, at 1.1).

This discussion allows for the introduction of the subject matter of this dissertation. Natural resources considered in the subsidy context first connotes the situation that the government provides natural resources for free or at below-market value to its domestic downstream industries. If natural resources are exploited by the government itself (usually by state-owned enterprises [SOEs]), the government's provision of such exploited natural resources is similar to the government's provision of other goods. Therefore, this practice should not be a particular concern in the subsidy context. However, the government might not be the sole exploiter of national natural resources. It can allocate the right to exploit/harvest natural resources to its domestic exploiters. To support domestic industries and maintain necessary social–economic policies, the government tends to provide natural resource exploitation rights at free or below-market value. Economists call this state aid practice the inadequate recovery of natural resource rents.[67] Indeed, the governmental provision of below-market natural resource exploitation rights is the distinct feature of natural resources in the subsidy context.

For purposes of the dissertation, "**natural resource subsidy**" or "**natural resource underpricing**" is the governmental provision of exploited natural resources or natural resource

[66] Alan O. Sykes, 'The Questionable Case for Subsidies Regulation: A Comparative Perspective', 2(2) Journal of Legal Analysis 473 (2011), at 504.
[67] Gareth Porter, 'Natural Resource Subsidies and International Policy: A Role for APEC', 6(3) Journal of Environment and Development 276 (1997), at 279–82.

exploitation rights directly or indirectly at below-market value to its domestic downstream producers that make the subsidy-alleged merchandise.

b. Literature Review

Trade law scholarship increasingly discusses the problem of governmental provision of below-market exploited natural resources to domestic downstream industries, namely the dual-pricing practice.[68] This natural resource manipulation practice is pervasive in the fossil fuel sector – the sector that is a vital resource for most manufacturing industries. According to the International Energy Agency (IEA), the estimated amount of fossil fuel consumption subsidies was 400 billion USD globally in 2018.[69] Despite this challenging subsidy situation and its terrible environmental impacts, there is no subsidy dispute concerning the fossil fuel dual-pricing practice at the WTO. In other words, this highly dangerous natural resource intervention does not show up on the world trade law radar.

Trade law scholars might not be so surprised by this absence because most of them might agree that it may be difficult for a fossil fuel subsidy challenge to satisfy the subsidy definition's specificity element.[70] In other words, fossil fuel underpriced programs are mostly widely provided to domestic downstream industries of a country. Therefore, no specific benefit

[68] David G. Tarr and Peter D. Thomson, 'The Merits of Dual Pricing of Russian Natural Gas', 27(8) World Economy 1173 (2004), at 1173–94; S Ripisnky, 'The System of Gas Dual Pricing in Russia: Compatibility with WTO Rules', 3(3) World Trade Review 463 (2004), at 463–81; Henok Birhanu Asmelash, 'Energy Subsidies and WTO Dispute Settlement: Why Only Renewable Energy Subsidies Are Challenged', 18(2) Journal of International Economic Law 261 (2015), at 261–85; Anna Marhold, 'Subsidy Regulation in WTO Law: Some Implications for Fossil Fuels and Renewable Energy', TILEC Discussion Paper DP-2006-022, Tilburg University 1 (2016), at 1-25; Timothy Meyer, 'Explaining Energy Disputes at the World Trade Organization', 17(3) International Environmental Agreements: Politics, Law and Economics 391 (2017), 391–10; Harro van Asselt and others, 'Fossil Fuel Subsidies and the Global Trade Regime', in Jakob Skovgaard and Harro van Asselt (eds), *The Politics of Fossil Fuel Subsidies and Their Reform* (Cambridge University Press, 2018), at 121–39.

[69] International Energy Agency, Fossil Fuel Consumption Subsidies Bounced Back Strongly in 2018, 13 June 2019, https://www.iea.org/commentaries/fossil-fuel-consumption-subsidies-bounced-back-strongly-in-2018 (visited November 2, 2021).

[70] Dirk De Bièvre, Ilaria Espa, and Arlo Poletti, 'No Iceberg in Sight: On the Absence of WTO Disputes Challenging Fossil Fuel Subsidies', 17(3) International Environmental Agreements: Politics, Law and Economics 411 (2017), at 418.

is found to be a countervailable subsidy in the legal sense.[71] The absence of an anti-subsidy challenge against fossil fuel underpricing practices is also due to the strategic characteristics of these "powerful" natural resources.[72] In addition, it is too complicated to recognize the downstream subsidy effects of a fossil fuel consumption subsidy. The problem might impose huge and undetermined burdens on the complainant to prove its case before the WTO judiciary.[73] These are the reasons dual-pricing practices in the fossil fuel sector are so persistent but are of less interest under subsidy law.

By contrast, the case of governmental provision of below-market natural resource exploitation rights has emerged in multilateral subsidy law as a hub of debates. The timber harvesting rights conflict (*Softwood Lumber*) between the United States and Canada was the pioneer that brought natural resources into the GATT/WTO subsidy regime. Since then, other natural resources have been brought before the WTO: coal and iron mining rights for steel production in India (appellate rulings in 2014) and timber rights for paper production in Indonesia (Panel rulings in 2017). The United States has to a greater extent employed the anti-subsidy instrument against land-use rights in China. However, this "divine" natural resource might reflect the highest nature of sovereignty.

Some questions may be asked regarding this phenomenal "development" of the multilateral subsidy regime.

As background, what could be the problem(s) in placing the natural resource allocation of a trading country under the intricate subsidy debate? Is it a conflict between the principle of

[71] Cleo Verkuijl and others, 'Tackling Fossil Fuel Subsidies Through International Trade Agreements: Taking Stock, Looking Forward', 58 Virginia Journal of International Law 309 (2019), at 366–68; see also Gabrielle Marceau, 'The WTO in the Emerging Energy Governance Debate', 5(3) Global Trade and Customs Journal 83 (2010), at 89.

[72] Daniel Behn and Vitaliy Pogoretskyy, 'Tensions between the Liberalist and Statist Approaches to Energy Trade', in Karoline Kuzemco and et al. (eds), *Dynamics of Energy Governance in Europe and Russia* (Palgrave Macmillan, 2012), at 45–65.

[73] Henok Birhanu Asmelash, above n 68, at 79.

natural resource sovereignty and the multilateral subsidy regime? In the trade law context, whether and to what extent can the WTO subsidy rules accept governmental provision of underpriced natural resource exploitation rights as a form of governmental subsidy? As a structural question along this line, what is the borderline of the multilateral subsidy regime in specific cases or of the multilateral trading rules in general toward the natural resource policies of a trading country? Placing natural resources under the WTO subsidy regime, regardless of whether the exploited resources take the form of goods or the right to exploit natural resources, would mean imposing market mechanisms upon a trading country's natural resource allocation policies. A policy question is thus whether such a market-based demand is compatible with natural resource allocation and management practices? All these questions provide the motivation for this dissertation.

Professor John H. Jackson in his seminal textbook in the field named natural resource subsidies as a problem for the current multilateral subsidy regime.[74] The literature review that follows will show his wisdom toward this complex topic.

The subsidy debate in the *Softwood Lumber* disputes has dominated the academic discourse on the topic of natural resource subsidies. There is very little literature outside of the discussions on *Softwood Lumber* which invests much in the unique position of natural resources under the WTO subsidy regime, except for an excellent article by Professor Julia Qin in 2019.[75] Based on the WTO's rulings in *Softwood Lumber IV*, three legal issues are brought to the debate: (1) whether or not the governmental provision of timber harvesting rights (or natural resource exploitation rights in general) at below-market value could be considered a subsidy transaction; (2) how the amount of subsidy allegedly received from such governmental

[74] John H. Jackson, *World Trading System: Law and Policy of International Economic Relations*, 2nd ed. (The MIT Press, 1997), 300.

[75] Y. Qin, 'Market Benchmarks and Government Monopoly: The Case of Land and Natural Resources under Global Subsidies Regulation', 40(3) University of Pennsylvania Journal of International Law 575 (2019), at 575–642.

provision of natural resource exploitation rights should be calculated; and (3) with regard to the specific facts of this case, how the question of input subsidy or upstream subsidy should be answered.

Unfortunately, these issues are entirely outside of the WTO Subsidy Agreement's textual indications.[76] The WTO adjudicators had to use their legal interpretation skills to adjudicate this natural resource subsidy dispute. However, it should be kept in mind that this landmark dispute's results are pretty "powerful" because the WTO case law has its own precedential power.[77] Getting out of the "pure" subsidy dimension, Professor Jeffrey L. Dunoff underscored the value of this inter-century dispute:[78]

> In short, the many dimensions of the dispute highlight many of the dilemmas facing the current trade law and international law systems. Perhaps more importantly, the dispute can help us to rethink at least some of these dilemmas. This is why, despite its tortuous history and arcane doctrine, the many dimensions of the Softwood Lumber dispute deserve our sustained attention.

Professor Gilbert Gagné even viewed the *Softwood Lumber* problem as a clash between policy autonomies with respect to structural aspects of the international economic system. He asked the question of what international trade law can do with such regulatory diversity.[79]

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[76] Gilbert Gagné and Franois Roch, 'The US–Canada Softwood Lumber Dispute and the WTO Definition of Subsidy', 7(3) World Trade Review 547 (2008), at 549.

[77] James Bacchus and Simon Lester, 'Of Precedent and Persuasion The Crucial Role of an Appeals Court in WTO Disputes', Free Trade Bulletin Paper 74, CATO Institute 1 (2019).

[78] Jeffrey L. Dunoff, 'The Many Dimensions of Softwood Lumber', 45(2) Alberta Law Review 319 (2007), at 356.

[79] Gilbert Gagné, 'Policy Diversity, State Autonomy, and the US-Canada Softwood Lumber Dispute: Philosophical and Normative Aspects', 41(4) Journal of World Trade 669 (2007), at 722; Greg Anderson appeared to agrue in the same direction, see Greg Anderson, 'The Compromise of Embedded Liberalism, American Trade Remedy Law, and Canadian Softwood Lumber: Can't We All Just Get Along?', 10(2) Canadian Foreign Policy Journal 87 (2003), at 99.

Nevertheless, most scholars writing on *Softwood Lumber* agree that a legal solution is likely not the way forward for this decades-long conflict.[80]

With regard to the three aforementioned legal questions, trade law scholars still debate with each other and, on some points, against WTO jurisprudence. Given the importance of this landmark dispute on the development of subsidy law in general, this dissertation will not complicate the picture but will identify the main patterns of the current subsidy debate related to natural resources.

Turning to the *first question* – the subsidy transaction issue – Henrik Horn and Petros C. Mavroidis agreed with the WTO jurisprudence and saw the government's provision of natural resource exploitation rights as equivalent to the government's provision of goods.[81] However, Professor Qin suggested that such natural resource provisions should be considered to be a function of natural resource taxation.[82] Which argument is more persuasive? These scholars might be addressing whether the WTO Subsidy Agreement is permitted to capture existing property rights over natural resources. If so, what is the legal implication(s) of this subsidy capture? These questions are intriguing.

The *second question* relates to the appropriateness of the benchmark to measure a subsidy conferred by the government's provision of natural resource exploitation. The government's predominance or even monopoly is pervasive in the natural resource sector. The WTO adjudicators have been seeking ways for this complex situation of natural resource subsidy disputes to be brought before them. However, numerous trade law scholars are not in full agreement with the WTO's jurisprudence regarding the benchmarking solution for the

[80] Daowei Zhang, *The Softwood Lumber War: Politics, Economics, and the Long U.S-Canada Trade Dispute,* (Resources for the Future, 2007), 263–275; see also Sarah E Lysons, 'Resolving the Softwood Lumber Dispute', 32 Seattle Univeristy Law Review 407 (2005), at 441.
[81] Henrik Horn and Petros C. Mavroidis, 'United States – Preliminary Determination with Respect to Certain Softwood Lumber from Canada: What is a Subsidy?', 4(S1)World Trade Review 220 (2005), at 226–29.
[82] Y.Qin, above n 75, at 610–13.

government predominance situation.[83] Beyond the existing critics, Professor Qin may be the first scholar to suggest an answer to the benchmarking question in the natural resource subsidy context. Distinct from options proposed by the WTO judiciary, she has recommended a benchmarking mechanism constructed on the basis of the optimal use of natural resources.[84]

The dissertation aims to analyze this topic but not necessarily in a way that is similar to Professor Qin's suggestion. In 2020, Eugene Beaulieu and Denise Prévost also discussed the benchmarking problem of natural resource predominance (arising from the Indonesian timber rights dispute in 2017). However, these authors appeared to describe the existing subsidy jurisprudence and emphasized the academic discourse around the topic.[85] They did not provide a possible answer to the underlying benchmarking question. Therefore, Professor Qin's scholarship with its lengthy theoretical discussion and resulting solution might be the most advanced answer to date.

The *third question* is the upstream subsidy situation in which a below-market natural resource (upstream input) is sold to independent downstream manufacturers to produce the subsidy-alleged merchandise. Because natural resources are essential inputs to downstream productivity, they usually fall into the upstream–downstream relationship. The underlying question is whether a subsidy conferred upon the upstream natural resource input is transferred to the downstream subsidy-alleged merchandise. This dissertation brings this upstream subsidy situation into the natural resource subsidy picture, but it is not necessarily a distinct feature of natural resources in the subsidy context.

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[83] Notably, Henrik Horn and Petros C. Mavroidis, 'United States – Final Determination with Respect to Certain Softwood Lumber from Canada (AB-2003-6, WT/DS257/AB/R)', in Henrik Horn and Petros C. Mavroidis (eds), *The WTO Case Law of 2003* (Cambridge University Press, 2006), at 130–45; Wentong Zheng, 'The Robert E. Hudec Article on Global Trade: The Pitfalls of the (Perfect) Market Benchmark: The Case of Countervailing Duty Law', 19 Minn. J. Int'l L. 1 (2010), at 1–32; Andrew Lang, 'Governing "as if": Global Subsidies Regulation and the Benchmark Problem', 67 Current Legal Problems 135 (2014), at 135–68.

[84] Y. Qin, above n 75, at 622–38.

[85] Eugene Beaulieu and Denise Prévost, 'Subsidy Determination, Benchmarks, and Adverse Inferences: Assessing "Benefit" in US–Coated Paper (Indonesia)', 19(2) World Trade Review 216 (2020), at 221–24.

If trade law scholarship is a fertile land to encourage debates,[86] this dissertation will hopefully find a place in it. The recent literature might not paint a complete picture of natural resource subsidy practice under the multilateral subsidy regime. Indeed, most of the aforementioned studies focus on legal standards set in *Softwood Lumber IV.* Subsequent natural resource subsidy disputes at the WTO have rarely been discussed in a structural manner. The article by Professor Qin may be the most comprehensive consolidation to date. However, it just concentrates on the benchmarking problem and is not convincing in some of its points. This dissertation is prepared for the purpose of sketching a complete picture of the natural resource subsidy phenomenon, giving comments to relevant WTO jurisprudence and adding perspectives to the current benchmarking debate toward natural resources. Thus, the first hypothesis of the dissertation is:

> **Governmental provision of below-market natural resources may confer an artificial benefit on its exporters. The WTO subsidy regime should address this practice.**

(v) From trade to the environment: a debate toward using countervailing duties for environmental protection

The relationship between trade and the environment is always a controversial topic in an increasingly interdependent world. Using unilateral trade restrictions for environmental protection has been extensively discussed in the trade and environmental literature.[87] This is

[86] John H. Jackson, 'Reflections on International Economic Law', 17(1) University of Pennsylvania Journal of International Economic Law 17 (1996), at 25–28.

[87] See notable scholarships: Daniel C. Esty, *Greening the GATT; Trade, Environment and the Future* (Peterson Institute for Initernational Economics, 1994); Robert E Hudec, 'GATT Legal Restraints on the Use of Trade Measures against Foreign Environmental Pratices', in Jagdish Bhagwati and Robert Hudec (eds), *Fair Trade and Harmonization* (The MIT Press, 1996) vol 2, at 95–174; Thomas J. Schoenbaum, 'International Trade and Protection of the Environment: The Continuing Search for Reconciliation', 91(2) The American Journal of International Law 268 (1997), at 268–313; Robert Howse, 'The Appellate Body Rulings in the Shrimp/Turtle Case: A New Legal Baseline for the Trade and Environment Debate', 27(2) Columbia Journal of Environmental Law 489 (2002), at 489–519; Steve Charnovitz, 'The Law of Environmental "PPMs" in the WTO: Debunking the Myth of Illegality', 27(1) Yale Journal of International Law 59 (2002), at 59–110; Bradly J. Condon, *Environmental Sovereignty and the WTO: Trade Sanctions and International Law,* (Brill – Nijhoff, 2006).

the "mainstream" scholarship of the trade and environment debate. Policy and academic discourses tend to follow disputes brought to international trade law forums. Two symbolic disputes in the field, *Tuna–Dolphin* (1991, 1994) in the GATT period and *Shrimp–Turtle* (1998) at the WTO, harshly sparked the trade and environment controversy for more than a decade. After the latter dispute, environmental critiques against the multilateral trading system gradually evaporated.[88]

Daniel C. Esty lucidly explained the conflict as "a clash of cultures, a clash of paradigms, a clash of judgments."[89] This scholar suggested a bridge for the underlying controversy:[90]

> Adherence to the **polluter pays principle or other cost-internalization** strategies can harness market forces in the cause of environmental protection by creating **incentives to use scarce resources** carefully and to minimize pollution. At the same time, such incentive-based environmental regulations (by avoiding the technology-specific mandates of traditional command and control regulations) reduce the scope for conflict with market access rules and other aspects of the international trade system. (Emphasis added.)

This bridge is the precise rationale behind the current U.S. proposal (at the WTO in December 2020) for using countervailing duties against weak environmental standards.[91] This point is used to discuss the existing WTO subsidy law's implication for environmental protection.

On the "green" front, environmentalists have proposed that weak environmental standards should be considered a kind of implicit subsidy; consequently, countervailing duties or eco-duties (hereafter green CVDs) could be invoked against environment-dumping

[88] Howard F. Chang, 'Toward a Greener GATT: Environmental Trade Measures and the Shrimp–Turtle Case', 74(1) Southern California Law Review 31 (2000), at 32.
[89] Daniel C. Esty, above n 87, at 35–41.
[90] Ibid, at 277.
[91] WTO, above n 11.

imports.[92] The rationale behind this "past" green CVD proposal is likely the same as that of the United States today: encouraging internalization of environmental externalities for better environmental protection as well as securing a fair trade relation.[93] Beyond the trade concern, environmentalists fear a loss of higher environmental standards (downside harmonization) as well as future domestic resistance to the upgrading of standards.[94] In other words, green CVDs should be employed against eco-dumping imports to pursue two relevant objectives: leveling the playing field and environmental protection.

On the "amber" front, trade scholars might not think in the same way. Most of them have argued that such a green CVD proposal may not pass the subsidy law test from a purely legal perspective. In particular, it might not satisfy the specificity test (a subsidy must be conferred on specific recipients to be potentially countervailed) because weak foreign environmental policies are generally implemented across the country. This means the benefit of such weak environmental policies (if any) is supposedly widely distributed. Further, the multilateral subsidy regime may not be designed to "punish" a regulatory subsidy.[95] Indeed, if an anti-subsidy punishment is permitted against a trading nation's "weak" environmental policies, what would be the next target of such uncontrolled protectionism once Pandora's box is opened?[96]

[92] See notable discussions: Kenneth S. Komoroski, 'The Failure of Governments to Regulate Industry: Subsidy under the GATT', 10(2) Houston Journal of International Law 189 (1988), at 189–210; Thomas Plofchan Jr., 'Recognizing and Countervailling Environmental Subsidies', 26(3) International Lawyer 763 (1992), at 763–80; J.J. Barcelo, 'Countervailing against Environemntal Subsidies', 23(1) Canada Business Law Journal 3 (1994), at 3–22; Laura J. Van Pelt, 'Countervailing Environmental Subsidies: A Solution to the Environmental Inequities of the North American Free Trade', 29(1) Texas International Law Journal 123 (1994), at 123–48.

[93] WTO, above n 11.

[94] Daniel C. Esty, 'Bridging the Trade–Environment Divide', 15(3) Journal of Economic Perspectives 113 (2001), at 121–22.

[95] Gary Horlick and Peggy A. Clarke, 'Rethinking Subsidy Disciplines for the Future: Policy Options for Reform', 20(3) Journal of International Economic Law 673 (2017), at 695.

[96] John H. Jackson, 'World Trade Rules and Environmental Policies: Congruence or Conflict?', 49(4) Wash. & Lee L. Rev. 1127 (1992), at 1227–78.

In the very first report on Trade and the Environment in 1992, GATT formally dismissed this offsetting proposal for neutralizing differences among national environmental standards. The reasons that were released were *inter alia* causing chaos in international trade relations, wrongly countervailability of a "real" comparative advantage of a trading nation, and easily leaning toward protectionist interests.[97] Professors Jagdish Bhagwati and T. N. Srinivasan vociferously rejected this green CVD proposal as an illogical and unwise policy with faulty normative and ethical bases.[98] Professor John H. Jackson even proposed to add an environmental exception (to the Subsidy Agreement) to prevent the invocation of such eco-dumping duties:[99]

> A recognition that just because the environmental rules of an exporting nation are not as stringent as those of an importing nation, the latter **should not apply** "countervailing duties" based on a subsidy theory. On the other hand, international minimum standards might be formulated over time, possibly creating a benchmark required for goods to move freely in international trade. (Emphasis added.)

Professor Robert E. Hudec might agree with the trade law obstacles to a green CVD proposal. However, he envisioned the subsidy definition as a loose concept as it "can always be extended to cover any additional unfair benefits that political leaders want to countervail."[100] Does Professor Hudec's wisdom ring true under the treatment of natural resources in the current multilateral subsidy regime?

The green CVD proposal has rarely been discussed in recent scholarship. Strident critics of the "past" trade scholars might gradually dispirit its policy and academic attractiveness. For

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[97] GATT, 'Trade and Environment', GATT/1529, February 3, 1992, at 16–21.

[98] Jagdish Bhagwati and T. N. Srinivasan, 'Trade and the Environment: Does Environment Diversity Detract from the Case of Free Trade', in Jagdish Bhagwati and Robert E Hudec (eds), *Fair Trade and Harmonization* (The MIT Press, 1996) vol.1, 159–224.

[99] John H. Jackson, above n 96, at 1248.

[100] Robert E Hudec, 'Differences in National Environmental Standards: The Level-Playing-Field Dimension', 5(1) Minnesota Journal of Global Trade 1 (1996), at 14–19.

example, Professor Joseph Stiglitz proposed that the government's failure to internalize climate change costs should be considered a hidden subsidy. By contrast, trade law experts immediately refuted that this "fair-trade-for-all" suggestion lacks the support of WTO subsidy law.[101]

As mentioned in the previous section, recent discussions on the role of the WTO anti-subsidy instrument against fossil fuel consumption subsidies also point out technical challenges stemming from the subsidy law. This fossil fuel subsidy scholarship substantially concentrates on the governmental provision of underpriced energy products to downstream industries and does not give sufficient consideration to governmental provision of energy extraction rights. It appears that only the article by Jackson Erpenbach in 2020 has contributed a thoughtful discussion of the potential to use anti-subsidy instrument against underpriced natural resource exploitation rights.[102] Of no surprise, Erpenbach's conclusion is contrary to the scholarship on fossil fuel subsidies. He argues that the U.S. underpriced coal leasing program might confront a countervailing challenge by China as the largest coal producer. As a result, the WTO subsidy regime might contribute to the current fight about climate change.[103]

Why do such contradictory conclusions exist? There is no error in understanding WTO jurisprudence; the reason is simply that Erpenbach's argument is based on the WTO subsidy jurisprudence related to natural resource exploitation rights. Indeed, Erpenbach's conclusion is a close fit with this dissertation's agenda. However, it would be better if this scholar would further connect his analysis to the past environment–competitiveness debate on the green CVDs topic. The article focuses solely on the coal leasing program in the United States, but can there be a similar countervailability conclusion for other natural resources such as fisheries? In this dissertation, the green CVDs discussion will be expanded in these directions.

[101] Jagdish Bhagwati and Petros C. Mavroidis, 'Is Action against US Exports for Failure to Sign Kyoto Protocol WTO Legal?', 6(2) World Trade Review 298 (2007), at 303.
[102] Jackson Erpenbach, 'The Federal Coal Leasing Program as an Actionable Subsidy Under International Trade Law', 9(2) Michigan Journal of Environmental & Administrative Law 503 (2020), at 503–29.
[103] Ibid, at 529.

In summary, the past controversy on the use of countervailing duties for environmental protection will be revisited in this dissertation by taking the subsidy issue into the trade and environment debate and relying on the development of WTO subsidy law concerning natural resources. In addition, current perspectives on the applicability of this green trade instrument in the natural resource conservation context will be presented. The second hypothesis of the dissertation is thus:

> **Governmental provision of below-market natural resources can exacerbate natural resource disposals. It is permissible to use countervailing duties against such environmentally harmful practices as a governmental subsidy.**

(vi) Research questions

In reliance on the policy background and literature review, the dissertation is conducted to answer three questions:

(1) To what extent does the WTO subsidy regime regulate the natural resource underpricing practice as a form of governmental subsidy?

(2) Given that the governmental provision of underpriced natural resources may exacerbate natural resource disposals, can countervailing duties be invoked for natural resource conservation?

(3) Given the sovereign nature and public policy functions of natural resources, what problems result from placing natural resources under the market-based WTO subsidy regime? If problems exist, what are their solutions?

(vii) Research methodology

The dissertation follows the international trade law discipline, specifically the WTO subsidy rules. Natural resources do not textually possess a separate regime in the current subsidy rules. In addition, matters put into the hands of the WTO judiciary are not natural resources in the abstract but are specific natural resources, such as the right to harvest timber, the right to mine coal or iron ore, or even the right to use land. Therefore, the GATT/WTO adjudicators have

had to use their legal interpretation skills to apply the general subsidy rules to specific natural resource subsidy situations. Through such specific applications, WTO jurisprudence on natural resource subsidies is developed. Besides the literature study, two other research methods are employed in the conduct of this dissertation: treaty interpretation and caselaw analysis.

Treaty interpretation: Article 3(2) of the Dispute Settlement Understanding (WTO) requires the WTO judiciary to clarify the WTO treaty provisions in accordance with customary rules of interpretation of public international law. In practice, the WTO adjudicators and trade law scholars agree that Articles 31–33 of the Vienna Convention on the Law of Treaties 1969 provides the guidance for interpreting WTO laws.[104] These interpretative techniques will thus be used to analyze and comment upon the WTO jurisprudence. Article 31(1) of the Vienna Convention formulates the general rule of treaty interpretation as:

> 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 the light of its object and purpose.

In addition, supplementary means of interpretation are provided in Article 32:

> Recourse may be had to supplementary means of interpretation, including the preparatory work of the treaty and the circumstances of its conclusion, to confirm the meaning resulting from the application of article 31, or to determine the meaning when the interpretation according to article 31:
>
> (a) leaves the meaning ambiguous or obscure; or
>
> (b) leads to a result which is manifestly absurd or unreasonable.

Caselaw analysis: WTO adjudicators' interpretations will be found by applying the subsidy rules in specific natural resource subsidy cases. Through these "applicable" interpretations, it

[104] See WTO, The Repertory of the Appellate Body Reports on INTERPRETATION of the WTO Legal Provisions, https://www.wto.org/english/tratop_e/dispu_e/repertory_e/i3_e.htm#I.3.6 (visited November 3, 2021).

will be possible to sketch the development of WTO subsidy jurisprudence toward the natural resource subsidy practice.

(viii) Research outline

The dissertation is conducted primarily in the domain of the WTO subsidy rules. How natural resources are placed under the multilateral subsidy regime is the primary subject matter of the research. This natural resource subsidy discussion will be expanded to the trade and environment context to test the proposal of using countervailing duties for environmental protection. In the final chapter, perspectives on the existing WTO subsidy jurisprudence toward natural resources will be presented. Excluding the introduction and conclusion, the dissertation is framed in five chapters.

Chapter 1. Natural resources under the subsidy context: the emergence of an unfair trade claim

This chapter aims to discover the historical background of the natural resource subsidy topic. The history is expected to reveal the unfinished works of the subsidy negotiations regarding this phenomenon. As observed in the subsequent chapters, the disputing parties before the WTO tribunals have frequently referred to the unfinished history to defend their natural resource sovereignty. An absence of the textual rule coupled with a failure in the lawmaking history may complicate the current debates. Section 1.1. introduces the WTO regulations on subsidies as the legal background for the whole dissertation. This section discusses the subsidy problem under the legal view. Section 1.2 examines the emergence of the natural resource underpricing practice under the premature U.S. subsidy law in the 1980s. As a leader of the WTO law negotiations, the United States brought this problem to the Uruguay Round; Section 1.3, therefore, tells the story of this first multilateral discussion on the natural resource subsidy topic.

Chapter 2. Natural resources under the GATT/WTO subsidy regime: setting legal standards

This chapter explores the legal foundation of natural resources under the WTO subsidy rules. The subsidy debates over natural resources have generally developed out of the *Softwood Lumber* conflict between the United States and Canada. Canada brought this pernicious conflict to multilateral trade law tribunals due to a failure to find a satisfactory solution under U.S. subsidy law. In this chapter, the arguments of "three" parties involved in this forest rights dispute will be described: arguments to defend natural resource sovereignty (Canada); arguments to put natural resources under the subsidy capture (the United States); and the justifications of the GATT/WTO judiciary with respect to these opposing arguments. The inclusion of natural resources in the multilateral subsidy regime resulted from the action of the judiciary in *Softwood Lumber IV*. The chapter first examines the *Softwood Lumber* debate in the GATT period (2.1) to establish "elements of the game" for the subsequent *Softwood Lumber* litigations at the WTO (2.2).

Chapter 3. Recent natural resource subsidy disputes and jurisprudential developments

After a quasi-success in *Softwood Lumber IV*, the United States confidently challenged foreign natural resource exploitation rights using the anti-subsidy instrument. The targeted countries brought their cases before the WTO (3.1); the adjudicators in these subsequent cases thus had opportunities to revise the past legal standards (3.2). Fruits of the *Softwood Lumber* jurisprudence were brought to the Doha Development Round to renegotiate the multilateral subsidy rules. The chapter will examine the natural resource subsidy's influence on this legislative agenda (3.3).

Chapter 4. From trade to the environment: countervailability of natural resource subsidies for natural resource conservation

In this chapter, an "intrusion" will be made into the trade and environment debate by relying on the analysis in the previous chapters relative to natural resource subsidy practice. The chapter will revisit the past unresolved environment–competitiveness controversy on the use of countervailing duties for environmental protection. It will substantiate the argument that with current jurisprudential developments, the multilateral subsidy regime might permit the use of countervailing duties for natural resource sustainability. Section 4.1. searches the theoretical basis for such a green anti-subsidy proposal. Section 4.2 then shows the legal and practical bases of the proposal. Section 4.3 attempts to assess this green offsetting proposal in the case of fishing rights. Finally, section 4.4. presents observations on the applicability of the green CVDs instrument.

Chapter 5. Rethinking the multilateral subsidy rules toward natural resources

Natural resources have been placed under the WTO subsidy regime by means of legal interpretations of the WTO judiciary rather than through a textual reading of the Subsidy Agreement. Given the sovereign nature and the vital roles these natural assets play in the social–economic life of a trading country, WTO jurisprudence might not escape controversy. This chapter attempts to bring perspectives to jurisprudential and academic debates on the natural resource subsidy topic. First, comments are provided on the WTO subsidy jurisprudence toward natural resources (5.1). Next, the possible collision of ideas caused by placing natural resources under the WTO subsidy context is examined (5.2, 5.3), and a solution is sought for such a possible collision (5.4). As a result, an explanatory footnote should be added to Article 14(d) of the Subsidy Agreement to establish the *lex specialis* treatment of natural resources under the multilateral subsidy context (5.5).

(ix) Research limitations

The research is conducted primarily under the WTO subsidy law domain while the natural resource underpricing practice can be justified under the anti-dumping law (the so-called "input dumping" problem). Governmental intervention to reduce natural resource input prices can be considered a "particular market situation" (Article 2.2, Anti-dumping Agreement) in order to employ a third-country price or a constructed price for the dumping calculation. Use of these "fair market" benchmarking prices ensures that the means by which input cost is adjusted disuses in-country distorted prices of the alleged natural resources for the dumping calculation. In other words, it aims to correct the natural resource underpricing problem in the dumping country. Anti-dumping duties can then be invoked against the natural resource underpricing practice as a green offsetting instrument. Further research should be conducted to examine the natural resource underpricing practice under the WTO anti-dumping rules.

As previously discussed, natural resources are the connecting piece between trade and the environment. Natural resources are underpinned by general international law primarily through the natural resource sovereignty principle. The sovereign characteristic generally protects natural resource exploitation, utilization, and management from foreign concerns. However, once natural resources turn into trading goods, they are likely regulated by international trade law, including the subsidy rules. The natural resource trade, in turn, affects natural resource exhaustibility and the surrounding environment. In fact, the connection between natural resources, international trade, and the environment is natural and persistent. Further studies should investigate natural resources in the context of regime interactions between international trade, natural resource sovereignty, and the environment outside the subsidy law domain.

Chapter 1

NATURAL RESOURCES IN THE SUBSIDY CONTEXT: THE EMERGENCE OF AN UNFAIR TRADE CLAIM

Natural resource disputes in the subsidy context primarily concern the natural resource pricing issue. A country that has the advantage of natural resource abundance can intentionally set the prices of its natural resources at below-market value for domestic production and consumption. Domestic industries in the importing countries may challenge such a natural resource underpricing program because these upstream interventions can create trade-distortive consequences on the downstream competition. Consequently, they could demand countervailing measures by alleging that such price-manipulation schemes in the natural resource sector should be regarded as a subsidy.

However, natural resource issues are not necessarily considered only in the trade or competition context. Natural resources are exceptional products because of their sovereign characteristics and extreme importance to a country's economic and social life. Sovereignty over natural resources is protected by general international law. Therefore, any legal restraints toward the natural resource advantage are inherently controversial, regardless of whether they are domestic or international.

This chapter discusses the past debates on the natural resource underpricing problem and its connection to the subsidy context. The subsidy concern over natural resource underpricing first emerged in U.S. trade politics in the 1980s (Section 1.2). The topic was then brought to the Uruguay Round negotiations, which established the current multilateral trade rules (Section 1.3). This historical examination is expected to uncover what was already agreed upon in the current rules and what remained unresolved regarding the natural resource underpricing practice. It may foretell the natural resource factor's challenges to the current

WTO subsidy rules. To begin, Section 1.1 succinctly introduces international regulations on subsidies.

1.1.GATT/WTO regulations on subsidies: a background

Subsidies are intrinsic to a government's functions toward its economy and society. Most economists and trade law scholars recognize the complexity of the subsidy problem. Their overall conclusion is that a universal definition of subsidy is elusive.[105] We may observe hundreds of government support programs in the present double crisis[106]; all of them might be subsidies in common perception but not necessarily subsidies in the legal sense. In its report, the WTO pointed out four main objectives of subsidies: industrial development, encouragement of innovativeness, resource redistribution, and environmental protection.[107] A government could support its nationals by means of countless programs and resources, ranging from direct fund transfers to passive exemption of monetary obligations, which have numerous direct and indirect effects.

A subsidy can be "good" to a certain extent but really "bad" to another extent, depending on the context and the understanding of the subsidy situation. For example, environmentalists may be critical of fuel and gear subsidies in the fishery sector, but these supporting programs could be a decent economic–social policy to promote coastal life.[108] International regulations on the subsidy problem attempt to separate bad subsidies from good subsidies in terms of their trade effects. However, this attempt is as elusive as trying to find a

[105] Martin Ricketts, 'The Subsidy As A Purely Normative Concept', 5(3) Journal of Public Policy 401 (1985), at 401–11.
[106] World Economic Forum, 'What today's bailouts can do for tomorrow's economies', June 24, 2020, https://www.weforum.org/agenda/2020/06/todays-bailouts-tomorrows-economies-covid-19-coronavirus-economy-crisis-pandemic-great-reset-government-stimulus/ (visited November 3, 2021).
[107] WTO, *World Trade Report 2006: Exploring the Links between Subsidies, Trade and the WTO*, (WTO, 2006), 107-08.
[108] Ussif Rashid Sumaila and others, 'Fuel Price Increase, Subsidies, Overcapacity, and Resource Sustainability', 65(6) ICES Journal of Marine Science 832 (2008), at 835.

"perfect" subsidy definition.[109] In light of this situation, this dissertation discusses the subsidy concept in the international trade context which is not necessarily reflective of the perception of a subsidy in other aspects of governmental affairs.

Economists and policymakers primarily rely on the bad economic effects of subsidies as rationales for the international disciplines on subsidies: market forces distortion (efficiency) and leveling the playing field (fairness).[110] Under the neoclassical economic ideology, a subsidy is thought to be governmental intervention into the *laissez-faire* market allocation of economic resources. With the sovereign powers at hand, the government can redistribute national wealth and resources in favor of an inefficient economic sector at the price of the general welfare (e.g., fossil fuel subsidies).

A subsidy can create "beggar-thy-neighbor" effects in international trade relations since it might artificially strengthen a domestic producer against import competition and advance it in foreign markets. Therefore, trade policymakers have been critically concerned about such artificial or unfair trade advantages conferred by a governmental subsidy.[111] However, the rationales for disciplining such "bad" subsidies still fail to convince some prominent trade law experts.[112] Subsidies can also create non-trade externalities such as environmental degradation (e.g., fisheries subsidies can exacerbate the overexploited fishing problem) or unemployment. In addition, non-trade aspects of the subsidy phenomenon are "awaking" in international

[109] Alan O. Sykes, above n 66, at 473–77.
[110] Kyle Bagwell and Robert W. Staiger, *The Economics of World Trading System*, 1st ed. (The MIT Press, 2002), 163–165; WTO, above n 107, at 55–64.
[111] According to Professor Hudec, the fairness concept is likely unilaterally determined by the government itself for what it calls unfair. See Robert E. Hudec, *Essays on the Nature of International Trade Law,* (Cameron May, 1999), 227.
[112] Michael J. Trebilcock, Robert Howse, and Antonia Eliason, *The Regulation of International Trade*, 4th ed. (Routledge, 2013), 389–92.

governance since fishery subsidies are the sole agenda item in the current WTO subsidy discussion.[113]

1.1.1. What is a subsidy?

A governmental subsidy is regulated under Article XVI of the GATT, but this article lacks a definition of subsidy. In the past, GATT negotiators have at least once considered that it is neither necessary nor feasible to reach a definitive concept of the term "subsidy."[114] The first definition of subsidy that could be recognized by the GATT Panel is found in *Australia – Ammonium Sulfate* (1950):[115]

> It noted that, although this Article is drafted in very general terms, the type of subsidy which it was intended to cover was the financial aid given by a government to support its domestic production and to improve its competitive position either on the domestic market or on foreign markets.

The first ever multilateral subsidy agreement, the Subsidies Code 1979, or the Code, did not have a subsidy definition. In the Uruguay Round, the United States and the European Economic Community (EEC) maintained different perceptions of the subsidy concept.[116] A final compromise was reached in Article 1(1.1) of the Agreement on Subsidies and Countervailing Measures (the Subsidy Agreement or SCMA) to state the first ever multilateral definition of subsidy. Accordingly, a subsidy is a government's financial contribution which thereby confers a benefit.[117] This legal definition of the subsidy phenomenon comprises two

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[113] The Mainichi, 'New WTO Chief Pushes for Vaccine Access, Fisheries Deal, March 2, 2021, https://mainichi.jp/english/articles/20210302/p2g/00m/0bu/004000c (visited November 3, 2021).
[114] Simon Lester, 'The Problem of Subsidies as a Means of Protectionism: Lessons from the WTO EC – Aircraft Case', 12 Melbourne Journal of International Law 1 (2012), at 3–6.
[115] Panel Report (GATT), *Australia – Ammonium Sulfate*, para 10.
[116] GATT, Communication from the United States, MTN.GNG/NG10/W/1, March 16, 1987; GATT, Communication from the EEC, MTN.GNG/NG10/W/7, June 11, 1987.
[117] Peggy A. Clarke and Gary N. Horlick, 'Chapter 16. The Agreement on Subsidies and Countervailing Duties' in Patrick F.J. Macrory et al., *The World Trade Organization: Legal, Economic and Political Analysis* (Springer, 2005) 1st ed., at 688–89.

elements: a financial contribution on the government's side and a benefit received from the contribution on the recipient's side.

1.1.1.1.From the donor: the financial contribution element

Article 1(1.1.a.1) of the Subsidy Agreement exhaustively lists a limited number of transactions that could be considered a financial contribution. This provision lists *direct* financial contributions from the government: (i) direct funds transfers, (ii) government revenue foregone, (iii) provision or purchase of goods or services. It also lists an *indirect* financial contribution which is (iv) made through a government entrusted private body. It is necessary to note that it was the intention of the Subsidy Agreement's drafters to exhaustively limit the financial contribution concept to these four situations. They intended to constrain any "generous" interpretation of the subsidy definition to capture all governmental transfers of economic resources.[118] This critical point is the basis for the subsequent arguments discussed in Chapter 5.

Such intentional limitation on the subsidy definition also puts a regulatory subsidy or governmental inaction outside the current multilateral subsidy regime.[119] Indeed, this point becomes critical in Chapter 4 in the consideration of whether or not an environmental policy is a subsidy in the current legal context. However, Article 1(1.1.a.2) of the Subsidy Agreement seems to broaden the above financial contribution concept by further considering "any form of income or price support" as a subsidy transaction.[120]

[118] Panel Report, *US – Export Restraints*, para 8.38.

[119] Ibid, para. 9.1.

[120] For interpretation, see Panel Report, *China – GOES,* para 7.85: "The concept of 'price support' also acts as a gateway to the SCM Agreement, and it is our view that its focus is on the nature of government action, rather than upon the effects of such action. Consequently, the concept of 'price support' has a more narrow meaning than suggested by the applicants, and includes direct government intervention in the market with the design to fix the price of a good at a particular level, for example, through purchase of surplus production when price is set above equilibrium."

Article 1(1.1.a.1) of the Subsidy Agreement requires that the financial contribution must be conferred or directed by the government or any public body. According to the GATT, the term "government" might comprise all governmental agencies of a trading country.[121] However, both the GATT and the Subsidy Agreement fail to contain any explanation of the term "public body." Fortunately, WTO jurisprudence does provide a clarification of this term. The Appellate Body explained that a public body must be an entity that possesses, exercises, or is vested with governmental authorities.[122] However, the USTR has strongly criticized this interpretation as erroneous because it opens the door for circumvention by SOEs from non-market economy countries. From the USTR's perspective, the term "public body" should have the meaning of any entity controlled by the government or a sense of ownership.[123] Scholars are still debating the understanding of this term.[124]

1.1.1.2.From the recipient: the benefit conferred element

To constitute a subsidy in the legal sense, a governmental financial contribution must confer a benefit on its recipient(s). The term "benefit" has been interpreted as "the financial contribution makes the recipient **better off** than it would otherwise have been, absent that contribution."[125] Hence, there should be a direct link between the financial contribution and the benefit bestowed on the recipient.[126] The WTO judiciary has explained that market transactions are the appropriate benchmark to determine whether a governmental transaction confers a

[121] GATT, Article XXIV:12.
[122] Appellate Body Report, *US – AD/CVD (China)*, para 317.
[123] United States Trade Representative (USTR), above n 7, at 82–89.
[124] See Curtis J. Milhaupt and Wentong Zheng, 'Beyond Ownership: State Capitalism and the Chinese Firm', 103(3) Georgetown Law Journal 665 (2015), at 715–17 for support for the Appellate Body's rulings. By contrast, see Michel Cartland, Gérard Depayre, and Jan Woznowski, 'Is Something Going Wrong in the WTO Dispute Settlement?', 46(5) Journal of World Trade 979 (2012), at 1007–08 for critiques.
[125] Appellate Body Report, *Canada – Aircraft*, para 152.
[126] Mitsuo Matsushita and others, *The World Trade Organization: Law, Practice, and Policy*, 3rd edn (Oxford University Press, 2015), 317.

benefit.[127] In other words, the marketplace is the accepted standard to discern a distorted subsidy.

Article 14 of the Subsidy Agreement contains guidance on the calculation of the benefit conferred. The article provides clarifications for four subsidy transactions: governmental provision of equity capital (14[a]); a loan provided by the government (14[b]); a loan guaranteed by the government (14[c]); and governmental provision or purchase of goods or services (14[d]). The conferred benefit is measured by comparing the actual value received/paid by the recipient with a supposed "counterfactual" value found in the market without the alleged governmental contribution.[128] However, it is challenging to identify an appropriate market value as the benchmark for the benefit calculation.

1.1.1.3.The specificity requirement of the subsidy

The specificity concept, previously incorporated into the U.S. Trade Agreements Act 1979, was introduced for the first time to the Uruguay Round. This specificity requirement means that a subsidy can be countervailed only if it is conferred on a specific recipient(s). It also means that international trade rules should not constrain an across-the-board or "generally available"' subsidy from the government. The Panel in *US – Upland Cotton* clarified that a subsidy could not be specific if provided throughout the economy. Such a generally available subsidy does not confer any "preferential" benefit on a particular enterprise or group of enterprises.[129] But why the generally available subsidy is excluded? Professor John H. Jackson explained that the generally available subsidy might create minimal international trade-distortive effects and thus should not be countervailed.[130] Article 2 of the Subsidy Agreement classifies the specificity requirement into three categories: enterprise or industry specificity

[127] Appellate Body Report*,* *Canada – Aircraft*, paras 157–58.
[128] Petros C. Mavroidis, *The Regulation of International Trade: The WTO Agreements on Trade in Goods*, (The MIT Press, 2016) vol. I, 217.
[129] Panel Report, *US – Upland Cotton*, paras 7.1142-43.
[130] John H. Jackson, above n 74*,* at 296–97.

(2.1), regional specificity (2.2), and prohibited subsidies specificity (2.3). Practically speaking, most subsidy disputes focus on enterprise or industry specificity (generally labeled as certain enterprises specificity).

There are three principles (rather than rules) for ascertaining certain enterprises specificity.[131] Article 2(1a) indicates the *de jure* specificity by which the granting authority (or legislation) explicitly limits access to the subsidy to specific enterprises or group of enterprises. By contrast, Article 2(1b) gives an exemption to *de jure* specificity; if the subsidy-granting authority establishes objective criteria governing the subsidy program's eligibility, the subsidy program shall not be considered specific. Nevertheless, if a subsidy is seemingly provided across-the-board but is accessed by a limited number of users, the subsidy is considered to be *de facto* specific. *De jure* specificity should be examined by concrete evidence from the subsidy-granting authority (the legal formation). By contrast, *de facto* specificity should be discerned by indica of the program's actual operation.[132]

In summary, the subsidy concept is very complicated because it directly connects to the government functions toward the economy and society at large. International trade law is only trying to capture trade-distorted subsidies from a large domain of government supported programs. However, the law is not ambitious enough to grasp all types of trade-distortive subsidies. As previously mentioned, a subsidy in the legal sense under Article 1 of the Subsidy Agreement comprises two elements: a financial contribution from the government or its agencies (public body in legal terms) and the benefit thereby conferred on the recipient. Nevertheless, the *per se* existence of a subsidy does not necessarily trigger a trade challenge. This subsidy must be specific in accordance with Article 2 of the Subsidy Agreement for the countervailability.

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[131] Appellate Body Report, *US – AD/CVD (China)*, paras 366, 371.

[132] Peter Van den Bossche and Werner Zdouc, *The Law and Policy of the World Trade Organization*, 4th ed. (Cambridge University Press, 2017), 799.

1.1.2. Types of subsidies

When a specific subsidy is found to exist, the next step is to search for its legal treatment. Scholars classify subsidies by means of traffic light images: red light for the prohibited subsidies, amber light for the actionable or countervailable subsidies, and green light for the nonactionable or permitted subsidies. Depending on the type of subsidy, reactions against a foreign subsidy can be a multilateral challenge at the WTO and/or a unilateral challenge by imposing countervailing duties or simply doing nothing.

First, the prohibited category comprises the export contingent subsidy (export subsidy) and the import substitution subsidy (local content subsidy). These types of subsidies are legally prohibited because they seek to intentionally and directly cause trade-distortive effects. With respect to the export contingent subsidy, the Subsidy Agreement has an illustrative list of those subsidies which fall into this group.[133] The WTO judiciary once explained that a subsidy transaction described in the list is *ipso facto* prohibited; no detailed explanations are required. The Subsidy Agreement also distinguishes between in-law and in-fact export contingent subsidies. However, neither have a similar illustrative list nor is there an "in-law and in-fact" distinction for the import substitution subsidy. The Appellate Body in *US – Upland Cotton* worried that a sole consideration of "in law" indications for the import substitution subsidy could create a loophole for circumvention.[134] Generally, a prohibited subsidy could be subject to a multilateral challenge or to countervailing duties if it causes an injury to the importing party's domestic industry. If a prohibited subsidy is found to exist, it must be withdrawn without delay or within a specified period recommended by the WTO Dispute Settlement Body (DSB).[135]

[133] Subsidy Agreement, Annex I.
[134] Appellate Body Report, *US – Upland Cotton*, para 552.
[135] Subsidy Agreement, Article 4.

Second, the actionable category is in the middle between the prohibited subsidies and the permitted subsidies.[136] The qualifying word "actionable" means that a subsidy is not prohibited in principle but could be subject to a challenge if it is inflicting adverse effects on trading partners. Article 5 of the Subsidy Agreement specifies three kinds of adverse effects: (1) injury to domestic industry, (2) nullification or impairment, and (3) serious prejudice.

Any foreign subsidy which is allegedly causing injury to a domestic industry in the importing country must be confirmed by an investigation. Footnote 45 to Article 15 clarifies that the injury shall include material injury, threat of material injury, or material retardation of an industry's establishment. Article 6 clarifies how to determine serious prejudice as a form of adverse effects. Accordingly, to demonstrate the serious prejudice caused by a subsidy, the complaining party must satisfy any of four effect tests: (1) displace or impede imports of another member into the markets of the subsidizing member (2) displace or impede exports of another member from a third country market; (3) significant price-cutting or significant price suppression, price depression, or lost sales; (4) increase in the world market share of a particular subsidized primary product. The final form of adverse effects is nullification or impairment of benefits accruing to another member caused by the alleged subsidy. For example, the GATT Panel in *EEC-Oilseeds I* concluded that the EEC systematically offset the tariff concessions enjoyed/expected by the United States by maintaining production subsidy programs.[137] Hence, a nullification or impairment challenge depends on the art of demonstration as compared to the finding of injury with more legal rules.

A party affected by an actionable subsidy can multilaterally challenge the alleged subsidy by requesting a WTO panel or can unilaterally trigger the countervailing duty procedure. If a countervailable subsidy is found to exist, a demand is made to the subsidizing

[136] Professor John H. Jackson called this category the residual, see John H. Jackson, above n 74, at 292.
[137] Panel Report (GATT), *EEC – Oilseeds I*, para 156; see also Panel Report, *US – Offset Act of 2000*, para 7.127.

party to remove the adverse effects of the disputed subsidy *or* to withdraw the subsidy within six months. If the subsidizing member does not properly comply, the complaining party can seek a countermeasure from the WTO judiciary.[138]

Third, the permitted category is regulated in Article 8 of the Subsidy Agreement (e.g., subsidies for regional development or environmental improvement). However, this type of "good" subsidy no longer exists. Since 2000, these permitted subsidies could be challenged (actionable) if, for example, they were found to cause an injury to a domestic industry of the importing party. Indeed, the failure to revitalize these "public good" subsidies might frustrate governmental efforts to promote sustainable development programs. Scholars support these beneficial subsidies as desirable, especially in the aftermath of the challenge to the Canadian renewable energy policies before the WTO dispute settlement mechanism.[139]

1.1.3. The countervailing duties

Countervailing duty was first multilaterally endorsed under Article VI of the GATT 1947. The article defines a countervailing duty as "a special duty levied for the purpose of offsetting any bounty or subsidy bestowed, directly, or indirectly, upon the manufacture, production or export of any merchandise."[140] It is necessary to understand the reason such an anti-subsidy instrument came into existence before examining its legal disciplines.

Resorting to countervailing duties against a foreign subsidy seems to provoke unlimited controversies. Most economists, or those from the economic perspective, favor the abolition of the countervailing duty instrument as a first-best policy.[141] Professor Michael Trebilcock

[138] Subsidy Agreement, Article 7.9.

[139] See Luca Rubini, 'Ain't Wastin' Time No More: Subsidies for Renewable Energy, the SCM Agreement, Policy Space, and Law Reform', 15(2) Journal of International Economic Law 525 (2012), at 525–79.

[140] GATT, Article VI:3.

[141] Alan O. Sykes, 'Countervailing Duty Law: An Economic Perspective', 89(2) Columbia Law Review 199 (1989), at 263; see also Michael J. Trebilcock, 'Is the Game Worth the Candle – Comments on a Search for Economic and Financial Principles in the Administration of U.S. Countervailing Duty Law', 21(4) Law & Policy in International Business 723 (1990), at 733.

(among others) viewed this trade defense mechanism as increasing international trade frictions and encouraging trade protectionism.[142] However, the political economy behind it might not be in accordance with this suggestion.[143] Therefore, the crucial question is: What should be the countervailable object of the countervailing duty instrument?

There has been an inconclusive debate between two different schools relative to the targeting object of the countervailing duties: the injury-only school *versus* the anti-distortion school (excellently sketched by Professor Gary C. Hufbauer).[144] From the perspective of the injury-only school, subsidies are inherent to government functions. Therefore, it is appropriate to counter injurious effects suffered by the importing country's domestic industries rather than to offset a governmental function. By contrast, the anti-distortion school suggests that such a remedial instrument should offset the distortion caused by subsidies as accurately as possible. The anti-injury idea was subsequently refined to become the entitlement theory for the employment of countervailing duties.[145] According to this theory, the importing country's domestic industry should be entitled "the right to 'insulation' from adverse and uncompensated international manipulation."[146] In other words, this theory suggests that the employment of the anti-subsidy instrument is aimed to neutralize the negative effects of a foreign subsidy. The development of the injury test under the GATT/WTO appears to support the entitlement theory (also known as the injury-only school).

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[142] Michael J. Trebilcock, Robert Howse, and Antonia Eliason, above n 112, at 392.

[143] Alan O Sykes, 'Second-Best Countervailing Duty Policy: A Critique of the Entitlement Approach', 21(4) Law and Policy in International Business 699 (1990), at 700; see also John H. Jackson, 'Perspectives on Countervailing Duties', 21(4) Law & Policy in International Business 739 (1990), at 742.

[144] Gary C. Hufbauer, 'Subsidy Issues After Tokyo Round', in William R.Cline (ed), *Trade Policy in the 1980s* (The MIT Press, 1983), at 335–37.

[145] Charles J. Goetz, Lloyd Granet, and Warren F. Schwartz, 'The Meaning of "Subsidy" and "Injury" in the Countervailing Duty Law', 6(1) International Review of Law and Economics 17 (1986), at 17–32. See also Richard Diamond, 'A Search for Economic and Financial Principles in the Administration of United States Countervailing Duty Law', 21(4) Law & Policy in International Business 507 (1990), at 507–608.

[146] Ibid, at 19.

Part V of the Subsidy Agreement provides substantive and procedural requirements for imposing countervailing duties. To employ this offsetting instrument, the investigating authority must fully substantiate three elements: (1) the existence of a countervailable subsidy, (2) an injury to the importing country's domestic industry, and (3) a causal link between the subsidized imports and the injury. Hence, to exploit the "power" of this unilateral instrument, the existence of a countervailable subsidy in accordance with the Subsidy Agreement is a prerequisite. To determine the injury, the investigating authority is required to examine (1) quantity effects and price effects of the subsidized imports in domestic markets and (2) consequent impacts of the subsidized imports on the domestic industry[147] of the importing country. In determining the threat of material injury, the investigating authority must base the threat on facts and not merely on allegation, conjecture, or remote possibility. Article 15(8) demands that the threat of material injury be decided with special care.

The procedural requirements for imposing countervailing duties are similar to those for an anti-dumping investigation. Thus, the WTO judiciary usually makes jurisprudential cross-references in adjudicating a subsidy dispute.[148] The primary purpose of this procedure is to ensure the investigating process is being conducted in an objective manner[149] and to offer adequate opportunities for conflicting stakeholders to defend their interests. The investigating authority could initiate an anti-subsidy investigation based on a consideration of the application from domestic industries (or on their behalf) or even *ex officio*. The investigation period should be a maximum of 18 months. However, the Subsidy Agreement's language might not limit the duration for the countervailability to be on stage. Provided that all substantive and procedural requirements are fulfilled to result an affirmative determination, no countervailing duty can be

[147] Subsidy Agreement, Article 16 provides details for understanding of this term.
[148] Peter Van den Bossche and Werner Zdouc, above n 132, at 847.
[149] Panel Report, *EC – Countervailing Measures on DRAM Chips*, para 7.274.

levied in excess of the subsidy amount found to exist. However, a lesser amount of countervailing duties should be desirable.[150]

1.2.Natural resources and subsidy debates under U.S. trade politics in the 1980s

The U.S. economy's general decline in the 1980s prompted some ailing domestic industries to increase their demands for governmental protection. For example, the steel industry with international structural imbalances (this sector suffered from global overproduction but enjoyed luxurious subsidies at that time) was on the frontline between the United States and the EEC.[151] As typically observed in downturn periods, domestic producers are likely to claim "leveling the playing field" through the use of protective instruments. They also tend to lobby for legislation supporting their protective purposes.[152] They might understandably search for any "acceptable" reason which causes them to be in an unfair situation. Indeed, they could easily attract the government's attention by alleging an unfair disadvantage *vis-à-vis* foreign exporters rather than admitting that they could economically lose on a fair competition battlefield. The emergence of the natural resource problem in the subsidy context has demonstrated this protectionist scenario.

Because natural resources are substantial inputs for most manufacturing industries, a growing number of trade claims in the 1980s were about foreign natural resource pricing policies as a kind of production intervention. U.S. domestic industries claimed that these pricing practices should constitute a governmental subsidy if the government provides natural resources to its downstream manufacturers at below-market value (the natural resource underpricing problem). In other words, U.S. domestic industries attempted to stretch the subsidy definition (in U.S. domestic law) to impose countervailing duties against foreign

[150] Subsidy Agreement, Article 19.
[151] Patrick J. McDonough, 'Subsidy and Countervailing Measures Agreement', in Terence P. Stewart (ed), *The GATT Uruguay Round: A Negotiating History (1986-1992)* (Kluwer, 1993) vol. I, at 821–25.
[152] David Richardson, 'U.S Trade Policy in the 1980s: Turns – and Roads Not Taken', NBER Working Papers Series, NBER 1 (1991), at 14–37.

natural resource underpricing practices. However, this trade-offsetting motivation could not be effortlessly settled under U.S. trade politics that heavily coalesced competing interests.[153] The subject matter's inherent complexity – natural resources – also made such a "level the playing field" demand more challenging.

1.2.1. Early subsidy cases concerning natural resource underpricing practice

Subsidy concerns regarding natural resource underpricing practices were observed early in the energy controversy between the United States and the EEC on textile and petrochemical products (1979–1980). The EEC blamed U.S. price controls in the oil and natural gas markets for conferring an "artificial" advantage in producing synthetic fibers and petrochemicals; therefore, it threatened to impose countervailing duties.[154] The United States rejected these subsidy claims since its energy pricing programs could not fulfill the specificity test for being a countervailable subsidy. The EEC then refrained from imposing such anti-subsidy tariffs.[155] Ironically, subsequent legal standards for countervailability of natural resource underpricing practice solely developed under U.S. domestic law.

Early cases of the natural resource underpricing problem in the United States, again ironically, concerned steel products imported from several EEC countries.[156] At that time, there was no legal instrument to expressly discipline this "new" unfair trade practice; therefore, the United States Department of Commerce (USDOC) likely possessed all of the power to consider countervailability of such underpricing allegations.[157] The USDOC's discretion thus became

[153] Daowei Zhang, above n 80, at 18–19.
[154] United States International Trade Commission (USITC), *Operation of the Trade Agreements Program*, (USITC, 1982), 121.
[155] Gary Horlick and Geoffrey D. Oliver, 'Antidumping and Countervailing Duty Law Provisions of the Omnibus Trade and Competitiveness Act 1988', 23(3) Journal of World Trade 5 (1989), at 7 and footnote 10.
[156] United States Department of Commerce (USDOC), Notices of Initiation of Investigations: Certain Steel Products from France (47 Fed. Reg. 5739 (1982)); Germany (Republic) (47 Fed. Reg. 5741(1982)); Belgium (47. Fed. Reg. 5744 (1982)).
[157] Giuseppe L Barca, 'Measures Under Subsidies and Countervailing The GATT And The WTO and in The US Law and Developments and Practice: Parallel Interactions', PhD dissertation, (University of Warwick, 2007), at 88.

the primary source for later legislative efforts in the U.S. Congress. The USDOC based its justifications on the subsidy clause in the U.S. Trade Agreement Act of 1979:[158]

> SUBSIDY - The term "subsidy" has the same meaning as the term "bounty or grant" as that term is used in section 303 of this Act, and includes, but is not limited to, the following:
>
> (A) Any export subsidy described in Annex A to the Agreement (relating to illustrative list of export subsidies).
>
> (B) The following domestic subsidies, if provided or required by government action to a **specific** enterprise or industry, or group of enterprises or industries, whether publicly or privately owned, and whether paid or bestowed directly or indirectly on the manufacture, production, or export of any class or kind of merchandise:
>
> (i) [...]
>
> (ii) **The provision of goods or services at preferential rates.**
>
> (iii) [...] (Emphasis added.)

In the preliminary determinations concerning coal input subsidies to downstream steel producers from Belgium, France, and Germany (1982), the USDOC premised the rejection of all domestic subsidy allegations on the specificity test. The sole rationale was that the steel industry did not exclusively use the subsidized coal input.[159] Later jurisprudential developments showed that the specificity test would become a focus in a natural resource subsidy dispute. However, in its final subsidy determinations, the USDOC used a new assessment to (again) dismiss all coal input subsidy claims. The USDOC made the interpretation that if transactions between input coal producers and downstream steel purchasers are conducted under arm's length conditions, the countervailable benefit supposedly

[158] U.S. Trade Agreement Act 1979, Section 771 (5)(B) (19 U.S.C. Section 1677 (5)(B)).
[159] Hans-Michael Giesen, 'Upstream Subsidies: Policy and Enforcement Questions after the Trade and Tariff Act of 1984', 17 Law & Policy in International Business, 241 (1985), at 256.

accrued to the former could not flow onto the latter. This interpretation later became known as the pass-through test in the input subsidy situation.

The next natural resource underpricing dispute before the USDOC, *Certain Softwood Lumber Products from Canada (1983),* concerned the other aspect of natural resource allocation – the right to exploit natural resources. The U.S. softwood producers worried that "cheap" stumpage programs (timber harvesting rights) in Canada could create a cost advantage for the Canadian timber harvesters. These benefited harvesters could then sell the underpriced timber to produce cheap softwood lumber bound for the U.S. markets (the upstream–downstream relationship).

Like the previous coal underpricing cases, the USDOC applied the specificity test to reject the underlying subsidy allegation against the Canadian stumpage programs. It confirmed that these timber pricing programs did not bestow a countervailable subsidy on timber harvesters/producers because their availability did not satisfy the specificity test.[160] In this case, the USDOC clarified two essential aspects of the specificity requirement. The first is a need to consider the alleged subsidy program's actual availability, also known as the *de facto* specificity test. The USDOC clarified that a subsidy program's nominal general availability does not create a sufficient excuse under the specificity test. Therefore, the actual use of the alleged stumpage programs had to be examined. The second clarification was that the specific use of a natural resource might reflect its inherent characteristics and the country's current technological development.[161] As a result, the USDOC understood that current limitations on the use of the Canadian stumpage programs did not stem from governmental discretion; thus, specificity did not exist.

[160] United States Department of Commerce (USDOC), Countervailing Duties: Softwood Products from Canada, 48 Feb. Reg. 24167 (1983).
[161] Ibid, at 24176.

The USDOC understood the Canadian stumpage programs to involve subsidy transactions of a type falling under the governmental provision of goods under Section 771 (5)(B) of the Trade Agreement Act 1979. However, it reasoned that the stumpage rates were uniform to all timber harvesters; therefore, the stumpage did not confer a preferential benefit on the timber harvesters.[162] The USDOC also refused to use the external benchmark proposal (the U.S. prices) to measure the preferential benefit conferred by the alleged stumpage programs.[163]

As we will see in subsequent chapters, the USDOC might forget its own words when the *Softwood Lumber* saga comes to the WTO twenty years later. For all of the above "impartial" interpretations of the USDOC, Professor Daowei Zhang observed that *Softwood Lumber* in 1983 was a "politic-free" trade dispute.[164] The case was fundamental in presenting the three main problems of a future natural resource subsidy dispute: the inherent specificity, the use of an external benchmark for the subsidy calculation, and the input subsidy situation.

In all subsequent anti-subsidy cases brought against the natural resource underpricing practice, the USDOC consistently applied its *de facto* specificity test coined in *Softwood Lumber (1983)*. A notable example was a series of natural resource underpricing cases, *Ammonia*, *Carbon Black, Cement from Mexico (1983),* that were in regard to natural gas pricing policies of the PEMEX.[165] U.S. domestic competitors accused Mexico's energy underpricing programs of conferring a countervailable benefit on its domestic downstream producers of

[162] Ibid, at 24167.

[163] David Scott Nance, 'Natural Resource Pricing Policies and The International Trading System', 30(1) Harvard International Law Journal 65 (1989), at 85–86. The USDOC explained, "The standard contained in subsection (ii) is 'preferential,' which normally means only more favorable to some within the relevant jurisdiction than to others within that jurisdiction," Ibid, at 24167.

[164] Daowei Zhang, above n 80, at 35.

[165] PEMEX or Petróleos Mexicanos is a state-run petroleum company in Mexico. It has been a state monopoly for petroleum and gas exploitation/distribution in this country but now this monopolization is supposed to end. See The Wall Street Journal, 'Mexico Energy Bill to End Pemex's Monopoly on Oil', December 7, 2013, https://www.wsj.com/articles/mexico-energy-bill-to-end-pemex8217s-monopoly-on-oil-1386452140 (visited November 3, 2021).

ammonia, black carbon, and cement. However, relying on its experience with the specificity test, the USDOC once again found no existence of a countervailable subsidy because such natural gas underpricing programs were accessible by most Mexican industrial users.[166]

The U.S. domestic producers that failed to request countervailing duties against foreign natural resource underpricing practices perceived the (domestic) anti-subsidy instrument to be almost ineffective under the USDOC's "inflexible" application. As is a natural tendency in U.S. trade politics, they made their growing dissatisfaction known to the U.S. Congress.[167] The natural resource underpricing problem then underwent its legal evolution through political debates, institutional conflicts, and perhaps international dissents. Congress implacably and critically challenged the USDOC's "moderate" approach toward foreign natural resource underpricing policies. Afterward, new legislation was necessarily enacted for this emerging phenomenon.

1.2.2. Natural resource underpricing debates for the U.S. upstream subsidies legislation

As observed from early subsidy cases in U.S. domestic litigation, there are two forms of the natural resource underpricing practice. First, the government or its agencies directly provide natural resources (extracted natural resources or tradable natural resources) to its downstream producers at below-market prices, such as in Mexico's natural gas underpricing programs. Thus governmental underpricing mechanism will be called the "**direct**" natural resource subsidy.

The other form of natural resource underpricing is the governmental provision of below-market natural resource exploitation rights to respective resource exploiters/producers

[166] Judith Hippler Bello and Alan F. Holmer, 'Subsidies and Natural Resources: Congress Rejects a Lateral Attack on the Specificity Test', 18(2) George Washington Journal of International Law and Economics 297 (1984), at 308–12.

[167] Charlene Barshefsky and others, 'Foreign Government Regulation of Natural Resources: Problems and Remedies Under United States International Trade Laws', 21(1) Standford Journal of International Trade Law 251 (1985), at 44.

(upstream producers). The natural resource inputs produced by such upstream producers are then purchased by producers of the subsidy-alleged merchandise (downstream producers). The underlying question becomes whether a subsidy by the underpriced natural resource exploitation rights conferred upon the upstream producers is transferred to the downstream producers of the subsidy-alleged merchandise. Thus situation will be called the "**indirect**" natural resource subsidy. The case of the Canadian stumpage programs in *Softwood Lumber (1983)* is a precise demonstration of this upstream–downstream subsidy circumstance.

The problems of the natural resource underpricing practice were first brought to the 1983 U.S. congressional debate and included both the direct and indirect forms of the natural resource subsidy. One group of legislative proposals directly addressed the governmental provision of underpriced resources to its downstream exporters (direct subsidy). The other was proposed to discipline the natural resource input subsidy (indirect subsidy). Both types of legislative pursuit exhaustively went through the U.S. shuffle legislative process. In the end, only the latter (the indirect natural resource subsidy) successfully claimed a position in the U.S. Trade and Tariff Act 1984.

Two bills concerning the direct natural resource subsidy were from Representative W. Henson Moore (H.R.4015) and Representative Sam Gibbons (H.R.4784). At first glance, the natural resource subsidy proposal in H.R.4784 appeared to be more sophisticated in structure and language than its counterpart. Both bills attempted to add a new subparagraph to Section 771(5) of the Tariff Act of 1930 to discipline the direct natural resource subsidy practice.[168] Accordingly, if the government provided a natural resource input to its exporters at a discounted price as compared to the fair market value, a countervailable subsidy could be found to exist. These bills surprisingly eliminated the specificity test for justifying the subsidy situation even though the USDOC had consistently upheld it in previous countervailing cases.

[168] Ibid, at 50.

In hearings before the House Subcommittee on Trade, the H.R.4784 Bill provoked huge concerns from representatives of agricultural states. These representatives asserted that U.S. agricultural exports could confront aggressive foreign retaliation if such sensitive legislation was enacted. For example, Representative Arlan Stangeland from Minnesota remarked:[169]

> Unfortunately, H.R.4784 would extend countervailing duty law into areas that many fears would invite direct retaliation against our farm exports and other key exports […] American farmers, more than anyone else, realize the end result of a retaliatory trade war would mean less market for our farm exports and other key exports […]America's farmers, more than anyone else, realize the end result of a retaliatory trade war would mean less markets for our farm exports, huge surpluses and lower commodity prices at home, and a contracting world economy…

The Administration (the executive branch of the U.S. Government) expressed strong opposition against these direct natural resource subsidy proposals. It presented numerous counterarguments against such "protectionist" proposals, such as confronting foreign retaliation from mirror legislation, undermining the natural comparative advantage of a trading nation, causing backfires on U.S. consumers, or being inconsistent with U.S international obligations.[170] Nevertheless, the H.R.4784 Bill still successfully passed the House round.

This House-passed bill did not survive under the Republican-controlled Senate. The Senate also prepared its own proposal by adding to the Tariff Bill (H.R.3398) an "upstream subsidies" clause for counteracting the indirect natural resource subsidy practice.[171] The House, in its turn, reconsidered the H.R.3398 Senate-passed version and appended to this bill the direct natural resource subsidy provision. It was clear that the Senate and the House had a difference

[169] Ibid, at footnote 51.
[170] Judith Hippler Bello and Alan F. Holmer, above n 166, at 320–27.
[171] S. 2952 – A bill to improve the operation of certain trade laws of the United States (by Senator John Heinz) at the 98th US Congress.

of opinion regarding the object of the countervailability. Therefore, they went into a bicameral conference to seek an agreement.[172] The Senate steadily rejected the direct natural resource subsidy provision, and the House ultimately surrendered. Therefore, after strident congressional debates, only the upstream subsidies proposal (of the Senate) was included in the final bill. The draft provision was finally adopted to implicitly discipline the indirect natural resource subsidy under a generic form: the upstream subsidy.

The upstream subsidies clause added by the Trade and Tariff Act of 1984 includes both substantive and procedural rules. There are three requirements to arrive at the conclusion that an upstream subsidy exists: (1) a subsidy conferred on an input product used in the production of merchandise subject to a countervailing proceeding; (2) a competitive benefit bestowed on the downstream merchandise; and (3) a significant effect (of the upstream input product) on the manufacturing costs of the downstream merchandise.[173] From these legal criteria, two layers of an upstream subsidy examination are (1) whether an upstream subsidy is conferred on the input product and (2) whether the competitive benefit derived from this upstream subsidy is transferred onto downstream products. This 1984 upstream subsidies provision was subject to several minor amendments to reach its present version in 1996, mainly for clarification and consistency purposes.[174]

As guidance, Section 351.523 of the U.S. Code of Federal Regulations (C.F.R) explains that the term "input product" means "any product used in the production of the subject merchandise."[175] This means that the input product might not only be natural resource inputs;

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[172] Hans-Michael Giesen, above n 159, at 284–86.

[173] Sec.771A. Upstream Subsidies (19 1677-1) of Title VII of Tariff Act 1930, added by Sec. 613, Tittle 5 of Trade and Tariff Act 1984.

[174] The upstream subsidies section was subsequently amended on Oct. 22,1986 (100 U.S Congress), Dec. 8,1994 (108 U.S Congress), and Oct. 11,1996 (110 U.S Congress).
See Legal Information Institute (Cornell University), https://www.law.cornell.edu/uscode/text/19/1677-1 (visited November 3, 2021).

[175] U.S. Code of Federal Regulations, Section 351.523(b).

however, the upstream subsidy provision's legislative history exclusively reflects the natural resource underpricing concern. This provision was subsequently the subject matter of several GATT subsidy disputes.[176] GATT's jurisprudence in this matter has been the legal basis for future input subsidy disputes at the WTO.

1.2.3. Post-upstream subsidies legislation: continuous debates

The debates over foreign natural resource underpricing practices promptly regained the stage in the U.S. 99th Congress (1985–1986). The direct natural resource subsidy – the governmental provision of underpriced natural resources to downstream exporters – was the sole subject matter of this second legislative campaign.[177] Proposals required two main elements to constitute a natural resource subsidy: (1) the domestic price of an alleged natural resource is lower than the fair market value; and (2) this natural resource input constitutes a significant portion of total production costs of the subsidy-alleged merchandise.[178] The subsidy amount is estimated by the difference between the alleged natural resource's domestic price and its fair market value under arm's length conditions. Apparently, such natural resource subsidy proposals ignored the specificity test which had been consistently upheld by the USDOC because this requirement could constrain enforcement.

To substantiate the House's hearings, the U.S. International Trade Commission (USITC) submitted a report entitled "Potential Effects of Foreign Governments' Policies of Pricing Natural Resources" at the request of Representative Sam M. Gibbons. The report had

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[176] Input subsidy disputes concerning agricultural input products: *EEC – Pasta Subsidies*, *Canada – Manufacturing Beef*, *US – Canadian Pork*, and *US - Norwegian Salmon.* Input subsidy disputes concerning natural resources*: US – Softwood Lumber I* and *US – Softwood Lumber II*.

[177] These Bills were H.R. 2345 – A bill to define natural resource subsidies for purposes of the countervailing duties – (Rep. Moore); H.R. 2451 – A bill to amend Title VII of the Tariff Act of 1930 in order to apply countervailing duties with respect to resource input subsidies – (Rep. Gibbons) in 1985; S. 1292 – A bill to amend Title VII of the Tariff Act of 1930 in order to apply countervailing duties with respect to resource input subsidies – (Sen. Baucus); and S. 1356 – Trade Law Modernization Act of 1985 – (Sen. Heinz) in 1986.

[178] H.R. 2345 at Section 771(5) (B)(i); H.R. 2451 at Section771(B) (a)(1)(A). However, the Ribbons Bill H.R. 2451 contained the removal rights as a special case of natural resources in the subsidy context. It seemed to reflect current concerns over the *Softwood Lumber* dispute with Canada.

two significant implications: first, preferential natural resource pricing is just one policy instrument to promote industrial competitiveness; and second, lowering natural resource prices could provide a production cost advantage to domestic industries which use such resources.[179] Another report from the Congressional Budget Office presented possible difficulties in calculating the fair market value of natural resources and envisioned possible repercussions if such a sensitive subsidy legislation was enacted.[180]

The Administration still affirmed its dissenting position against these "precarious" bills. The opposition lent support from foreign representatives (from Canada and Mexico) who directly participated in the congressional debates. On behalf of the Coalition to Promote America's Trade (later the USTR [1996–2001]), Charlene Barshefsky contended that enactment of such natural resource subsidy proposals was unnecessary and ill-advised. She further stated that these flawed amendments should not be requested because Section 301 (The U.S. Trade Act 1974) could adequately address foreign natural resource underpricing practices.[181] More philosophically, the American Bar Association criticized these subsidy bills as an unwise trade policy because they misperceived the legitimate governmental role in natural resource management.[182] By the same token, Francois Tougas maintained that if enacted, these proposals could undermine trading countries from fully benefitting from their natural comparative advantages. This scholar also argued that such unfair trade concerns should be

[179] United States International Trade Commission (USITC), *Potential Effects of Foreign Governments' Policies of Pricing Natural Resources*, (USITC, 1985), x-xi.
[180] See U.S. Congress (Congressional Budget Office), *Effects Of Countervailing Duties On Natural Resource Input Subsidies*, (U.S. Congress, 1985).
[181] U.S. Congress, *Natural Resource Subsidies: Hearings before the Subcommittee on Trade of the Committee on Ways and Means,* (U.S. House of Representatives, 1985), 406–07.
[182] Committee Report (American Bar Association), 'The Natural Resource Subsidy Debate : A Critique of Proposed Legislative Action', 21(1) International Lawer 285 (1987), at 320.

handled multilaterally (e.g., by the GATT/Uruguay Round forum) rather than through a unilateral response.[183]

There were several arguments to support countervailability of the natural resource subsidy practice. First and foremost, domestic resource-intensive industries praised these proposals as a desirable anti-subsidy instrument to uphold their "playing field." According to John A. Ragosta, countervailability of the natural resource subsidy practice should be acceptable under GATT and the Subsidies Code 1979 because these international instruments do not explicitly exclude this kind of governmental subsidy. He argued that if the exporting country upholds the sovereign right to provide underpriced natural resources to its domestic exporters, the importing country should retain the sovereign right to respond with the countervailability.[184] In addition, at least one author suggested amending the Subsidies Code to tackle this "natural advantage" subsidy.[185]

Unable to withstand such massive opposing pressure, especially from the Administration, all direct natural resource subsidy bills were once again defeated in the U.S. 99th Congress. The issue resurfaced in the U.S. 100th Congress in 1988 but was finally stopped by the presidential veto.[186] Since then, this controversially unfair trade demand has gradually gone into retreat.

To conclude Section 1.2, natural resource underpricing was one of the most controversial topics in U.S. trade politics in the 1980s. The main question was how to put the natural resource underpricing problem into the subsidy law context. An array of natural

[183] Francois Tougas, 'Softwood Lumber from Canada: Natural Resources and the Search for a Definition of Countervailable Domestic Subsidy', 24(1) Gonzaga Law Review 135 (1988), at 163–65.
[184] John A. Ragosta, 'Natural Resource Subsidies and the Free Trade Agreement: Economic Justice and the Need for Subsidy Discipline', 24(2) George Washington Journal of International Law and Economics 255 (1990), at 266–69.
[185] Shi-Ling Hsu, 'Input Dumping and Upstream Subsidies: Trade Loopholes Which Need Closing', 25(1) Columbia Journal of Transnational Law 137 (1986), at 164.
[186] David Scott Nance, above n 163, at 105.

resource underpricing disputes before the USDOC and the subsequent legislative agendas might be sufficient to portray the complexity of the natural resource subsidy phenomenon.

In terms of the subsidizing object, there are two types of natural resource subsidy practices. The first is the governmental provision of underpriced natural resources to its downstream exporters. This situation is as normal as the governmental provision of goods to domestic industries at below-market value; therefore, it should not be a natural resource problem in the subsidy context. The second is the governmental provision of underpriced exploitation rights over natural resources to upstream exploiters or even downstream exporters. This is a unique feature of the natural resource subsidy practice because it directly connects to sovereignty over natural resource disposals.

There are also two types of natural resource subsidy practices in terms of the subsidy transaction mechanism. Suppose the government provides below-market exploited natural resources or exploitation rights over natural resources directly to its downstream exporters. In that case, the practice should be called a "**direct**" natural resource subsidy. However, there is also the case in which the government grants natural resource exploitation rights at below-market value to a natural resource exploiter (upstream producer). Such an upstream producer then sells exploited resources to a producer of the subsidy-alleged merchandise (downstream producer). Suppose a subsidy from the below-market exploitation rights conferred on the upstream producer is proven to transfer to the downstream producer. In that case, it should be called an **"indirect**" natural resource subsidy.

The U.S. executive branch in the 1980s consistently opposed all legislative proposals aimed at disciplining any foreign natural resource underpricing practice as a type of subsidy. It claimed that this legislative movement could result in an abundance of negative repercussions. After a strident and complicated legislative process, the upstream subsidy or input subsidy proposal was placed in the U.S. legislation to implicitly capture the indirect natural resource

subsidy. By contrast, the direct natural resource subsidy was too controversial for a legal response at that time.

Despite huge controversies at home, the United States brought the natural resource underpricing concern to the Uruguay Round for an international solution. The natural resource underpricing phenomenon then began its global adventure.

1.3. From domestic to international: the natural resource underpricing problem in the Uruguay Round

There was perhaps no better place than the Uruguay Round for the United States to express its concerns over the natural resource underpricing practice. At the same time, it had domestically experienced the issue for nearly a decade. The United States proceeded with its agenda as part of two negotiating groups established by the Punta del Este Declaration 1986: Natural Resource-based Products (NG3) and Subsidies and Countervailing Measures (NG10).[187] The U.S. position on the issue invited support from a few industrial partners. Nevertheless, developing countries were very critical of this "protectionist" agenda. The simple reason was that the U.S. proposals likely directly threatened their national sovereignty over natural resources. Negotiators from the South could find their rationale in the general international law of natural resource sovereignty.[188] This broad background, to some extent, heralded a tough road ahead for multilaterally disciplining the natural resource underpricing practice under the subsidy context.

1.3.1. Debates at the negotiation group on natural resource-based products (NG3)

As the largest trading nation and the traditional pioneer in international trade rulemaking, the United States went ahead and submitted its agenda to the NG3 group. In its first submission, the United States mentioned five specific but related practices which were

[187] GATT, Ministerial Declaration on the Uruguay Round, MIN.DEC, September 20, 1986, paras 47, 68.
[188] See Introduction at (ii).

assumed to impede free trade in natural resource-based products. Three out of the five concerns explicitly or implicitly related to the natural resource subsidy practice: dual pricing, export restrictions, and government ownership.[189] These matters were subsequently crystalized in another U.S. submission titled "Natural Resource-based Products: Two-Tier Pricing Issue." The terms "two-tier pricing" and "dual pricing" seemed to be interchangeably used here, similar to the European Communities' term "double pricing."

From the U.S. perspective, the dual-pricing practice was understood to be "any government programs or actions to establish domestic prices for natural resources at some level below the value they would otherwise have if determined by market forces in a situation where there are no impediments to export."[190] This price-setting practice certainly confers a cost advantage on downstream domestic industries based on the natural resource advantage. Therefore, the dual-pricing practice directly connects to government ownership of natural resources. This type of ownership is likely to create the government's "natural" predominant position in natural resource production and distribution. The United States emphasized that it did not intend to challenge the sovereign rights over natural resources of a trading nation. Yet it expressed tremendous concerns about the use of such a natural advantage to artificially cause trade distortions. It explained:[191]

> However, cases can exist in which governments use their ownership or control of industries to control the availability of raw materials for commercial advantage, cross-subsidize otherwise non-competitive production, and provide other trade advantages to firms under their jurisdiction. Moreover, the lack of transparency inherent in such situations points to the need to examine potential trade-distorting effects.

[189] GATT, Submission from the United States, MTN.GNG/NG3/W/2, July 1, 1987, at 2–4.
[190] GATT, Natural Resource-Based Products: Two-Tier Pricing Issue – Submission from the United States, MTN.GNG/NG3/W/13, June 8, 1988, at 2,3.
[191] GATT, above n 189, at 4.

In response, the group of least-developed countries expressed their firm approach to the natural resource advantage issue:[192]

> Natural resource-based products are of major importance to the trade and development of least-developed countries and the sovereign right of these countries to adopt all appropriate measures for the safeguard and development of such resources must be recognized. Any agreement in this sector shall allow for the right of least-developed countries to protect and optimize their natural resource products and provide for support and assistance, including assistance to export development.

The United States also contended that the dual-pricing practice in the natural resource sector is relevant to the imposition of export restrictions against the natural resources concerned. It was critical of using quantitative restrictions (generally prohibited by GATT Article XI) to artificially keep natural resource inputs at a below-market price for domestic use. It admitted that some export-control practices could be consistent with GATT (e.g., export taxes); however, their trade-distortive effects should be called to the attention of this negotiating group.[193]

Australia and the European Communities lent support to the U.S. natural resource underpricing proposals. The Australian submission in June 1988 mentioned the dual-pricing practice and the government ownership problem as "two clear examples" of the trade-distortive measures in the natural resource sector. This country exclusively concentrated on extractive industries (mineral, fossil fuels) – the most critical resources in this period.[194] The European Communities, in turn, observed that the double-pricing practice usually generated trade effects similar to a subsidy. The current negotiators should therefore "bring about a higher degree of

[192] GATT, Proposals on Behalf of The Least-Developed Countries, MTN.GNG/NG3/W/29, November 14, 1989.
[193] GATT, above n 189, at 3.
[194] GATT, Subsidies and Other Non-Tariff Support Programs Affecting Market Access in World Minerals, Metals and Energy Trade – Submission from Australia, MTN.GNG/NG3/W/12, June 3, 1988, at 6–7.

multilateral disciplines in the recourse to such measures."[195] However, in the end, the natural resource underpricing debate within this negotiating group closed without an imprint.

1.3.2. Draft Article 14(e) to the Subsidy Agreement (NG 10): a failed attempt toward natural resource underpricing practice

The United States explicitly raised distinct features of the natural resource sector before the subsidy negotiating group in its submission in June 1988. Like those presented before NG3, the United States criticized the trade-distortive effects caused by three distinct but relevant natural resource practices: dual-pricing, export restraints, and government ownership. It maintained that such market-intervention schemes should be considered a "traditional" subsidy.[196] At a meeting in the middle of the Uruguay Round, one participant (possibly the U.S. delegate) relentlessly demanded the multilateral subsidy response to be taken against these practices. By contrast, several participants argued that natural resource pricing policies reflect a trading nation's legitimate comparative advantages. Therefore, such trade advantages could not be considered as the cause of trade distortions.[197]

The United States distinguished the subsidy treatment between the government's provision of extraction/exploitation rights with respect to natural resources *versus* the government's provision of processed natural resources. In this case, processed natural resources were understood as "natural resources which have been extracted and undergone primary processing by the government or the government-owned entities." The United States proposed that if the government's provision of processed natural resources is open to all parties on the same terms and conditions, such governmental provision is permitted. Similarly, suppose the government provides natural resource exploitation rights through an auction

[195] GATT, Natural Resource-Based Products – Submission by the European Communities, MTN.GNG/NG3/W/37, June 25, 1990, at 2–3.
[196] GATT, Communication from the United States, MTN.GNG/NG10/W/20, June 15, 1988.
[197] GATT, Meeting of 21 June 1990 - Note by the Secretariat, MTN.GNG/NG10/20, July 3, 1990.

bidding process which is open to all parties. In that case, the practice should be considered a non-actionable subsidy and be permitted.[198]

It may be understood from the U.S. perspective that indiscriminate access and market mechanisms are requisite to constitute an "undistorted" practice in the natural resource sector. Attention should be paid to the above distinction because this historical note might provide an implication for future resource subsidy jurisprudence. At least in this drafting period, natural resource exploitation rights may not have been included in the same category as exploited natural resources from the U.S. perspective. The notion of indiscriminate access to natural resource products appeared in Article 14(e) of the Chairman Draft Text (Cartland IV) likely due to U.S. persistent demand. This provision reads as follows:[199]

> When the government is the sole provider or purchaser of the good or service in question, the provision or purchase of such good or service shall not be considered as conferring a benefit, **unless the government discriminates among users or providers of the good or service**. Discrimination shall not include differences in treatment between users or providers of such goods or services due to normal commercial considerations. (Emphasis added.)

There is no doubt that this proposed provision was aimed at addressing the governmental provision of natural resources to downstream industries on preferential terms and conditions. However, the United States might further emphasize the treatment of access between domestic and foreign purchasers.[200] Mexico strongly criticized this draft provision as going far beyond the natural resource underpricing concern. It asked for a clarification that

[198] GATT, Elements of the Framework for Negotiations – Submission by the United States, MTN.GNG/NG10/W/29, November 22, 1989.
[199] GATT, Draft Text by the Chairman, MTN.GNG/NG10/W/38/ rev.3 (Cartland Draft Text IV), November 6, 1990.
[200] GATT, above n 190, at 5.

would read "unless the government discriminates **within its territory** among users or providers of the good or service"[201] (emphasis added).

Mexico argued that without such a clarification, a country would likely denounce its own natural comparative advantage which could be inconsistent with the national treatment principle.[202] Draft Article 14(e) was subsequently dropped from the final draft text; therefore, it has no place in the current Subsidy Agreement. Professor Julia Qin calls this historic draft a mystery,[203] and perhaps it is. However, suppose how harshly the Mexican exporters confronted the natural resource subsidy allegations in U.S. domestic litigation could be observed. It could then be partly understood how tough it was for this draft provision to get approval. In other words, the current Subsidy Agreement has no particular provision for natural resources under the subsidy context though the issue was brought for debate in its drafting history.

To conclude Section 1.3, relying on its own "abundant" domestic experiences, the natural resource underpricing problem was brought by the United States to the Uruguay Round (1986–1994). This complex topic was discussed in two negotiating groups: the Natural Resource-based Products group (NG3) and the Subsidies and Countervailing Measures group (NG10). There were three main concerns about the natural resource underpricing problem: dual-pricing practice, export restraints, and government ownership over natural resources. The U.S. proposals were staunchly supported by the European Communities and Australia, representing the "industrialist" perspective on natural resources in international trade relations. By contrast, developing countries (explicitly Mexico) consistently affirmed the "sovereigntist" approach to this topic. The overall result of this "natural resource underpricing game" was clear: nothing was agreed upon for a multilateral solution. The Draft Article 14(e) to the

[201] GATT, Subsidies and Countervailing Measures – Communication from the Permanent Delegation of Mexico, MTN.TNC/W/38, November 26, 1990. No other opposition could be found in records of the negotiation except for this one by Mexico.
[202] Ibid.
[203] Y.Qin, above n 75, at 584.

Subsidy Agreement was proposed as an attempt for a multilateral response to the natural resource underpricing problem, but this historical draft was soon omitted. Nevertheless, its legacy might endure when the problem resurges in future WTO disputes.

Conclusion of Chapter 1

Natural resources in the subsidy context, or the natural resource underpricing problem, was the critical subject of U.S. trade politics in the 1980s. The USDOC's experiences in dealing with this emerging phenomenon were a rich source of information for subsequent debates in the U.S. Congress. Generally, natural resources under the subsidy context are understood as the governmental provision of below-market natural resources (exploited resources as a form of goods) or below-market natural resource exploitation rights to domestic industries. Exploitation rights are the unique feature of natural resources under the subsidy context, directly connecting it to natural resource sovereignty.

There are two forms of the natural resource subsidy practice. The **direct** natural resource subsidy connotes a situation in which the government directly provides natural resources (both exploited and unexploited) at below-market value to its downstream exporters. In other words, this is the dual-pricing or two-tier pricing practice that has consistently been condemned by the United States. Secondly, there is a possibility that the government confers natural resource exploitation rights at below-market charges to an upstream exploiter/producer (input producer). The underpriced resource inputs of this exploiter are then purchased by a downstream producer of the subsidy-alleged merchandise. This upstream–downstream relationship is called the **indirect** natural resource subsidy – a form of the input subsidy situation.

After intense congressional debates, U.S. subsidy law implicitly disciplined the indirect natural resource subsidy by the upstream subsidies clause under Section 771A of the Tariff Act 1930 (inserted in 1984). However, the direct natural resource subsidy was too controversial at that time. Among other reasons, a trading nation's sovereignty was the primary concern.

The U.S. then took the initiative to bring the natural resource underpricing problem to debates at the Uruguay Round. At this forum, conflicts gradually emerged between the

industrial interests and the natural resource sovereignty interests. Like the United States or the European Communities, the industrialists demanded that the natural resource underpricing practice be defined as a governmental subsidy. By contrast, numerous developing-country negotiators perceived this demand as a threat to their natural resource sovereignty. As a result, no multilateral compromise to explicitly put natural resources under the international subsidy regime could be achieved.

Consequently, the current Subsidy Agreement does not clarify or specifically mention natural resources in the subsidy context. It is likely that the Draft Article 14(e) to the Subsidy Agreement (Cartland Draft Text IV) was designed to discipline the natural resource underpricing problem. Although this draft provision was soon removed from the final text, it might imply the direction of future natural resource subsidy debates at the WTO.

Chapter 2

NATURAL RESOURCES UNDER THE GATT/WTO SUBSIDY REGIME: SETTING LEGAL STANDARDS

Among other natural resource subsidy cases litigated under U.S. subsidy law, *Softwood Lumber* has loomed as the most acrimonious trade dispute in the history of modern international trade. The heart of the dispute were the stumpage programs maintained by the Canadian provincial governments that the United States believed to confer a countervailable benefit to exported softwood lumber to U.S. markets. Canada explained its stumpage mechanism as "the right to harvest standing timber. It is transferred to harvesters as part of tenure agreements that generally require harvesters to assume a variety of obligations including roadbuilding, silviculture and numerous other forest management responsibilities."[204] The stumpage charges are similar to royalties or resource-rent taxes paid for exploiting other *in situ* natural resources such as coal, iron ores, or minerals. The practice is prevalent in the management of public natural resources.[205]

This natural resource pricing controversy stemmed from different attitudes toward governmental roles in natural resource management and economic development. In Canada, over 90 percent of forest lands is under federal and provincial ownership. Therefore, the forest management authorities would administratively set the stumpage price for tenure-holders. Canada has consistently maintained three core principles in setting the stumpage arrangement – economic, social, and environmental sustainability – in order to pursue a sustainable forest policy.[206] By contrast, over 70 percent of forest lands in the United States are in private

[204] Panel Report*, Softwood Lumber IV*, Annex A, para 24.
[205] Jack Mintz and Dtuanjie Chen, 'Capturing Economic Rents from Resources Through Royalties and Taxes', SPP Research Papers vol.5(30), University of Calgary 1 (2012), at 1–45.
[206] Martin K. Luckert, David Haley, and George Hoberg, *Policies for Sustainably Managing Canada's Forests: Tenure, Stumpage Fees, and Forest Practices*, 1st ed. (UBC Press, 2011), 1–16.

ownership, accounting for nearly 90 percent of industrial wood supplies. Market principles certainly set the stumpage price in this situation through competitive auction or other market-determined mechanisms.[207] Stephanie Golob succinctly described the *Softwood Lumber* saga: "The United States acts to defend its market-driven lumber interests from what is seen as unfair Canadian statist protectionism. At the same time, Canada claims that its state-led rather than market-driven system is necessary to maintain the industry and calls for its neighbor to adjudicate through dispute settlement rather than unilateral countervailing action."[208]

This "natural resource rights" conflict is monumental for considering natural resources under the multilateral subsidy regime. In terms of the taxonomy introduced in Chapter 1, the dispute can be classified as an indirect natural resource subsidy situation. In other words, this case is concerning natural resources in the upstream/input subsidy context. However, the complexity of the timber supply chain might involve the direct natural resource subsidy situation. The subject matter of this harvesting rights dispute is not exploited natural resources as a form of trading goods (which the United States called "processed natural resource products" in the Uruguay Round) but rather the right to exploit a natural resource in its natural state (standing timber but not harvested timber). Therefore, the situation is very distinctive of natural resources under the multilateral subsidy rules as well as international trade law in general.

This chapter first investigates the emergence of the *Softwood Lumber* conflict in the GATT period. Most studies ignore or inadequately discuss the softwood dispute in this "precursor stage." However, this preliminary phase can be meaningful because it sets an analytical framework for future natural resource subsidy disputes at the WTO. Given that the international subsidy rules at that time were prematurely established under respective GATT

[207] Roger A. Sedjo, 'Comparative Views of Different Stumpage Pricing Systems: Canada and the United States', 52(4) Forest Science 446 (2006), at 446–50.
[208] Stephanier Golob, 'North America beyond NAFTA? Sovereignty, Identity, and Security in Canada–US Relations', 52 Canadian-American Public Policy 1 (2002), at 16.

articles and the Subsidies Code 1979, it is interesting to observe how the GATT adjudicators considered the intricate softwood problem with such limited legal bases. The *Softwood Lumber* conflict was subsequently brought before the WTO, thus providing an opportunity to compare the WTO interpretations to the GATT jurisprudence. Indeed, the WTO jurisprudence in *Softwood Lumber IV* formally placed natural resources in their natural state under the subsidy law domain.

2.1. Natural resources in the past subsidy rules: *Softwood Lumber* under the GATT

2.1.1. GATT's involvement with no adjudicating results

The *Softwood Lumber* conflict between the United States and Canada was brought to GATT in 1983, 1986, and 1991 in response to unilateral countervailing actions from the United States. The *Softwood Lumber* case before the USDOC in 1982 marked the commencement of a long series of tit-for-tat actions.[209] In the middle of the dispute, Canada sent a request to GATT asking for conciliation pursuant to Article 17 of the Subsidies Code.[210] However, the final non-subsidy determination of the USDOC (1983) put an end to the GATT proceeding. This 1982 countervailing case was the only occasion in which the USDOC denied the grant of countervailing duties against Canadian softwood products. Canada later relied on this result to criticize the United States for "swallowing its words."[211] Nevertheless, one trade lawyer involved in the dispute contended that the later reversed results against the Canadian stumpage programs were due to the development of U.S. subsidy law rather than the protectionism in U.S. trade politics.[212]

[209] Joseph A. McKinney, 'The Political Economy of the U.S.–Canada Softwood Lumber Dispute', Canadian-57 American Public Policy 1 (2004), at 3.
[210] GATT, Request for Conciliation under Article 17 of the Agreement – Communication from Canada, SCM/40, 17 February 1983.
[211] Panel Report (GATT), *Softwood Lumber II*, para 122.
[212] John A. Ragosta, above n 184, at fn 9.

A material change in the subsidy determination in *Cabot Corp v. The United States (1985)* set the legal premise for the second countervailing challenge against the Canadian stumpage programs. In this case, the United States Court of International Trade (USCIT) rejected the USDOC's narrow approach since this authority used the preferential standard (strictly following the legal text at that time) in *Certain Softwood Lumber Products from Canada (1983)* to determine the countervailable subsidy. Instead, the USCIT demanded that the USDOC must concentrate on a broader question of additional benefits or competitive advantages conferred by the alleged subsidy transactions (below-market natural gas and carbon black feedstock in this case).[213] In other words, the USCIT marked a fundamental change in U.S. subsidy law for subsidy calculation in the case of governmental provision of goods or services: from the preferential standard to the competitive benefit standard.

In May 1986, the (U.S.) Coalition for Fair Lumber Imports (CFLI) formally filed a petition asking for 27 percent of countervailing duties against the imported Canadian softwood products. The USDOC promptly initiated a countervailing investigation in early June.[214] Although Canada was signaled for a negotiated resolution of the ongoing conflict, it still asked GATT to review this second trade harassment. Canada maintained that the ongoing investigation results should not be different from the former negative finding in 1983.[215] Canada seemed to ignore the U.S. subsidy law's development regarding the subsidy determination. Also, the USDOC itself changed the specificity test approach which had previously shielded the Canadian stumpage programs from the subsidy accusations.[216] As a

[213] United States Court of International Trade (USCIT)*, Carbot Corp. v. United Sates*, 620F. Supp. 722 (Ct.Intl. Trade 1985) at 499.
[214] Gilbert Gagné, 'The Canada–US Softwood Lumber Dispute: A Test Case for the Development of International Trade Rules', 58(3) International Journal 335 (2003), at 342.
[215] GATT, Request for Conciliation under Article 17 of the Agreement – Communication from Canada, SCM/73, 2 July 1986.
[216] United States Department of Commerce (USDOC), Countervailing Duties: Softwood Products from Canada, 51 Feb. Reg. 37456 (1986).

consequence, the USDOC's preliminary findings in October 1986 upset Canada: a countervailable subsidy was found to exist for the Canadian stumpage programs. In combination with the injury findings by the USITC, the United States asked for 15 percent of countervailing duty bond against the Canadian softwood lumber imports.[217]

Before the preliminary subsidy decision was issued, the Canadian Government requested GATT to establish a panel to review the ongoing softwood lumber investigation (*Softwood Lumber I*).[218] In meetings with the Panel, Canada contended that GATT Article VI never facilitates countervailing duties to offset the comparative advantage in natural resources between trading nations.[219] As observed in the Uruguay Round, this argument was a critical source of debates since different nations could have different perceptions of the comparative advantage concept. The natural resource endowment is undoubtedly a factor in the comparative advantage; however, trading countries continue to dispute *how* such natural endowment is used to gear up the trade advantage.[220]

The Canadian Government did not want the lumber matter to disrupt its current trade agenda with the United States (for the conclusion of the Canada–United States Free Trade Agreement [CUSFTA]).[221] Therefore, it reached the first truce in the *Softwood Lumber* war with its "adversary" at the end of 1986. The United States then dismissed the 1986 preliminary determination, released the bonds, and made a refund to Canada. In return, the Canadian Government imposed an export charge (15 percent) on softwood lumber products bound to the U.S. markets.[222] F. J. Anderson criticized the 1986 USDOC subsidy determination as an

[217] Daowei Zhang, above n 80, at 59–60.
[218] GATT, Request for Establishment of a Panel – Communication from Canada, SCM/76, July 30, 1986.
[219] Panel Report (GATT), *Softwood Lumber I*, para 5.
[220] Sarah E Lysons and others, above n 80, at 440–42.
[221] Daowei Zhang, above n 80, at 60–63.
[222] Iain Sandford, 'Determining the Existence of Countervailable Subsidies in the Context of the Canada–United States Softwood Lumber Dispute: 1982–2005', in D.M. McRae (ed.), *Canadian Yearbook of International Law* (UBC Press, 2006) vol.44, at 304.

"economically unsound" decision. This scholar claimed that the resulting 1986 Softwood Lumber Agreement would damage Canada's sovereignty over natural resource management.[223] Consequently, both the disputing parties notified the GATT Panel of their satisfactory resolution of the dispute; the Panel then declared its mandate complete in January 1987.[224] Thus, in its first involvement, GATT did not have an opportunity to provide its views on how natural resources should be considered under the GATT subsidy disciplines.

2.1.2. GATT's involvement with adjudicating results

On September 3, 1991, Canada dispatched a formal notice to the United States to terminate the 1986 Softwood Lumber Agreement. After the termination took effect, the USTR immediately imposed provisional bond requirements against Canadian softwood lumber imports to buy time for a preliminary subsidy determination.[225] In response, Canada promptly proceeded with the Subsidies Code's procedure for consultation (October 8, 1991) and conciliation (November 1, 1991) and finally requested the establishment of a panel (December 2, 1991; *Softwood Lumber II*). Canada asked the Panel to review the interim measures enforced by the USTR and the subsequent subsidy investigation by the USDOC.[226] With regard to the latter, Canada challenged the USDOC's subsidy self-initiation as being inconsistent with Article 2.1 of the Subsidies Code: "If in special circumstances the authorities concerned decide to initiate an investigation without having received such a request, they shall proceed only if they have **sufficient evidence** on all points under (a) to (c) above" (emphasis added).

Although the Panel's main task was to examine whether the USDOC had sufficient evidence to self-initiate an anti-subsidy investigation, it had to consider the reasonableness of

[223] F. J. Anderson and Robert D. Cairns, 'The Softwood Lumber Agreement and Resource Politics', 14(2) Canadian Public Policy/Analyse de Politiques 186 (1988), at 194–95.
[224] Panel Report (GATT), *Softwood Lumber I*, paras 9–10.
[225] United States Trade Representative (USTR), Initiation of Section 302 Investigation and Request for Public Comment on Determinations Involving Expeditious Action: Canadian Exports of Softwood Lumber, 56 Fed Reg 50739 (1991).
[226] Panel Report (GATT), *Softwood Lumber II*, paras 1–3.

the subsidy claim. This implies that the exercise of discretion by the Panel by no means included a full assessment of the natural resource subsidy situation. However, the disputing parties' arguments on the subsidy question related to the governmental provision of timber harvesting rights are worth studying.

2.1.2.1.Canadian stumpage programs under GATT and the Subsidies Code

The Panel first examined whether the Canadian stumpage pricing practice could constitute a countervailable subsidy as a matter of law. Because the Subsidies Code had no formal definition of the term "subsidy,"[227] the Panel exercised its discretion by referring to GATT Article VI and some clarifications to Article 11 of the Code. In interpreting Article VI, the Panel explained that even though the article provides broad guidance for determining the subsidy's existence, the natural resource pricing practice was not explicitly excluded from the term "subsidy."[228] The Panel also interpreted Article 11 of the Code to mean that the subsidy concept involves a cost to the government (financial contribution) and a benefit thereby conferred on certain recipients.[229] These interpretations set the legal background for justifying Canada's two main arguments in defense of its stumpage pricing programs.

First, Canada contended that a charge for access to public standing timber does not *per se* involve a financial contribution or a cost to the government. It argued that these natural resource pricing schemes were a type of government revenue collection function, such as royalties or taxes, which should be outside the subsidy concept.[230] Canada explained: "the stumpage fee levied **did not constitute** the sale of logs but was rather the collection of some or all of the gain accruing to those who were granted the right of access to government land to

[227] J. Michael Finger and Julio Nogués, 'International Control of Subsidies and Countervailing Duties', 1(4) World Bank Economic Review 707 (1987), at 712.
[228] Panel Report (GATT), *Softwood Lumber II*, paras 340, 341.
[229] Panel Report (GATT), *Softwood Lumber II*, para 342.
[230] Panel Report (GATT), *Softwood Lumber II*, paras 157–159.

extract a natural resource (in this case standing trees) and to perform economic activity to turn them into logs"[231] (emphasis added.)

Canada perhaps attempted to make two distinctions to defend the fiscal nature of its stumpage programs. First, it clarified the difference between the government's revenue collection function and a financial contribution through the governmental provision of goods. However, it still agreed with the Panel's assumption that if the revenue collected in return for providing timber harvesting rights did not sufficiently cover the government costs in the provision of such standing timber, a financial contribution might exist.[232] Despite this, Canada argued as a matter of fact that its government expenditure in the forest sector did not exceed the stumpage revenue collected. As a result, there should be no financial contribution by the Canadian stumpage programs.

Canada then contended that the governmental provision of harvesting rights to standing timber should be distinguished from governmental price-setting for an *exploited* resource, such as natural gas. In the former situation, a natural resource in its natural state is no longer transformed into a good or a resource product that is going through commercial streams.[233] Such a distinction is essential to an examination of the scope of the subsidy rules toward natural resources, as will be argued in Chapter 5.

The United States responded that there were no words in the GATT and the Subsidies Code that were meant to exclude the natural resource underpricing practice from the subsidy regime:[234]

> The **United States** considered that the text of Article 11 of the Agreement contradicted Canada's claim that subsidies provided to natural resource products could not be the

[231] Panel Report (GATT), *Softwood Lumber II*, para 151.
[232] Panel Report (GATT), *Softwood Lumber II*, para 163.
[233] Panel Report (GATT), *Softwood Lumber II*, para 164.
[234] Panel Report (GATT), *Softwood Lumber II*, para 170.

subject of countervailing duty actions. Article 11:1 of the Agreement listed a half-dozen "important policy objectives" in respect of which governments might wish to provide subsidies but did not contain any reference to subsidies provided to natural resource products. Moreover, even subsidies expressly referenced on the list were not considered non-actionable under either the General Agreement or the Agreement. Article 11:2 indicated that a wide variety of domestic subsidies might be countervailed if they caused or threatened to cause injury to a domestic industry.

Nevertheless, it was still unclear whether the Canadian stumpage programs could not involve a cost to the government or revenue forgone (as argued by Canada) based on the available records. Therefore, the Panel considered that the financial contribution question should be empirically answered by further investigation.[235] In the Panel's view, it was thus reasonable for the U.S. investigating authority to initiate a subsidy investigation.

Second, as the economic rationale for the subsidy debate, Canada relied on the economic rent theory[236] to maintain that its stumpage pricing programs did not influence the production costs nor increase the output or price of the exported softwood lumber. Canada explained that through the stumpage charges, its forest authorities simply collected the economic rents in return for cutting public standing timber.[237] Professor William Nordhaus (Yale University) supported this economic rent argument in defense of British Columbia's stumpage system before the CUSFTA proceedings (1992). Professor Nordhaus explained that charging the stumpage fees within a "normal range" of economic rents did not affect the quantity of lumber produced.[238]

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[235] Panel Report (GATT), *Softwood Lumber II*, para 343.

[236] Economic rent is equivalent to that of (positive) economic profit – that is, a return in excess of normal profit, in which the latter is the return that an entrepreneur should earn to cover the opportunity cost of undertaking a certain activity rather than its best alternative. Economists generally classify economic rent into three types: differential or Ricardian rent, scarcity rent, and quasi-rent. WTO, above n 27*,* at 77.

[237] Panel Report (GATT), *Softwood Lumber II,* para 162.

[238] Joseph McKinney, above n 209, at 24.

The United States, by contrast, criticized Canada's economic rent argument as theoretically wrong and that it distanced itself from the real world of supply and demand forces.[239] The United States was lent theoretical support from an economist at Harvard University, Professor Robert Z. Lawrence, who claimed that low stumpage fees could increase supplies in the long-term investment of lumber production.[240] The United States further argued that even if the economic rent rationale could be theoretically accepted, it should be verified by an empirical examination as part of the ongoing investigation.[241] The United States cited an "impartial" source from the World Bank to maintain that the government's inadequate recovery of resource rents could entail severe economic and environmental consequences.[242] In other words, from the U.S. perspective, the Canadian stumpage pricing practice could cause a trade distortion and an investigation should verify this presumption.

As a sole third party to the dispute, Japan generally perceived that pricing natural resources in some cases could generate a trade distortion and might cause an injury to domestic industries of the importing country. Thus, Japan was not convinced by Canada's argument that its stumpage programs could not cause a trade distortion.[243]

The Panel appeared to avoid this economic matter by offering presumptions and logic. It made a presumption that the economic rent theory was relevant to the subsidy question at issue, and that, in its view, this presumption should be empirically tested for the case of the stumpage pricing practice in Canada. The Panel explained that if the stumpage was specifically available only to certain harvesters, this incident could imply that the stumpage mechanism could potentially confer a benefit.[244] In short, the Panel understood that the issue of whether

[239] Panel Report (GATT), *Softwood Lumber II*, para 178.
[240] Joseph McKinney, above n 209, at 24.
[241] Panel Report (GATT), *Softwood Lumber II*, para 179.
[242] Panel Report (GATT), *Softwood Lumber II*, para 180.
[243] Panel Report (GATT), *Softwood Lumber II*, para 296.
[244] Panel Report (GATT), *Softwood Lumber II*, para 347.

the Canadian stumpage pricing programs were a countervailable subsidy or not should be an empirical question. As a result, it considered the U.S. anti-subsidy self-initiation to be reasonable.

2.1.2.2.Canadian stumpage programs from the U.S. perspective

In the Notice of Self-Initiation on October 31, 1991, the United States claimed that it had sufficient evidence to believe that the Canadian stumpage programs conferred a countervailable subsidy on softwood lumber exported to the U.S. markets. The United States claimed that the stumpage programs intentionally granted by the Canadian forest authorities were limited to specific timber harvesters. As a consequence, the situation satisfied the specificity requirement for constituting a countervailable subsidy.[245] The United States further argued that the governmental stumpage was preferentially priced to benefit the timber harvesters as compared to the private stumpage within Canada.[246] The GATT Panel examined these issues based on the facts presented by the United States to justify the subsidy investigation's reasonableness.

The first issue was the specificity element of the Canadian stumpage programs. At that time, the U.S. subsidy law formally endorsed the *de facto* specificity test to justify a countervailable subsidy.[247] The USDOC presented evidence that the Canadian stumpage programs were under governmental discretion to benefit only two industries: the solid wood industry (including lumber) and the pulp and paper industry. Thus, the United States argued that such discriminate treatment fulfilled the *de facto* specificity requirement.[248]

[245] United States Department of Commerce (USDOC), Self-Initiation of Countervailing Duty Investigation: Certain Softwood Lumber Products from Canada, Fed Reg 56055-56057 (1991).
[246] Ibid.
[247] Charlene Barshefsky and Nancy Zucker, 'Amendments to the Antidumping and Coutervailing Duty Laws under Omnibus Trade and Competitiveness Act of 1988', 13(2) North Carolina Journal of International Law and Commercial Regulation 251 (1988), at 279.
[248] Gilbert Gagné, above n 214, at 346.

By contrast, Canada maintained that its stumpage system was used by 27 forest industries categorized in the Canadian Industrial Classification System. Further, industrial timber use naturally depends on the inherent characteristics of the timber resource. Therefore, government discretion did not intentionally create discrimination in favor of the softwood industry. According to Canada, a distinction should be drawn between government discretion for exercising governmental functions in general (natural resource management in this case) and government discretion to provide certain benefits to specific industries according to GATT Article VI.[249] Canada also recalled the 1983 USDOC's finding that the natural resource's inherent characteristics could not fulfill the specific element.[250]

Against these arguments, the United States put forward that the inherent characteristics consideration was ignored by its domestic jurisprudence and rejected during the Uruguay Round negotiations.[251] The United States contended that if Canada's inherent characteristics argument was accepted, it could allow the government to select a specific industry for the granting of subsidies just by claiming its inherent characteristics. Therefore, this situation could be a loophole in the anti-subsidy law.[252] However, Canada countered that this "open-ended" interpretation could pose a risk as it would broaden the subsidy concept against the sovereignty over natural resource management.[253]

The Panel appeared to avoid an investigation of the question of inherent characteristics. It just suggested that the manner of the governmental discretion could constitute "probative evidence" of the specificity requirement.[254]

[249] Panel Report (GATT), *Softwood Lumber II*, para 113.
[250] United States Department of Commerce (USDOC), above n 160.
[251] Panel Report (GATT), *Softwood Lumber II*, para 119.
[252] Panel Report (GATT), *Softwood Lumber II*, para 117.
[253] Panel Report (GATT), *Softwood Lumber II*, para 123.
[254] Panel Report (GATT), *Softwood Lumber II*, para 353.

The second issue was how to estimate the preferentiality conferred by the Canadian stumpage programs and thus the subsidy amount. Canada contested both the method and data of the preferentiality comparison explained by the U.S. investigating authority. Canada argued that there was "no right price" for a public-owned natural resource; therefore, the comparison supposedly made by the USDOC between the administrative-set stumpage charges and the market stumpage prices was improper or inappropriate.[255] However, the Panel explained that it was not necessarily unreasonable for the USDOC to make such a stumpage price comparison to measure the preferentiality.[256] Thus, the remaining question was the appropriateness of the benchmark chosen for the preferentiality comparison. On this matter, Canada argued that the United States was incorrect to consider cross-jurisdictional data because of stark differences in stumpage mechanisms across the federal system (Canada). The Panel noted that the USDOC had showed evidence of necessary adjustments to such contextual differences and appeared to agree with the USDOC's preferentiality comparison.[257]

In summary, the Panel understood that the natural resource underpricing practice was not an exception to the GATT's subsidy concept. The Panel was ultimately in favor of the United States in initiating a countervailing investigation. By limiting itself only to the procedural issues, the Panel intentionally refused to be involved in the complexity of this natural resource subsidy dispute. Canada presented two well-supported arguments to defend its timber pricing programs against the GATT rules: the government's revenue collection function and the economic rent theory. Canada also put forward two other arguments to shield its stumpage programs against the U.S. subsidy law: the timber resource's inherent characteristics and the unreasonableness of the preferentiality comparison by the USDOC. These four substantiated arguments would set the analytical framework for a future natural

[255] Panel Report (GATT), *Softwood Lumber II*, para 143.
[256] Panel Report (GATT), *Softwood Lumber II*, para 354
[257] Panel Report (GATT), *Softwood Lumber II*, para 356.

resource subsidy dispute. The subsequent *Softwood Lumber* debates at the WTO would examine most parts of this framework but under the newborn multilateral subsidy rules.

2.2. Natural resources in the WTO subsidy rules: *Softwood Lumber IV*

Like the first episode in the 1980s, the *Softwood Lumber* disputes in the 1990s finally ended with the second truce – the 1996 Softwood Lumber Agreement. After five years of existence, the Agreement was terminated on March 31, 2001 without an extension.[258] Right after the Agreement's expiration, the U.S. softwood coalition (and its allies) continuously filed petitions to request anti-subsidy and anti-dumping investigations against several Canadian forest programs, primarily concerning the provincial stumpage pricing practice. Anti-dumping claims were the new development in the old debate. However, this dissertation will concentrate on the subsidy matter only.

On October 25, 2001, Canada requested a panel established by the WTO dispute settlement mechanism to consider the preliminary results of the ongoing U.S. anti-subsidy investigation (*Softwood Lumber III*). On July 18, 2002, Canada lodged one more subsidy case at the WTO in response to the USDOC's final affirmative determinations on April 2, 2002 (*Softwood Lumber IV*). Further, it requested a panel to adjudicate the injury determinations by the USITC under the light of the WTO rules. Unlike *Softwood Lumber II* (GATT period) which was limited to a consideration of the procedural requirements, this "bundle" of *Softwood Lumber* cases examined the complete picture of the natural resource subsidy practice through the "image" of timber harvesting rights. Therefore, they set the legal foundation necessary to justify natural resources under the current multilateral subsidy regime.

The newborn subsidy agreement, SCMA, attempted to fix the ambiguous defect of its predecessor by formally providing a subsidy definition. Article 1 of the Agreement requires

[258] Softwood Lumber Agreement between the Government of the United States and the Government of Canada (1996), Article X.

two compulsory elements to constitute a subsidy: (1) a financial contribution by the government/public body or any kind of income/price support; and (2) a benefit thereby conferred on the recipient. In the case of the Canadian stumpage programs, the financial contribution element could be the governmental provision of goods through the stumpage mechanism (SCMA Article 1.1. (a)(1)[iii]) *or* the government's revenue forgone through inadequate stumpage charges (SCMA Article 1.1. (a)(1)[ii]). In addition, a subsidy must be specific according to SCMA Article 2. The inherent characteristics argument was again brought before the WTO under the specificity test.

A problem arising here was that the subsidy conferred could not be directly on the subject merchandise – the softwood lumber. The Canadian stumpage programs were directly provided to timber harvesters for making logs; the harvested logs would then be processed to become softwood lumber.[259] The direct beneficiary of these stumpage programs, the timber harvesters, could be viewed as the softwood lumber producers. So, the stumpage programs here might be deemed to directly benefit the softwood lumber. This would be the direct natural resource subsidy practice as classified in Chapter 1.

The timber harvesters could also sell harvested timber to independent softwood lumber manufacturers. In this case, the stumpage programs could benefit the input product (harvested timber) used in producing the subject merchandise (softwood lumber). Therefore, this situation would be the indirect natural resource subsidy practice or natural resources in the input subsidy context. Unfortunately, the current Subsidy Agreement does not have a special regime for natural resources nor does it contain any legal discipline toward the input subsidy situation. The WTO judiciary had to specifically apply the general subsidy rules to the timber rights situation in the input subsidy context. Therefore, most of the legal substance in *Softwood Lumber IV* stemmed from the legal interpretations of the WTO adjudicators.

[259] Panel Report, *Softwood Lumber III,* para 4.302.

As noted in the Introduction, Professor John H. Jackson observed that the natural resource subsidy would be troublesome to the multilateral subsidy regime.[260] The wisdom of the venerable trade law scholar is beginning to be discovered.

2.2.1. Subsidy by governmental provision of natural resource exploitation rights

2.2.1.1.The financial contribution element

Canada refuted the finding by the USDOC that the Canadian provincial stumpage programs made a financial contribution as a governmental provision of goods by explaining its stumpage system's nature based on the property rights theory. Canada clarified that its stumpage programs could not be considered a good – defined as tangible, movable personal property – because the programs provided harvesting rights as a form of intangible property to tenure holders under SCMA Article 1.1. (a)(1)(iii).[261]

The United States asserted that the fact that Canada's provincial governments provided public standing timber for domestic harvesters through the stumpage mechanism could not be ignored.[262] The United States further argued that the definition of the term "goods" has a broad meaning as it includes "an identified thing to be severed from real property." As a result, this broad definition covers the standing timber as provided by the Canadian stumpage programs.[263]

It seems that the United States leaned toward considering *the mechanism* through which the Canadian stumpage system operated, while Canada concentrated on *the literal meaning* of the term "goods" in common sense. Interestingly, in *Softwood Lumber III*, Canada recalled the negotiating history of the Subsidy Agreement to argue for the exclusion of natural resource extracting/harvesting rights from the agreement's coverage:

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[260] John H. Jackson, above n 74, 300.
[261] Panel Report, *Softwood Lumber IV,* paras 4.9, 7.6.
[262] Panel Report, *Softwood Lumber IV,* para 7.8.
[263] Panel Report, *Softwood Lumber IV,* para 7.7.

> This draft provided in relevant part that "the amount of subsidy arising from government provision of goods, services, *or extraction/harvesting rights* […]." The terms "or extraction/harvesting rights" are nowhere found either in the final text of Article 1.1(a)(1)(iii) or the final text of Article 14(d) of the SCM Agreement. This confirms that rights, such as *profits à prendre,* are not included within the scope of the Agreement [264] (Italics as in original.)

The Panel rejected Canada's argument as this historical note by no means provided formal guidance by which to interpret the current Subsidy Agreement:[265]

> We note that the text of the SCM Agreement does not in any way provide an exception for the right to exploit natural resources […] Moreover, the paper referred by Canada in support of its argument that harvesting rights are not covered by Article 1.1(a)(1)(iii) SCM Agreement, called Discussion Paper No. 6, […] In our view, this Discussion Paper thus **has little if any probative value**, especially in light of the fact that the reference to "harvesting rights" as separate from "goods" was not included in the final text of the Agreement. (Emphasis added, footnotes omitted.)

The Panels in *Softwood Lumber III & IV* agreed that the Canadian stumpage programs would make a financial contribution under SCMA Article 1.1. (a)(1)(iii)) – the governmental provision of goods. The Appellate Body ultimately upheld this finding.[266] It understood that SCMA Article 1.1. (a)(1)(iii) as applied to the Canadian stumpage arrangements connotes a governmental transfer of nonmonetary resources through the provision of goods. Thus, the task before it was to examine the question of whether or not the Canadian stumpage programs did,

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[264] Panel Report, *Softwood Lumber III,* para 4.13. Professor Gagné pointed out that during the Uruguay Round, Canada proposed that the provision of extraction rights to natural resources be considered a non-actionable subsidy. See Gilbert Gagné, above n 214, at 363.

[265] Panel Report, *Softwood Lumber III,* para 7.26.

[266] Appellate Body Report, *Softwood Lumber IV,* para 52 and footnote 35.

in fact, "provide goods" in the sense of the applicable provision. Specifically, it had to clarify the terms "goods" and "provides" which are absent from the SCMA's textual explanations.

The Appellate Body adopted a broad understanding of the term "goods" which was quite similar to the U.S. interpretation. Based on dictionary meanings, it determined that the term "goods" had the broad meaning of "property or possessions" and included immovable property.[267] It substantiated this broad interpretation by clarifying that the context of SCMA Article 1.1. (a)(1)(iii) covered a *wide-ranged meaning* for "goods" and only excluded general infrastructure from its definition.[268] By contrast, Canada limited the meaning of "goods" to only "the tradable goods with a tariff classification" in order to exclude standing timber as an unexploited resource.[269] Consequently, the Appellate Body rejected Canada's limited understanding and further warned that such a narrowed understanding could open doors to the circumvention of the subsidy disciplines.[270]

Canada also contended that its stumpage programs did not provide identifiable trees (harvesting rights over an identifiable area but not over identifiable trees); therefore, it should not fall under the scope of the term "goods." However, the Appellate Body considered standing timber to be similar to fungible goods such as milk in *Canada – Dairy*; thus, it was suitably the object of the financial contribution transaction.[271] In short, from the AB's viewpoint, standing timber harvested by the Canadian stumpage programs fell appropriately under the term "goods" in SCMA Article 1.1. (a)(1)(iii). This means that the WTO judiciary agreed that the WTO Subsidy Agreement could capture a natural resource in its natural state.

[267] Appellate Body Report, *Softwood Lumber IV,* para 59.
[268] Appellate Body Report, *Softwood Lumber IV,* para 60.
[269] Appellate Body Report, *Softwood Lumber IV,* para 61.
[270] Appellate Body Report, *Softwood Lumber IV,* paras 64, 65. European Communities as a third party in this case presented a similar argument to support the broad meaning of the term "goods" in SCMA Article 1.1. (a)(1)(iii). See Panel Report, *Softwood Lumber IV,* para 5.6.
[271] Appellate Body Report, *Softwood Lumber IV,* para 66; Appellate Body Report, *Canada – Diary,* para 113.

The Appellate Body also interpreted the term "provides" as contained in SCMA Article 1.1. (a)(1)(iii). Canada put forward an argument that the term "provides" should be given a limited interpretation and have the meaning of supplying or giving goods or services. The United States asserted another meaning, that is to "make available."[272] The Appellate Body seemed to support the United States by interpreting "provides" to mean "making available" or "putting at the disposal of."[273] The Appellate Body clarified this broad understanding to require: "a **reasonably proximate relationship** between the action of the government providing the good or service on the one hand, and the use or enjoyment of the good or service by the recipient on the other"[274] (emphasis added).

This "reasonable proximate relationship" test suggests two simultaneous elements to constitute a financial contribution within the providing goods transaction. This phrase could be read to embrace both the government and the recipient in a "give and get" process rather than to solely consider the government's perspective in transferring economic resources. As emphasized by the Appellate Body, "Moreover, what matters, for purposes of determining whether a government 'provides goods' in the sense of Article 1.1. (a)(1)(iii), is the consequence of the transaction." Given the fact that the Canadian stumpage programs supplied tenure holders with the right to cut standing timber on public lands and to enjoy exclusive rights over the harvested timber, the Appellate Body concluded that such stumpage arrangements signified a situation capable of constituting a financial contribution.[275]

Henrik Horn and Petros C. Mavroidis supported this interpretation from the economic perspective. [276] They maintained that despite the requirement to carry out other forest management obligations, the economic interests to harvest standing timber and to have

[272] Appellate Body Report, *Softwood Lumber IV,* para 70.
[273] Appellate Body Report, *Softwood Lumber IV,* para 69.
[274] Appellate Body Report, *Softwood Lumber IV,* para 71.
[275] Appellate Body Report, *Softwood Lumber IV,* para 74.
[276] Henrik Horn and Petros C. Mavroidis, above n 81, at 227.

possession over the harvested timber were determinative for firms to enter into the stumpage arrangements. From the government's point of view, despite public policy considerations in allocating timber harvesting rights, the stumpage programs at issue could not escape from the economic consideration to transfer the standing timber ownership from the provincial governments to tenure holders.[277] Thus, the conclusion that the Canadian stumpage programs did make a provision of goods (a financial contribution) was entirely meaningful.

In *Softwood Lumber II* before the GATT, Canada substantially premised its stumpage programs on the governmental revenue collection rationale. It argued that the stumpage system at issue did not constitute a financial contribution (see previous section at 2.1.2.1). This argument was again presented in *Softwood Lumber III* but disappeared in *Softwood Lumber IV*. This absence could imply that Canada changed the theoretical basis to defend its stumpage programs from the tax-collection function of the sovereignty to the property rights theory over natural resources. If Canada had still affirmed the governmental revenue argument, the stumpage programs could have been considered under SCMA Article 1.1. (a)(1)(ii) (the government revenue otherwise due is forgone or not collected). Professor Julia Qin emphasized this reasoning to support the Canadian stumpage pricing programs as a governmental collection of natural resource rents (similar to the taxation function).[278] Different from the AB's perspective, she asserted that the subsidy transaction should be considered under SCMA Article 1.1. (a)(1)(ii).

This resource rent argument might be at odds with the previously mentioned economic analysis by Henrik Horn and Petros C. Mavroidis. Some questions may be asked relative to the fiscal argument by Professor Qin. First, how could this argument be explained in a context in which natural resource exploitation rights are transferred (from the government to its domestic

[277] Ibid, at 229.
[278] Y.Qin, above n 75, at 610–13.

exploiters) in return for the rents collected? Phrased differently, how could such stumpage programs be explained as a "pure" governmental revenue/tax collection function? Does this mean that the programs are a kind of economic transaction – doing something in exchange for something else – rather than a tax/revenue collection function with a non-direct compensation characteristic?[279]

In the governmental revenue foregone situation, the government actively denies its sovereign interests in order to benefit the obligated payers. However, in the case of stumpage arrangements, such an active role of the government might hardly be observed. Without the timber harvesters' active motivation and participation in the stumpage programs, the government might have nothing to collect. In other words, the stumpage mechanism means an *equivalent* active role of both sides to form a transaction. Therefore, in the context of the current subsidy regulations, the governmental provision of natural resource exploitation rights is "closer" to the governmental provision of goods (Article 1.1. (a)(1)[iii]) rather than the revenue/tax collection function (Article 1.1. (a)(1)[ii]) as argued by Professor Qin.

In summary, the WTO judiciary confirmed that the governmental provision of timber harvesting rights in Canada could constitute a financial contribution equivalent to the governmental provision of goods. By inventing the "reasonable proximate relationship" test, the WTO judiciary equated the governmental provision of exploitation rights over a natural resource to the governmental provision of the resource itself (an unexploited natural resource). This interpretation has been recognized as a determinative basis to place natural resources in their natural state under the multilateral subsidy regime. The subsequent natural resource subsidy disputes have inevitably relied on this fruit of jurisprudence to justify their situation.

[279] Pasquale Pistone and others, *Fundamentals of Taxation: An Introduction to Tax Policy, Tax Law, and Tax Administration* (IBFD, 2019), 4.

2.2.1.2.The benefit conferred element

To constitute a subsidy, SCMA Article 1.1(b) requires that a benefit resulting from the financial contribution be received by respective recipients. In *Canada – Aircraft*, the Appellate Body clarified the term "benefit" to imply "making the recipient better off than it would otherwise have been, absent of the contribution."[280] It also explained that the marketplace is the standard to recognize the alleged financial contribution's trade-distorting potential. SCMA Article 14(d) sets guidelines for the benefit calculation in the case of governmental provision of goods:

> The provision of goods or services or purchase of goods by a government shall not be considered as conferring a benefit unless the provision is made for **less than adequate remuneration**, or the purchase is made for more than adequate remuneration. The adequacy of remuneration shall be determined **in relation to prevailing market conditions** for the good or service in question in the country of provision or purchase (including price, quality, availability, marketability, transportation, and other purchase or sale conditions). (Emphasis added.)

In *Softwood Lumber IV*, Canada challenged the "cross-border" benchmark comparison applied by the USDOC as being *de jure* inconsistent with SCMA Article 14(d). Because government monopoly is very common in natural resource markets, this fact might inactivate the market-based comparison guided by SCMA Article 14. To overcome this distinct feature of a natural resource subsidy dispute, the USDOC attempted to stretch the article using the "out-of-country" market benchmark for its countervailing purpose. As a consequence, Canada complained that the USDOC erred in:[281]

[280] Appellate Body Report, *Canada – Aircraft,* para 157.

[281] WTO, United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada – Request for the Establishment of a Panel by Canada, WT/DS257/3, August 19, 2002.

(1) rejecting the evidence of prevailing market conditions in the country of provision as required by SCMA Article 14 (d);

(2) thereby using faulted market prevailing conditions in the country other than the country of provision to determine the adequacy of remuneration; and

(3) by so doing, incorrectly making the comparison to a benchmarking value that reflects the "out of country" prevailing market conditions.

From Canada's point of view, the textual wording of SCMA Article 14(d) requires the use of only in-country benchmark prices for the benefit determination. Therefore, this provision does not permit the use of such an "out-of-country" value.[282] In other words, the Subsidy Agreement requires the use of the market benchmark *as it exists* in the country of provision.[283] Canada further mocked the past determination as the USDOC itself had dismissed the cross-border price comparison since this method could be "arbitrary and capricious."[284] Canada continued by stating that there are huge barriers to putting a foreign price into the prevailing market conditions of the country of provision. It clarified:[285]

> International borders affect market conditions and, in particular, prices; these effects are substantial and notoriously difficult to quantify. Political boundaries drive differences in government regulatory regimes, tax regimes, investment regimes, currency, banking and financial systems, business practices, and business climate. Government policies and other factors in different jurisdictions affect economic conditions, including wage rates, taxes, capital costs, labor costs, and exchange rates.

By closely referring to the Panel's reasoning in *Softwood Lumber III*, Canada proceeded with a virtually undeniable argument inherent to natural resources: price differences across countries

[282] Panel Report, *Softwood Lumber IV,* para 4.19; Panel Report, *Softwood Lumber III,* para 7.59.
[283] Panel Report, *Softwood Lumber IV,* para 4.23; Panel Report, *Softwood Lumber III,* para 7.53.
[284] Panel Report, *Softwood Lumber IV,* para 4.29. See Gilbert Gagné, above n 214, at 364.
[285] Panel Report, *Softwood Lumber IV,* para 4.26.

reflect the differences in the natural resource endowment, which partly forms the "natural" comparative advantage of a trading nation.[286]

The United States responded by interpreting SCMA Article 14(d) and its justifications for using the cross-border benchmark. First, it maintained that the commercial market used for the adequacy remuneration determination should not be distorted by governmental intervention. As a result, the United States determined that the Canadian timber market generally was not a "commercial market." Therefore, the Canadian private stumpage prices could not be used as a market benchmark for discerning the stumpage subsidy.[287]

Second, the United States intentionally chose a different phrase than did Canada in the second sentence of SCMA Article 14(d) to support its position. The U.S. interpreted the phrase "in relation to" to mean "with reference to" or "taking account of" the prevailing market conditions of the country of provision. This interpretation thus meant that the Subsidy Agreement did not restrict itself to the use of only in-country data. In other words, the United States understood the Subsidy Agreement to permit the use of an out-of-country "fair market" benchmark if the investigating authority shows by positive evidence that the alleged financial contribution has heavily distorted the in-country prices.[288] The United States argued that it had made necessary adjustments to reflect the timber's fair market value in Canada to comply with the requirement of reflecting the prevailing market conditions of the country of provision.

The Panel in *Softwood Lumber IV (*and *Softwood Lumber III)* recognized this interpretation of out-of-country benchmark as being inconsistent with the "plain" interpretation of SCMA Article 14(d). It understood the phrase "prevailing market conditions" to mean "as they exist" in the country of provision.[289] However, this interpretation did not survive at the

[286] Panel Report, *Softwood Lumber IV,* para 4.27; Panel Report, *Softwood Lumber III*, para 7.58.
[287] Panel Report, *Softwood Lumber IV,* para 7.38.
[288] Panel Report, *Softwood Lumber IV,* para 7.39.
[289] Panel Report, *Softwood Lumber IV,* para 7.50.

appellate stage. The Appellate Body criticized the Panel's strict interpretation as frustrating the Subsidy Agreement's object and purpose. It understood that the guidelines set by Article 14 do not mean using private prices in the country of provision in every circumstance.[290] It thus found that the investigating authority may use a benchmark *other than* private prices in the country of provision if it establishes that the government's predominance distorts those domestic prices.[291]

The judiciary, nevertheless, confirmed that such domestic private prices should be used as a "starting point" in making the price comparison.[292] However, the Appellate Body disapproved of the "pure" market or the market without governmental intervention argument advanced by the United States.[293] From the economic perspective, Henrik Horn and Petros C. Mavroidis also observed that such a "pure" market idea is conceptually desirable but very difficult to find in practice.[294]

Nevertheless, recourse to an alternative benchmark is not a free choice. The Appellate Body set preconditions that the investigating authority has to establish to use this privilege; namely that the domestic private prices are being distorted by the government's predominant role in the relevant markets. The reason is that such private prices might align with the government-determined price because of the government's market predominance. The use of these prices as a benchmark for the benefit calculation might thus become circular.[295] However, the judiciary predicted that there would be very limited situations in which the use of a benchmark other than domestic prices in the country of provision would be permitted. The government's market predominance does not by default mean a price distortion as a basis for

[290] Appellate Body Report, *Softwood Lumber IV,* para 96.
[291] Appellate Body Report, *Softwood Lumber IV,* para 91.
[292] Appellate Body Report, *Softwood Lumber IV,* para 90.
[293] Appellate Body Report, *Softwood Lumber IV,* para 87.
[294] Henrik Horn and Petros C. Mavroidis, above n 81, at 233–34.
[295] Appellate Body Report, *Softwood Lumber IV,* paras 99,100.

using the alternative benchmark. Therefore, the situation should not be presumed but has to be established on a *case-by-case* basis.[296]

The next question before the Appellate Body was which alternative benchmark should be relied upon in the case of a government's market predominance. Unfortunately, the WTO judiciary left this question open because of "out of the appealing mandate." It just suggested the world market price or a proxy constructed on the basis of production costs (costs plus profit) as potential alternative benchmarks.[297] It again confirmed the obligation to ensure that any selected alternative benchmarks reflect the country of provision's prevailing market conditions as required by Article 14(d).

In short, the choice of a benchmark for the price comparison would determine the amount of the benefit conferred and thus the margin of the subsidy. Therefore, the choice of a benchmark is perhaps the trickiest issue in a subsidy case. The government's market predominance is likely distinct in the natural resource sector, which poses a challenge under SCMA Article 14(d). As in the case of interpreting the financial contribution element, the Appellate Body again showed its innovativeness. The AB's interpretations set a precedent for the use of alternative benchmarks for the benefit calculation other than the in-country prices. However, this innovativeness has not been free of critics. Henrik Horn and Petros C. Mavroidis considered this interpretation to be "impermissible judicial activism" and the exercise of discretion by the Panel to be correct in the textual sense.[298] These scholars also questioned this "generous" interpretation from the practical perspective as it seems to require extremely comprehensive justifications for a selected alternative benchmark.[299]

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[296] Appellate Body Report, *Softwood Lumber IV,* para 102.
[297] Appellate Body Report, *Softwood Lumber IV,* para 106.
[298] Henrik Horn and Petros C. Mavroidis, above n 83, at 138–39.
[299] Thus, Canada's arguments in this case might be supported by Henrik Horn and Petros C. Mavroidis. See Henrik Horn and Petros C. Mavroidis, above n 81, at 238–40.

The AB's failure to point out what should be the appropriate alternative proxies might provide a fertile ground for abuse in its application. Ambiguities often cause problems, and this statement is true at least in this situation. Wentong Zheng appropriately remarked that "the floodgate is open" as the United States promptly used such an alternative benchmark advantage in its subsequent anti-subsidy investigations.[300] It should be noted that both the Appellate Body and the Panel seemed to neglect the natural resource sovereignty argument put forward by Canada. Canada argued that its below-market charges for the transfer of timber harvesting rights reflects its own natural resource endowment as a comparative advantage.[301] Although the Appellate Body did confirm that countervailing measures must not be used to offset the comparative advantage between trading nations,[302] such confirmation appeared not to be applied in this stumpage rights dispute.

2.2.1.3. The specificity requirement

A subsidy satisfying SCMA Article 1.1 has to be conferred upon specific recipients to be subject to a countervailing measure. In *US – Upland Cotton,* the Panel suggested that the specificity concept's breadth or narrowness should be assessed according to the given case's particular circumstances.[303] This means that the general concept of specificity should be examined under the timber rights situation's distinct features. The USDOC claimed that a specific limited group of wood industries used the Canadian stumpage programs; therefore, such stumpage usage has to be *de facto* specific under the SCMA Article 2.1(c). The Panel in *Softwood Lumber IV* finally agreed with the USDOC and Canada did not appeal the issue. This section discusses how the Panel considered Canada's arguments with respect to the inherent

[300] Wentong Zheng, above n 83, at 28–35.
[301] Panel Report, *Softwood Lumber IV,* para 4.27; Panel Report, *Softwood Lumber III,* para 7.58.
[302] Appellate Body Report, *Softwood Lumber IV,* para 109.
[303] Panel Report, *US - Upland Cotton,* para 7.1142.

characteristics specificity requirement as previously presented in *Softwood Lumber II* (the GATT period).

Canada explained that the nature of the natural resource at issue (standing timber) would make its use by a certain number of enterprises easy; thus, this usage pattern naturally fits the specificity concept of the Subsidy Agreement. In other words, the inherent characteristics of the provided goods would limit those goods to a number of potential users rather than merely by reliance on the governmental provision of such goods.[304] Canada continued that if a subsidy by its nature limits itself to specific users, the specificity determination should not be accrued to such "natural users" unless the use is further limited to a subgroup of them.[305] The United States argued that SCMA Article 2 neither means to testify to the intent of the granting government nor permit any consideration of the inherent characteristics of the provided goods.[306] It is interesting to note that the USDOC had at one time supported the inherent specificity argument presented by Canada (1983) but then dismissed it (1986) by reinterpreting its own countervailing rules.[307]

The Panel rejected Canada's "inherent characteristics" argument as it saw no premise in the Subsidy Agreement to permit such an inherent specificity interpretation. It observed that not all instances of governmental provision of goods should specifically be used solely by a limited number of users.[308] However, the Panel might go beyond the given case's circumstantial scope as proposed by the later Panel in *US – Upland Cotton.* The nature of the resource in this particular case (standing timber) should not be compared to other resources (oil, gas, water) or should not be put into the general scenario of the use of natural resources. In this case, the Panel

[304] Panel Report, *Softwood Lumber IV,* paras 4.53, 7.108.
[305] Panel Report, *Softwood Lumber IV,* para 7.116.
[306] Panel Report, *Softwood Lumber IV,* para 4.290.
[307] Peter A. Piliounis, 'Anatomy of a Trade Dispute: The Question of Softwood Lumber', 1 Dalhousie Journal of Legal Studies 71 (1992), at 75–77.
[308] Panel Report, *Softwood Lumber IV,* para 7.116.

saw virtually no basis for the inherent specificity analysis. This does not mean that the Canadian stumpage programs could not be specific by the mere reason of the stumpage nature.

In summary, the Panel rejected all of Canada's arguments for the inherent specificity idea. This means that any governmental provision of exploitation rights to *in situ* natural resources could be deemed to specifically benefit its exploiters. It seemed to the Panel that the governmental provision of a natural resource should not be different from the governmental provision of other goods. Therefore, its own distinct usage pattern should not be an exception to the specificity requirement.

2.2.2. Pass-through of natural resource subsidy: natural resources in the input subsidy context

A pass-through test is the distinct feature of an input subsidy dispute as a type of indirect subsidization. It is necessary to note that natural resources are only one type of input incorporated into production chains; therefore, the pass-through analysis is not a unique aspect of a natural resource subsidy dispute. The *Softwood Lumber IV* case is complicated due to the complexity of the softwood production chains. The dispute comprises both the direct and indirect natural resource subsidy situations. If the timber harvester itself owns a sawmill to produce exported softwood lumber, a subsidy from the cheap timber harvesting rights is deemed to benefit the subsidy-alleged merchandise (softwood lumber). This should be the *direct* natural resource subsidy in which the pass-through test does not exist.

However, when the timber harvester and the sawmill are independent and transact with each other, the question is whether an alleged subsidy provided by the timber harvesting rights is transferred from the upstream timber harvester to the downstream sawmill that produces the softwood lumber. This case is the *indirect* natural resource subsidy for which the pass-through test is needed. Unfortunately, the Subsidy Agreement does not have any textual guidance related to the pass-through test. The WTO judiciary had to refer to *US – Canadian Pork* (GATT

period) for jurisprudential guidance on the pass-through analysis. In interpreting GATT Article VI (3), the Panel in *US – Canadian Pork* noted: "According to this clear wording, the United States may impose a countervailing duty on pork **only if a subsidy has been determined to have been bestowed on the production of pork;** the mere fact that trade in pork is affected by the subsidies granted to producers of swine is not sufficient" [309] (emphasis added).

Specifically, the investigating authority cannot rely on a mere presumption but has to determine whether the benefit of a subsidy conferred on the input product (upstream) is used to produce the downstream subsidy-alleged merchandise in order to invoke a countervailing action. However, this general guidance was in no way clear enough for the complex softwood lumber industry. Therefore, the jurisprudence developed in *Softwood Lumber IV* added details to the pass-through test or the input subsidy situation.

In Canada's opinion (to the Panel in *Softwood Lumber IV*), the U.S. investigating authority should not simply presume the transfer of the timber rights subsidy from the upstream to the downstream given the fact that the evidence of arm's length transactions existed between the timber harvesters and the softwood producers.[310] In response, the United States argued that it was unnecessary to conduct the pass-through analysis because the USDOC used the aggregate methodology to calculate the benefit conferred.[311]

The Appellate Body confirmed the Panel's interpretation of the pass-through analysis as required in the input subsidy context. Accordingly, the investigating authority has to establish that a benefit conferred directly on the input producer is at least in part passed through to the downstream producer of the subject merchandise.[312] The Appellate Body explained that the pass-through test must be conducted before the imposition of any countervailing duties

[309] Panel Report (GATT), *US – Canadian Pork*, para 4.6 referred by Panel Report, *Softwood Lumber III*, para 5.39; Panel Report, *Softwood Lumber IV,* para 7.92; and Appellate Body Report, *Softwood Lumber IV*, para 144.
[310] Panel Report, *Softwood Lumber IV,* paras 7.68, 7.71.
[311] Panel Report, *Softwood Lumber IV,* para 7.74.
[312] Appellate Body Report, *Softwood Lumber IV,* para 146.

against the downstream merchandise. For the pass-through analysis, arm's length transactions are the central indicator. According to Canada, it could be presumed in the pass-through analysis of vertically integrated enterprises that a benefit conferred on the input product would be *automatically* transferred to the downstream product.[313]

Pass-through test as applied in *Softwood Lumber IV*

Entities	Products	Canada	United States	Panel	Appellate Body
Harvesters Sawmills	Logs	Required	Required	Required	Required
Harvesters – Harvesters/sawmills	Logs	Required	Required	Required	Required
Harvesters/sawmills – Sawmills	Logs	Required	Not required	Required	Required
Harvesters/sawmills – Harv./sawmills	Logs	Required	Not required	Required	Required
Harvesters/sawmills – Remanufacturers	Lumber	Required	Not required	Required	Not required
Sawmills – Remanufacturers	Lumber	Required	Not required	Required	Not required

(Reproduced from Gilbert Gagné & Francois Roch [2008][314])

The WTO adjudicators often used the term "arm's length" but unfortunately did not provide a formal definition for this term. The lack of a terminological clarification perhaps makes the jurisprudence confusing to some extent. It is questionable whether the arm's length signal could be recognized in a market-determined transaction or a transaction between unrelated parties. Indeed, the Appellate Body in *Softwood Lumber IV* might lean toward the arm's length transaction being a transaction between unrelated entities: "Hence, the situation where **vertically** integrated enterprises, **not** operating at arm's length, harvest timber under stumpage contracts, produce softwood lumber and remanufacture lumber, is also not before us" (emphasis added).[315]

The AB's understanding seems to be compatible with the arm's length principle in the context of multinational enterprises (MNEs) in accordance with the OECD Transfer Pricing Guidelines: "By seeking to adjust profits by reference to the conditions which would have

[313] Panel Report, *Softwood Lumber IV,* para 7.79.
[314] Gilbert Gagné and Franois Roch, above n 76, at 561.
[315] Appellate Body Report, *Softwood Lumber IV,* para 127.

obtained between independent enterprises […] the arm's length principle follows the approach of treating the members of an MNE group as operating **as separate entities** rather than as inseparable parts of a single unified business"[316] (emphasis added).

Sherzod Shadikhodjaev was not in full agreement with such an understanding of the WTO judiciary regarding the term "arm's length."[317] He argued that the relationship between transacted entities only signals a grounds for the presumption of an arm's length transaction. This means a transaction conducted by affiliated entities could be taken or not be taken under market conditions.[318] He elaborated that the rationale for continuing the upstream subsidy toward the downstream subsidy-alleged merchandise should be the price paid for the input product. Therefore, from his perspective, the arm's length indication should rely on the terms of the transactions for obtaining the input product rather than on the relationship between the parties involved.[319] In other words, the nature of transactions between the input seller and the downstream purchaser should indicate the arm's length characteristic.

From the practical perspective, relying on the terms of the transaction to ascertain the arm's length indication for the pass-through test may be more burdensome than merely relying on the relationship of the involved parties. The reason is that the former might require the scanning all input sale transactions regardless of whether they are from unaffiliated or affiliated parties in order to identify the arm's length indication. Therefore, the arm's length understanding of the Appellate Body might be more straightforward for the investigating authority to conduct the pass-through analysis.

[316] OECD, *OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations,* (Paris: OECD Publishing, 2017), para 1.6.
[317] Sherzod Shadikhodjaev, 'How to Pass a Pass-through Test: The Case of Input Subsidies', 15(2) Journal of International Economic Law 621 (2012), at 635.
[318] Ibid.
[319] Ibid.

In summary, the pass-through test is the distinct aspect of the input subsidy situation. The natural resource input subsidy thus needs the pass-through test. In this situation, natural resource exploitation rights are provided to an upstream exploiter (e.g., timber harvester). This exploiter then sells the exploited resource to a downstream producer of the subsidy-alleged merchandise (e.g., softwood lumber). Therefore, the pass-through test is employed to test the subsidy transfer from the upstream to the downstream. The legal substance of the pass-through test was confirmed and developed by the WTO judiciary in *Softwood Lumber IV*. However, this judiciary should provide a formal definition of the arm's length concept in order for the pass-through jurisprudence to be more precise.

Conclusion of Chapter 2

Natural resources became part of the multilateral subsidy regime through the timber rights disputes between the United States and Canada. The GATT dealt with this acrimonious topic three times, but it stopped at an examination of the procedural issues. Canada's arguments to defend its natural resource sovereignty thus set the legal framework for future natural resource subsidy disputes at the WTO.

The Appellate Body in *Softwood Lumber IV* formally placed natural resources under the current multilateral subsidy rules. According to this judiciary, the governmental provision of natural resource exploitation rights can be considered a financial contribution in the form of a governmental provision of goods. It substantiated this jurisprudence by inventing the "reasonably proximate relationship" test. This means the WTO permitted the multilateral subsidy regime to capture natural resources in their natural state (unexploited).

The benchmarking issue appeared to be the most debatable topic when the Appellate Body opened a door for the use of an out-of-country benchmarking value. Indeed, the government's predominance in this dispute in the natural resource sector was determinative to the birth of this second jurisprudential intervention of the WTO judiciary. In other words, the government's predominance in the natural resource sector required the WTO judiciary to find a solution to uphold the multilateral subsidy regime. The Appellate Body permitted the use of alternative benchmarking values to recognize the alleged subsidy because such governmental predominance is likely to influence private prices in the country of provision. However, numerous trade law scholars have criticized this benchmarking jurisprudence as going beyond the legal text.

Canada argued for inherent specificity as a unique feature of natural resources in the subsidy context, according to which the specificity element could only be fulfilled if natural resource use was limited to a subset of the inherent industrial users. However, the Panel in

Softwood Lumber IV rejected this inherent specificity argument as it found no support in the Subsidy Agreement.

Regarding the input subsidy context of this harvesting rights dispute, the Appellate Body provided a jurisprudential confirmation of the pass-through test as required in the upstream–downstream subsidy situation. Natural resources are the common productive inputs; therefore, they often fall into the input subsidy context. The pass-through test has to be examined rather than making a presumption. Arm's length transactions are the indicator of the pass-through test. The WTO judiciary should provide a formal definition of the arm's length concept to clarify the pass-through jurisprudence.

Chapter 3

RECENT NATURAL RESOURCE SUBSIDY DISPUTES AND JURISPRUDENTIAL DEVELOPMENTS

The AB's interpretations in *Softwood Lumber IV* clear the way for member countries to challenge foreign natural resource pricing policies using the anti-subsidy instrument. Based on vast experience in domestic litigation and international adjudication, the United States took advantage of the interpretations to initiate "market distortion" cases against land-use rights granted to a dozen Chinese companies[320], mining rights granted to Indian hot-rolled steel exporters,[321] stumpage programs granted to the Indonesian paper industry,[322] and repeatedly against the Canadian stumpage programs.[323] The USDOC found that all four circumstances concerning the governmental allocation of natural resource exploitation rights constituted countervailable subsidies; therefore, they were subject to the U.S. unilateral countervailing duties. The affected countries subsequently brought their cases before the WTO and again the natural resource allocation policies of a trading country were justified under the multilateral subsidy regime. Hence, the jurisprudential bases set out in *Softwood Lumber IV* have inevitably become the guidance in examining these natural resource subsidy practices.

However, this landmark dispute left some "blurred" points for future clarification. This chapter investigates the jurisprudential contribution of the posterior natural resource subsidy

[320] United States Department of Commerce (USDOC), Issues and Decision Memorandum for the Final Affirmative Countervailing Duty Determination: Laminated Woven Sacks from the People's Republic of China, C-570-917, June 16, 2008.

[321] United States Department of Commerce (USDOC), Issues and Decision Memorandum: Final Results of Administrative Review on Certain Hot-Rolled Steel Flat Products from India, C-533-821, July 7, 2008.

[322] United States Department of Commerce (USDOC), Issues and Decision Memorandum for the Final Affirmative Countervailing Duty Determination: Coated Free Sheet Paper from Indonesia, C-560-821, October 17, 2007.

[323] United States Department of Commerce (USDOC), Issues and Decision Memorandum for the Final Affirmative Determination of Sales at Less Than Fair Value and Determination of Critical Circumstances of Certain Softwood Lumber Products from Canada, A-122-857, November 1, 2017.

disputes to the legal foundation set in *Softwood Lumber IV*. The chapter first briefly chronologically presents the content of such post-*Softwood Lumber* disputes (3.1). It then sketches the jurisprudential developments toward the natural resource subsidy practice (3.2). The chapter ends with a discussion of the natural resource subsidy issue at the Doha Development Round (3.3).

3.1.Recent natural resource disputes under the WTO subsidy regime

Land-use Rights in China (2010)

The USDOC alleged that the Chinese government provided land for less than adequate remuneration to subsidy-alleged producers located in industrial parks. Thus, such land-use rights provision was determined to be a countervailable subsidy.[324] China challenged these land-use subsidy determinations before the WTO in two particular aspects: regional specificity and benchmark issues.[325] Given the fact that the Chinese government owns almost all lands in the country, the private sector can only secure land-use rights rather than the supreme power of a landowner.[326] Relying on this distinct characteristic of land ownership, the United States claimed that the Chinese government had exercised significant control over the entire land market's supply-side; therefore, it had distorted land-use prices by virtue of the predominant role of the government.[327] As a result, the USDOC deemed Thailand to be appropriate for making the adequacy comparison and used it as the out-of-country market benchmark.[328]

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[324] United States Department of Commerce (USDOC), above n 320, at 14–18.

[325] WTO, United States – Definitive Anti-dumping and Countervailing Duties on Certain Products from China – Request for the Establishment of a Panel by China, WT/DS379/2, December 12, 2008.

[326] Peter Ho, 'Who Owns China's Land? Policies, Property Rights and Deliberate Institutional Ambiguity', 166 The China Quarterly 394 (2001), at 394–21.

[327] Panel Report, *US – AD/CVD (China)*, para 10.71. For commentaries on the application of U.S. countervailing laws specifically to land-use rights in China, see Yu Wu, 'The application of "the Agreement on Subsidy and Countervailing Measures (ASCM)" of the World Trade Organization to Non-Market Economy (NME) of China', Doctoral Dissertation, (University of Aberdeen, 2011), at 219–31.

[328] Panel Report, *US – AD/CVD (China),* paras 157,158; See Ming Du, 'China's State Capitalism and World Trade Law', 63(2) International and Comparative Law Quarterly 409 (2014), at 409–48.

No matter how compelling the evidence presented by the USDOC, the case of land-use rights here should not be considered to be a natural resource subsidy practice as examined in *Softwood Lumber IV*. The cost of a piece of land or land-use rights is often viewed as a fixed cost of production as compared to variable costs for purchasing natural resource inputs.[329] In other words, with respect to the value of location,[330] governmental provision of land or land-use rights should not be considered a "pure" natural resource subsidy practice in this dispute. In fact, by considering the land-use rights as a place of operation (in industrial parks), the USDOC conducted the regional specificity test (SCMA Article 2.2) rather than the specificity test against the alleged enterprises (SCMA Article 2.1 [c]). The Panel finally decided in favor of China on the regional specificity test but against this country on the benchmark issue, and China did not appeal these findings.[331]

Mining Rights in India (2014)

India challenged the USDOC's *Carbon-Steel* 2001 subsidy determinations before the WTO in 2012, including the USDOC decisions regarding iron ore and coal captive mining rights. The Government of India was alleged to provide below-market captive mining rights to its domestic steel producer (Tata).[332] The USDOC decided such mining rights provisions constituted a financial contribution in the form of governmental provision of goods. This investigating authority further determined that such mining rights provisions fulfilled the specificity test under section 771(5A)(D)(iii)(I) of the Tariff Act 1930.[333] Most of the comments submitted to the USDOC concerned the benchmarks used for the benefit calculation. The USDOC employed iron ore prices in Australia (Tier II) as the market benchmark for the

[329] Rubinfeld Robert, Pindyck & Daniel*, Microeconomics*, 9th ed. (Pearson, 2018), 241.
[330] Paul Metzemakers and Erik Louw, 'Land as a Production Factor', 45th Congress of the European Regional Science Association: 'Land Use and Water Management in a Sustainable Network Society', (Delft University of Technology, 2005), at 17–19.
[331] Panel Report, *US – AD/CVD (China),* paras 9.164, 10.191.
[332] United States Department of Commerce (USDOC), above n 321, specifically at comments 24–36.
[333] Ibid.

Indian iron ore because of a lack of actual commercial transactions.[334] Nevertheless, it used imported coal prices from Australia (purchased by Tata itself) as the alternative benchmark (Tier I) for the case of coal mining.[335]

Hence, the crux of this extraction rights dispute was whether such governmental provision of mining rights should constitute a countervailable subsidy and, if appropriate, the benchmark values that should be employed.[336] The "out-of-country" benchmark authorized by *Softwood Lumber IV* had sparked intensive jurisprudential debates; therefore, any stretching or squeezing of this mining rights dispute to fit past jurisprudence may also be debatable. In addition, the adjustment requirement for alternative benchmark prices was a central controversy since India demanded that its comparative advantage in natural resources should be taken into account. In the end, the Appellate Body rendered judgments mostly in favor of the United States.[337]

Stumpage Rights in Indonesia (2017)

In September 2009, three American paper companies joined the labor union to file "unfair trade" cases against Indonesia's coated paper imports. The USDOC promptly rendered final affirmative subsidy determinations against the Indonesian imported paper in October 2009.[338] Finding that the Indonesian domestic stumpage prices were market-distorted by the government's predominant position, the USDOC referred to Malaysia's wood export prices (to Indonesia) for the benefit calculation – the out-of-country benchmark price.[339] As a result, Indonesia asked the WTO Panel to fault the USDOC's benchmark determination. However, Indonesia did not challenge the USDOC's financial contribution determination which is the

[334] Ibid.
[335] Ibid.
[336] Suhail Nathani and James Nedumpara, 'India Back among WTO Disputes: An Update on India's Current and Potential WTO Disputes', 7(11) Global Trade and Customs Journal 466 (2012), at 468–99.
[337] Appellate Body Report, *US - Carbon Steel (India),* paras 4.81, 4.335.
[338] Eugene Beaulieu and Denise Prévost, above n 85, at 216–31.
[339] United States Department of Commerce (USDOC), above n 322, at 8 and comment 11.

principal element of a subsidy case. Indonesia should regret this omission. The Panel repeated many times that it had to presume the financial contribution element as established by the USDOC, although Indonesia argued that it provided the land-use rights, not the forest harvesting rights.[340] Given the fact that the final adjudication results were overwhelmingly against Indonesia, a challenge to the financial contribution element could presumably have brought about a very different end.

Softwood Lumber VII (2020)

In 2017, the USDOC again issued final affirmative subsidy determinations against Canadian softwood lumber products. Consequently, Canada brought this "as applied" case to the WTO in March 2018. As *Softwood Lumber IV* was the pioneer case to set legal standards to justify the inclusion of natural resources under the WTO subsidy regime, the underlying dispute tested these standards in a quite similar situation. Neither party disputed the financial contribution element. The benchmark for benefit calculation was the subject of Canada's focused attack.[341] Canada questioned the appropriateness of using log prices in another regional market (Nova Scotia) for the benefit calculation in the investigated regional markets (Alberta, Ontario, and Québec) in accordance with Article 14(d) of the Subsidy Agreement.[342] It further challenged the use of Washington logs price (used by the USDOC) as the alternative benchmarking value for the benefit calculation against British Columbia's stumpage.[343] To examine this disputed matter, the Panel provided clarifications of the phrase "prevailing market conditions" (Article 14(d) of the Subsidy Agreement) as applied to the large

[340] Even though the Panel agreed that "the nature of the alleged financial contribution will affect what methodology is appropriate to determine the adequacy of the remuneration," it decided to presume the existence of the financial contribution element in the underlying case. Panel Report, *US – Coated Paper (Indonesia)*, paras 7.45, 7.77, 7.142, 7.147.

[341] WTO, United States – Countervailing Measures on Softwood Lumber from Canada - Request for the Establishment of a Panel by Canada, WT/DS533/2, March 16, 2018.

[342] Panel Report, *Softwood Lumber VII*, Section 7.4.

[343] Panel Report, *Softwood Lumber VII*, Section 7.7.

and various stumpage market segments in Canada.[344] It further endorsed a special requirement of cost adjustment to the selected benchmark price.[345] This point is critical and will likely influence future natural resource exploitation disputes because the exploiters are likely to make massive efforts or fulfill environmental obligations to acquire the extracted results.

3.2. Jurisprudential Developments after *Softwood Lumber IV*

3.2.1. For the financial contribution element

The case of mining rights in *US – Carbon Steel (India)* was the most comprehensive assessment of the natural resource subsidy practice after *Softwood Lumber IV*. In this dispute, the Panel had the sole opportunity to apply the "reasonable proximate relationship" test (invented by *Softwood Lumber IV*) specifically to the Indian iron ore and coal mining rights. India understood this test to mean a link between the governmental action of provision and the goods received by the recipient. India added that the governmental action itself should directly result in the provision of goods. In other words, such governmental provision means there is no need for intervening acts from other non-governmental bodies. Applying this understanding to the transfer of mining rights, India contended that its miners had to invest significant interventions/efforts in extraction activities. Therefore, the relationship was too remote to be considered "reasonably approximate." The provision of only mining rights to the extracting companies did not mean that the underlying iron ore or coal could automatically or without effort be extracted by the companies in order to enjoy the benefit.[346]

The United States perceived these mining rights as being no different from the timber harvesting rights in *Softwood Lumber IV.* It countered that regardless of the reasons, the ultimate purpose of transferring the mining rights was to provide government-controlled iron

[344] Panel Report, *Softwood Lumber VII*, Section 7.2.
[345] Panel Report, *Softwood Lumber VII*, Section 7.6.
[346] Appellate Body Report, *US - Carbon Steel (India),* paras 4.61, 4.66, 4.70.

ore and coal to certain Indian extracting enterprises.[347] The Panel rejected the arguments put forward by India as lacking in legal certainty due to the complexity of the extraction process.[348]

The Appellate Body disagreed with the Panel and determined that an examination of the complexity and uncertainty of the mining rights arrangement was needed to satisfy the "reasonable proximate relationship" requirement. In India's view, the extraction rights were "severable" from the extracted minerals. Thus, this situation should not be viewed as the same as the stumpage rights in the *Softwood Lumber* disputes. The Appellate Body disagreed with India by referring to the exact interpretation in *Softwood Lumber IV*:[349]

> Like the right to harvest standing timber, the mining rights put iron ore and coal deposits at the disposal of steel companies, which allowed them exclusively to make use of those resources. We further recall the distinction drawn by the Panel between the mining rights at issue in this dispute, which permit the right to extract minerals from known sites, and more tenuous arrangements such as exploration rights. Indeed, rights over extracted iron ore and coal follow as **a natural and inevitable consequence** of the steel companies' exercise of their mining rights, which suggests that making available iron ore and coal is the *raison d'être* of the mining rights. (Emphasis added, footnote omitted.)

As a result, the Appellate Body upheld the Panel's finding that the governmental provision of mining rights constituted a financial contribution under SCMA Article 1.1(a)(1)(iii). Notably, the Panel appeared to ignore a caution raised by the Panel in *Softwood Lumber IV* that the extraction process's inherent uncertainty (e.g., minerals or oil) sets itself apart from the timber harvesting business.[350] Ironically, this seems to be the exact point made

[347] Appellate Body Report, *US – Carbon Steel (India),* para 4.67.
[348] Panel Report, *US - Carbon Steel (India),* paras 7.237, 7.238.
[349] Appellate Body Report, *Softwood Lumber IV,* para 75.
[350] Panel Report, *Softwood Lumber IV,* footnote 99.

by India. The Appellate Body in *Softwood Lumber IV* refrained from clarifying whether the extraction process's inherent uncertainty was relevant to the "reasonable proximate relationship" test. As was explained by the Appellate Body in the context of the mining rights dispute, the uncertainty and complexity of natural resource extraction activities have to be taken into account to examine the proximity test. This, therefore, should be a clarification to the existing jurisprudence on natural resource subsidy.

Additionally, the Appellate Body in the *US – Carbon Steel (India)* made a distinction between the governmental provision of the right to extract *versus* the right to explore a natural resource.[351] However, it is still unclear whether and to what extent the nature and the uncertainty of such exploration activities could be relevant to the "reasonable proximate relationship" test. These questions might be left open for future clarification to the financial contribution element of a natural resource subsidy dispute.

3.2.2. For determination of the benefit conferred element

The WTO judiciary has often reiterated that the term "benefit" as used in SCMA Article 1(b) implies some kind of comparison and that the marketplace is appropriate for conducting such comparisons.[352] The Appellate Body in *US – Carbon Steel (India)* affirmed that the benefit comparison should be assessed from the recipient's perspective; that is, a comparison should be made between the price paid to the governmental provider and the price found in the market to justify whether the remuneration of the governmental price is adequate or not.[353] In other

[351] Appellate Body Report, *US – Carbon Steel (India),* para 7.240: "…we observe that the panel expressly refrained from making any findings on the matter at hand. Second, and more importantly, in our view, the panel's statement refers to a possibly relevant difference between rights to extract goods, and rights to explore and, if anything is found, extract the goods. The present case concerns the provision of mining rights, that is the right to extract minerals from known sites, rather than the right to explore or prospect, and, if anything is found, extract it."

[352] Appellate Body Report, *Canada – Aircraft,* paras 157,158; Appellate Body Report, *Canada – Renewable Energy,* para 5.163.

[353] Appellate Body Report, *US – Carbon Steel (India),* para 4.129; Panel Report, *US – Carbon Steel (India),* para 7.33.

words, to calculate the benefit conferred, the governmental price of the provided good and the market benchmark price of a like product of this provided good should be compared.

3.2.2.1.Identifying governmental price for the benefit comparison

The case of governmental provision of natural resource exploitation rights seems to pose a distinct problem as to how to identify the governmental price. As India appropriately argued in *US – Carbon Steel (India),* it provided the mining rights in return for royalties but not the extracted minerals. Therefore, assessing remuneration adequacy should be based on the comparison between its royalty rates and the market rates in other benchmarking countries.[354]

The Appellate Body determined that the governmental provision of mining rights is equivalent to the governmental provision of extracted minerals (the financial contribution element); therefore, the USDOC was permitted to use the governmental price of extracted minerals for the benefit comparison purpose.[355] In other words, the AB's interpretation appears to mean that the subsidy transaction's object of the governmental provision of resource exploitation rights should be the results of the exploitation (exploited resources) rather than the intangible rights for such exploitation. In its timber harvesting rights dispute (2017), Indonesia also claimed that it did not provide standing timber to its harvesters but rather land-use royalties.[356] Hence, the WTO adjudicators appeared to faithfully observe their predecessors' guidance in *Softwood Lumber IV*:[357]

> In our view, this assertion misses the point, because felled trees, logs and lumber are all distinct from the "standing timber" on which the Panel based its conclusions. Moreover, what matters, for purposes of determining whether a government "provides goods" in

[354] Appellate Body Report, *US – Carbon Steel (India),* para 4.324.
[355] Appellate Body Report, *US – Carbon Steel (India),* para 4.332.
[356] Panel Report, *US – Coated Paper (Indonesia),* para 7.42.
[357] Appellate Body Report, *Softwood Lumber IV,* para 75.

the sense of Article 1.1(a)(1)(iii), is the **consequence of the transaction**. (Emphasis added.)

The Appellate Body in *US – Carbon Steel (India)* further explained the use of the governmental price for benefit calculation as: "Once it is established that the price paid to the government provider is less than the price that would be required by the market, the government price in question is inadequate, and a benefit is thereby conferred."[358]

Indeed, in the case of governmental provision of natural resource exploitation rights, the recipient's payment (price) to the governmental provider for exploited resources might not exist. Simply put, there is no "real" governmental transaction which provides exploited natural resources to the recipient. In this situation, the investigating authority might construct a governmental value for the purpose of the benefit calculation as did the USDOC in *US – Carbon Steel (India).* The Appellate Body in this case agreed with the USODC's constructed methodology for the governmental price:[359]

> We consider that it is **permissible** for an investigating authority in a benefit calculation to construct a price **on the basis of any fees and royalties** paid for the mining rights plus the cost plus profit of the extraction process. As we understand it, this is what the USDOC did when it calculated the royalties for the mining rights and then added operational mining costs associated with the extraction of the iron ore and coal. (Emphasis added.)

In short, the governmental price for the benefit calculation in the case of governmental provision of natural resource exploitation rights is the price accruing to the exploited resources – the consequence of such "provides goods" transaction. However, there might be no actual governmental price for the exploited resources because the government does not provide such

[358] Appellate Body Report, *US – Carbon Steel (India),* para 4.128.
[359] Appellate Body Report, *US – Carbon Steel (India),* para 4.332.

goods to the recipient. Therefore, it is possible that the governmental price could be constructed based on the royalties and fees paid by the recipient for the natural resource exploitation rights.

3.2.2.2.Identifying benchmarking value for the benefit comparison

Turning to the benchmark issue, the Appellate Body in *Softwood Lumber IV* allowed alternative benchmark(s) to the private prices in the country of provision to be used for the benefit comparison if the government was predominant in supplying the provided goods. In brief, the Appellate Body in *Softwood Lumber IV* required three main questions to be answered to reach the use of alternative benchmarking: (1) Under what premises would it be appropriate to reject the in-country private prices? (2) What alternative benchmark value(s) would be relied upon in the benefit comparison if in-country private prices were rejected? and (3) How should the selected benchmark be adjusted to reflect the prevailing market conditions in the country of provision? The subsequent natural resource subsidy disputes somehow both narrowed and widened the alternative benchmark jurisprudence of *Softwood Lumber IV*.

Regarding **the first question**, subsequent cases seem to set limitations on the motivation to reject the in-country private benchmark. The Appellate Body in *US – AD/CDV (China)* reiterated that the government's predominant role in a market should not be equated with the existence of market distortion but that governmental distortion has to be established on a *case-by-case* basis by positive evidentiary standards.[360] Also, the Appellate Body demanded an examination of the governmental provider's market power and considered the market share of such predominance.[361] Premised on these interpretations, the Appellate Body in *US – Carbon Steel (India)* determined that the investigating authority may be required to examine various aspects[362] of the relevant market and the quality and quantity of the

[360] Appellate Body Report, *US – AD/CVD (China)*, para 453.
[361] Appellate Body Report, *US –AD/CVD (China)*, para 444.
[362] The Appellate Body provided guidance that "This examination may involve an assessment of the structure of the relevant market, including the type of entities operating in that market, their respective market share, as well

information supplied by the disputed parties to arrive at the selection of a proper benchmark. However, the WTO judiciary still noted that the greater the governmental predominance in the market, the more likely such predominance would distort in-country private prices.[363] In other words, the basis for rejecting the in-country prices for the alternative benchmark employment should be the *result* of the governmental predominance – the market distortion – rather than the *presence* of such market predominance.[364]

The Appellate Body in *US – Carbon Steel (India)* modified the jurisprudence in *Softwood Lumber IV* by recognizing the government's public policy objectives in setting governmental prices. The Panel in this case stuck its assessment on the past guidance to exclude the governmental prices from determining the market benchmark in the context of Article 14.[365] The Appellate Body, however, rejected this position, stating that "In our view, the fact that governments *may* set prices in pursuit of public policy objectives, rather than market-based profit maximization, […] In particular, we consider the Panel's statement to be erroneous in respect of government-related prices that have the requisite nexus with prevailing market conditions in the country of provision."[366] This means that the Appellate Body accepted the potentiality that the governmental prices reflected market signals even under a government-predominance situation. As a result, such governmental prices could be used as a potential benchmark to discern a subsidy. The AB's approach was thus to balance the "pro-market" demand in economic sectors primarily dominated by the government. The natural resource sector is an obvious example of this context.[367]

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as any entry barriers. It could also require assessing the behavior of the entities operating in that market in order to determine whether the government itself, or acting through government related entities, exerts market power so as to distort in-country prices." See Appellate Body Report, *US – Carbon Steel (India)*, footnote 754.

[363] Appellate Body Report, *US – Carbon Steel (India)*, paras 4.156, 4.157 quoted Appellate Body Report, *US – AD/CVD (China)*, para 444.

[364] Appellate Body Report, *US – Carbon Steel (India),* para 4.155; Appellate Body Report, *US – Countervailing measures (Article 21.5 – China)*, para 5.147.

[365] Panel Report, *US – Carbon Steel (India),* para 7.39.

[366] Appellate Body Report, *US – Carbon Steel (India),* para 4.170.

[367] Eugene Beaulieu and Denise Prévost, above n 85, at 223–24.

The second question is about what types of alternative benchmarks could be relied upon by the investigating authority to make the benefit comparison in the case of governmental market predominance. For this point, the post-*Softwood Lumber* jurisprudence sets a larger menu for the benchmarking choice. It is important to remember that the Appellate Body in *Softwood Lumber IV* introduced two examples of the alternative proxy: the world market price and the domestically constructed price (cost plus profit).

The price in a foreign country is also a possible benchmark[368] that the United States has consistently employed in the disputes over standing timber (Canada and Indonesia) and land-use rights (China). In the latest natural resource subsidy dispute, *Softwood Lumber VII,* the Panel made a factual assessment of whether the USDOC's employment of an out-of-country benchmark (Washington log price) was legally appropriate. In the end, the Panel concluded that the USDOC's approach was inconsistent because it failed to make an adequate adjustment to the selected benchmark to reflect the prevailing market conditions of British Columbia.[369]

The Appellate Body in *US – Carbon Steel (India)* further offered yet another choice: the export price of the financial contribution provider (other than the subsidy transaction). India contended that the USDOC should have used the export price of the (Indian) National Mineral Development Corporation (NMDC) as a Tier II benchmark (hierarchically set under the U.S. subsidy law) for making the benefit comparison, and the Appellate Body agreed with this assertion.[370] In this dispute, the Appellate Bodyalso accepted the import price of a like product of the government-provided good as an alternative benchmarking value.[371] In summary, these subsequent natural resource subsidy cases supplied *three more choices* that the investigating

[368] Appellate Body Report, *US – Carbon Steel (India),* para 4.188 quoted Appellate Body Report, *Softwood Lumber IV*, para 89.
[369] Panel Report, *Softwood Lumber VII*, para 7.499.
[370] Appellate Body Report, *US – Carbon Steel (India),* para 4.291.
[371] Appellate Body Report, *US – Carbon Steel (India),* para 4.262.

authority could use to select a proper benchmarking value. However, such a benchmarking selection still depends on the third question.

With respect to **the third question** – the obligation to make adjustments to a selected alternative benchmark in order to reflect the prevailing market conditions in the country of provision – the post-*Softwood Lumber* cases have provided useful explanations of the phrase "prevailing market conditions." According to the Appellate Body in *US – Carbon Steel (India),* the term "prevailing market conditions" means "generally accepted characteristics of an area of economic activity in which the forces of supply and demand interact to determine market prices."[372]

The scope of the phrase "prevailing market conditions" is discussed under the Panel report in *Softwood Lumber VII.* A question brought before the Panel was whether the phrase "prevailing market conditions in the country of provision" represents the prevailing conditions of the country-wide market or of regional markets, as contended by Canada in defending its distinctively regional stumpage markets.[373] The Panel first presented a clarification that the prevailing market conditions in the country of provision should be the prevailing market conditions accrued to the government-provided good.[374] Depending on the facts of the underlying case, the Panel further noted:

> Where the record shows that the prevailing market conditions for the government-provided good span, and are limited to, a particular geographical area, say a specific region within the country of provision, **the benchmark price must reflect the prevailing market conditions in that region**, because it is those prevailing market

[372] Appellate Body Report, *US – Carbon Steel (India),* para 4.150.
[373] Panel Report, *Softwood Lumber VII,* para 7.17.
[374] Panel Report, *Softwood Lumber VII,* para 7.27.

conditions that constitute the prevailing market conditions for the transactions concerning the government-provided good being investigated.[375] (Emphasis added.)

The Panel's innovative interpretation to distinguish the prevailing market conditions of a particular regional market as compared to the country-wide market or other regional markets within the country of provision is a positive development for jurisprudence under Article 14(d) of the Subsidy Agreement. However, the interpretation that the "regional market distinction" should be made by the investigating authority might be burdensome. Indeed, it would be better to place such an obligation to show its distinct regional market(s) on the complainant (or its investigated exporters) rather than on the investigating authority. Otherwise, the investigating authority would consider the country-wide prevailing market conditions only. This should also be the case because of the information collection advantage.

Beyond the "substantive" jurisprudence regarding the employment of alternative benchmarking the post-*Softwood Lumber* disputes consistently impose a procedural obligation upon the investigating authority: the "reasoned and adequate" explanation.[376] Relying on this "good faith" obligation, the Panel in *Softwood Lumber VII* overwhelmingly declared the USDOC's faults in making the alternative benchmarking selection for the Canadian timber.[377] The Panel in this dispute also required the investigating authority to take into account monetary/environmental obligations incurred by the recipient through the timber harvesting arrangements.[378] As a result, it faulted the USDOC for not adjusting the selected alternative benchmark prices based on such in-kind obligations. This interpretation seems to be unique to the natural resource subsidy situation because the natural resource exploiters are usually

[375] Panel Report, *Softwood Lumber VII,* para 7.30.
[376] Appellate Body Report, *US – Carbon Steel (India),* para 4.153; Appellate Body Report, *US – Countervailing measures (Article 21.5 – China)*, para 5.157.
[377] Panel Report, *Softwood Lumber VII*, paras 7.342, 7.397.
[378] Panel Report, *Softwood Lumber VII*, para. 7.50.

required to fulfill such administrative and environmental requirements to achieve the exploitation results.[379]

In summary, the post-*Softwood Lumber* cases added necessary clarification to past jurisprudence concerning the benefit calculation, thus resulting in the alleged subsidy. The WTO judiciary determined that the prices (both of the government and the market) employed for the benefit calculation should be accrued to the extracted resources rather than to the exploitation rights for such resources. Regarding the benchmark problem, the adjudicators of the subsequent natural resource subsidy disputes supplied three more alternative proxies which widened the benchmarking choice. Stricter procedural requirements were imposed in order to reject the in-country values (of the subsidizing country) for the use of an alternative benchmark. The most recent natural resource subsidy dispute, *Softwood Lumber VII*, also provided helpful explanations for the term "prevailing market conditions" through the lens of Canada's regional timber markets.

3.2.3. For the specificity test

As considered under the specificity analysis, the unique feature of natural resources was primarily observed in *US – Carbon Steel (India).* Again, the inherent characteristics of the disputed natural resources (iron ore and coal) were the center of debates regarding the *de facto* specificity under SCMA Article 2.1(c). India made an argument to defend its mining rights programs as non-specific in virtually the same manner that Canada had previously done. India reasoned that if the inherent characteristics of the provided goods limited their possible use to certain enterprises, the concerned subsidy should not be considered specific unless its access was further limited to a subset of those enterprises.[380] This argument was premised on an

[379] FAO, 'Governance Principles for Concessions and Contracts in Public Forests', FAO Forestry Papers, (Rome, 2001), at 45.
[380] Appellate Body Report, *US – Carbon Steel (India),* para 4.398.

incident of the Subsidy Agreement's negotiating history (Second Cartland Draft, Article 4[d]):[381]

> A subsidy may be specific in fact if it can be demonstrated, on the basis of facts which were known – or should have been known – to the granting authority at the time of establishment of the subsidy program, that the subsidy would be limited to certain enterprises.***
>
> ***It remains for signatories to address the issue of limited access as a result of **the inherent characteristics** of goods, services, or **extraction or harvesting rights** provided by a government. (Emphasis added.)

India argued that the text of the asterisked note and its absence later on from the final text indicated that the negotiating members were not in consensus on specificity based solely on the inherent characteristics of the provided good. The Panel rejected this reasoning as this historical draft should not be used to support any definitive conclusion, and the Subsidy Agreement has no special regime for inherent specificity.[382] Relying on the guidance in *Softwood Lumber IV*, the Panel interpreted that "if access is limited because only certain enterprises may use the subsidized product, the subsidy is specific."[383] The Appellate Body then upheld the Panel's ruling, and this gesture perhaps confirmed an absolute end to the inherent specificity argument under the current jurisprudential context.

This dissertation, however, finds these interpretations (in both *US – Carbon Steel (India)* and *Softwood Lumber IV*) questionable. A prevalent argument to defend the governmental provision of natural recourses as out of reach of the Subsidy Agreement is that such natural resources have been widely used throughout the country. This argument posits

[381]Appellate Body Report, *US – Carbon Steel (India),* para 4.935 and footnote 1041. Panel Report, *Softwood Lumber IV,* para 4.354.
[382] Appellate Body Report, *US – Carbon Steel (India),* paras 7.129-130.
[383] Appellate Body Report, *US – Carbon Steel (India),* para 7.131.

that such a usage pattern does not meet the specificity requirement.[384] However, the WTO judiciary's interpretation appears to connote that the usage pattern of an alleged natural resource could be found to be inherently specific. Putting the two opposing viewpoints together, it can be argued that a finding of specificity might further depend on the usage pattern of the provided goods and not just the government discretion in providing such goods. If this reasoning is established, the WTO judiciary would seem to create a new indicator for the specificity requirement beyond what is limitedly provided in SCMA Article 2. Given the fact that the specificity test is a negotiated restraint to the protectionist-amenable subsidy rules, any interpretation to stretch such a "control button" should potentially be overreaching.

With respect to the other venue, the regional specificity test as applied to the land-use rights in *US – AD/CVD (China)* may provide an implication for some kinds of natural resources for which exploitation activities are usually allocated by harvesting zones rather than by specified exploiters.[385] In this dispute, China argued that the regional specificity under SCMA Article 2.2 is established if a subsidy is granted to certain enterprises *within* a designated region. China premised its argument on the drafting history of Article 2.2 in which the phrase "available to all enterprises" was finally replaced by the phrase "limited to certain enterprises." The United States asserted that China's interpretation would make Article 2.2 redundant because a subsidy could be specific under SCMA Article 2.1(a) even if there was an absence of such geographical limitation.[386] In other words, the United States understood that the regional specificity analysis should be based on the regional basis itself instead of being limited to a subset of the enterprises within this location.

[384] S. Ripisnky, above n 68.
[385] For example in the case of fisheries, see Dorothy Dankel et al., 'Allocation of Fishing Rights in the NEA', Discussion Paper, (Nordic Council of Ministers, 2015).
[386] Panel Report, *US – AD/CVD (China),* para 9.118.

By taking Article 2.2 in the context of relevant provisions (SCMA Article 2.1, 8.2[b]), the standing Panel warned that an interpretation such as that put forward by China would be inconsistent with the principle of effective treaty interpretation:[387] there would be no need for the regional specificity test under Article 2.2 as the alleged subsidy could already be specific merely under Article 2.1. Therefore, the Panel interpreted the term "certain enterprises" in SCMA Article 2.2 to refer to those enterprises within a designated geographical region, with no further limitation within the region required.[388]

In short, the post-*Softwood Lumber* cases fortify the interpretation that the inherent characteristics of the natural resource at issue could not be an excuse for the *de facto* specificity test under SCMA Article 2.1(c). The unresolved drafting history relevant to the issue is still controversial, as presented by India. The interpretation of the regional specificity test under SCMA Article 2.2 in *US – AD/CVD (China)* could shed light on determining the specificity requirement of some natural resources for which exploitation rights are allocated on the zonal basis rather than the exploiter basis.

To conclude Section 3.2, the jurisprudential clarifications to natural resource subsidy situations after *Softwood Lumber IV* were primarily concentrated on the benchmark problem. This jurisprudence stretched and squeezed the issue to some extent, but the general sense is that the subsequent adjudicators aimed to use "due process" requirements to constrain the past judicial activism. The subsequent cases had an opportunity to apply the "reasonable proximate relationship" test in another natural resource exploitation situation to test the financial contribution element. It appears that this proximity test created by *Softwood Lumber IV* has been formally accepted and practically applied with no more questions. The inherent characteristics of the natural resource at issue were again brought to WTO dispute settlement;

[387] Isabelle van Damme, 'Treaty Interpretation by the WTO Appellate Body', 21(3) European Journal of International Law 605 (2010), at 635–39.
[388] Panel Report, *US-AD/CVD (China),* paras 9.133, 9.134.

nevertheless, this inherent specificity argument was again defeated. Regional specificity as applied to the land-use rights in China might provide guidance for some natural resources for which exploitation rights are commonly allocated by geographic basis rather than harvester basis.

3.3.From litigation to legislation: natural resource underpricing in the Doha Development Round

As usually seen in municipal legal systems, the fruits of the litigation process are likely to provoke legislative changes. But rulemaking with respect to the multilateral trading system has certainly not gone smoothly because it embraces various economic systems and divergent levels of economic development. Natural resources under the subsidy context had been discussed in the Uruguay Round, but no results had been achieved. Therefore, the issue has been causing trade friction as observed in WTO dispute settlement practice.

China's accession to the multilateral trading system in 2001 and other natural resource-endowed countries like Russia added fuel to the natural resource underpricing debate.[389] For example, the European Union expressed huge concerns over the below-market gas pricing monopoly of the Russian energy giant – Gazprom – as conferring a substantial subsidy on the Russian domestic manufacturers. In the extreme, the European Union negotiators even demanded the Russian Government to triple its domestic gas prices as compared to the exported prices to the European Union.[390]

The Doha Ministerial Declaration 2001 set mandates for the negotiators *inter alia* to discipline trade-distorting practices. It perhaps provides a legal basis to widen the grasp of the multilateral subsidy regime.[391] The Doha Round does not have a separate negotiating forum for

[389] For example, the European Union expressed great concerns about Russia's gas pricing policies throughout Russia's accession to the WTO. See Daniel Behn and Vitaliy Pogoretskyy, above n 72, at 45–65.
[390] Hubert Zimmermann, 'Realist Power Europe? The EU in the Negotiations about China's and Russia's WTO Accession', 54(4) Journal of Common Market Studies 813 (2007), at 825.
[391] WTO, Doha Ministerial Declaration, WT/MIN (01)/DEC/1, November 14, 2001, para 28.

natural resource-based products as did its predecessor; therefore, concerns over the natural resource underpricing practice have solely been discussed at the Rules Negotiation Group (in the Subsidy Agreement part). Since 2011, discussions of general subsidy matters in the renegotiation of the subsidy rules has been suspended and the fisheries subsidies negotiations have proceeded alone. The Chairman of the Negotiating Group confirmed the current negotiations' impasse in 2011; therefore, the draft text of the Subsidy Agreement's renegotiation has remained untouched since the 2008 Chair Text (except for the fisheries subsidies part).[392]

The United States again took the lead in tackling certain trade-distorting practices before the Rules Negotiation Group. In its background paper, the United States did not precisely mention the natural resource underpricing practice. It just noted "inappropriate government involvement […] in such industries as steel and fisheries."[393] However, the United States explicitly mentioned the natural resource underpricing problem in the subsidy renegotiating agenda in the subsequent document. Although the United States recognized the intricacy of the fair-market pricing demand in the natural resources sector, it still emphasized a need for further discussions on the issue, especially the dual-pricing practice.[394] The United States even suggested a framework for the steel subsidy agreement (a sectoral agreement). It argued that the OECD countries lent support for this idea.[395]

Such an unfair trade concern or a benign worry about natural resource disposals is no longer the exclusive domain of the United States or the developed world. Saudi Arabia presented quite a substantiated paper to accuse the OECD countries with respect to their energy

[392] WTO, Communication from the Chairman, TN/RL/W/254, April 21, 2011.
[393] WTO, Communication for the United States – Basis Concepts and Principles of the Trade Remedy Rules, TN/RL/W/27, October 22, 2002, at 3.
[394] WTO, Communication for the United States – Subsidies Disciplines Requiring Clarification and Improvement, TN/RL/W/78, March 19, 2003, at 3.
[395] WTO, Elements of a Steel Subsidies Agreement – Comments from the United States, TN/RL/W/95, May 5, 2003.

subsidy policies. It claimed that such energy subsidizing practices have inflicted substantial financial losses on the "southern" fossil fuel exporters and exacerbated their economic development.[396]

Details of the subsidy discussion, the question of the government's market predominance as commonly observed in the natural resource sector, and the benchmark selection for calculating the remuneration adequacy (for this situation) are respectively found at **Article 2.1(c)** and **Article 14.1(d)** of the Draft Text 2008. As crystalized in the "regulated pricing" concept, the proposed text to Article 2.1(c) presents guidance for the specificity determination in the case of governmental provision of goods or services at regulated prices. The proposed Article 14.1(d) accordingly introduces a few clarifications for the benefit calculation in this situation.[397] The proposed texts read as follows:

Article 2

Specificity

2.1

(c) […] In the case of subsidies conferred through the provision of goods or services ***at*** **regulated prices**, factors that may be considered include the **exclusion** of firms within the country in question from access to the goods or services at the regulated prices.

Article 14

Calculation of the Amount of a Subsidy ~~in Terms of the Benefit to the Recipient~~

14.1

(d) […] Where the price level of goods or services provided by a government **is regulated**, the adequacy of remuneration shall be determined in

[396] WTO, Energy Taxation, Subsidies and Incentives in OECD Countries and Their Economic and Trade Implications on Developing Countries, in Particular Developing Oil Producing and Exporting Countries – Submission by Saudi Arabia, WT/CTE/W/215 - TN/TE/W/9, September 23, 2002.

[397] WTO, Communication from the Chairman, TN/RL/W/254, April 21, 2011, para 20; see also WTO, Subsidies – Submission of the European Communities, TN/RL/GEN/135, April 24, 2006, at 2.

relation to prevailing market conditions for the goods or services in the country of provision when sold at unregulated prices, adjusting for quality, availability, marketability, transportation and other conditions of sale; provided that, when there is **no unregulated price, or such unregulated price is distorted because of the predominant role of the government in the market as a provider of the same or similar goods or services**, the adequacy of remuneration may be determined by reference to the export price for these goods or services, or to a market-determined price outside the country of provision, adjusting for quality, availability, marketability, transportation, and other conditions of sale. (Emphasis added.)

Without a doubt, the proposed amendments primarily come from the jurisprudence set forth in *Softwood Lumber IV* regarding the natural resource subsidy practice. Specifically, these draft provisions generally concur with the benchmarking jurisprudence concerning the government's market predominance. Given the fact that such jurisprudence of the WTO judiciary has invited constant debate, borrowing its substance in the rule-making process is debatable.[398]

Some negotiators have considered these amendments to be necessary; others (mainly developing members) have been concerned that these draft provisions could deny their comparative advantage and tie their hands on "policy space" considerations.[399] In fact, the North–South divide has been observed in this thorny corner. It appears to repeat the industrialist *versus* sovereigntist conflict in the Uruguay Round. This means that the road ahead for the subsidy rules renegotiation could be murky if these proposed amendments are kept unchanged. Some technical points of the proposed texts will now be explained.

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[398] Pallavi Arora and Isha Das Bhatnagar, 'External Benchmark Choices in Anti-Dumping and Countervailing Duty Proceedings: A Battle of "Proxies"'?, in James J. Nedumpara and Weihuan Zhou (eds) *Non-Market Economies in the Global Trading System-The Special Case of China* (Springer, 2018), at 155–84. See ibid, para 21.

[399] WTO, Working Document from the Chairman (Annex B), TN/RL/W/232, May 28, 2008, at B-3.

First, with respect to Article 2.1(c) of the Draft Text 2008 (the specificity requirement), the exclusion of firms within the country of provision from accessing goods or services at a regulated price could be a factor to take into account for the specificity examination. However, the degree of such exclusion might need to be clarified. Is the exclusion against the rest of the eligible users (accessed by one or a few but excluding the rest) or just against one or a few users (accessed by the rest but excluding one or a few)?[400] Is this exclusion factor equivalent to a limitation on the access to government-provided goods or services? This exclusion factor is a reminder of a past omission: Draft Article 14(e) of the Subsidy Agreement. This abandoned draft provision presented a rebuttable presumption that the government monopoly in providing goods or services should *not* be considered as conferring a subsidy unless it conducts such provision in a discriminate manner.[401] Does the exclusion factor in the Draft Text 2008 equate with the discrimination in Draft Article 14(e) of the Subsidy Agreement (Uruguay Round)?[402]

Second, concerning the benchmark problem, the proposed text permits the use of alternative benchmarks for the benefit calculation if an unregulated price does not exist or the government's predominance distorts such an unregulated price. This proposal seems to change the rationale behind choosing comparable prices for the benchmark determination (compared to the existing jurisprudence). Although WTO adjudicators have consistently emphasized that the marketplace is the appropriate standard for conducting a price comparison, the underlying proposal (in the Draft Text 2008) appears to shift the focus from the market-determined standard to whether the prices at issue are regulated or not. In fact, it may not necessarily be clear whether the unregulated price is equivalent to the market-determined price.

In addition, the proposed draft text offers a menu from which an alternative benchmark is selected to deal with the government's market predominance situation. It introduces three

[400] Ibid.
[401] See Chapter 1, at 1.3.2.
[402] GATT, above n 199.

possible proxies: the export price, the world market price, and the foreign country market price. While the constructed price was initially implanted into GATT Article VI as a potential benchmark for the price comparison (although this inclusion was set for the dumping calculation) and there is a high probability that this price can reflect the prevailing market conditions of the country of provision,[403] the exclusion of such a constructed price benchmark from the proposed text seems not to be convincing.[404] In addition, the WTO judiciary formally permitted the use of the constructed price as a possible benchmark; such exclusion is thus quite questionable against this background. For these reasons, it is reasonable to criticize the proposed amendment to Article 14(d) of the Draft Text 2008 as deviating from and weakening the existing jurisprudence.[405] Furthermore, some negotiators have been concerned that this amendment appears to permit a *direct jump* to use of the external benchmark, thereby implicitly ignoring the country of provision's prevailing market conditions.[406]

In summary, the natural resource underpricing problem has again been brought to the Doha Development Round under the subsidy rules' renegotiation. The proposed amendments in the Chair Draft Text 2008 implicitly cover the issue. The highly controversial matter in this rule-making agenda has been the benchmark selection for the government's market predominance as a reflection of the government's predominance in the natural resource sector. Solutions for this tricky topic were implanted into the Draft Text under two provisions: Article 2.1(c) and Article 14.1(d).

Because the legal substance of these proposed texts is substantially derived from the natural resource subsidy jurisprudence, the more controversial the jurisprudence, the more

[403] Y. Qin, above n 75, at 602–06.
[404] Sophia Müller, *The Use of Alternative Benchmarks in Anti-Subsidy: A Study on the WTO*, *the EU and China,* (Springer, 2018), 218.
[405] WTO, above n 399, at B-4.
[406] WTO, above n 399, at B-3,4.

controversial the legislative process might be. The reason is simply that the quasi-judiciary[407] characteristic of WTO dispute settlement can to some extent shield it against outright dissent. However, the WTO's member-run[408] rulemaking process might aggravate a debatable topic. The jurisprudence on the natural resource subsidy practice has, on the one hand, influenced the renegotiation of the subsidy rules, while on the other hand, it has indirectly caused the current rule-making agenda to be under a stalemate.

[407] Donald McRae, 'What Is the Future of WTO Dispute Settlement?', 7(1) Journal of International Economic Law 3 (2004), at 7–8.
[408] Colin B. Picker, 'The AB Crisis as Symptomatic of the WTO's Foundational Defects or: How I Learned to Stop Worrying and Love the AB', in Tsai-Fang Chen, Lo Chang-fa, Nakagawa Junji (eds), *The Appellate Body of the WTO and Its Reform* (Springer, 2020), at 59.

Conclusion of Chapter 3

All post-*Softwood Lumber* subsidy disputes analyzed in this dissertation involve the governmental provision of natural resource exploitation rights rather than the exploited resources. The value of the post-*Softwood Lumber* cases is to provide clearer jurisprudence to justify natural resources under the current multilateral subsidy regime. These subsequent natural resource subsidy cases have primarily relied on the legal standards set in *Softwood Lumber IV.* The "reasonable proximate relationship" test developed in this landmark dispute was formally applied to India's mining rights. This approach appears to be accepted as a "classic" precedent without further questions. However, subsequent adjudication has clarified that consideration of natural resource exploitation's uncertainty and complexity is required in conducting the proximity test. Post jurisprudence has also distinguished between the governmental provision of exploitation rights *versus* exploration rights to natural resources; however, it has not explained how to connect the latter with the proximity test.

The post-*Softwood Lumber* jurisprudence supplies necessary explanations for the alternative benchmark problem with regard to the government's market predominance in the natural resource sector. It confirms that the price comparison for the benefit calculation should be based on the prices of the exploited resources rather than the value of the resource exploitation rights. This interpretation can make the subsidy calculation easier, but it might not convince the allegedly subsidizing member. India (and Indonesia) have argued that it actually provides the right to exploit natural resources instead of the exploited resources themselves. In addition, subsequent jurisprudence has added three more choices to the past jurisprudence regarding the selection of an appropriate alternative benchmark. But it might require stricter procedural requirements to obtain permission to use such an alternative "privilege."

India again put forward the inherent specificity concept as the unique feature of natural resources in the subsidy context. However, this argument was again defeated. The

interpretation of the regional specificity test in *US – AD/CVD (China)* might provide a hint for considering the specificity of some "regional-based" natural resources.

In the legislative arena, the natural resource underpricing problem has been brought for discussion under the Doha Development Round's subsidy renegotiation. Fruits of the natural resource subsidy jurisprudence (*Softwood Lumber IV*) provide substance for this legislative process. A central point of the proposed amendments in the 2008 Draft Text (Subsidy Agreement) is how to deal with the government's market predominance problem in the subsidy calculation. The government predominance concern here is likely to reflect the government's role in the natural resource sector. However, existing jurisprudence seems to paralyze the legislative path due to conflicting interests. In other words, the government's market predominance problem in the natural resource sector appears to put the renegotiation of the current subsidy rules into a stalemate.

Chapter 4

FROM TRADE TO THE ENVIRONMENT: COUNTERVAILABILITY OF NATURAL RESOURCE SUBSIDIES FOR NATURAL RESOURCE CONSERVATION

In the trade and environment context, the existing WTO subsidy jurisprudence with regard to natural resources could provide a perspective on the use of trade instruments for environmental protection. In the past, environmentalists proposed green CVDs to offset the impact of weak environmental standards (considered a kind of implicit governmental subsidy) on the competitiveness between trading nations. This environmentally "progressive" proposal stemmed from the past subsidy debates over natural resources in U.S. trade politics.[409]

The United States in 2020 reinvigorated this idea at the WTO when it suggested countervailing action against "eco-dumping" products that come from countries with weak environmental standards.[410] For the United States, this situation put the "leveling of the playing field" and the sustainable development goals on the same front. By contrast, most trade scholars see a lack of support in the current trade rules for such a green CVD proposal.[411] Professor Robert E. Hudec also examined this innovative idea from the trade law perspective. He believed that the "loose nature" of the subsidy concept might provide room for such an environment-offsetting tariff in the future.[412]

It was demonstrated in the preceding chapters how the governmental provision of underpriced resource exploitation rights was placed under the WTO subsidy regime. This

[409] Two bills presented before the U.S. 99th Congress (1985–1986) for the purpose of neutralizing differences among environmental standards accrued to mineral industries: HR.1905 – Coal Trade Equalization Act of 1985 (by Representative Rahall) and S.353 – Copper Environmental Equalization Act of 1985 (by Senator DeConcini). See Richard B Dagen and Michael S Knoll, 'Duties to Offset Competitive Advantages', 10(2) Maryland Journal of International Law 273 (1986), at 273–93.
[410] WTO, above n 11.
[411] See Introduction, at section (v).
[412] Robert E Hudec, above n 100, at 14–19.

development in the WTO jurisprudence means that it is permissible to use the countervailing duty instrument to combat inefficient natural resource allocation, as seen in the U.S anti-subsidy campaign against timber harvesting rights (Canada, Indonesia) and against mining rights (India). The prerequisite under the current subsidy rules to the employment of green CVDs must be the existence of a countervailable natural resource subsidy. Although technical matters of the subsidy rules might cause some difficulties, the general impression is that the current trade laws might support the past "green" anti-subsidy proposal, despite its application being limited to the natural resource sector. If this is the case, countervailing duties can support the "resource optimization" goal as recognized in the WTO establishment agreement.[413]

This chapter aims to revisit the past green anti-subsidy proposal in light of current WTO subsidy jurisprudence. Jackson Erpenbach in 2020 explored the application of existing WTO subsidy law in the U.S. coal lease program. He examined the federal coal leasing program's underpricing practice managed by the U.S. Bureau of Land Management. In light of the existing WTO jurisprudence, Erpenbach argued that such coal underpricing practice might constitute a countervailable subsidy and, as a result, could be subject to a foreign anti-subsidy challenge.[414] His conclusion might not come as a big surprise to those who have observed recent natural resource disputes at the WTO. In fairness, if the United States did impose green CVDs against below-market (coal and iron ore) captive mining programs in India, its underpriced coal lease program should be ready for a similar anti-subsidy situation.

The question of whether under the current legal basis this green anti-subsidy tool could be employed against below-market fishing rights or in the fishery sector – one of the four most-traded natural resources (forest, fish, fossil fuel, and minerals) – is also considered in this dissertation.[415] Given that forest harvesting rights and mining rights have already been the

[413] Agreement Establishing the World Trade Organization 1994, Preamble.
[414] Jackson Erpenbach, above n 102, at 503–29.
[415] WTO, above n 27, at 46.

target of green CVDs, an assessment of fishing rights is undertaken to further understand this green trade instrument's applicability. To begin, the theoretical basis for this green anti-subsidy proposal is examined.

4.1. Natural resources and international trade: the property rights issue

4.1.1. The property rights concept and natural resources

Property rights over natural resources are a distinct topic of discussion in the World Trade Report 2010 on natural resources trade because trade aspects of natural resource products are considered and attention is paid to the rational use of our natural endowment. Before the WTO panel (*Softwood Lumber IV*), Canada argued that its stumpage mechanism is a property right – the right to harvest standing timber from public lands.[416] As discussed in Chapter 2, it seems that Canada changed the theoretical basis upon which to defend its natural resource sovereignty: from the economic rent theory (in *Softwood Lumber II*) before the GATT to the theory of property rights over natural resources before the WTO (in subsequent *Softwood Lumber* disputes).

The property rights concept itself is complicated and inconsistent across the literature and relevant disciplines.[417] From the legal perspective, the property rights discussion can be traced back to the divergence between Roman Law and Common Law systems in understanding the property concept and its accompanying rights.[418] However, the "bundle of rights" theory in Common Law seems to have been used by economists to develop the property rights concept in the natural resource sector.[419] Based on the "bundle of rights" theory, Schlager

[416] Panel Report, *Softwood Lumber IV,* paras 4.6, 4.7.
[417] Daniel H. Cole and Elinor Ostrom, 'The Variety of Property Systems and Rights in Natural Resources', in Daniel H. Cole and Elinor Ostrom (eds), *Property in Land and Other Resources* (Lincoln Institute of Land Policy, 2012), at 39.
[418] Yun Chien Chang and Henry E. Smith, 'An Economic Analysis of Civil versus Common Law Property', 88(1) Notre Dame Law Review 1 (2012), at 1–55.
[419] Harold Demsetz, 'Toward a Theory of Property Rights', 57(2) The American Economic Review 347 (1967), at 374.

& Ostrom in 1992 developed a theory on property rights over natural resources which has wide influence.[420] Accordingly, property rights to a natural resource comprise two classes: the rights at the operational level[421] – access and withdrawal – and the rights at the collective-choice level[422] – management, exclusion, and alienation. Depending on the possession of any or all of these property rights, an entity could be the owner, proprietor, claimant, authorized user, or authorized entrant.

Bundles of Rights Associated with Titles

	Owner	Proprietor	Claimant	Authorized User	Auth. Entrant
Access	X	X	X	X	X
Withdrawal	X	X	X	X	
Management	X	X	X		
Exclusion	X	X			
Alienation	X				

Source: E. Ostrom and Schlager[423]

The principle of permanent sovereignty over natural resources has set political and legal foundations for government ownership in the natural resources sector.[424] This particular type of ownership is usually established by constitutional arrangements which confer to the

[420] Edella Schlager and Elinor Ostrom, 'Property-Rights Regimes and Natural Resources: A Conceptual Analysis', 68(3) Land Economics 249 (1992), at 249–62. Although one might demand an expansion of this theory to cope with the complexity of natural resource management, it is still the theoretical foundation of the field. See Thomas Sikor, Jun He, and Guillaume Lestrelin, 'Property Rights Regimes and Natural Resources: A Conceptual Analysis Revisited', 93 World Development 337 (2017), at 337–49.

[421] Right of "access" is the right to enter into a defined physical property. Right to "withdraw" is the right to obtain products from a resource (catch fishes, cut trees…). See Ibid, at 250.

[422] Right of "management" is the right to regulate the terms of internal use and make improvements to the resource. Right of "exclusion" is the right to determine who will have the access right and how such right is being transferred. Right of "alienation" is the right to sell or lease either or both of the other collective choice rights. See ibid, at 251.

[423] The authorized entrant was added by further refinement to the theory. See Elinor Ostrom, 'Private and Common Property Rights', Workshop in Political Theory and Policy Analysis, and Center for the Study of Institutions, Population, and Environmental Change, (Indiana University, 2000), at 340.

[424] United Nations General Assembly (UNGA), Resolution 1803 (XVII) 'Permanent Sovereignty over Natural Resources' (1962). See Nico J. Schrijver, 'Fifty Years Permanent Sovereignty over Natural Resources', in Marc Bungenberg and Stephan Hobe (eds), *Permanent Sovereignty over Natural Resources* (Springer, 2015), at 22–23.

government a representative function toward national natural resources.[425] Government ownership over natural resources is prescribed in the constitution of most countries.[426] In this principle–agent relationship,[427] the government is expected to pursue efficient strategies to exploit and manage its national natural windfalls.

Applying Ostrom's theory to governmental ownership toward natural resources can help to conceptualize some arguments presented by the complainants in the WTO natural resource subsidy disputes. The central government or provincial governments were the owners of the disputed resources in the case of standing timber (Canada) or iron and coal mines (India). The government thus held the collective-choice rights to set rules for natural resource exploitation and conservation (the management right), to determine upon whom the operational rights should be conferred (the exclusion right), and even to transfer such governmental ownership (the alienation right). The government as the owner of the natural resources can through its agents (mostly state-owned enterprises) exploit and distribute such natural assets to domestic users. Another possibility is to transfer the operational rights (the rights to entry and withdrawal) to domestic exploiters or even foreign exploiters. As Canada contended, its timber harvesters were provided a *profit à prendre* or license to harvest public standing timber.[428] Thus, the timber harvesters could be deemed as the authorized users of the resource. They cannot "upgrade" to become the proprietor because only the government as the owner holds the right of exclusion (allocation of natural resource exploitation rights).

To pursue the efficient use of national resources, the government must find effective ways to allocate such natural resource exploitation rights. According to Ostrom's theory, the

[425] Nicholas Haysom and Sean Kane, 'Negotiating Natural Resources for Peace: Ownership, Control and Wealth-Sharing', Briefing Paper, (Center for Humanitarian Dialogue, 2009), at 9.
[426] Y. Qin, above n 75, at 582–94.
[427] Cornelia Luchsinger and Adrian Mueller, 'Incentive Compatible Extraction of Natural Resource Rent Natural Resource Rent', CEPE Working Paper No.21, (CEPE, 2003).
[428] Panel Report, *Softwood Lumber IV,* para 4.7.

government is expected to designate allocation rules (right of exclusion) for the resources under consideration. In other words, the government may set the mechanism for allocation of natural resource exploitation rights. Transparency and accountability principles are also essential in the natural resource allocation process to secure an efficient and fair distribution.[429] Most scholars and policymakers suggest that competitive markets are the prospective solution for implementing such natural resource allocation rules.[430] In addition, the government is expected to prescribe exploitation or withdrawal rules, set conservatory obligations, and guarantee that these rules are being adequately enforced. In short, concerning natural resource management under the government ownership context, the property rights function should be to: (1) set rules for allocation of natural resource exploitation rights; (2) set rules for exploitation activities and conservation objectives; and (3) effectively enforce the established rules.

4.1.2. Natural resources and international trade: the property rights factor

In the international trade context, the natural resource endowment is an essential factor in a trading country's comparative advantage.[431] However, Professor Graciela Chichilnisky recently proposed that property rights over natural resources, known as a trade advantage, should be considered. By examining a trade model between two trading partners with identical capacity and endowment except for the ownership status toward natural resources, she concluded that property rights could create trade in natural resources. Unfortunately, such trade could worsen the common property problem over natural resources.[432] The "victim" of such a

[429] See Andrés Mejía Acosta, 'The Impact and Effectiveness of Accountability and Transparency Initiatives: The Governance of Natural Resources', 31(S1) Development Policy Review 89 (2013), at 89–105.
[430] Natural Resource Governance Institute, 'Granting Rights to Natural Resources – Determining who takes resource out of ground, March 2015, https://resourcegovernance.org/sites/default/files/nrgi_Granting-Rights.pdf (visited November 4, 2021).
[431] Thomas Gunton, 'Natural Resources and Regional Development: An Assessment of Dependency and Comparative Advantage Paradigms', 79(1) Economic Geography 67 (2003), at 89.
[432] Graciela Chichilnisky, above n 29, at 856.

regretful scenario is the country with ill-defined and weak enforcement of property rights over natural resources (usually the Global South).

Inadequate property rights lead this country to behave as if it possesses an actual comparative advantage toward natural resources even if it does not.[433] According to Professor Chichilnisky, trade between a country with an ill-defined property rights regime and a country with a well-defined property rights structure "leads to apparent comparative advantage when none exist, and to apparent gains but actual losses from trade." She indicated that "the South overproduces, the North overconsumes" when the developing countries export their underpriced natural resources at below social costs.[434] As a result, unregulated competitive markets cannot efficiently allocate natural resources in the inadequate property rights environment.[435] This theory by Professor Chichilnisky has subsequently been confirmed in the recent literature, such as by Barnder and Scott and by Copeland and Taylor.[436]

Property rights over natural resources are synonymous with institutional arrangements in natural resource management. Nita Ghei proposed that a focus on enforcement of the property rights regime over natural resources is likely equivalent to providing "infrastructure" to exploit the advantage of such natural endowment.[437] For the sake of natural resource conservation, countless pieces of evidence in institutional economics confirm that strengthening property rights regimes is generally contributes to natural resource

[433] Graciela Chichilnisky, above n 29, at 858.
[434] Graciela Chichilnisky, above n 29, at 858, 863–65; See also R. H. Coase, 'The Problem of Social Cost', (3) Journal of Law and Economics 1 (1960), at 1–44.
[435] Graciela Chichilnisky, above n 29, at 859.
[436] James A. Brander and M. Scott Taylor, 'Open Access Renewable Resources: Trade and Trade Policy in a Two-Country Model', 44(2) Journal of International Economics 181 (1998), at 203–04; Brian R. Copeland and M. Scott Taylor, 'Trade , Tragedy , and the Commons', 99(3) The American Economic Review 725 (2009), at 738–39.
[437] Nita Ghei, 'Institutional Arrangements, Property Rights, and the Endogenity of Comparative Advantage Advantage', 18(3) Transnational Law & Contemporary Problems 617 (2009), at 648.

sustainability.[438] In short, this discussion supports the proposition that property rights over natural resources are an intermediate *link* between international trade and natural resource conservation.

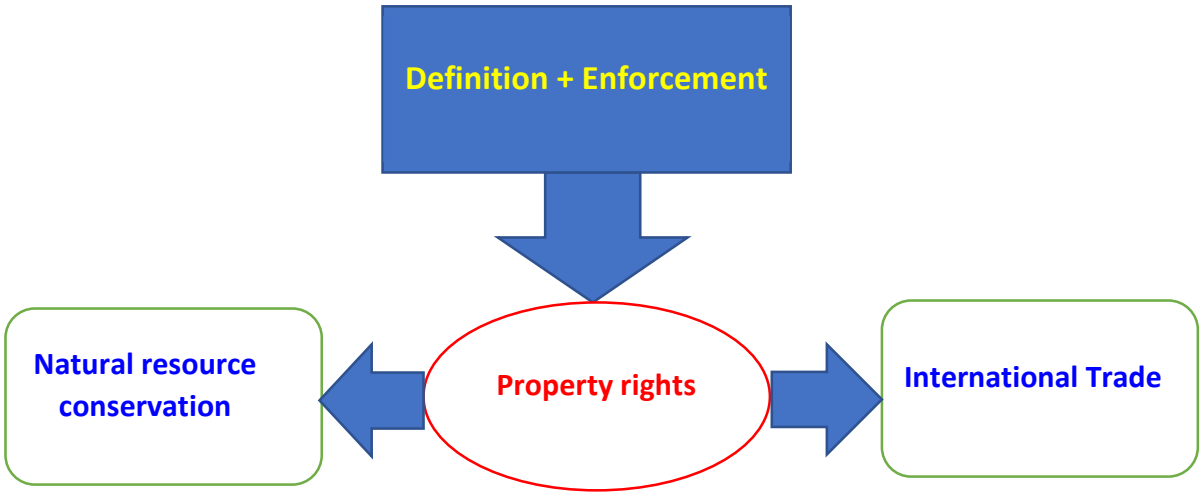

Illustration of the intermediate link of the property rights factor

(Summarized by the author)

Natural resource underpricing practice was the unresolved issue at the Uruguay Round to establish the WTO. One form of such natural resource waste practice is the governmental provision of underpriced resource exploitation rights to domestic producers (the right to exploit natural resources in their natural state).[439] An exploitation rights provision can be equivalent to the provision of underpriced natural resources (exploited resources) under existing WTO jurisprudence. Chichilnisky's theory on the relationship between international trade and natural resource conservation through the property rights factor could be applied to this circumstance.

Governmental provision of underpriced natural resource exploitation rights may support domestic exploiters/producers with cheap inputs for production and consumption. However, behind this "virtuous" policy is likely the government's failure to define and enforce

[438] See an early interdisciplinary research studied on this subject under cooperation with the World Bank: Susan Hanna and Mohan Munasinghe, *Property Rights and The Environment: Social and Ecological Issues,* (The Beijer International Institute of Ecological Economics and The World Bank, 1995).
[439] Michele Ruta and Anthony J. Venables, above n 16, at 341.

property rights over the resources at issue.[440] From the resource economists' viewpoint, by inadequately recouping the natural resource rents, the government seems to purposefully neglect the market and transparency principles in allocating its natural resource endowments as the first–best solution.[441] According to Ostrom's theory, such neglect could be considered a failure to strengthen the property rights regime toward the resources. In return, the government budget for natural resource management could be constrained by granting the exploitation rights with inadequate remuneration of royalties.[442]

Such a property rights failure may also be a basis to claim that the government might not adequately observe its duties to effectively exploit and develop national natural resources for the country's wellbeing.[443] Relying on Chichilnisky's theory, opening trade with such a "disguised" trade advantage would exacerbate the natural resource endowment and be a loss of welfare in the long run. Professor William Ascher empirically observed the environmental consequences of the natural resource underpricing policy in selected developing countries.[444] This "resource waste" practice is also causing negative economic and institutional externalities, such as keeping inefficient industries in place or nurturing corruption.[445]

Thanks to the development of WTO subsidy jurisprudence to capture the governmental provision of below-market natural resource exploitation rights, the use of countervailing duties against a natural waste practice could be an immediate solution. From the view of the importing countries, the green CVDs might not only counteract the unfair trade advantage enjoyed by foreign downstream exporters (using the underpriced natural resource inputs) but also decrease

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[440] William Ascher, *Why Governments Waste Natural Resources: Policy Failures in Developing Countries*, (Johns Hopkins University Press, 1999), 39–41.
[441] Paul Collier and Anthony J. Venables, above n 22, at 11–13.
[442] Colin Hunt, 'Economic Instruments for Environmental and Natural Resource Conservation and Management in The South Pacific', Working Papers in Ecological Economics, (The Australian National University, 1997), at 9–12.
[443] United Nations General Assembly (UNGA), above n 424.
[444] William Ascher, above n 440, at 247–49.
[445] William Ascher, above n 440, at144–89.

importing demand for such below-market resources.[446] In light of Professor Chichilnisky's theory, this natural resource underpricing policy should be attacked because it creates a disguised comparative advantage to the resource-exporting country. The inevitable consequence of such a "false" trade advantage is natural resource destruction. Therefore, countervailability of the underpriced resource exploitation rights is expected to reduce foreign demand of such "dumped" natural resources as well as to generate trade pressure on the resource-wasting country to strengthen its property rights regime.

In summary, green CVDs for natural resource conservation find their theoretical foundation in Chichilnisky's theory on the relationship between international trade and natural resource conservation through the property rights factor. The use of countervailing duties against the underpriced natural resource exploitation rights could promote a more sustainable trading system. Relying on this theory means that the green CVDs proposal takes the perspective of the exporting country rather than the unfair trade rationale as conventionally invoked from the perspective of the importing country. Such a green trade instrument is expected to press the resource-wasting country to strengthen its property rights regime over natural resources toward market-based and transparent principles.

4.2. Green countervailing duties for natural resource conservation

4.2.1. Legal premise

Although environmentalists and even the USTR (under the Trump Administration) vehemently support the use of countervailing duties against weak environmental standards, most trade scholars cast doubts on this suggestion.[447] From the normative aspect, some scholars have criticized this environment-competitiveness offsetting proposal as running afoul of the

[446] Perhaps the most vociferous advocate for this anti-subsidy campaign was John A. Ragosta, a brilliant attorney who was extensively involved in the countervailing actions against Canadian softwood lumber. See John A. Ragosta, above n 184, at 255–303.
[447] See Introduction, section (v).

comparative advantage concept as well as that the unfair trade rationale behind this instrument is illusory.[448] Putting environmental policies of a government under the multilateral subsidy rules can also raise some technical questions. Professor Hudec pointed out that the first hurdle to such an environment-offsetting proposal is the definition of a subsidy. He reminded that the definition in the GATT (including the Subsidy Agreement) does not capture regulatory subsidies (e.g., subsidized by an environmental policy) or governmental inaction (e.g., intentionally set less stringent environmental standards) as forms of the subsidy transaction. Therefore, under the current legal context, any expectation to stretch the subsidy definition to embrace a less-stringent environmental policy would be inconsistent with world trade law.[449]

The second hurdle is how to find a market value for calculating the amount of subsidy conferred by an environmental policy. In fact, there is no existence of a "fair market" value for a governmental policy in the country of provision as required by the Subsidy Agreement. One can suggest the use of an environmental standard in a foreign country's equivalent environmental situation as the benchmarking value. However, the problem is also how to evaluate such a referenced environmental policy in monetary terms. Given the multilateral subsidy law's market-based rationale, a failure to find a "persuasive" market benchmark for calculating the alleged subsidy means the collapse of the subsidy allegation. Even though the consideration is limited to the natural resource sector, public policy dimensions of the natural resource endowment mean these public assets are very hard to evaluate.[450] Therefore, finding a comparable market benchmark for the subsidy calculation might be challenging, especially in the situation of a government monopoly (see comments in Chapter 5, at 5.2).

[448] Michael J. Trebilcock, Robert Howse, and Antonia Eliason, above n 112, at 661.
[449] Robert E Hudec, above n 100, at 14–19.
[450] Lucas Bretschger and Karen Pittel, 'Twenty Key Challenges in Environmental and Resource Economics', 77(4) Environmental and Resource Economics 725 (2020), at 735.

Even the subsidy definition could legitimately be stretched to discipline weak environmental standards as a governmental subsidy. The last hurdle is the specificity test. Most trade law scholars point out this element to argue that such a regulatory subsidy could not be countervailed. The reason is simply that environmental policies are usually applied throughout the country. This general application is an "exception" to the specificity test under the current subsidy regime. However, this element can be omitted if domestic lawmakers want to countervail a below-standard environmental policy.[451]

All of these legal barriers have gradually made the environment-offsetting proposal a disappointment in academic discourse. Very few pieces of literature that continue to discuss this topic have been found after 2000.[452] This tendency might herald a gloomy future for the present "weak environment countervailability" proposal of the United States. However, through the lens of *Softwood Lumber* and subsequent natural resource subsidy disputes at the WTO, the existing subsidy jurisprudence could tell a different story. Countervailability of a traded natural resource could be more feasible than attacking a national environmental policy.

WTO subsidy law concerning natural resource exploitation rights removes the aforementioned legal obstacles to the green CVDs proposal. First, the WTO judiciary connected the governmental provision of natural resource exploitation rights to the governmental provision of goods (SCMA Article 1.1. (a)(1)[iii]) by means of the invention of the "reasonable proximate relationship" test and some other expansive interpretations to the treaty terms. As a result, the governmental provision of natural resource exploitation rights can be a subsidy transaction (by fulfilling the first element of the subsidy definition). Although

[451] Robert E Hudec, above n 100, at 15.

[452] A very rare article in recent literature: Rambod Behboodi and Christopher Hyner, 'Countervailing Climate Change: Emissions Trading and the SCM Agreement', 50(3) Georgetown Journal of International Law 599 (2019), at 599–624. This article could be academically worthwhile; however, its suggestion that the regulatory failure may be an indicator of the specificity requirement appears to go beyond the current subsidy regime's capacity.

some scholars are worried about this WTO jurisprudence,[453] it formally placed natural resource exploitation rights under the multilateral subsidy regime. Whether desired or not, countervailing duties can be invoked against imported products made with a resource from below-market exploitation rights.

Second, WTO subsidy jurisprudence eases the way to calculate the subsidy in the case of the governmental provision of natural resources. Unlike environmental policies which do not have an "equivalent" market benchmark value, natural resources are common trading products; therefore, they are capable of finding an appropriate benchmark for the subsidy calculation. We should note that the existing jurisprudence permits the benefit calculation for the exploited natural resources rather than for the exploitation rights of such resources (unexploited natural resources). The Appellate Body in *US – Carbon Steel (India)* explained:[454] "This, in our view, supports the Panel's conclusion that the government grant of mining rights is reasonably proximate to the use or enjoyment of the minerals by the beneficiaries of those rights."

For example, suppose a government provides mining rights to extract aluminum. In this case, the benefit calculation should compare the governmental price with the market benchmark price of the extracted aluminum rather than of the right to extract aluminum. Since the market value of natural resource exploitation rights might hardly exist, the market value of the extracted resources would be easier to find. If the investigating authority could not find an appropriate domestic market value for the extracted resources due to the government's predominant position, the existing subsidy jurisprudence suggests that up to five alternatives should be looked at to find a proper benchmark value.[455] The benefit calculation could be

[453] Adarsh Ramnujan, Atul Sharma, and S. Seetharaman, 'US-Carbon Steel (India): A Major Leap in Trade Remedy Jurisprudence', in Abhijit Das and James J. Nedumpara (eds), *WTO Dispute Settlement at Twenty* (Springer, 2016), at 344–46.
[454] Appellate Body Report, *US – Carbon Steel (India*), para 4.74.
[455] See Chapter 3, at 3.2.2.

feasible with these innovations in the current jurisprudence. Thus, the subsidy amount is possibly estimated for the governmental provision of natural resource exploitation rights as in *US – Carbon Steel (India)*.

Third, in contrast to a national environmental policy which is likely implemented across the country (no specific endorsement), exploitation rights over *in situ* natural resources (forests, oil wells, coal mines…) are almost always allocated to specific eligible/capable exploiters. This specific allocation could appropriately fit the specificity test under the Subsidy Agreement and, therefore, satisfy the last element of the countervailable subsidy. However, the specificity analysis should depend on exploitation patterns of the resources at issue. For some natural resources, such as fisheries, the right to harvest them is distributed on a geographic rather than exploiter basis. In this situation, the regional specificity test under SCMA Article 2.2 as interpreted in *US – AD/CVD (China)* might help determine the specificity element (see the next section, at 4.3).

In summary, the WTO subsidy law currently provides the legal premise to determine the governmental provision of below-market natural resource exploitation rights as a countervailable subsidy. As a result, countervailing duties could be employed against this resource-wasting practice if the injury element[456] is subsequently found to exist. The subsidy amount is recognized by comparing the governmental price and the market price which accrues to the exploited resources as a result of the underpriced exploitation rights. This means that a subsidy could be found to exist even if the government provides the right to exploit a resource but does not provide the exploited resource itself. The market-based demand behind the green CVDs is expected to promote the rational use of the resources. Therefore, this instrument could provide a "trade pressure" on the resource-waste country to strengthen the property rights regime of the resources. It is thus fortifies the theory of Professor Chichilnisky on the

[456] Subsidy Agreement, Article 5.

relationship between international trade and natural resource conservation through the property rights factor.

4.2.2. Practical evidence

Natural resource economists teach us that the market mechanism is effective in allocating natural resource exploitation rights for natural resource sustainability.[457] Relying on this rationale, the United States has challenged the allegedly underpriced natural resource exploitation of Canada, Indonesia (stumpage rights), and India (mining rights) using the countervailing instrument. As noted previously, the United States has demanded that such natural resource underpricing practices be considered countervailable subsidies under current trade law. No matter what the protectionist interests behind these unfair trade challenges, the environmental motive should be appreciated. In the early case concerning the natural resource underpricing practice, *Softwood Lumber II,* the United States premised its anti-subsidy allegation on research of the World Bank (Indonesia taken as an example):[458]

> Low rates of rent "capture" have several important effects. The first is to limit Government revenues. Since such revenues should be available for development purposes, there is a cost to the public in terms of the foregone benefits. The second is to leave the rent available to other parties, giving rise to "rent seeking" by concessionaires. This means that there is pressure to harvest large areas in order to obtain quick profits. The net result is an acceleration in the rate of forest depletion as concessionaires rush to secure their share of high profits. Finally, high profits permit

[457] Shneidman, Jeffery et al., 'Why Markets Could (but don't currently) Solve Resource Allocation Problems in Systems', Paper presented at the 10th Workshop on Hot Topics in Operating Systems in Santa Fe, NM, June 12–15, 2005.

[458] Panel Report, *Softwood Lumber II*, para. 180, cited "International Bank for Reconstruction and Development, *Indonesian Forest Land and Water: Issues in Sustainable Development*, IBRD Report No. 7822-IND, 5 June 1989, para 1.38.

concessionaires to sell good timber products at low prices, even though the practice may not be economically sound. (Underlined as in original.)

Apart from the legal premise, this subsection shows U.S. anti-subsidy pressures on the "victim" countries with regard to the natural resource allocation policy. Although immediate acceptance of the U.S. "aggressive" market demand in natural resource allocation should not be expected, a more market-based and transparent natural resource allocation approach could contribute to the sustainable use of the resources.[459]

The United States has pressed for a market-based timber industry in Canada since the softwood lumber conflict emerged in the bilateral trade relations. Besides a request to impose export taxes on lumber exports (on Canada's side), the United States has further demanded a reform in the Canadian stumpage system toward market principles. The U.S. lumber industry has consistently called for an open and competitive timber market in Canada. Otherwise, it will continuously initiate anti-subsidy cases against Canadian softwood lumber imports.[460] After the expiration of the 2006 Softwood Lumber Memorandum between the two countries, the U.S. lumber industry filed anti-subsidy petitions against the Canadian softwood lumber imports in 2017, and the dispute is now on stage before the WTO dispute settlement mechanism.

Taking British Columbia as a primary example, U.S. countervailing pressure, among other factors, has been a "coercive" incentive in fostering the forest policy reform in this territory.[461] Along with the litigation of the *Softwood Lumber* disputes at the WTO, the United States dispatched a policy proposal in 2003 to push for the market-based reform in the Canadian

[459] Chris Wold, Sanford Gaines, and Greg Block*, Trade and the Environmen : Law and Policy*, 2nd ed. (Carolina Academic Press, 2011), 575.
[460] Daowei Zhang, above n 80, at 263.
[461] Kurt Niquidet, 'Revitalized? An Event Study of Forest Policy Reform in British Columbia', 14(4) Journal of Forest Economics 227 (2008), at 229–31.

forest sector.[462] At that time, British Columbia immediately released the Forest Revitalization Act (SBC 2003) to establish the market-based timber pricing system for reallocating 20 percent of the timber harvest from major licenses. At present, such a market-based timber mechanism is operated under the BC Timber Sales Regulation (B.C. Reg. 142/2020). However, one should not expect a complete free-market timber sale mechanism in British Columbia or Canada at large; Canada still affirms the tenet of public policy-based forest policies.[463] Nevertheless, any movement toward the market-based allocation of timber harvesting rights may contribute to an efficient use of this resource.

Although the United States did not issue a policy press on the captive mining system in India as it did in the case of Canada's timber rights, the general WTO legal loss in *US – Carbon Steel (India)* in 2014 with respect to the captive mining rights subsidy to some extent meant additional pressure on the ongoing market-based reform in this sector.[464] India has employed competitive auctions as a market-based instrument for mineral exploitation since 2015. Recently, an advanced market-based reform proposal has been circulated for public comments, which promises a crucial market-based transformation in the Indian mining industry.[465]

In 2009, the Indian Government in a special report entitled "Subsidy Discipline on Natural Resource Pricing" (submitted to the UNCTAD India Program) admitted to the existence of implicit subsidies in mining and energy sectors created by its underpricing practices. This report advised that the elimination of such implicit subsidies might not be in

[462] United States Department of Commerce (USDOC), Proposed Policies Regarding the Conduct of Changed Circumstance Reviews of the Countervailing Duty Order on Softwood Lumber from Canada, 68 Fed. Reg. 37456 (2003).

[463] Gilbert Gagné, above n 79, at 724.

[464] Appellate Body Report, *US – Carbon Steel (India)*, para 5.1. See also United States International Trade Commission (USITC), *Trade and Investment Policies in India 2014–2015*, (USITC, 2015), 83–87.

[465] Finance Minister, Notice of Inviting Public Comments to Proposed Reforms on Mining Activities, September 3, 2020, https://mines.gov.in/writereaddata/UploadFile/revisednotice03092020.pdf (visited November 3, 2021).

India's interest.[466] However, the current movement toward market principles in the allocation of mining rights in this country might prove to be the best contradiction to this advice. What was missing in this report were the ongoing countervailing duty investigations at the USDOC against India's captive mining rights. Such a subsidy concern from the United States and the subsequent loss at the WTO appear to contribute to India's market movement in natural resource management reform.

These case studies bring up two implications. First, the current tendency in the management of some "industrial" natural resources appears to be the use of a market-based allocation of natural resources as compared to the underpriced resource policies.[467] Second, U.S. countervailing pressure against such "harmful" natural resource practices directly or indirectly promotes a market-based resource allocation in the victim countries. The WTO subsidy jurisprudence toward natural resource exploitation rights strengthens U.S. countervailing confidence against foreign resource underpricing policies. As discussed in Chapter 3, after its positive litigation results in *Softwood Lumber IV*, the United States promptly initiated market-distortion cases against land-use rights, mining rights, and timber rights provided by its trading partners. These pieces of evidence are the practical aspect of the green CVDs proposal.

To conclude Section 4.2, green CVDs have been proven to be a prospective trade-based instrument for natural resource conservation. Even if this trade-offsetting instrument does not directly promote the purpose of conservation, it could support the rational use of the natural resources in the "victim" countries. This instrument finds its legitimacy in the WTO subsidy law through the natural resource exploitation disputes. Its target is the below-market natural resource exploitation rights rather than the exploited natural resources. This green trade

[466] Bishwanath Goldar and Anita Kumari, *Subsidies Discipline on Natural Resource Pricing*, (University of Delhi Enclave, 2009), 84–85.
[467] Paul Collier and Anthony J. Venables, above n 22, at 11–13.

instrument is based on Professor Chichilnisky's theory on the relationship between natural resource conservation and international trade through the property rights factor.

The United States has employed green CVDs against the underpriced natural resource allocation in foreign countries. To date, the below-market allocation of timber harvesting rights, mining rights, and even land-use rights have gradually "suffered" from the U.S. anti-subsidy attacks. These legal and practical bases demonstrate that the proposal to use countervailing duties for natural resource conservation has now been achieved. Thus, respect should be paid to Professor Hudec for his wisdom in making this prediction two decades ago.

4.3. Case-study: green countervailing duties for sustainable fisheries

4.3.1. Background of the discussion

Conservation of marine resources is the "below-water" element of our world's sustainable development picture.[468] The drastic decline of world marine fish stocks as reported since 1973[469] has prompted us to find a holistic solution instead of waiting for a severe ocean collapse. Before the era of the United Nations Convention on Law of the Sea 1982 (UNCLOS 1982), fishing rights were customarily deemed to be free in a vast area of the high seas beyond the territorial waters of coastal states.[470] Since the UNCLOS 1982, fishing rights are "embedded" into the extended maritime zones of coastal states and a mixture of international legal regimes governing the high seas. Regional Fisheries Management Organizations (RFMOs) have directly contributed to this legal landscape to promote sustainable marine fisheries.[471] Efforts to secure the world's marine resources have also long been maintained by

[468] United Nations General Assembly (UNGA), Transforming Our World: the 2030 Agenda for Sustainable Development, A/RES/70/1, September 25, 2015, Goal 14.
[469] United Nations Economic and Social Council, Progress towards the Sustainable Development Goals – Report of the Secretary-General, E/2020/57, April 28, 2020, para. 119.
[470] Shigeru Oda, 'Fisheries under the United Nations Convention on the Law of the Sea', 77(4) The American Journal of International Law 739 (1983), at 739–40.
[471] There are currently over twenty RFMOs which have competence over very broad ocean zones. They can be a generic or species-based organization. Terje Løbach and others, 'Regional Fisheries Management Organizations

through the relentless lead of the Food and Agriculture Organization of the United Nations (FAO). This specialized United Nations agency has been setting international and regional rules in a number of fishery domains. In addition, this organization has been issuing countless soft-law instruments and technical reports to provide international guidance.[472]

Along with these environment-based institutional struggles, the fisheries subsidies problem has gradually become one of the most intricate policy issues in current international governance. There is perhaps no more appropriate place to discuss this issue than in the WTO. Fisheries subsidies were brought to trade negotiations as early as the Uruguay Round (1986–1994). Since the Doha Development Agenda 2001, it has been negotiated under the WTO subsidy domain.[473] The current fisheries subsidies discussion concentrates on "infrastructural" issues of the marine fisheries, such as preventing illegal, unreported, unregulated fishing (IUU fishing) or the problems of overcapacity and overfishing. The WTO negotiation group recently released the new Chair's draft text to provide a basis for the 12th Ministerial Conference scheduled at the end of 2021.[474] However, this progress might not be enough as room for discussion and certainly debates remain.[475]

The previous section (4.2) demonstrated that WTO subsidy jurisprudence creates an opportunity for importing countries to challenge foreign underpriced resource allocation

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and Advisory Bodies: Activities and Developments, 2000–2017', FAO Fisheries and Aquaculture Technical Paper 651, FAO 1 (2020).

[472] Regarding the rule-setting function, there were eight international and regional agreements related to fisheries management whichwere brought under FAO authority. Among them, Agreement on Port States Measures to Prevent, Deter and Eliminate Illegal Unreported and Unregulated Fishing (PSMA) is considered to be symbolic in the fisheries sector. See FAO, http://www.fao.org/treaties/results/en/?search=adv&subj_coll=ArticleXIV (visited November 3, 2021). Among the standard-setting documents, Code of Conduct for Responsible Fisheries 1995 might represent the crystallization of FAO's comprehensive approach to fisheries, conservation and development.

[473] Chen-Ju Chen, *Fisheries Subsidies under International Law,* (Springer, 2010), 45–111.

[474] WTO, 'Fishing Subsidies Negotiations Chair Introduces New Text in run-up to July Ministerial, May 11, 2021, https://www.wto.org/english/news_e/news21_e/fish_11may21_e.htm (visited November 4, 2021).

[475] U.S. Mission to International Organizations in Geneva, Ambassador Tai's remarks at WTO meeting on the fisheries subsidies negotiations, July 15, 2021, https://geneva.usmission.gov/2021/07/15/ambassador-tais-remarks-at-wto-ministerial-meeting-on-the-fisheries-subsidies-negotiations/ (visited November 4, 2021).

practices. In other words, countervailing duties could be employed as a trade-based instrument to promote the sustainable use of the resources of concern. Looking through the natural resource subsidy disputes before the WTO, it can be noted that all the disputed resources are the *in situ* natural resources: timber (from Canada, Indonesia) and minerals (from India). This brings up a question as to whether such green CVDs could be applied to some extent to the case of governmental provision of below-market fishing rights.

In *Softwood Lumber III*, Canada viewed the governmental provision of timber harvesting rights as similar to the governmental provision of licensed fishing quotas. Both situations are likely to result in the right to exploit natural resources in the respective public domains.[476] Therefore, if the existing trade rules permit the use of green CVDs to counteract below-market prices on timber or iron ore inputs, these rules should logically permit such an anti-subsidy challenge against below-market prices for fish in terms of the fishing rights factor. In other words, the governmental provision of free access or "cheap" fishing rights to domestic harvesters could result in a subsidy dispute under WTO subsidy law.

The influence of the bitter *Softwood Lumber* conflicts between the United States and Canada on the development of trade remedy laws may attract most of the legal scholarship regarding the natural resource underpricing practice. Tremendous public concerns over fossil fuel consumption subsidies (dual-pricing practice) have also dominated recent academic and policy discussions on the topic.[477] As a formal forum in which to discuss the fisheries subsidies problem, no word in the current Draft Text on fisheries subsidies (as released on 11 May 2021) mentions the fishing rights issue, although three instances of natural resource exploitation rights were challenged under the WTO subsidy regime.[478] For example, the Draft Text in

[476] Panel Report, *Softwood Lumber III,* para 4.118.
[477] David Coady and others, 'Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates', IMF Working Papers WP/19/89, IMF 1 (2019). See further in Introduction, section (iv).
[478] WTO, Fisheries Subsidies - Draft Consolidated Chair Text (Communication from the Chair), TN/RL/W/276, May 15, 2021.

principle prohibits subsidies contributing to overcapacity and overfishing, such as cost supports for vessel equipment, catching instruments, or fishing operation, but does not address the issue of "cheap" fishing rights.[479] At least one WTO law practitioner has argued that the natural resource subsidy disciplines should be consistently applied across different natural resources regardless of whether they are forest, fish, or minerals. He simply asked: "if we require governments to collect 'adequate remuneration' for trees that are harvested from public lands, why don't we require governments to collect 'adequate remuneration' for fish that are harvested from public waters?"[480]

From the theoretical point of view, Gareth Porter suggested the negotiation of a unique natural resource subsidy agreement under the WTO Subsidies Committee to *inter alia* cover the fishing rights issue. This scholar further advised that the negotiating process should be conducted in close technical cooperation with the FAO.[481] These scant pieces of the policy discussion seem to align with existing WTO subsidy law toward the below-market natural resource exploitation rights. This means these authors might agree with the idea of using green CVDs to "punish" the inadequate remuneration of the governmental provision of fishing rights. As a result, such trade punishment may contribute to sustainable fisheries.

It is necessary to explain the geographic scope of fishing rights allocation. The right of a state to regulate fisheries, including the fishing rights issue, is based on sovereignty over its jurisdictional waters. Every coastal country enjoys the territorial sea (maximum 12 nautical miles from the baseline) which falls entirely within its sovereignty.[482] A coastal country's fishing rights are also extended to 200 nautical miles in its Exclusive Economic Zone (EEZ),

[479] Ibid, Article 5.
[480] Matthew S.Yeo, 'Natural Resources Subsidies', https://www.wto.org/english/res_e/publications_e/wtr10_forum_e/wtr10_yeo_e.htm (visited November 4, 2021).
[481] Gareth Porter, above n 67, at 283.
[482] United Nations Convention on Law of the Sea 1982, Article 3.

accounting for around 90% of marine resources globally.[483] Therefore, a coastal country has jurisdiction to allocate fishing rights within these maritime zones to its nationals or even foreign harvesters.[484] In addition, a member country of an RFMO can enjoy fishing rights in the high seas through an allocation by this organization.[485] A non-member country might receive such a fishing opportunity (so-called "new entrants" allocation), but the fishing privilege is usually limited.[486] Therefore, such high sea fishing rights are not inherent to a state's jurisdiction but earned through international distribution. In short, the marine fishing rights directly accrue to national jurisdiction by international law. Such "national" fishing rights are then redistributed to domestic harvesters according to the country's domestic laws.

This section aims to assess the applicability of the green CVDs instrument in the fishery sector. However, the answer should not be spelled out in haste. The crux of the subsidy regime is the practical existence of an "appropriate" market benchmark for the subsidy calculation. Therefore, failing or not convincingly finding a market proxy might cause the green countervailing proposal to be useless. Indeed, the Panel in *Softwood Lumber II* recognized that the subsidy question (in this dispute) was an empirical issue, which should require a practical investigation.[487] Also, any difficulty and uncertainty in finding the "right price" for a particular natural resource might affect the application of the green CVD proposal. The Panel in *Softwood Lumber IV* noted: "there is **a clear difference** between tenure agreements concerning standing timber and the granting of extraction rights in the case of minerals or oil, or fishing rights where the owner of the right is not at all certain what and how much of it he will find, and what he

[483] Christine Stewart, 'Legislating for Property Rights in Fisheries', FAO Legislative Study 83, (FAO, 2004), at 14–15.
[484] United Nations Convention on Law of the Sea 1982, Article 62.
[485] Anthony Cox, 'Quota Allocation in International Fisheries', OECD Food, Agriculture and Fisheries Papers No.22, OECD 1 (2009), at 15–19.
[486] K. Mfodwo and J. Noye, 'The Principles of Allocation Systems and Criteria for Indian Ocean Tuna Fisheries', (WWF Report, 2011), at 20, https://wwfint.awsassets.panda.org/downloads/a_guide_to_negotiating_qas_in_the_io_new_.pdf (visited November 4, 2021).
[487] Panel Report (GATT), *Softwood Lumber II*, para 347.

pays for is the right to explore a particular site and the chance of finding something"[488] (emphasis added). Therefore, the green CVD proposal should be practically examined in the fishery sector rather than relying on a mere presumption. First, it is necessary to introduce existing trade-related measures for sustainable fisheries with an emphasis on the trade law context.

4.3.2. Current trade-related measures for sustainable fisheries

With the expansion of international fish trade, trade-related measures are an integral part of fisheries management.[489] A **quantitative import prohibition** against fish harvested under unsustainable conditions is perhaps the most "effective" and severe measure in terms of trade restrictiveness. At present, this trade-based instrument's primary target is illegal, unreported, and unregulated fishing (IUU fishing). In the past, this direct trade-prohibitive instrument was unilaterally employed against unsustainable fishing methods (e.g., purse seine nets), which could be acceptable in harvesting countries but not in the United States. The WTO judiciary ultimately confirmed the environmental legitimacy of the U.S. trade restrictions (GATT Article XX[g]); however, it demanded that such trade-restrictive measures must not constitute arbitrary and unjustifiable discrimination.[490]

Recently, the European Union has been the pioneer in using this trade prohibition against suspected IUU fishers and noncooperating IUU countries.[491] It should not be a legal concern if the EU trade prohibitive measures are precisely tailored to the illicit fish harvesters. However, a complete trade ban against fish imported from the noncooperating countries could

[488] Panel Report, *Softwood Lumber IV,* footnote 99.
[489] Duncan Leadbitter, 'Market-Based Mechanisms – Improving Fisheries Management?', in Trevor Vard and Bruce Phillips (eds), *SEAFOOD Ecolabelling: Princiles and Practice* (Blackwell, 2008), at 187–206.
[490] Appellate Body Report, *US – Shrimp*, para186.
[491] European Union, European Council Regulation (EC) 1005/2008 of September 29, 2008, establishing a community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, amending Regulations (EEC) No 2847/93, (EC) No 1936/2001 and (EC) No 601/2004 and repealing Regulations (EC) No 1093/94 and (EC) No 1447/1999, https://eur-lex.europa.eu/eli/reg/2008/1005/oj (visited November 4, 2021).

pose a legitimate concern with regard to its disproportionality.[492] Given the fact that the most popular marine fishery management mechanism is the stock-based or species-based approach, it is questionable for the European Union to employ such "all-stocks" trade punishment.

Evidence shows that the small-scale fishery sector is currently under an actual threat due to such "aggressive" campaigns to fight illegal fishing.[493] The United States also endorses the tool of "identification, certification, and trade penalty" against IUU countries. However, the United States employs the *specific* fish or fisheries approach for trade enforcement rather than an approach like the EU blanket trade embargo.[494] Regardless of the divergence in trade sanctioning mechanisms against unsustainable fisheries, this trade-based environmental instrument's unilateral characteristic might be questionable under the FAO guidelines.[495] At least one fisheries expert has suggested "multilateralizing" such unilateral sanctions through regional trade agreements.[496]

Prohibitive enforcement against the fishing trades can be found at the international level in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the RFMOs. A dozen fish species and whales, dolphins, and turtles in Annex I of the CITES (species threatened with distinction) are generally prohibited from introduction from the sea and commercial trading. More than seventy fish species are listed in Annex II (species not necessarily threatened but requiring an effective trade control) and are subject to stricter

[492] Gilles Hosch, 'Trade Measures to Combat IUU Fishing: Comparative Analysis of Unilateral and Multilateral Approaches', Issue Paper, ICTSD 1 (2016), at 56–57.
[493] Andrew M. Song and others, 'Collateral Damage? Small-Scale Fisheries in the Global Fight against IUU Fishing', 21(4) Fish and Fisheries 831 (2020), at 831–43.
[494] U.S. Illegal, Unreported, and Unregulated Fishing Enforcement Act of 2015, Section 101. See Chris Oliver and Neil A. Jacobs, *Report to Congress: Improving International Fisheries Management*, (National Oceanic and Atmospheric Administration Fisheries, 2019), 18–37.
[495] FAO, International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing (IPOA-IUU) 2001, Article 66.
[496] Gilles Hosch, above n 493, at ix.

authorization and export/re-export permits.[497] However, the FAO experts were once concerned whether this trade control agreement would conflict with the rights to fish endorsed by UNCLOS 1982.[498]

Regarding trade restrictions authorized by the RFMOs, most of them permit the use of restrictions (including trade) against listed IUU vessels. However, the case of trade sanctions against the illicit fishing country is very rare.[499] To date, there has been no legal challenge over the compatibility of such regional trade-restrictive measures with the WTO rules. Therefore, a conflict between these international regimes has not yet been observed.

Catch Documentation Schemes (CDSs) are another trade-related instrument specifically used in the fishery sector. This verifying tool is employed to eliminate the IUU and unsustainable fish harvests from approaching the importing markets. According to the FAO, CDS is "a system that tracks and traces fish from the point of capture through unloading and throughout the supply chain."[500] In terms of trade management, the CDSs identify the origin of fish entering the import markets and operate as a traceability instrument from the market back to the vessel. In terms of natural resource management, this tool could verify whether fish are being caught in accordance with conservation requirements and provide data for fishery management works. However, the CDSs are currently active only in three RFMOs: CCAMLR, CCSBT, and ICCAT.[501]

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[497] Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Article III, IV and Appendices I, II, III. See Mary Ann Palma, Martin Tsamenyi, and William Edeson, *Promoting Sustainable Fisheries: The International Legal and Policy Framework to Combat Illegal, Unreported, and Unregulated Fishing* (Martinus Nijhoff Publishers, 2010), at 76–78.

[498] Ibid.

[499] Richard Tarasofsky, 'Enhancing the Effectiveness of Regional Fisheries Management Organizations through Trade and Market Measures', Breifing Paper EEDP BP 07/04, (Chatham House, 2007).

[500] FAO, Report of the Expert Consultation on Catch Documentation Schemes (CDS), FAO Fisheries and Aquaculture Report FIPM/R1120, FAO 1 (2015), at 11.

[501] CCAMLR: Commission for the Conservation of Antarctic Marine Living Resources; CCSBT: Commission for the Conservation of Southern Bluefin Tuna; ICCAT: International Commission for the Conservation of Atlantic Tunas. See Foundation International Seafood Sustainable, RFMO Catch Documentation Schemes: A Summary, September 14, 2016, https://www.iotc.org/documents/rfmo-catch-documentation-schemes-summary (visited November 4, 2021).

Turning to state practice, the European Union is the first ever organization to inaugurate the unilateral CDS since 2017 and is presently developing a fully functioning CDS system based on information technology.[502] According to the FAO Guidelines on CDSs in 2017, one of the "highest-positioned" principles is that the CDSs should not create unnecessary trade restrictions.[503] For this case, the CDSs are likely considered a technical regulation (related process and production method) under the WTO Technical Barriers to Trade Agreement (TBT Agreement). This trade-based environmental instrument has its "green" virtue for promoting sustainable fisheries; therefore, it could meet the "legitimate regulatory distinction test" as required by WTO jurisprudence.[504] The FAO's standardization function could also legitimize the CDS instrument in terms of its design and operation according to Article 2.4 of the TBT Agreement.[505] As long as the CDSs operate in a nondiscriminatory and transparent manner, this instrument is likely to pass trade law examination. However, given the fact that there is no CDS compatibility challenge before the WTO, this discussion is just presumptive.[506]

If the CDSs are mandatory by some RFMOs, the **eco-labeling schemes** might not have compulsorily multilateral endorsement. This market-based environmental instrument provides ecological information/logos to discern that fish are being harvested in compliance with conservation standards. There are usually three forms of eco-labeling: first-party labeling (self-labeling), second-party labeling (by industry associations), and third-party labeling (by

[502] IUU Watch, 'Going Digital – Why an EU-Wide Database Can Help Stop Imports of Illegal Fish, October 30, 2020, http://www.iuuwatch.eu/2020/10/blog-going-digital-why-an-eu-wide-database-can-help-stop-imports-of-illegal-fish/ (visited November 4, 2021).
[503] FAO, *Voluntary Guidelines for Catch Documentation Schemes,* (FAO, 2017), at Principles 3.2.
[504] Appellate Body Report, *US – Tuna II (Mexico)*, para 297.
[505] The article says: "Where technical regulations are required and relevant international standards exist or their completion is imminent, Members shall use them, or the relevant parts of them, as a basis for their technical regulations except when such international standards or relevant parts would be an ineffective or inappropriate means for the fulfilment of the legitimate objectives pursued, for instance because of fundamental climatic or geographical factors or fundamental technological problems."
[506] Robin Churchill, 'International Trade Law Aspects of Measures to Combat IUU and Unsustainable Fishing', in Richard Caddell, Erik J. Molenaar (eds), *Strengthening International Fisheries Law in an Era of Changing Oceans* (Hart Publishing, 2019), at 337–38.

independent certifiers).[507] This market-based instrument may be less trade-restrictive because the final market prohibition belongs to consumer choice rather than government determination. Similar to the CDSs, this instrument is very technical as it demands a high level of science and standardization. Therefore, the FAO and the ISO (International Standardization Organization) are very supportive in setting up international guidance for this instrument.[508]

Eco-labeling in the fishery sector can be compulsory or voluntary. An excellent example of voluntary third-party eco-labeling is the Marine Stewardship Council (since 1997) which has worked with its standards and fame.[509] The most famous governmental eco-labeling program is perhaps the U.S. "dolphin-safe label" on imported tuna. This dolphin-safe program has concentrated on fishing methods (purse seine nets), which Mexico has found to be very irritating. Consequently, Mexico challenged the U.S. eco-labeling program before the WTO in 2009 (*Tuna – Dolphin II*) and the dispute has been in a ceasefire. The WTO judiciary found that the U.S. eco-labeling measure is a technical regulation due to its legally enforced character. However, its application has been causing "less favorable treatment" against Mexican tuna imports.[510] By contrast, the private eco-labeling schemes might escape from a trade law challenge as long as their operation is independent from the government.

In summary, there are three common trade-related instruments for fishery sustainability. At present, the direct market-deny measure is primarily imposed against suspected IUU harvesters or exporters. Catch Documentation Schemes could be a form of technical regulation according to the current trade rules which are distinctively developed in the fishery sector. Eco-labeling programs might result in less trade restrictiveness because their

[507] Cathy Roheim Wessels and others, 'Product Certification and Ecolabelling for Fisheries Sustainability', FAO Fisheries Technical Paper 422, FAO 1 (2001), at 11.
[508] ISO issued the sub-group standards Code 13.020.50 – Ecolabelling (ISO 14020 family), https://www.iso.org/ics/13.020.50/x/ (visited November 4, 2021).
[509] Stefano Ponte, 'The Marine Stewardship Council (MSC) and the Making of a Market for "Sustainable Fish"', 12 Journal of Agrarian Change, 300 (2012), at 300–15.
[510] Appellate Body Report, *US – Tuna II (Mexico)*, paras 199, 299.

operating effects are placed in the hands of responsible consumers. The FAO is very active in standardizing these trade-related environmental instruments to strike a delicate balance between trade and environment interests. With the development of the WTO subsidy law, can the green CVDs join this group to be a prospective environmental instrument for fishery sustainability?

4.3.3. Green countervailing duties for sustainable fisheries: an assessment

4.3.3.1. Countervailability of below-market fishing rights in the WTO subsidy regime

As discussed in the previous chapters, the United States in reliance on the development of WTO subsidy law has recently employed the countervailing instrument to challenge foreign below-market natural resource allocation. As one of the most traded natural resource commodities,[511] a flood of cheap fish harvested by "free of charge" fishing access might cause irritations for fishers in the importing countries that supposedly maintain a sophisticated fishing rights allocation system. Even without sustaining the market-based allocation of fishing rights, higher environmental requirements for fishing activities in these countries might increase fishing costs to their harvesters as compared to those under weak fishery management. Given the fact that open access is widespread in the fishery sector, especially in developing countries, fish harvesters in such countries can easily engage in a "race to fish," resulting in quicker fish collapse.[512]

To offset such an "unfair" trade advantage or prevent the environmental "dumping" practice, fishers from a market-based fishery management country can suggest using green CVDs against fish imports derived from free or below-market fishing rights. As in the case of timber tenure or captive mining rights, the government, in theory, should not forgo the fishing

[511] According to the UN Statistics, raw fish trade accounted for nearly 150 billion USD in 2019, see United Nations, *International Trade Statistics Yearbook 2019*, (United Nations Publication, 2019), vol.2, 21.
[512] Trond Bjørndal and Jon M. Conrad, 'The Dynamics of an Open Access Fishery', 20(1) The Canadian Journal of Economics 74 (1987), at 74–85.

rents to provide free or below-market fish for its domestic harvesters. Collecting adequate fishing rents by the market mechanism or other equivalent instruments could be a fiscal solution to the overfishing problem. The revenue from such fishing rents could also be significant for fishery management programs.

In theory, the anti-subsidy instrument could be used against free or below-market fishing rights thanks to the development of WTO subsidy law. As discussed in the previous chapters, the existing subsidy jurisprudence permits the governmental provision of natural resource exploitation rights to be captured as a form of subsidy transaction (**the first element** of a countervailable subsidy). Therefore, the governmental provision of below-market fishing rights could logically be considered a subsidy transaction. The Appellate Body in *Softwood Lumber IV* demanded a demonstration of the "reasonable proximate relationship" or the *raison d'être* between the action of provision from the government and the recipient's use or enjoyment.[513] Applying this interpretation to the case of fisheries, the governmental provision of fishing rights may be equivalent to the governmental provision of the harvested fish. However, the conclusion still depends on the risks and uncertainties of fishing activities (weather conditions, fishing techniques, fish stock estimation…). Therefore, this situation should be examined on a *case-by-case* basis rather than by means of a general conclusion.

The second element of the subsidy examination is a calculation of the amount of benefit (thus the amount of subsidy) received by eligible fishers. Guidance from the WTO subsidy jurisprudence relates to the use of governmental price and the market price of the government-provided goods to make a benefit comparison. In this situation, we should know beforehand the governmental price and the comparable market price of the fishing rights. Fortunately, existing WTO law may ease the way to calculate the alleged benefit in this

[513] Appellate Body Report, *Softwood Lumber IV*, para 71; Appellate Body Report, *US – Carbon Steel (India),* para 4.74.

situation. It is permitted to use the prices accruing to the consequence of the financial contribution transaction – the exploited resources - rather than the right to exploit such resources.[514] In the fishing rights situation, this means that the benefit conferred could be calculated based on the price comparison upon the harvested fish rather than the fishing rights. For example, in an examination of the benefit conferred by the governmental provision of tuna fishing rights, the investigating authority should compare the price of tuna paid by the alleged harvester to the governmental tuna supplier with the price of "private" tuna harvested under the market-based fishing rights. If the governmental price of tuna is less than the private price of tuna, a benefit and thus a subsidy might exist.

As discussed in Chapter 3 at 3.2.2, in the case of governmental provision of natural resource exploitation rights, an actual governmental price for the exploited resources might not exist. Therefore, the USDOC in *US – Carbon Steel (India)* used the constructed methodology for calculating the governmental price of exploited minerals from the captive mining rights (consumed solely by the steel producers). Similarly, in this fishing rights situation, a governmental price for the harvested tuna might not exist. Therefore, the investigating authority should construct a governmental price for tuna based on royalties and fees paid for the tuna fishing rights. Another option is that the investigating authority can use the price of tuna from a governmental fishing operator under the same fishing rights allocation as the investigated tuna harvester. In this case, the investigating authority might have to explain its choice.

The next question is how to find a benchmarking price for tuna in order to make the benefit calculation. Since the government completely controls the fishing rights allocation within its jurisdictional waters, the government is the monopoly provider of fishing rights or the "public fish" to its domestic harvesters regardless of the provision method. Therefore, under

[514] Appellate Body Report, *US – Carbon Steel (India),* para 4.332.

a free or below-market tuna fishing rights allocation system (e.g., license to fish or fishing quotas set by the government), all tuna fishers of the country may enjoy the same "cheap" fishing rights. This phenomenon can result in a situation in which no tuna is harvested based on the market-based allocation of fishing rights. This means there would be no domestic "market" price for tuna in terms of the fishing rights factor. Therefore, the domestic price of tuna in this situation cannot be used as a point of reference to discern the fishing rights subsidy.

Fortunately, the WTO's alternative benchmarking jurisprudence might provide a solution for this fishing rights monopoly circumstance. The investigating authority can employ any of five alternative options for the benchmarking choice: the export price of the governmentally harvested tuna, the imported price of foreign tuna, the world market price of tuna, the market price of tuna in a foreign country, or the constructed price of tuna by the "costs plus profit" methodology. With the number of choices permitted by the WTO case law, the chance to find a market benchmark price for tuna to discern the fishing rights subsidy is theoretically highly secured.

The domestic price of tuna can at least be used for the benchmarking purpose. Like the case of regional public timbers in Canada,[515] the central/federal government can designate the right to allocate fishery resources to its local/provincial governments in fishing areas under their authority.[516] This means a local government can allocate its fishing rights following the market-based mechanism (e.g., fishing quota auction). In this situation, the local market price of fish (in terms of the fishing rights factor) can be employed as the benchmark to discern a subsidy by the below-market fishing rights in other locals/regions within the country. This local

[515] WTO, above n 341, at 3–5.

[516] For example, the case of Australia at Ian Knuckey, Sevaly Sen, and Paul Mcshane, 'Review of Fishery Resource Access and Allocation Arrangements Across Australian Jurisdictions', FRDC Project No. 2017/122, Fisheries Research and Development Cooperation 1 (2019).

benchmarking price might be closer to the prevailing market conditions of the underpriced fish as required by the Subsidy Agreement (Article 14 [d]).[517]

The final element to constitute a countervailable fishing rights subsidy is the specificity test. In this situation, the nature of fishing activities might result in a distinctive specificity test. In the timber rights (Canada, Indonesia) and mining rights (India) disputes, the USDOC conducted the *de facto* specificity analysis (under SCMA Article 2.1[c]) to verify whether the governmental provision of natural resource exploitation rights was conferred on specific exploiters. However, it is common for fishing rights to be allocated upon fishers in a designated fishing area.[518] The right to fish is commonly allocated on a regional/geographical basis (harvesters within a specific fishing zone) rather than on a harvester basis. The specificity test here should thus be the regional specificity under SCMA Article 2.2. The WTO panel in *US – AD/CVD (China)* explained that a subsidy conferred upon certain enterprises located in a designated geographical region could satisfy the regional specificity requirement of the SCMA Article 2.2.[519] Taking advantage of this jurisprudence, a group of harvesters authorized to fish in a designated fishing zone (a fishing region) could be considered to be regionally specific.[520]

In practice, there is undoubtedly a case in which fishing rights are allocated in accordance with a particular fish stock (e.g., tuna, toothfish).[521] Since the fish stocks' ecological nature usually connects to a particular range of maritime regions, this geo-biological pattern might be the regional basis for the specificity element. In summary, given the regional nature

[517] Panel Report, *Softwood Lumber VII,* para 7.27.
[518] Kevern L. Cochrane and Serge M. Garcia, *A Fishery Manager's Guidebook*, 2nd ed. (FAO, 2009), 262.
[519] Panel Report, *US – AD/CVD (China),* paras 9.133, 9.134.
[520] Jackson Erpenbach also argued that the regional specificity test could be applied to the U.S. coal leasing program because coal extraction is almost always located in a designated region. See Jackson Erpenbach, above n 102, at 522.
[521] Kasia Mazur and others, 'Allocating Fish Stocks between Commercial and Recreational Fishers Examples from Australia and Overseas', Research Report 20.4, Australia Bureau of Agricultural and Resources Economics and Siences 1 (2020). The stock-based approach is predominantly applied in the United Nations Convention on Law of the Sea 1982, United Nations Fish Stock Agreement 1995, and most RFMOs.

of fishery resources, the investigating authority can use the regional specificity test (SCMA Article 2.2) to examine whether the governmental provision of underpriced fishing rights could be countervailable. The specificity test might be unsatisfactory if the concerned fishing rights are allocated over an unidentified fishing zone or even across the coastal state's jurisdictional waters.

In conclusion, the current WTO subsidy law may *theoretically* provide the legal standards to justify the governmental provision of below-market fishing rights as a countervailable subsidy. This means that the importing country could use countervailing duties to "punish" such trade-distorting fishing rights allocation. This trade pressure might encourage the targeted country to utilize its fishery resources more efficiently. The investigating authority should use regional specificity to examine whether the foreign underpriced fishing rights could be countervailable. However, it should be cautious in that the subsidy determination may depend on the complexities and uncertainties of fishing activities.

4.3.3.2. Practical challenges

The legal analysis presented is just a theoretical prediction based on WTO case law. There is currently no clear trend as to the consideration of governmental provision of below-market fishing rights as a subsidy. The case of inadequate recovery of fishing rents was excluded from the fishery subsidy examination by the United Nations Environment Program (UNEP).[522] The OECD mentioned uncollected fishing rents as an implicit subsidy; however, the issue is generally negligible.[523] By contrast, below-market exploitation rights in the forest and mineral sectors have been overly examined. These facts reflect a stark difference in the general perception toward how control can be tightened over a particular subsidy problem. The governmental allocation of fishing rights has never appeared in the WTO fisheries subsidies

[522] Alice V. Tipping, 'A "Clean Sheet" Approach to Fisheries Subsidies Disciplines, Strengthening the Global Trade System', Think Piece, ICTSD 1 (2015), at 3.
[523] Gareth Porter, above n 67, at 51–52.

negotiations. On the contrary, WTO dispute settlement has addressed the subsidy question of forest harvesting rights and mining rights. This reality raises the question of whether a countervailability proposal against free or underpriced fishing rights can be practicable. There are at least four obstacles that this green CVD proposal has to confront.

a. The open-access problem

The problem of open access is vastly predominant in fisheries history and still remains in most parts of the world's oceans.[524] Fishing activities connect to human history as part of our economic life. This connection has directly secured the lives of millions of people in coastal areas.[525] The open-access status of fishery resources creates the dissipation of fishing rents; therefore, a concern over the concentration of fishing interests in a few "powerful" fishers is likely negligible. [526] The benefits of fishery resources are theoretically distributed "across-the-board" among fish harvesters. There is thus virtually no governmental intention to treat some harvesters more favorably than others in terms of the fishing rights factor. However, this favorability or preferential treatment is precisely the object that WTO subsidy law was designed to counteract. As enshrined in Article 2 of the Subsidy Agreement, the specificity test is to countervail a governmentally preferential treatment conferred on certain enterprises or a group of enterprises. Therefore, the economics of the open-access problem in the fishery sector generally shields the underpriced fishing rights from the anti-subsidy attack.

[524] Robert Ian Arthur, 'Small-Scale Fisheries Management and the Problem of Open Access', 115 Marine Policy 103867(1) (2020), at 1–5.
[525] Ian Payne, 'The Changing Role of Fisheries in Development Policy', 59 Natural Resource Perspectives 1 (2000), at 1–4.
[526] Frances R. Homans and James E. Wilen, 'Markets and Rent Dissipation in Regulated Open Access Fisheries', 49(2) Journal of Environmental Economics and Management 381 (2005), at 381–404.

b. Challenges against redistribution of public fish resources

Marine resources had traditionally been set as *res nullius* (things belong to no one) for free exploitation.[527] However, the fishing rules at sea have been critically transformed over the past fifty years to go against this free fishing tradition. As a newly-introduced maritime zone, the EEZ enables coastal countries to possess a broad and fertile fishing area that is exclusively reserved for their national harvesters.[528] This imposes a "legitimate" exclusion against the traditional high sea fishing rights of non-national fishers. It also limits their national fishermen's "uncontrolled" fishing activities as compared to the past *res nullius* period. As a result, the domestic fish harvesters have to comply with more conservatory requirements, fishery management burdens, and even a limitation on fishing access.

At the same time, the legal development of fishing rights regimes in the high seas is likely to transform marine resources from the *res nullius* to the *res communis* in light of sustainable exploitation and management. The International Court of Justice (ICJ) noted this general direction as:[529]

> It is one of the advances in international maritime law, resulting from the intensification of fishing, that the former *laissez-faire* treatment of the living resources of the sea in the high seas has been replaced by a recognition of a duty to have due regard to the rights of other States and the needs of conservation for the benefit of all.

Certainly, these limitations on marine fishing rights do not please traditional fishers. They are likely to have reminisced about their past ultimate freedom and have relentlessly opposed the redistribution of public fishing rights. For example, the public trust doctrine over fishery resources in the United States seems to impede any governmental attempt to redistribute

[527] Alexandre Kiss, 'The Common Heritage of Mankind: Utopia or Reality?', 40(3) International Journal 423 (1985), at 423–24.
[528] United Nations Convention on Law of the Sea 1982, Articles 56, 57.
[529] ICJ, *Fisheries Jurisdiction (1974)*, Judgement of 25 July 1974, para 72.

public fishing rights in this country.[530] To avoid such a legal–political conflict, the U.S. Courts have consistently asserted the non-property characteristic of fishing rights. However, this judicial confirmation may be at odds with the current tough movement toward market-based fishing rights allocation.[531]

The political economy usually complicates the fishing rights redistribution process because fishing interest groups attempt to secure the "status quo" of their free fishing privileges. This scenario appears to derail any "ambitious" reform toward the market-based fishery allocation.[532] In addition, the direct importance of fishery resources to the right to food of the coastal population might disrupt any market-based fishing rights redistribution.[533] These are the main reasons that the open-access problem is very difficult to regulate in the fishery sector.

c. A delicate existence of the market-based allocation of fishing rights

All of these economic and legal–political constraints lead to the central obstacle to the employment of green CVDs against underpriced fishing rights: finding a market benchmark. Because the anti-subsidy instrument's rationale is to use market values as the gage for finding the existence of a distorted subsidy, we can logically infer that the failure of a comparable market value for fishing rights could mean a collapse of the countervailing proposal. In line with this argument, Alice V. Tipping contended that the idea of countervailability of the inadequate collection of fishing rents would be impractical because of the difficulties in calculating a "fair" fishing rent.[534] However, this scholar appears not to have considered the

[530] Kenvin J. Lynch, 'Application of the Public Trust Doctrine to Modern Fishery', 15 N.Y.U Environmental Law Journal 285 (2007), at 285–313.
[531] Mark Fina and Tyson Kade, 'Legal and Policy Implications of the Perception of Property Rights in Catch Shares', 2(2) Washington Journal of Environmental Law & Policy 283 (2012), at 302–21.
[532] Julio Pena-Torres, 'The Political Economy of Fishing Regulation: The Case of Chile', 12 Marine Resource Economics 253 (1997), at 265–78.
[533] Anniken Skonhoft, Ambra Gobena, and Dubravka Bojic Bultrini, 'Fisheries and the Right to Food: Implementing the Right to Food in National Fisheries Legislation', FAO 1 (2009), at 26–28.
[534] Alice V. Tipping, above n 523, at 10.

updates to existing WTO case law, especially in *US – Carbon Steel (India)*. As discussed in 4.3.3.1, the WTO judiciary might permit the use of comparable prices accruing to the *harvested fish* (exploited resources) to recognize a fishing rights subsidy. Thus, there is no need for Tipping's worry that there is no "fair" market value for fishing rights.

However, the nonexistence or exceedingly rare existence of market-based fishing rights means that a market-based value of fish cannot be found with respect to the fishing rights factor. This means that underpriced fishing rights might not be noticeable in this resource sector. Therefore, the green CVDs instrument might lose its target for countervailability. Simply put, if everyone is free to fish, where is the market-based fishing?

Practically, the policies toward market-based redistribution of public fishing rights, such as quota auctions, are currently under the trial-and-error stage.[535] The market-based allocation of fishing rights is limitedly employed in a minority of "environmentally friendly" countries like New Zealand, Australia, and Iceland.[536] According to John Lynham in 2013, fish auction accounts for just 3% of the world catch share allocation.[537] If an anti-subsidy challenge against foreign underpriced fishing rights were initiated, the country should fear a mirror countermeasure against its fish exports. The FAO also admits that the world is still debating about how to efficiently allocate the fishery resources.[538]

d. Technical challenges from the subsidy rules

The heart of the subsidy question is whether the governmental provision of fishing rights can be a subsidy transaction (the financial contribution element). Existing jurisprudence requires the "reasonable proximate relationship" test to confirm whether the fishing rights

[535] OECD, *Using Market Mechanisms to Manage Fisheries,* (OECD Publishing, 2006), 73–75.
[536] Daniel D. Huppert, 'An Overview of Fishing Rights', 15(3) Reviews in Fish Biology and Fisheries 201 (2005), at 201–05.
[537] John Lynham, 'How Have Catch Shares Been Allocated?', 44 Marine Policy 42 (2014), at 42–48.
[538] FAO, 'Governance of Capture Fisheries', http://www.fao.org/fishery/governance/capture/en (visited November 5, 2021).

transaction is a governmental subsidy, considering the complexity and uncertainty of the fishing activities. Unlike *in situ* resources (e.g., standing timber, mineral mines) with a certain degree of disposition, live fish are under the water and traverse across maritime areas, regions, or even countries. The fishing activities are largely dependent on weather conditions with plenty of uncertainty and risks.[539] Human behaviors, fishing methods, and fishing-supported technology contribute to the fish harvest's uncertainty.[540] Therefore, it might be the case that no one can assure that the governmental provision of fishing rights will *proximately* result in the harvested fish. Thus, the government's subsidy transaction by providing fishing rights might be very hard to demonstrate under the light of the existing jurisprudence.

Regarding the benefit calculation, the government monopoly in the allocation of fishing rights means the disuse of domestic fish prices for the benchmarking purpose. The investigating authority might rely on this situation to reject in-country fish prices in order to select an alternative benchmarking value, such as the world or foreign fish prices. However, to use such an alternative benchmark, existing case law demands that the investigating authority make necessary adjustments to the selected benchmark to reflect the prevailing market conditions in the subsidizing country. This requirement is undoubtedly very circumstantial and technical with respect to the fishing rights case. The harvest uncertainty, fishing costs, fishing techniques, and conservatory requirements are enormously diverse among countries or even among fish stocks[541]; therefore, the adjustment obligation here may be too burdensome.

Beyond conducting the adjustments, the investigating authority must also provide "reasoned and adequate" explanations for its adjustments. With almost forty years of litigation

[539] Sara Rezaee, Ronald Pelot, and Alireza Ghasemi, 'The Effect of Extreme Weather Conditions on Commercial Fishing Activities and Vessel Incidents in Atlantic Canada', 130 Ocean and Coastal Management 115 (2016), at 115–27.
[540] J.M. Gates, 'Principle Types of Uncertainty in Fishing Operations', 1(1) Marine Resource Economics 31 (1984), at 31–49.
[541] Kirsty L. Nash and others, 'Improving Understanding of the Functional Diversity of Fisheries by Exploring the Influence of Global Catch Reconstruction', 7(1) Scientific Reports 1 (2017), at 1–12.

experience with regard to the timber rights system and timber markets in Canada, the United States still did not satisfy the Panel in *Softwood Lumber VII* in 2020 in terms of the benchmarking adjustment requirement.[542] Numerous trade law scholars cast doubts on the practicability of such cross-border benchmark adjustments in general.[543] Therefore, selecting an alternative benchmark for the fishing rights subsidy determination might be too legally risky in a WTO dispute.

All of the aforementioned obstacles demonstrate that the green CVDs proposal against below-market fishing rights is immature in practice. Is this green trade instrument for sustainable fisheries dead?

4.3.3.3. The very limited application

At least one corner of the fishing rights allocation should be captured by green CVDs: commercial fishing rights under a fishing access agreement. Distant fishing countries (mainly the European Union and China) usually pay for the right to access fishery resources in southern developing countries under a fishing sharing agreement.[544] According to the OECD, the inadequate remuneration of foreign fishing-access costs (rents forgone) may constitute a substantial subsidy to the distant fishing industry.[545] For example, the EU's total payments to its southern fishing partners (including the fishing access fees and other payments for fisheries governance) were around 135 million EUR in 2014.[546] In principle, the European Union should proportionately distribute these "hired" fishing costs to its distant fish harvesters (licensed to

[542] Panel Report, *Softwood Lumber VII*, paras 7.342, 7.397.
[543] For example, see Henrik Horn and Petros C. Mavroidis, above n 81, at 233–34.
[544] U. Rashid Sumaila and others, 'Updated Estimates and Analysis of Global Fisheries Subsidies', 109 Marine Policy 103695 (1) (2019), at 1–11.
[545] Gareth Porter, above n 67, at 52.
[546] European Commission, 'EU SFPAs: Sustainable Fisheries Partnership Agreements', https://op.europa.eu/en/publication-detail/-/publication/1356ec43-99b7-11ea-aac4-01aa75ed71a1 (visited November 5, 2021).

fish in foreign waters). If the European Union does not adequately recover such fishing access costs, its distant fishing operators might be subsidized by such "cheap" foreign fishing rights.

In this situation, the "hired" fishing rights are expected to be specifically allocated to a small group of distant fishing harvesters. This type of favorable treatment could thus fit the specificity requirement of the WTO Subsidy Agreement. Green CVDs could then be employed to "punish" these discounted distant fishers. However, the subsidy determination here may be examined under SCMA Article 1.1 (a)(1)(ii) – the government revenue forgone or not collected – rather than SCMA Article 1.1 (a)(1)(iii) – governmental provision of below-market goods.

In conclusion, unlike the forestry or mining sector which might embrace a strong demand for market-based allocation of resource exploitation rights, market-based allocation of fishing rights is not generally noticeable. There are at least four challenges to the green CVDs proposal as applied in the fishery sector. Among them, the current unclear trend toward market-based allocation of fishing rights might paralyze this green trade idea because there are virtually no underpriced fishing rights in the current legal and political context. Opening an anti-subsidy war in respect to fishing rights might be counterproductive to all fishing nations. However, the distant commercial fishery operating under an international fishing access agreement should be a "potential" target of this green anti-subsidy instrument. The green CVDs proposal may thus have **very limited applicability** in the fishery sector to promote its sustainability.

4.4. The applicability of the green countervailing duties proposal

4.1.1. Practical value of the green countervailing duties

Until now, the GATT/WTO rules have not permitted the anti-subsidy instrument to offset differences among national environmental standards. However, the multilateral subsidy law's development can open a door for the use of countervailing duties against below-market natural resource exploitation rights (not necessarily a governmental policy). From the perspective of environmental economists, underpriced natural resource allocation is a bad

choice. The use of the anti-subsidy instrument against this practice could reduce the demand for such "dumped" resources or products in the importing markets. Moreover, with the market ideology at heart, the anti-subsidy instrument could promote a market-based resource allocation policy.

The question of why this trade defense tool should be armed for conserving natural resources could be raised. We could have had beforehand import tariffs or a complete trade ban against imported downstream products that are made of natural resources under below-market exploitation. At the extreme, we might seek to negotiate a treaty-based prohibition on subsidies by "cheap" natural resource exploitation rights. The concerned country could then demand the elimination of such prohibited subsidies by a subsidy challenge before WTO dispute settlement instead of imposing countervailing duties. Indeed, we could have more weapons in the course of using trade laws for environmental protection, so why should countervailing duties be considered a choice?

It is important to remember that the employment of countervailing duties against natural resource underpricing practices has been used in U.S. trade law since the 1980s.[547] The United States has used this trade defense instrument (primarily against Mexico and Canada) merely because this country had it in its toolbox. Countervailing duties are simply a kind of import tariff. If such duties against natural resource underpricing practices are not used, the importing country can definitely raise the import tariffs to the level that satisfies it against the allegedly below-market products. But what should be the appropriate satisfied level of tariffs? WTO members limit themselves by the bound level of tariffs (bound tariffs).[548] This means they cannot freely raise the tariffs beyond the committed levels. The narrower the tariff waters are,

[547] See Chapter 1, at 1.2.1.
[548] GATT, Article II:1.

the fewer spaces in which the WTO members can use the import tariff instrument.[549] As a result, raising the import tariffs might in some instances not be commensurate to the "unfair" values that the suspected imports may earn from cheap foreign natural resource exploitation.

In addition, what is the basis for such a tariff raising scheme? Baselessly raising tariffs against an imported product should not be a wise move because the same scenario is likely to be encountered in the "counterpart" markets. Such an "unexplained" tariff-raising scheme seems to signal a deviation from rule-based trade relations, dampening mutual trust between trading partners. Invoking countervailing duties by saying that foreign practices are an "offensive" subsidy under the existing trade laws could be more legally excusable. In fact, GATT Article II:2 permits the imposition of countervailing duties *in addition to* the bound tariffs. This means that countervailing duties are not controlled by the tariff commitments but are only subject to the subsidy rules. Moreover, procedural requirements for imposing such trade defense duties can lessen protectionist motives and secure a level of predictability as compared to freely adjusting the import tariffs within the WTO's cap. Countervailing duties are thus thought to be more reasonable and predictable than the "pure" tariff instrument in countering foreign below-market natural resource exploitation.

If the "pure" tariff instrument is less appropriate in the underlying situation, an import restriction might be relatively unsuitable. Environmentalists may support the solution that products made from below-market natural resource exploitation should be banned from import markets. However, the use of trade measures for environmental protection does not mean their legality under the trade law context should be ignored. WTO laws in principle prohibit quantitative restrictions.[550] A requirement to prove an environmental rationale behind such an

[549]Alessandro Nicita et al., 'Cooperation in the Tariff Waters of the World Trade Organization', Study Series No.62, UNCTAD (2014), https://unctad.org/system/files/official-document/itcdtab62_en.pdf , (visited November 5, 2021).
[550] GATT, Article XI:1.

import restriction seems to be excessively demanding.[551] In *US – Shrimp*, the Appellate Body considered protecting and conserving sea turtles as a shared policy and interest of the "vast majority of the nations of the world," including the disputed parties.[552] Thus, the importing country (the United States) could legitimately express a concern about foreign tuna harvesting activities that were supposedly having an adverse effect on sea turtles. Nevertheless, in the underlying situation, conservation of unexploited minerals or standing timbers in a foreign territory is hardly a "shared policy and interest" of the importing countries or the whole world. This first and foremost is exclusively the business of the resource-endowed country. Unconvincingly demonstrating the legitimate policy of natural resource conservation *relating to* the instrument in force [553] can imply trade law inconsistency. Therefore, it is quite legally risky to use the import restriction tool to counter foreign below-market natural resource exploitation in the current trade law context.

What about a treaty-based prohibition against subsidies by below-market natural resource exploitation? This seems to be the best solution so that subsidy law can support natural resource sustainability. The brightest example of this is from the subsidy treatment of the IUU fishing problem in the ongoing WTO negotiation: a complete prohibition.[554] Although we have spent more than two decades to garner the global compromise on the prohibition against IUU fishing subsidies,[555] this common subsidy perception has not yet been transformed into a legal instrument. There are certain signals which raise doubt about the successful conclusion of the fisheries subsidies agreement in the 12th WTO Ministerial Conference at the end of 2021.[556] There will likely be continued waiting for a "legal" prohibition on IUU fishing subsidies in the

[551] GATT, Article XX(g).
[552] Appellate Body Report, *US – Shrimp*, para 135.
[553] Appellate Body Report, *US – Shrimp*, para 135.
[554] WTO, Negotiating Group on Rules – Fisheries Subsidies Revised Draft Consolidated Chair Text, TN/RL/W/276/Rev.1, 30 June 2021, at Article 3.
[555] According to Chen-ju Chen, the fisheries subsidies issue was formally introduced to the WTO by the United States in 1997. See Chen-ju Chen, above n 474, at 48.
[556] U.S. Mission to International Organizations in Geneva, above n 476.

years ahead. Given the fact that the idea of a prohibition against subsidies by below-market natural resource exploitation has not yet formally appeared in the WTO forum, how long should waiting for legal endorsement be tolerated?

The protection and conservation of fish is likely the global policy focus[557] due to this resource's multifarious importance and existing nature. A multilateral response against IUU fishing subsidies thus seems to be more viable. Nevertheless, unexploited minerals or timber forests within a country are hardly considered a global interest in any generous sense. This means a multilateral demand to prevent the wasteful use of these resources might not exist. Rather, the plentifulness and cheapness of these industrial resources is an interest of the input-importing countries. Why should they negotiate a prohibition on this state-aid practice when they could earn interest from it? However, these countries may have a concern about competitiveness effects on downstream production of such below-market resources. But in this case, it is truly a *trade* concern rather than an *environmental* concern which sets the rationale for the prohibition against IUU fishing subsidies. Without a solid environmental motive and a global interest, the idea of a treaty-based prohibition against subsidies by below-market natural resource exploitation is relatively elusive. Phrased differently, this "most" environmentally friendly trade solution might be theoretically applauded but practically unsound.

In short, the WTO subsidy law opens a door for the use of countervailing duties against foreign below-market natural resource exploitation. In other words, the existing subsidy law is "greening" this trade defense instrument. Compared to other trade measures in the toolbox – import tariffs, import restrictions, and the idea of a prohibition against subsidies by below-market resource exploitation – the countervailing duties instrument shows itself as a *practical*

[557] United Nations, 'The Sustainable Development Goals Report 2021', https://unstats.un.org/sdgs/report/2021/The-Sustainable-Development-Goals-Report-2021.pdf (visited November 5, 2021).

and immediate solution for natural resource conservation. Certainly, this trade defense tool should never be the best fit in this context.

4.4.2. Limitations on applicability

The dissertation recognizes a very limited application of the green CVDs proposal in the fishery sector. This might raise the question of whether this green trade instrument can be effective for natural resource sustainability at large. Does this trade offsetting instrument have its own applicable limit? If so, what is the limit? The dissertation presents two arguments against the prospect of applicable green CVDs.

First, the legal foundation for green CVDs can be unstable under the multilateral subsidy law. This instrument's legal premise is merely the judicial guidance of the WTO Appellate Body rather than an explicit legal text. Governmental provision of natural resource exploitation rights is not explicitly disciplined as a subsidy transaction under the Subsidy Agreement. This means that the AB's interpretations might go beyond the textual limit of the current subsidy law. The WTO law also does not formally endorse the rule-making function of the WTO judiciary.[558] Therefore, it is debatable whether only WTO jurisprudence should be relied upon to challenge a member country's natural resource allocation.

Although WTO jurisprudence is commonly recognized as having the precedent-setting characteristic, its *stare decisis* power is still debatable.[559] A later case might rely on the previous jurisprudence for its adjudication, but it is not forced to do so.[560] This means the current judicial

[558] Dispute Settlement Understanding, Article 3.2.

[559] Professor Raj Bhala (1999) enthusiastically argued for *stare decisis* (the common law tradition) as the foundation of the WTO dispute settlement practice. However, Zachary Flowers viewed the WTO jurisprudence toward the "jurisprudence constante" doctrine of the civil law tradition. See Raj Bhala, 'The Precedent Setters: De Facto Stare Decisis in WTO Adjudication (Part Two of a Trilogy)', 9(1) Journal of Transnational Law and Policy, 1 (1999), at 149–51; Zachary Flowers, 'The Role of Precedent and Stare Decisis in the World Trade Organization's Dispute Settlement Body', 47(2) International Journal of Legal Information 90 (2019), at 90–104.

[560] Appellate Body Report, *Japan- Alcoholic Beverages II*, at 14. The Appellate Body referred to the ICJ to explain the precedential value of WTO jurisprudence: "It is worth noting that the Statute of the International Justice has an explicit provision, Article 59, to the same effect. This has not inhibited the development by that Court (and its predecessor) of a body of case law in which considerable reliance on the value of previous decisions is readily discernible."

permission to capture the governmental provision of underpriced natural resource exploitation rights as a countervailable subsidy might not be observed in a future natural resource subsidy case. This jurisprudence by the "past" WTO judiciary could simply be reversed by a future interpretation.

Let us take the example of the *Shrimp–Turtle* case – a monumental dispute in trade and the environment. This dispute concerned U.S. import restrictions on shrimp harvested with commercial fishing techniques that may adversely affect sea turtles. With a primarily similar disputing context and legal grounds, the Appellate Body in this "legendary" case departed from its past inflexible jurisprudence (*Tuna–Dolphin*) which resulted in a more balanced judgment.[561] In addition, the subsidy dispute was substantially fact-specific. Past judicial guidance might thus be twisted to result in a different ruling in a subsequent case. As argued in Chapter 5, by approaching a trading nation's natural resource sovereignty with the art of legal interpretation rather than a treaty-based premise, the natural resource exploitation rights jurisprudence might be highly at risk. Therefore, such a reversal scenario in future jurisprudence might be feasible in this situation.

Second, the natural resource allocation practice might create confusion as to the applicability of the green CVDs proposal. One rationale for the anti-subsidy mechanism is to protect the allocation of economic resources from the government's distorted intervention.[562] As a result, green CVDs are sought to promote natural resource efficiency through the power of market principles. However, natural resources and their allocation are not necessarily congruent with market principles. As discussed in the next chapter (at 5.2), these sovereign assets are too complicated to be completely immersed in the market context. Market principles are just one basis on which the government relies to construct its natural resource policies. The

[561] Elizabeth R. DeSombre and J. Samuel Barkin, 'Turtles and Trade: The WTO's Acceptance of Environmental Trade Restrictions', 2(1) Global Environmental Politics 12 (2002), at 12–18.
[562] WTO, Doha Ministerial Declaration, WT/MIN (01)/DEC/1, November 14, 2001, para 28.

right to access natural resources involves various social–political dimensions which are distant from the market principles. A growing literature demonstrates that market principles are not always the best solution to achieve natural resource efficiency.[563]

There might be a strong demand for market principles in allocating the exploitation rights of some "industrial" natural resources,[564] such as commercial timber or minerals. The natural resource underpricing concern has been solely against these industrial resources as observed through U.S. anti-subsidy practice. With vital roles in downstream manufacturing, government intervention in the upstream allocation of such resources may cause trade distortions. The allocation pattern for these "heavy" natural resources is commonly specific to a small group of potential users. Consequently, it is easier for this pattern of natural resource allocation to fulfill the technical requirements of subsidy law. By contrast, in the case of "consumer" natural resources,[565] such as fish (fishing rights) or public grasses (grazing rights), market principles might not have strong acceptance. As discussed in the preceding section (4.3), public policy values and the open-access problem shield these public resources from any market-based redistribution. Therefore, the green CVDs can be applicable to certain industrial resources but not to consumer resources.

Recent policy discussions have concentrated on whether international trade tools can support the world's climate change campaign.[566] The question becomes whether green CVDs

[563] Elinor Ostrom and others, *The Future of the Commons - Beyond Market Failure and Government Regulation*, (The Institute of Economic Affairs, 2012).

[564] According to the OECD, natural resources fall into four groups: mineral and energy resources, soil resources, water resources, and biological resources. OECD, 'Glossary of Statistical Terms', search for 'natural resources' at https://stats.oecd.org/glossary/detail.asp?ID=1740 (visited November 5, 2021). The term "industrial natural resources" should mean certain natural resources primarily used as inputs in industrial manufacturing, such as minerals, energy, and commercial logs under the OECD's classification.

[565] Compared to industrial natural resources, the term "consumer natural resources" is used herein to cover a group of natural resources primarily consumed by humans and/or attached to the agricultural culture, such as soil, water, or biological resources under the OECD's classification. Ibid.

[566] For example, European Commission, EU Green Deal (carbon tax adjustment mechanism), https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12228-EU-Green-Deal-carbon-border-adjustment-mechanism-_en (visited November 5, 2021).

can play a role in fighting climate change or curbing air pollution. It is noted that the Panel in *US – Gasoline* found that clean air is an exhaustible natural resource.[567] Relying on this basis, climate change mitigation could be considered the conservation of an exhaustible resource – clean air.[568] Under the logic of the green CVDs instrument, if the government provides underpriced clean air to its domestic industries, this practice might be countervailed. However, putting clean air into the market standard is questionable. It is hard to find such a thing as underpriced clean air as an *industrial input*, even though clean air markets exist in some countries as an environmental policy.[569] Ironically, green CVDs are expected to countervail the below-market allocation of natural resources as *inputs* for downstream production rather than an environmental policy. Therefore, clean air should not be an "attacking object" of green CVDs. Green CVDs are sought to limit the overuse of industrial natural resources like fossil fuels by steering the market standard in the allocation of these resources; as a result, green CVDs can *indirectly* contribute to climate change policies.[570]

In short, under existing WTO subsidy law, a positive contribution to natural resource conservation can be made through the green CVDs instrument. However, its applicability is doubtful. The legal foundation for this green trade instrument may be unstable due to its judicial endorsement rather than an explicit textual basis. The legality of this judicial endorsement is still unclear; therefore, relying on this jurisprudence to challenge a trading nation's natural resource allocation might be controversial. Green CVDs can be applied to certain "industrial" natural resources, such as minerals or commercial forests, as observed in U.S. practice. They may be impractical for "consumer" natural resources such as fisheries or public grasses.

[567] Panel Report, *US – Gasoline*, para 6.37.
[568] Steven Nathaniel Zane, 'Leveling the Playing Field: The International Legality of Carbon Tariffs in the EU', 34(1) B. C. Int'l & Comp. L. Rev. 199 (2011), at 210–12.
[569] United States Environmental Protection Agency, Clean Air Markets, at https://www.epa.gov/airmarkets (visited November 5, 2021).
[570] Jackson Erpenbach, above n 102, at 529.

However, this green trade instrument's exact applicability should be ascertained on a *case-by-case* basis rather than by a mere presumption.

Conclusion of Chapter 4

Based on WTO subsidy law on natural resource exploitation rights, this chapter revisited the past debate on using countervailing duties for environmental protection. Environmentalists have proposed this trade defense instrument to counteract weak environmental standards in a foreign country. This "eco-dumping" concern might be resurgent as the United States has just presented a "weak environmental countervailability" proposal before the WTO. However, most trade law experts have harshly criticized this green offsetting idea as there is a lack of an endorsement for it in the GATT/WTO subsidy rules. This chapter demonstrates that even though the current subsidy regime could not be used to countervail an environmental policy, it at least could be employed to promote natural resource sustainability.

This green CVDs proposal finds its rationale in Professor Chichilnisky' theory on the relationship between international trade and natural resource conservation through the property rights factor. From timber rights in *Softwood Lumber IV* to captive mining rights in *US – Carbon Steel (India),* existing subsidy law provides the legal basis for the green CVDs proposal. The U.S. experiences in challenging foreign underpriced natural resource allocations are vivid evidence for the practicability of this green trade instrument.

In this dissertation, the green CVDs proposal is investigated in the case of governmental provision of below-market fishing rights and a very limited application of this green trade instrument in this sector is found. The main reason is the unclear tendency toward market-based allocation of fishing rights. The failure to find a convincing market benchmark for the underpriced fish means the anti-subsidy proposal might collapse. The open-access problem is so prevalent in the fishery sector; therefore, the concept of below-market fishing rights is virtually nonexistent. However, green CVDs should be armed to challenge the underpriced fishing rights under an international fishing access agreement.

Although the existing WTO subsidy law provides the legal grounds for the green anti-subsidy proposal in the natural resource conservation context, this legal foundation is unstable and controversial. Using green CVDs based on this controversial legal basis against a trading nation's natural resource policy might be controversial, too. In terms of its applicability, green CVDs might be feasible against certain "industrial" natural resources such as minerals or commercial timber. By contrast, they can be ineffective for "consumer" natural resources such as fisheries or public grasses. Therefore, while this trade-based environmental instrument is now viable, there is little reason to be optimistic about it.

Chapter 5

RETHINKING THE MULTILATERAL SUBSIDY RULES TOWARD NATURAL RESOURCES

As a usual form of trade in goods, the government provision of exploited natural resources at below-market value to domestic downstream industries could be a subsidy under the WTO subsidy rules. If such governmental provision benefits downstream export-oriented producers, this subsidy practice can be prohibited (generally called natural resource-based products).[571] Through the art of trade law interpretation, the multilateral subsidy regime also disciplines the below-market allocation of exploitation rights to natural resources (natural resources in their natural state). This subsidy capture might collide with the sacrosanct principle of natural resources sovereignty which confirms the sovereign rights to "exploration, development, and disposition" of natural resources.[572]

For example, the OPEC countries consistently maintain that until an oil reserve is exploited for use as traded products (crude oil or other refined forms), it falls completely under a trading nation's sovereign powers.[573] Canada argued along the same line in *Softwood Lumber II*:[574] "This was fundamentally different from cases in which governments set the prices of resources which had been exploited or removed from their natural state. In such cases, the natural resource was **no longer** *in situ* but transformed into a good. There was no comparison between stumpage and the fixing of the price of natural gas which was in a state to be sold as an energy source or input to consumers." However, the uneven distribution of natural resources

[571] Subsidy Agreement, Annex 1(d).
[572] United Nations General Assembly (UNGA), above n 424.
[573] Anna Alexandra Marhold, 'WTO Law and Economics and Restrictive Practices in Energy Trade: The Case of the OPEC Cartel', 9(6) Journal of World Energy Law and Business 475 (2016), at 484.
[574] Panel Report (GATT), *Softwood Lumber II,* para 164.

and their importance in trade and international competition continuously sustain the subsidy concern through the mask of market-based natural resource allocation.

The unfinished negotiation work in the Uruguay Round on natural resource underpricing could foretell an uneasy acceptance of the existing jurisprudence. The United States has been a pioneer in challenging foreign natural resource underpricing practices by the use of the anti-subsidy instrument, yet it admits that discussion of such "sovereign" goods during the renegotiation (Doha Round) would be very sensitive and controversial.[575] The subsidy-alleged countries in the natural resource subsidy disputes at the WTO have continuously invoked the past unfinished negotiations to defend their natural resource sovereignty.[576] The governmental provision of natural resource exploitation rights is not textually contained in the Subsidy Agreement as a financial contribution. Therefore, interpretations of the WTO judiciary are highly questionable and such judicial endorsement is likely a brave move. By creating something not precisely found in the legal text, interpretations of the WTO adjudicators might not be convincing to the alleged subsidy member.

The problem also lies in the WTO rules themselves. The language used in the WTO legal texts predominantly came from diplomats. It should be ambiguous enough to reach a trade deal rather than employ strict terms, as usually found in a lawyer's document.[577] These vague provisions have now been primarily placed in the hands of law professors or trade lawyers who adjudicate a trade dispute. As Professor Raj Bhala once stated: "The Appellate Body members work in an arena where the imperfections of 'legislators' – the trade negotiators who produced the Uruguay Round agreements and its progeny – are all too plain. They are compelled to

[575] WTO, above n 394, at 3.
[576] Panel Report, *Softwood Lumber IV,* para 4.354.
[577] See Luiz olavo Baptista, 'A Country Boy Goes to Geneva', in Gabrielle Marceau (ed.), *A History of Law and Lawyers in the GATT/WTO* (Cambridge University Press, 2015), at 559–69.

resolve issues that are not addressed adequately, or at all, by the legislators in trade agreements."[578]

As masters of linguistic skills, the WTO judges facilitate clarification, gap-filling, or even rulemaking through their interpretations.[579] However, the DSU clearly demands that the interpretations do not "add to or diminish the rights and obligations provided in the covered agreements."[580] This chapter provides comments on the WTO jurisprudence, which has expanded the multilateral subsidy capture toward unexploited natural resources. It is argued that the WTO judiciary might manipulate the manner of treaty interpretation to build up the existing jurisprudence. As an incomplete work in the negotiating history, the natural resource exploitation issue should be handled by further negotiations rather than through existing judicial endorsement. This chapter also suggests appropriate benchmarking rules for natural resources in light of the government's roles in natural resource management.

5.1. Natural resources under the multilateral subsidy jurisprudence: comments

Natural resources in the subsidy context are theoretically limited to the situation in which the government provides exploited natural resources or exploitation rights to natural resources at below-market value to domestic industries. Governmental provision of exploited natural resources at below-market value can be justified as a subsidy transaction in the form of the governmental provision of goods. Nevertheless, the government provision of natural resource exploitation rights at below-market value is a distinct feature of natural resources in the subsidy context. In this case, the government can provide a direct benefit to the producer or an indirect benefit through an upstream–downstream situation (e.g., stumpage rights – timber harvester – softwood lumber). Such a state-aid practice inherently connects to the

[578] Raj Bhala, above n 560, at 150.
[579] WTO, 'Farewell Speech of Appellate Body Member Thomas R. Graham', https://www.wto.org/english/tratop_e/dispu_e/farwellspeechtgaham_e.htm (visited November 5, 2021).
[580] Dispute Settlement Understanding, Articles 3.2, 19.2.

government ownership over natural resources or the government's predominance in the natural resource sector.

The issue of natural resource exploitation had been brought to the Uruguay Round for discussions by the subsidy negotiation group (NG10).[581] However, it was not totally clear whether the WTO negotiators agreed to treat the governmental transfer of natural resource exploitation rights as a subsidy transaction. In fact, there are no words in the Subsidy Agreement that are relevant to this special state-aid practice. Through the art of legal interpretation, the existing subsidy regime extends its scope toward natural resource exploitation rights, thus directly touching on natural resources in their natural state (unexploited), such as standing timber or a coal mine. This means the governmental provision of a "genuine" natural resource in a less than remuneration manner could constitute a countervailable subsidy.

5.1.1. Provision of natural resource exploitation rights as the provision of goods: treaty interpretation by the Appellate Body

5.1.1.1.Searching the ordinary meaning of treaty terms

To begin the analysis, it is necessary to review the rules of treaty interpretation which have been used in the WTO dispute settlement. Article 3(2) of the DSU authorizes the Appellate Body to clarify existing provisions of the covered agreements in light of customary rules of interpretation of public international law. The interpretation rules as codified in the Vienna Convention on The Law of Treaties 1969 (Vienna Convention) have been well-followed in WTO case law as the customary rules of treaty interpretation.[582] As a primary rule, Article 31(1) of the Convention requires: "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

[581] See Chapter 1, at 1.3.
[582] Appellate Body Report, *US – Gasoline*, p 17; Appellate Body Report, *India – Patents (US)*, para 46.

in the light of its object and purpose." That means the interpretation process has to start with the ordinary meaning of a treaty term by its textual wording.[583] This ordinary meaning then has to be adapted in the light of the term's context and the treaty's object-and-purpose to arrive at the contextualized ordinary meaning.[584] In other words, the context and object-and-purpose elements assist in building the most appropriate ordinary meaning; that is, the treaty's meaning of the interpreted term.[585] AB practice has been characterized by placing the greatest weight on the ordinary meaning element.[586]

The "starting" question is what is the ordinary meaning of the interpreted term. In reality, it is not unusual for a word to have more than one ordinary meaning.[587] According to Professor Chang-fa Lo, the meaning of the treaty's terms has to be ordinary, not an unusual, uncommon, or distinctive meaning.[588] He put forward two principal questions to justify the ordinariness of a meaning for treaty terms: *ordinary meaning of what* and *ordinary to whom*.[589] The first question seems unnecessary because it is the words that literally appear in the legal text (that is an object of the interpretation task).[590] However, the second question might be crucial because it determines the appropriateness of the meaning of the treaty terms. Professor

[583] Appellate Body Report, *Japan – Alcoholic Beverages II*, at 11–12; see Yuejiao Zhang, 'Contribution of the WTO Appellate Body to Treaty Interpretation', in Gabrielle Marceau (ed.), *A History of Law and Lawyers in the GATT/WTO: The Development of the Rule of Law in the Multilateral Trading System* (Cambridge University Press, 2015), at 573–74.

[584] Appellate Body Report*, US – Continued Zeroing*, para 268; see Isabelle Van Damme, above n 387, at 621–22.

[585] Chang-fa Lo, *Treaty Interpretation Under the Vienna Convention on the Law of Treaties,* (Springer, 2017), 155.

[586] Claus-Dieter Ehlermann, 'Reflections on the Appellate Body of the World Trade Organization (WTO)', in *Proceedings of the Annual Meeting (American Society of International Law)* (Cambridge University Press, 2003), XCVII, at 80.

[587] Professor Ulf Linderfalk stated that, "In my assessment, what these authors wish to comment upon is not really the content of *the ordinary meaning* as such, but rather the possible existence of multiple ordinary meanings, and the rules they assume to exist for dealing with conflicts of this sort," at Ulf Linderfalk, *On the Interpretation of Treaties*, Law and Philosophy Library 83 (Springer, 2017), 66.

[588] Chang-fa Lo, above n 586, at 154.

[589] Chang-fa Lo, above n 586, at 157-59.

[590] Appellate Body Report, *EC - Hormones*, para 181.

Chang-fa Lo suggested that for a trade treaty, the ordinariness "must be decided based on the ordinary understanding of the term in the field of international trade."[591]

In short, the treaty interpretation process starts by selecting the ordinary meaning of the treaty term from a range of possible meanings. Such a selected meaning continues to be refined based upon the term's context and the treaty's object-and-purpose to result in the most appropriate ordinary meaning of the interpreted term. The meaning's ordinariness should rely on an understanding of it in the respective field rather than on a common understanding.

The next question is where we can find the ordinary meaning of the interpreted term. The usual practice of the Appellate Body is to start the interpretation exercise by looking at dictionary definitions.[592] However, searching for the ordinary meaning in dictionaries typically confronts a linguistic problem: a dictionary almost always comprises a catalog of all meanings of a word – whether those meanings are common or rare, universal or specialized.[593] Professor Donald McRae amusingly observed this fact by stating, "anyone who has pleaded a case knows that you can usually find a dictionary meaning to support the meaning that your client prefers."[594] This was the situation in *Softwood Lumber IV* when the disputing parties (the United States and Canada) suggested their own "beneficial" meaning from various definitions in the same dictionary. Therefore, as a "proper" starting point, it is necessary to discern the *appropriate* ordinary meaning of the interpreted term from such a range of "rare, common, or specialized" dictionary definitions.

[591] Chang-fa Lo, above n 585, at 158.
[592] Appellate Body Report, *EC – Chicken Cuts*, para 175; See David Pavot, 'The Use of Dictionary by the WTO Appellate Body: Beyond the Search of Ordinary Meaning', 4(1) Journal of International Dispute Settlement 29 (2013), at 32.
[593] Appellate Body Report, *US – Gambling*, para 164.
[594] Donald McRae, 'Treaty Interpretation and the Development of International Trade Law by the WTO Appellate Body', in Giorgio Sacerdoti, Alan Yanovich, and Jan Bohanes (eds), *The WTO at Ten – The Contribution of the Dispute Settlement System*, (Cambridge University Press, 2006), at 360, 364.

5.1.1.1.1. Interpreting “goods”

Both the Panel and the Appellate Body in *Softwood Lumber IV* consulted the same dictionaries in searching the ordinary meaning of “goods”:

> **Shorter Oxford English Dictionary**
>
> 3. Property or Possessions: *esp.* movable property
>
> 4. In *pl.* Saleable commodities: merchandise, wares.
>
> **Black’s Law Dictionary**
>
> 1. Tangible or movable personal property other than money; esp. articles of trade or items of merchandise <goods and services>. The sale of goods is governed by Article 2 of the UCC. 2. Things that have value, whether tangible or not <the importance of social goods varies from society to society>.
>
> > ‘‘Goods' means all things, including specially manufactured goods that are movable at the time of identification to a contract for sale and future goods. The term includes the unborn young of animals, growing crops, and other identified things to be severed from real property. The term does not include money in which the price is to be paid, the subject-matter of foreign exchange transactions, documents, letters of credit, letter-of-credit rights, instruments, investment property, accounts, chattel paper, deposit accounts, or general intangibles" UCC § 2 – 102 (a) (24).’

The Appellate Body here intentionally picked up “property or possessions” as a starting point for the meaning of the word “goods.” However, it is questionable whether this selected meaning is ordinary “enough” as compared to other meanings referred to by the Panel, such as “saleable commodities,” “merchandises,” or “wares.” Consulting Black’s Law Dictionary, the Appellate Body selected “growing crops, and other identified things to be severed from real property” instead of “tangible or movable personal property other than money” – the meaning

that was accepted by the Panel as the ordinary meaning of "goods."[595] Which meaning is more ordinary? In rejecting Canada's domestic recourse, the Appellate Body explained that "the manner in which the municipal law of a WTO Member classifies an item cannot, in itself, be determinative of the interpretation of provisions of the WTO covered agreements."[596] Ironically, the Appellate Body selected a meaning that originated in the U.S. Uniform Commercial Code – "growing crops, and other identified things to be severed from real property" – which is directly referenced in Black's. In the end, the Appellate Body broadly understood "goods" as "property or possessions" rather than adopting the more limited meaning accepted by the Panel.

Reflection on Professor Chang-fa Lo's question of "ordinary to whom" might cast doubt on the adoption of the broad reading of "goods" endorsed by the Appellate Body. The question here is whether this broad meaning could represent the ordinary understanding of "goods" in the respective field, that is, international trade. Put differently, does the meaning of "property or possessions" reflect the ordinary understanding of "goods" according to people in the field of international trade or economic activities at large? It is useful to note that the first meaning of "goods" in Black's is stated as "tangible or movable personal property other than money; **esp. articles of trade or items of merchandise <goods and services>**" (emphasis added). Do the emphasized words mean that the word "goods" should have the meaning of "articles of trade or items of merchandise" in the trading context?

The Appellate Body *ex-ante* selected "property or possessions" as the ordinary meaning of "goods" for starting its interpretative exercise. However, this judicial body perhaps "forgot" to explain the ordinariness of this meaning as compared to other attributes. Lacking such an ordinariness explanation, the AB's selection might not concur with the good faith requirement

[595] Panel Report, *Softwood Lumber IV*, para 7.24.
[596] Appellate Body Report, *Softwood Lumber IV*, para 65.

of the Vienna Convention[597] nor be sufficiently compelling. With such a "preferred" ordinary meaning in mind, the AB's interpretation appears just to confirm this ordinary meaning rather than to contextualize it under the term's context and the treaty's object and purpose. Professor Petros C. Mavroidis criticized this "select and confirm" style of treaty interpretation (this case is an obvious example) as incorrect.[598] He contended that the Appellate Body should give "a life with a particular integrated context" to words in the treaty rather than a static meaning.[599]

By endorsing such a broad understanding of "goods," it seems that the Appellate Body took the view of generalist international jurists rather than the GATT epistemic community.[600] In fact, "property or possessions" appears to be the meaning of "pure" legal sense[601] rather than a usual understanding of international trade or economic activities. The word "property" or "possession" might have an extremely broad meaning and embrace all economic resources of human existence, ranging from land and natural resources to means of production, ideas, and other intellectual products.[602] This certainly contains monetary values, such as funds, equity, or revenue – the subsidy transaction's objects stipulated at Article 1.1(a)(1)(i) and (ii) of the Subsidy Agreement. This means that under the AB's broad understanding of "goods," Article 1.1(a)(1)(iii) may be read to include the subsidy transaction objects of the two other provisions; that is, Article 1.1(a)(1)(iii) may be read to render the two other provisions redundant. Therefore, the AB's expansive reading of "goods" under Article 1.1(a)(1)(iii) could be inconsistent with the effectiveness principle in treaty interpretation, which asserts that an

[597] Vienna Convention on the Law of Treaties (1969), Article 31(1). See Chang Fa Lo, 'Good Faith Use of Dictionary in the Search of Ordinary Meaning under the WTO Dispute Settlement Understanding', *Journal of International Dispute Settlement*, 1.2 (2010), at 431–45.
[598] Petros C. Mavroidis, 'No Outsourcing of Law? WTO Law as Practiced by WTO Courts', 102(3) American Journal of International Law 421 (2008), at 446.
[599] Ibid, at 447.
[600] Robert Howse, 'The World Trade Organization 20 Years on: Global Governance by Judiciary', 27(1) European Journal of International Law 9 (2016), at 26–27.
[601] Joseph W Bingham, 'The Nature and Importance of Legal Possession', 13(7) Michigan Law Review 535 (1915), footnote 3.
[602] Stanford Encyclopedia of Philosophy, Property and Ownership, https://plato.stanford.edu/entries/property/#IssuAnalDefi (visited November 5, 2021).

interpreter is "not free to adopt a reading that would result in reducing whole clauses or paragraphs of a treaty to redundancy or inutility."[603]

Nevertheless, it might be inappropriate to characterize this course of searching for ordinary meaning by the Appellate Body as erroneous. The reason is simply that the Vienna Convention does not explain how to search for the ordinary meaning of the treaty terms or how to evaluate the ordinariness.[604] Using dictionaries is the most feasible way to discern the ordinary meaning of the treaty terms. The way in which a dictionary is compiled and its linguistic competence guarantee its comprehensiveness and credibility.[605] This tool also might contribute to legitimize the judicial discourse of judges. In a case in which a clear rule is non-existent, the search for ordinary meaning demands a greater extent of judgment and evaluation,[606] any criticism of it therefore seems to be subjective.

However, the AB's broad understanding of "goods" may be questionable in the case of intellectual property rights. Before the Panel in *Softwood Lumber IV,* the European Communities understood "goods and services" to include "any other property right such as e.g., intellectual property rights."[607] This understanding was incorporated into its "intellectual property rights" subsidy argument in *US – Large Civil Aircraft (2nd complaint)* which was evidently based upon the "property or possessions" meaning endorsed by the Appellate Body in *Softwood Lumber IV.* The European Communities contended that the transfer of intellectual property rights (e.g., patent rights by NASA/USDOD to Boeing) constituted a provision of goods under Article 1.1(a)(1)(iii).[608] By contrast, the United States asserted that intellectual

[603] Appellate Body Report, *US – Gasoline*, p 23.
[604] Terence P. Stewart, Amy S. Dwyer, and Elizabeth M. Hein, 'Trends in the Last Decade of Trade Remedy Decisions: Problems and Opportunities for the WTO Dispute Settlement System', 24(1) Arizona Journal of International and Comparative Law 251 (2007), at 273.
[605] Chang Fa Lo, above n 597, at 438.
[606] Chang Fa Lo, above n 597, at 434.
[607] Panel Report, *Softwood Lumber IV*, para 5.6.
[608] Panel Report, *US – Large Civil Aircraft (2nd Complaint)*, para 7.1266. Abbreviation: NASA – United States National Aeronautics and Space Administration; USDOD – United States Department of Defense.

property rights are not "goods" under this provision.[609] Both the Panel of first instance and the Appellate Body did not touch on this intellectual property rights question.[610] However, the Panel of compliance, *US – Large Civil Aircraft (2rd complaint) (Article 21.5 – EU)*, completed the analysis by rejecting the "goods" understanding of intellectual property rights as argued by the European Communities:[611]

> As property rights and assets, intellectual property rights are thus usually **distinguished from goods** as such: This is apparent in the TRIPS Agreement itself, which distinguishes between goods, and intellectual property rights that are embedded in such goods […] setting such an intellectual property right in a different category from goods as such. (Emphasis added.)

It explained the property nature of intellectual property rights as:[612]

> We note, in this connection, that intellectual property rights are generally understood to be economic assets and, in the form of patents, are tradeable categories of property; they are usually treated by national jurisdictions and international organizations as **immaterial property, or intangible assets**. (Emphasis added.)

Linking the above explanations together, it can logically be understood that intellectual property rights are distinguished from goods as a kind of intangible property. Does this understanding contradict the AB's interpretation of "goods" as "property and possessions" which inherently includes immaterial or intangible properties? Is the right to exploit natural resources distinguished from goods due to its intangible nature, much like the case of intellectual property rights?

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[609] Panel Report, *US – Large Civil Aircraft (2nd Complaint)*, para 7.1273.
[610] Panel Report, *US – Large Civil Aircraft (2nd Complaint)*, para 7.1276; Appellate Body Report, *US – Large Civil Aircraft (2nd Complaint),* para 742.
[611] Panel Report, *US – Large Civil Aircraft (2nd Complaint) (Art. 21.5)*, para 8.385.
[612] Panel Report, *US – Large Civil Aircraft (2nd Complaint) (Art. 21.5)*, para 8.383.

The view taken in this dissertation is that the Appellate Body in *Softwood Lumber IV* should offer a limited understanding of "goods" which reflects its ordinariness in the context of international trade or economic activities. This word should have the ordinary meaning of "articles of trade or items of merchandise" or more abstractly, **"**tangible or movable personal property other than money" as accepted by the Panel. By endorsing such a broad meaning of "property or possessions", the AB interpretation could be read to include intangible property – this meaning is not likely ordinary to any "trade" perception of "goods."[613] With this broad understanding in mind, it seems that natural resource exploitation rights by themselves can fall into "goods" as a kind of "property and possessions." Since the Vienna Convention does not have any rule for how to search for the ordinary meaning of the treaty terms, it might be inappropriate to criticize the AB's interpretation as erroneous. However, this judicial body needs to be cautious with its judgment on the ordinariness of a meaning in the treaty terms, with the word "goods" as a clear example.

5.1.1.1.2. Interpreting "provides" and the mechanism of timber harvesting rights

In searching for the ordinary meaning of the word "provides", the Appellate Body suggested the meaning "puts at the disposal of." According to the facts of this case as reasoned, it was not a matter if interpreting "provides" as "supplies" (preferred by Canada) or "making available" (preferred by the United States) or "puts at the disposal of" (preferred by the Appellate Body). The Appellate Body understood that the meaning of "provides" requires "a reasonably proximate relationship between the action of the government providing the good or service on the one hand and the use or enjoyment of the good or service by the recipient on the other."[614] In other words, what should be under consideration is the result of the underlying transaction – the *raison d'être* of the stumpage rights arrangements in this dispute. Therefore,

[613] Chang-fa Lo, above n 586, at 153.
[614] Appellate Body Report, *Softwood Lumber IV*, para 71.

in combination with the meaning of "goods," standing timber provided by the mechanism of the Canadian stumpage rights was considered as "provides goods" – a subsidy transaction according to Article 1.1(a)(1)(iii) of the Subsidy Agreement:[615]

> For these reasons, we *uphold* the Panel's finding, in paragraph 7.30 of the Panel Report, that USDOC's "[d]etermination that the Canadian provinces are providing a financial contribution in the form of the provision of a good by providing standing timber to timber harvesters **through** the stumpage programmes" is not inconsistent with Article 1.1(a)(1)(iii) of the *SCM Agreement*. (Emphasis added.)

It seems the Appellate Body's understanding (and also that of the United States) was different than Canada's with respect to the *modus operandi* of Article 1.1(a)(1)(iii) in the context of this stumpage rights dispute. Canada tended to emphasize timber harvesting rights as an *object* of the subsidy transaction or a type of economic resource transferred by the government. It argued that such an intangible right to harvest standing timber should not be read as "goods" as usual.[616] However, the Appellate Body appeared to concentrate on the word "provides" by claiming that the right to harvest standing timber can be considered as a *mechanism* of providing goods (standing timber as goods in this case).[617] The reasonably proximate relationship test was invented to verify the mechanism through which the timber harvesting rights could result in a good (the subsidy transaction's object). In other words, according to the Appellate Body, what should be under consideration is the consequence or effect of the subsidy transaction. The Appellate Body and Canada observed the subsidy transaction from different angles and thus had different rationales to justify their arguments.

The dissertation puts forth that in terms of the scope of the Subsidy Agreement, a subsidy transaction should be judged by its transactional object – the *type* of economic

[615] Appellate Body Report, *Softwood Lumber IV*, para 76.
[616] Appellate Body Report, *Softwood Lumber IV*, para 68.
[617] Appellate Body Report, *Softwood Lumber IV*, para 75.

resources that can be transferred by the government – rather than the *mechanism* through which such an economic resource is transferred. In other words, the scope of the subsidy rules, whether broad or narrow, should depend on the range of economic resources which the negotiators agreed should constitute a subsidy transaction. This argument might be supported by the Appellate Body in *US – Large Civil Aircraft (2nd complaint)*:

> Therefore, what is captured in the first sub-clause of subparagraph (iii), as well as in subparagraph (i), is a government's provision or goods or services, or of funds, irrespective of whether this is done gratuitously or in exchange for consideration. The difference between the two types of government conduct, however, **lies in what is being transferred by the government**. Under subparagraph (i), the government transfers financial resources, while under subparagraph (iii) (first sub-clause), the government provides a good or service.[618] (Emphasis added.)

Under the ambit of the Subsidy Agreement, what can be transferred by the government to benefit the recipient is limited: monetary value, goods, or services.[619] The inclusion in the Agreement of any other economic resources that can be transferred by the government, such as intangible property rights or entitlement, appears to surprise the negotiators. This necessarily emphasizes that the financial contribution element was not drafted according to a conceptual definition but rather through an exhaustive listing. The Appellate Body in *US – Large Civil Aircraft (2nd complaint)* confirmed: "Subparagraphs (i)-(iv) exhaust the types of government conduct deemed to constitute a financial contribution. This is because the introductory chapeau to the subparagraphs states that 'there is a financial contribution by a government …, i.e.

[618] Appellate Body Report, *US – Large Civil Aircraft (2nd complaint),* para 618.

[619] Panel Report, *US – Export Restraints*, para 8.73: "The negotiating history confirms that items (i)-(iii) of that list limit these kinds of measures to the transfer of economic resources from a government to a private entity. Under subparagraphs (i)- (iii), the government acting on its own behalf is effecting that transfer by directly providing something of value – either money, goods, or services – to a private entity."

where:'"[620] Therefore, the subsidy transaction's scope should be measured by specific economic resources textually agreed upon in the Subsidy Agreement through which the government can benefit its domestic industries.

The right to exploit natural resources or a *profits à prendre* is usually considered a kind of economic resource – the property rights – rather than a mechanism of transferring economic resources.[621] This economic resource is an intangible property similar to intellectual property rights which should be distinguished from goods.[622] Nowhere in Article 1.1(a)(1) of the Subsidy Agreement does it indicate that this economic resource is to constitute a subsidy transaction. Therefore, it might be doubtful to place this kind of intangible property into the legal text by considering it as a mechanism for the economic resource transfer. Unfortunately, this is the rationale understood through the AB's interpretation of the word "provides." The Appellate Body appeared to indirectly expand the scope of the Subsidy Agreement toward a universe of economic resources just by considering their pre-existing form – the property rights[623] – as a mechanism of the subsidy transfer. Did the Subsidy Agreement's drafters intend to regulate property rights as an object of the subsidy transaction? The answer might be in the negative based on the exhaustive nature of the financial contribution element.

In summary, the Appellate Body in *Softwood Lumber IV* through its interpretation of the word "provides" considered the Canadian timber harvesting rights as a mechanism to transfer economic resources (goods). However, Canada was of the view that its stumpage rights were a property right and thus should not be an object of the subsidy transaction under Article 1.1(a)(1)(iii). In line with Canada's argument, this dissertation puts forth that stumpage rights,

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[620] Appellate Body Report, *US – Large Civil Aircraft (2nd Complaint),* paras 613–614.
[621] Fiona Burns, 'The Evolution of the Profit À Prendre and Its Importance in Australia', 44(3) Monash University Law Review 688 (2018), at 688–722.
[622] Panel Report, *US - Large Civil Aircraft (2nd Complaint) (Art. 21.5)*, para 7.8.385.
[623] Armen A. Alchian, Property Rights, The Library of Economics and Liberty, https://www.econlib.org/library/Enc/PropertyRights.html (visited November 5, 2021).

or natural resource exploitation rights in general, should by themselves be considered a type of economic resource rather than a mechanism of transferring economic resources. As a form of property rights, this economic resource should be distinguished from "goods' (supported by the Panel in *US – Large Civil Aircraft (2nd complaint) (Article 21.5 – EU)*). As a result, it should be beyond the scope of the Subsidy Agreement, and the subsidy question regarding the governmental provision of natural resource exploitation rights should be answered in future negotiations.

5.1.1.2.Natural resource exploitation under the negotiation history

Besides the principal rules of treaty interpretation (the Vienna Convention 1969, Article 31), the Appellate Body occasionally made recourse to supplementary means of treaty interpretation under Article 32 in cases in which there was an "ambiguous or obscure, or leads to a result which is manifestly absurd or unreasonable." [624] Negotiating history is a supplementary category of treaty interpretation; however, the WTO's interpretative practice has mostly ignored it.[625] The reason may lie in WTO negotiating history itself since an official record does not exist.[626] This is also due to the "legalistic" approach to treaty interpretation preferred by the Appellate Body since this judicial organ wants to depart from the GATT *telos* tradition.[627] However, Professor John H. Jackson has worried that such a subordinate treatment

[624] Appellate Body Report, *Japan – Alcoholic Beverages II*, at 10; Appellate Body Report, *EC – Computer Equipment*, para 86.

[625] Dongsheng Zang, 'Textualism in GATT/WTO Jruisprudence: Lessons Fro the Constitutionalization Debate', 33(2) Syracuse Journal of International Law and Commerce 393 (2006), at 418. Nevertheless, the Appellate Body in *US – Continued Zeroing* provided a different emphasis in approahing Articles 31–32 of the Vienna Convention (1969) so as to follow the holistic approach to treaty interpretation. See Heléne Ruiz Fabri and Joel Trachtman, 'Final Report on the Jurisprudence of the WTO DSB', ILA Study Group on the Content and Evolution of the Rules of Interpretation (2018), at 2–3.

[626] Yuejiao Zhang, above n 583, at 574.

[627] Merit E. Janow, 'Reflections on the Functioning of the Appellate Body', 6(1) Loyola University Chicago International Law Review 249 (2008), at 250–51.

of *travaux preparatoires* might not get to "some of the essential needs of treaty interpretation."[628]

In *Softwood Lumber III*, Canada asserted that the harvesting rights issue (for a natural resource) had already been brought to the SCMA's negotiation (informal discussions to the draft text). But perhaps Canada did not bring such an "historical exclusion" argument before the Panel or the Appellate Body in *Softwood Lumber IV*. At that time, it argued that the harvesting rights issue should be discussed separately from goods or services as a subsidy transaction's object.[629] According to Canada, the final draft text did not include the subsidy treatment of harvesting rights, which shows it was meant to be excluded from the Subsidy Agreement's scope. However, the Panel in *Softwood Lumber III* rejected this historical negotiation argument:[630]

> We note that the text of the SCM Agreement does not in any way provide an exception for the right to exploit natural resources [...] In our view, this Discussion Paper thus has little if any probative value, especially because the reference to "harvesting rights" as separate from "goods" was not included in the final text of the Agreement.

The Panel's opinion might be appropriate because of the highly controversial nature of the subsidy rules' negotiations in the Uruguay Round.[631] A clear example is the confrontation at that time between the United States and most of the negotiators regarding the financial contribution concept.[632] This means that recourse to the SCMA's negotiation history to search for the common intentions[633] of its drafters might be significantly less persuasive. In fact,

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[628] John H. Jackson, 'Process and Procedure in WTO Dispute Settlement', 42(20) Cornell International Law Journal 233 (2009), at 237.
[629] Panel Report, *Softwood Lumber III,* para 7.25.
[630] Panel Report, *Softwood Lumber III,* para 7.26.
[631] Patrick J. McDonough, above n 151, at 875.
[632] Panel Report, *US – Export Restraints*, para 8.68.
[633] Appellate Body Report, *EC – Computer Equipment*, para 84: "The purpose of treaty interpretation under Article 31 of the Vienna Convention (1969) is to ascertain the common intentions of the parties.

Discussion Paper (No. 6), which was referred to by Canada, was used to facilitate further discussions on subjects addressed by neither the Cartland Draft I or II.[634] This means the document was far from reflective of the common intentions of the SCMA's negotiators toward the harvesting rights issue.

In this dissertation, one aspect of the negotiation history that may suggest the status of harvesting rights under the Subsidy Agreement is identified. The United States brought the natural resource subsidies problem to the subsidy rules' negotiation as early as 1988. The topic included 'government ownership practices,' which *inter alia* concerned governmental control over access to natural resources. According to the United States, such governmental intervention in the natural resource sector "has a measurable, distortive effect identical or akin to the direct provision of subsidies."[635] This concern seems to reflect the U.S. position at the time in its unresolved timber dispute with Canada.

The natural resource subsidies topic (including government control over access to natural resources) subsequently formed part of the "so-called new practices" in the U.S. submission in late 1989. The United States suggested in its paper that if the government provides natural resource exploitation rights through an auction bidding process, the practice could be deemed as a nonactionable subsidy.[636] However, it did not explicitly mention the subsidy treatment of the governmental provision of non-market-based natural resource exploitation rights.

Turning to the Chair's draft texts, Article 3 of the Cartland Draft I (July 1990) provided a definition for actionable subsidies which included the government provision of goods or services. This document notably contained Article 3a which only had the title of "Definition of

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These common intentions cannot be ascertained on the basis of the subjective and unilaterally determined 'expectations' of one of the parties to a treaty."

[634] Patrick J. McDonough, above n 151, at 871–72.

[635] GATT, above n 196, at 10.

[636] GATT, above n 198, at 8.

'so-called new practices'."[637] In the Cartland Draft III and IV (November 1990), Article 3a's "so-called new practices" changed into Article 1a's "so-called new practices" (still in title only) since the subsidy definition was repositioned to Article 1 of these draft texts.[638] This structure of the subsidy definition (Article 1 and *Article 1a*) continued to exist in the Draft Final Act released on December 3, 1990.[639] However, *Article 1.a* was subsequently dropped from the (final) Dunkel Text to result in the current Subsidy Agreement.[640]

How could such changes in the drafting process lead to an understanding of the status of natural resource exploitation rights in the Subsidy Agreement? The government's control over access to natural resources or the natural resource exploitation rights issue was a component of the "so-called new practices" concern of the United States. Admittedly, there was no clear evidence as to whether the "so-called new practices" draft article (in all Cartland Drafts) was similar in concept to the "so-called new practices" concern of the United States. However, one might strongly suppose that the United States itself demanded such a "so-called

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[637] GATT, Draft Text by the Chairman, MTN.GNG/NG10/W/38 (Cartland Draft Text I), 18 July 1990, at 4.

[638] Patrick J. McDonough, above n 151, at 886.

[639] GATT, Draft Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, MTN.TNC/W/35/Rev.1, 3 December 1990, at 84–85:

Article 1
Definition of a subsidy

1.1 For the purpose of this Agreement, a subsidy shall be deemed to exist if:

(a)(1) there is a financial contribution by a government or any public body within the territory of a signatory (hereinafter referred to as "government"), i.e. where:

…

(iii) a government provides goods or services other than general infrastructure, or purchases goods or services;

…

1.2 A subsidy as defined in paragraph 1 above shall be subject to the provisions of Part II or shall be subject to the provisions of Part III or V of this Agreement only if such a subsidy is specific in accordance with the provisions of Article 2 below.

Article 1a
Definition of "so-called new practices"

[640] GATT, Dunkel Draft Text, MTN.TNC/W/FA, 20 December 1991, pp. I1–I2.

new practices" draft article because it appeared to be the sole negotiator tabling the "so-called new practices" topic during the negotiation process.

If this supposition is logical, the natural resource exploitation rights issue might be implicitly understood as part of the "so-called new practices" draft article (*Article 3a* in the Cartland Draft I&II, *Article 1a* in the Cartland Draft III & IV). This technique of legal drafting[641] – Article 3 and *Article 3a* and Article 1 and *Article 1a* – could raise an implication that the "so-called new practices" draft article (*Article 3a* or *Article 1a*) was part of the main draft article (Article 3 or Article 1) with regard to the subsidy definition. This means that due to the drafting technique, the government provision of natural resource exploitation rights may be reflected independent of the government provision of goods. The "so-called new practices" draft article which stood without a substance appears to suggest that the negotiators did not agree in any way upon this topic, including the natural resource exploitation issue.[642] In addition, this draft article was finally dropped from the Dunkel Text (final), which possibly implied the drafters' indetermination on the topic.

Suppose the Panel in *Softwood Lumber III* was right to argue that the Subsidy Agreement does **not** in any way provide **an exception** for the right to exploit natural resources. It is equally correct to contend that, based upon the above historical drafting analysis, the

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[641] Walter Goode, *Negotiating Free-Trade Agreements: A Guide* (Australia Government, 2005), 112.

[642] Toward the end of the negotiating process, the "new practices" provision was still undecided. See GATT, Meeting of July 22–26, 1991 – Note by the Secretariat, MTN.GNG/RM/2, July 1991, p.2. It could be argued that the Cartland Drafts, which might implicitly contain the natural resource exploitation issue, may be considered as relevant instruments "in connection with the conclusion of the treaty" for setting up a context to interpret the Subsidy Agreement (Article 31 (2)(b), Vienna Convention 1969). However, to serve as a context in this way, these draft texts must be accepted by the other parties as instruments related to the Subsidy Agreement. The Appellate Body in *US – Gambling* demanded "sufficient evidence of their constituting an 'agreement relating to the treaty' between the parties" while distinguishing the GATT Secretariat's works (W/120 and 1993 Scheduling Guidelines in this dispute) from those drafted by the negotiating parties themselves. Finally, the Appellate Body rejected these Secretariat's documents as not reflecting a context for treaty interpretation. See Appellate Body Report, *US – Gambling*, paras 175–178.
The case of the Cartland Drafts here seems to be more distant from having sufficient acceptance by the parties to be a context for treaty interpretation. The highly debatable status of the subsidy rules' negotiation might not support anything like an acceptance from the negotiating parties until the final "package-deal" was approved in April 1994. Therefore, it is hardly convincing to consider the Cartland Drafts as a context for interpreting the Subsidy Agreement. See Patrick J. McDonough, above n 151, at 880–84.

Subsidy Agreement is **not** in any way interpreted to provide **inclusion** of the right to exploit natural resources. The subsidy question of natural resource exploitation rights should be considered an incomplete part of the negotiation history. Therefore, this issue should be touched on by further negotiations rather than the existing judicial solution. The discussion here is admittedly predicated merely on assumptions and logic. It is better to see it as an academic discourse rather than a persuasive argument. The reason is simply that the Subsidy Agreement's negotiating history was dominated by incompletes, debates, and compromises.[643]

For the conclusion of 5.1.1, the Appellate Body incorporated natural resource exploitation rights into the subsidy discourse by interpreting the term "provides goods" under Article 1.1(a)(1)(iii) of the Subsidy Agreement. It broadly understood the word "goods" as "property or possessions," which included standing timber as the inherent result of the stumpage rights arrangements. However, this broad interpretation might have been challenged by the Panel in *US – Large Civil Aircraft (2nd complaint) (Article 21.5 – EU)* if natural resource exploitation rights are considered a type of intangible property. The Appellate Body should narrowly read the word "goods" so as to reflect its common understanding in international trade or economic activities. In other words, it should consider the question of "ordinary to whom" suggested by Professor Chang-fa Lo to discern the ordinary meaning of this word.

The Appellate Body in general justified the Canadian timber harvesting rights or natural resource exploitation rights as a mechanism of providing goods rather than as a good. However, this dissertation takes the view that under the subsidy consideration, natural resource exploitation rights should be considered as an economic resource (a possible object of the subsidy transaction) rather than as a mechanism of the economic resource transfer (*providing* goods). In this way, natural resource exploitation rights as an intangible property should be distinguished from goods (similar to the case of intellectual property rights). As a result, these

[643] Patrick J. McDonough, above n 151, at 880–84.

rights should not fall into the term "providing goods" under Article 1.1(a)(1)(iii) as interpreted by the Appellate Body. The subsidy question of natural resource exploitation rights should thus be forwarded to future negotiations rather than relying on the existing judicial endorsement. The Subsidy Agreement's drafting history appears to show the drafters' indecision on this topic. However, the dubious and incomplete drafting process provides nothing more than suppositions and logic.

5.1.2. Post-Softwood Lumber's jurisprudence on the benefit calculation

In light of the existing jurisprudence, there might be practical problems in calculating the benefit conferred by the governmental provision of natural resource exploitation rights. The Appellate Body in *US – Carbon Steel (India)* relied on past jurisprudence to permit the USDOC to calculate the benefit conferred by means of prices accruing to exploited resources (e.g., exploited iron ore) rather than prices or values for exploitation rights over natural resources (e.g., extraction rights to an iron ore mine).[644] India argued that it provided iron ore mining rights, not the extracted iron ore. Therefore, the benefit conferred should be the recipient's favorable benefit from the governmental transfer of mining rights.[645] By the same token, Indonesia complained that the USDOC premised the subsidy determination on a fundamental misconception since the Indonesian Government provided land-use rights but not standing timber. Indonesia contended that the USDOC made errors in calculating the adequacy remuneration based on timber prices instead of land-use rights values.[646]

5.1.2.1. A concern to the interpretation in US - Carbon Steel (India)

The Appellate Body in *Canada – Renewable Energy* explained the relationship between the financial contribution and the benefit calculation as follows: "the characterization of a subsidy transaction under Article 1.1(a) of the SCM Agreement may have implication for the

[644] Appellate Body Report, *US – Carbon Steel (India),* para 4.332.
[645] See Chapter 3, at 3.2.2.1.
[646] Panel Report, *US – Coated Paper (Indonesia),* para 7.42.

manner in which the assessment of whether a benefit is conferred."[647] In the case of governmental provision of goods as a financial contribution, this means that the benefit assessment should rely on transactions accruing to the goods provided by the government.[648] In justifying the Canadian stumpage programs, the Appellate Body in *Softwood Lumber IV* concluded that such harvesting rights transactions could proximately arrive at the governmental provision of *standing timber* under Article 1.1(a)(1)(iii) of the Subsidy Agreement.[649] Since Canada asserted that it did not supply felled trees or logs but only the stumpage rights, the Appellate Body immediately reminded Canada that the subject matter was whether standing timber provided through the stumpage arrangements fell into the meaning of "goods," regardless of whether or not they were felled trees or logs.[650]

In practice, the USDOC has employed U.S. stumpage prices as the out-of-country benchmark to compare with the Canadian stumpage rates in order to determine the alleged benefit.[651] Stumpage prices or prices of timber harvesting rights have been used for the subsidy calculation since the softwood lumber controversy emerged in bilateral trade relations. Under the jurisprudence of *Softwood Lumber IV*, the prices of timber harvesting rights were deemed to be the prices of standing timber (a good) derived from such harvesting rights arrangements. The benefit calculation scheme had to concentrate on prices accruing to standing timber (an unexploited resource) rather than logs or harvested timbers (an exploited resource) – the possible ultimate result of such harvesting rights transactions.

The Appellate Body in this landmark dispute explained the economic rationale of the harvesting rights transactions as: "Rights over felled trees or logs crystallize as a natural and

[647] Appellate Body Report, *Canada – Renewable Energy,* para 5.130.
[648] Panel Report, *Softwood Lumber VII*, para 7.465.
[649] Appellate Body Report, *Softwood Lumber IV,* para 76.
[650] Appellate Body Report, *Softwood Lumber IV,* para 76.
[651] Panel Report, *Softwood Lumber IV,* para 7.43.

inevitable consequence of the harvesters' exercise of their harvesting rights."[652] Regardless of the economic logic for the availability of logs or harvested timbers as the ultimate result of the harvesting rights transactions, the Appellate Body still concluded that the Canadian stumpage programs provided standing timber as a good under Article 1.1(a)(1)(iii). Why did the Appellate Body articulate such an economic explanation which, in the end, it appears to be irrelevant to its conclusion? Should this statement be treated as an indication of *obiter dicta*[653] – the issue that the United States has been very critical of with regard to the AB's practice? [654] Notwithstanding the controversial status of *obiter dicta* in the WTO jurisprudence, this "irrelevant" economic explanation might confuse future interpretations.

In fact, the Appellate Body in *US – Carbon Steel (India)* made a deviation from *Softwood Lumber IV* by relying exactly on this *obiter dictum.* This reliance is evidenced as follows:[655]

> Although India is correct to point out that the good at issue in *US – Softwood Lumber IV* was standing timber, and not felled trees, the Appellate Body nevertheless observed in that dispute that rights **over felled trees "crystallize as a natural and inevitable consequence of the harvesters' exercise of their harvesting rights**", and thus that "making available timber is the *raison d'être* of the stumpage arrangements". We do not see that this reasoning supports India's view that the grant of mining rights is "severable" from the extracted minerals. (Emphasis added, footnote omitted.)

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[652] Appellate Body Report, *Softwood Lumber IV,* para 75. This reasoning was supported by Henrik Horn and Petros C. Mavroidis from the economic perspective, see Henrik Horn and Petros C. Mavroidis, above n 81, at 226–29.

[653] Aaron X. Fellmeth and Maurice Horwitz, *Guide to Latin in International Law*, *Guide to Latin in International Law* (Oxford University Press, 2009), 126.

[654] United States Trade Representative (USTR), above n 7*,* at 53. Henry Gao argued that the U.S. criticisms against the AB's use of *obiter dicta* seemed to be pointless. However, this author advised that the Appellate Body should not use this term to criticize the Panel's arguments. See Henry S Gao, 'Dictum on Dicta: Obiter Dicta in WTO Disputes', 17(3) World Trade Review 509 (2018), at 532.

[655] Appellate Body Report, *US – Carbon Steel (India),* para 4.74.

Based on this economic judgment, the Appellate Body concluded that the *raison d'être* of the mining rights transactions is the extracted minerals.[656] As a result, it permitted the USDOC to use prices accruing to the extracted minerals (mined iron ore and coal) to determine the benefit conferred.[657] The governmental provision of natural resource exploitation rights could thus be deemed equivalent to the governmental provision of the resulting *exploited* resources. However, the jurisprudence in *Softwood Lumber IV* "stopped" at concluding that the provision of natural resource exploitation rights could be equivalent to the provision of the *unexploited* resources derived therefrom (standing timber). Therefore, the AB's conclusion in *US – Carbon Steel (India)* amounted to a "renovation" to the past jurisprudence based on the *obiter dictum* therein.

The Appellate Body in *US – Stainless Steel (Mexico)* required that subsequent decisions take the legal interpretations and *ratio decidendi* of previous AB reports into account.[658] However, for "cogent reasons," a subsequent tribunal may deviate from the principle that the judiciary should "resolve the same legal question in the same way in a subsequent case."[659] Therefore, the following question might be asked: Did the Appellate Body in this mining rights dispute substantiate "adequate" cogent reasons to depart from the past timber rights jurisprudence? Could a so-called *obiter dictum* in past jurisprudence be considered the cogency in the AB decision in order to make the departure? Toward its conclusion, the Appellate Body explained:[660]

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[656] The Appellate Body explained, "In addition, the Panel observed that the mining rights at issue involved the payment of royalties that were tied to the amount of extracted material. The Panel specifically cited a response by Tata Steel Limited (Tata) to the USDOC as part of the 2006 administrative review, which showed that Tata made royalty payments for extracted iron ore and coal that were calculated on the basis of the extracted material, and noted that India had not disputed the United States' assertion that this evidence is proof that miners pay a per unit extraction fee" (footnote omitted), at Appellate Body Report, *US – Carbon Steel (India),* para 4.72.

[657] Appellate Body Report, *US – Carbon Steel (India),* para 4.332.

[658] Yuka Fukunaga, 'Interpretative Authority of the Appellate Body: Replies to the Criticism by the United States', in Chang-fa Lo, Junji Nakagawa, and Tsai-fang Chen (eds), *The Appellate Body of the WTO and Its Reform*, (Springer, 2020), at 175.

[659] Appellate Body Report, *US Stainless Steel (Mexico)*, para 160.

[660] Appellate Body Report, *US – Carbon Steel (India),* para 4.74.

> **Like the right to harvest standing timber** […] Indeed, rights over extracted iron ore and coal follow as a natural and inevitable consequence of the steel companies' exercise of their mining rights, which suggests that making available iron ore and coal is the *raison d'être* of the mining rights. This, **in our view**, supports the Panel's conclusion that the government's grant of mining rights is reasonably proximate to the use or enjoyment of the minerals by the beneficiaries of those rights. (Emphasis added.)

It is admitted that the AB's understanding should be considered circumstantial in this mining rights dispute due to its distinct factual evidence. This case-by-case analysis might justify the "cogent reasons" needed to depart from past jurisprudence. However, by picking such an *obiter dictum* in the past jurisprudence to build its *ratio decidendi*, the AB decision on its face seems to undermine the security and predictability required by the DSU.[661] While the Appellate Body itself perceived that the mining rights situation in *US – Carbon Steel (India)* was "like" the timber harvesting rights in *Softwood Lumber IV*, it is inconceivable that it did not follow the *ratio decidendi* of this previous decision.

5.1.2.2. Applicable problems

Regardless of the appropriateness of the AB conclusion on the *raison d'être* of the mining rights transactions, the use of prices for the extracted minerals for the benefit calculation seems to be questionable in practice. As cited above, the Appellate Body in *US – Carbon Steel (India)* observed that the case of the Indian mining rights should be treated as similar to the case of the Canadian stumpage rights. However, the Panel in *Softwood Lumber IV* warned:[662] "there is a **clear difference** between tenure agreements concerning standing timber and the granting of extraction rights in the case of minerals or oil, or fishing rights where the owner of the right is not at all certain what and how much of it he will find…" (emphasis added). Indeed,

[661] Dispute Settlement Understanding (DSU), Article 3(2). Appellate Body Report, *US Stainless Steel (Mexico)*, paras 158–160.
[662] Panel Report, *Softwood Lumber IV,* footnote 99.

there may be a difference in judgment between the Panel and the Appellate Body on the role uncertainty should play in natural resource exploitation activities. These contradictory observations might suggest that the *raison d'être* of the mining rights is not necessarily the same as the *raison d'être* of the timber rights.

In this mining rights dispute, India argued that the governmental provision of mining rights to an iron ore mine does not automatically turn this "unextracted" mine into the extracted iron ore. Its mining companies had to invest much effort and bear operational risks to achieve the extracted results. According to India, the uncertainty and complexity of the extraction activities can undermine the "reasonably proximate relationship" test used to arrive at the "provides goods" conclusion under Article 1.1(a)(1)(iii).[663] The Appellate Body finally upheld India's "uncertainty and complexity" argument and demanded to include it in the "reasonably proximate relationship" test. However, the Appellate Body seemed to be satisfied with the Panel's uncertainty assessment;[664] as a result, it concluded that the *raison d'être* of the mining rights is the extracted minerals.

The causal relationship between the right to exploit natural resources and the *exploited* resources derived therefrom might not be obvious because it depends on the practicability of the exploitation activities. The causal relationship between the right to exploit natural resources and the *unexploited* resources made available by virtue of this right appears to be more direct and obvious (the jurisprudence of *Softwood Lumber IV*). Therefore, to calculate the benefit conferred by the governmental provision of natural resource exploitation rights, it would be better to concentrate on prices accruing to the unexploited resources made available thereby (equivalent to prices of the resource exploitation rights). Otherwise, a confusing situation might result in which things transferred by the government to the recipient (the resource exploration rights) are

[663] Appellate Body Report, *US – Carbon Steel (India),* para 4.70.
[664] Appellate Body Report, *US – Carbon Steel (India),* para 4.72.

distant in nature from things identified for the benefit calculation purpose (the exploited resources).[665]

A contingent question deriving from the AB basis in *US – Carbon Steel (India)* is: Can the price comparison for the exploited resources precisely reflect the subsidy conferred by the below-market resource exploitation rights? The resource exploitation rights might not be the sole factor to constitute the value of the exploited natural resources. In theory, to identify an exploitation rights subsidy by comparing prices accruing to the exploited resources, the remaining value of the compared prices must be fittingly equal, except for the value of the exploitation rights. This "extreme" comparable condition might overburden the adjustment obligation required by Article 14(d) of the Subsidy Agreement, especially for an out-of-country benchmark. Therefore, this manner of price comparison might be practically distant from reflecting the resource exploitation rights subsidy.

Nevertheless, it may be argued that in the most recent resource exploitation subsidy dispute – *Softwood Lumber VII* – the USDOC has employed the benchmarking price of the exploited resource (Washington logs benchmark) in the benefit calculation of the Canadian stumpage rights. This means applying the benefit calculation jurisprudence developed in *US – Carbon Steel (India)* in this case. However, the USDOC's benefit calculation here is different in nature from the guidance in *US – Carbon Steel (India).* The substantial distinction is that both of the parties in *Softwood Lumber VII* agreed that the government-provided good at issue was standing timber (an unexploited resource), not harvested timbers or logs (an exploited resource).[666] As a result, the price comparison had to be accrued to standing timber or stumpage

[665] As India argued at Appellate Body Report, *US – Carbon Steel (India),* para 4.331: "Additionally, however, India's claim under Article 14(d) is premised on its view that, because the financial contribution at issue consists only of the GOI's grants of mining rights – i.e. what the GOI actually provided to the recipients, and what the GOI was actually paid for – the analysis must necessarily be limited to any benefit arising from the grant of the mining rights, and not the final extracted material in the form of iron ore and coal."
[666] Panel Report, *Softwood Lumber VII,* para 7.548.

rights rather than to the harvested timber/logs. This means that *Softwood Lumber VII* followed the *ratio decidendi* of *Softwood Lumber IV* rather than of *US – Carbon Steel (India).*

To be clear, the USDOC only employed log prices as a starting point to arrive at the appropriate benchmarking value for standing timber in British Columbia. The USDOC explained its derived demand methodology as: "Starting with delivered log prices from eastside Washington, collected by the Washington Department of Natural Resources (WDNR), the USDOC deducted harvesting and other costs reported by the Canadian respondents to derive a stumpage price in British Columbia."[667] That is, the USDOC would compare the *resulting* benchmark based upon the U.S. log prices to the stumpage prices reported by the Canadian respondents.[668] This "indirect" benchmarking methodology might not be inconsistent with Article 14(d) of the Subsidy Agreement since the article says "**any** method used by the investigating authority to calculate the benefit to the recipient conferred according to paragraph 1 of Article 1" (emphasis added).[669]

To summarize 5.1.2, the Appellate Body in *US – Carbon Steel (India)* permitted the use of prices accruing to exploited resources (e.g., extracted iron ore) for the benefit calculation based upon its extended interpretation of the financial contribution element. However, the Appellate Body in *Softwood Lumber IV* used prices accruing to the unexploited resources (e.g., standing timber) for this purpose. Thus, the failure of the Appellate Body in *US – Carbon Steel (India)* to follow past jurisprudence is questionable, especially since the Appellate Body admitted that the cases likely involved the same situation. By relying on a so-called *obiter dictum* of the past decision to build its *ratio decidendi,* the AB interpretation in this latter case seems to undermine the security and predictability of the dispute settlement mechanism. It is also reasonable to question whether the price comparison accruing to the exploited resources

[667] Panel Report, *Softwood Lumber VII,* para 7.548.
[668] Panel Report, *Softwood Lumber VII,* para 7.544.
[669] Panel Report, *Softwood Lumber VII,* para 7.455.

can precisely reflect the benefit conferred by the below-market resource exploitation rights. The benefit calculation conducted by the USDOC in *Softwood Lumber VII* is different in nature from the guidance in *US – Carbon Steel (India)*. The benchmarking prices based upon the exploited resource (log prices) were used only as a starting point here. However, this indirect benchmarking methodology might be more onerous in terms of the adjustment obligation.

5.1.3. Goods vs. potential goods distinction as applied to natural resources

In the Introduction, a natural resources definition was drawn (for this dissertation) to embrace both exploited natural resources (e.g., fish, timber, iron ore) and natural resources in their natural state (e.g., fish stocks, standing timber, iron mines). As previously discussed, the WTO judiciary permitted the multilateral subsidy regime to capture not only exploited natural resources as a form of trading goods but also natural resources in their natural state (e.g., the government transfer of harvesting rights over standing timber). The issue now is whether this judicial permission is in conflict with the natural resource sovereignty principle since WTO members did not explicitly contract out their sovereign rights (explore, exploit, dispose of natural resources)[670] in the WTO Subsidy Agreement. In other words, what should be the scope of the multilateral subsidy rules toward natural resources?

To provide substance for the World Trade Report 2010, the question of natural resources under international trade law was discussed at the International Economic Law and Policy Blog.[671] Professor Melaku Geboye Desta started the discussion by posing a key question: "What do we mean by trade in natural resources anyway – i.e., at what point does a natural resource cease to be a natural resource and become a tradable product, and does this matter in legal terms?"

[670] United Nations General Assembly (UNGA), above n 424.
[671] International Economic Law and Policy Blog, 'International Trade in Natural Resources', March 10, 2010, https://ielp.worldtradelaw.net/2010/03/international-trade-in-natural-resources.html (visited November 5, 2021).

Simon Lester followed by introducing a very intriguing concept of a distinction between goods *versus* potential goods. From his perspective, the extracting or exploiting processes toward an unexploited resource transfers this "genuine" natural resource as a potential good into a good. He believed that he would lean toward all natural resources (both exploited and unexploited) being covered by the WTO rules until a general standard to draw lines for such distinction exists.[672] However, Professor Desta distinguished natural resources in their natural state from exploited natural resources as a form of goods.[673] He argued that only the latter should be placed under international trade law. He indicated in *Canada – Herring and Salmon* (the GATT period) that a production restriction toward a natural resource was deemed to be outside the GATT rules.[674] Indeed, Canada had already made the same distinction in defending its stumpage system in *Softwood Lumber II*:[675]

> Canada emphasized that its position that the setting of natural resource prices did not involve a financial contribution by a government and was therefore not a subsidy that only covered natural resource policies relating to the granting of access to a natural resource and the levying of a fee or charge for that right of access. This was **fundamentally different** from cases in which governments set the prices of resources exploited or removed from their natural state. In such cases, the natural the resource was no longer in situ but had been transformed into a good. (Emphasis added.)

The World Trade Report 2010's perspective may support the view of Professor Desta as the WTO rules generally do not regulate natural resources prior to their exploitation.[676] As an exception to the current trade rules, the WTO subsidy regime might go beyond this "general

[672]Ibid. (See comments from Simon Lester.)
[673] Ibid. (See comments from Professor Melaku Geboye Desta.)
[674] See Panel Report (GATT), *Canada – Herring and Salmon*, para 3.8.
[675] Panel Report (GATT), *Softwood Lumber II,* para 164. This position was supported by Saudi Aribia at Panel Report, *US – Carbon Steel (India),* para 7.232.
[676] WTO, above n 27, at 162. Most scholars of the discussion at the International Economic Law and Policy Blog in 2010 supported this perception.

context" when it captures natural resources before their exploitation – a potential good according to Simon Lester's distinction.

In the negotiation of the Subsidy Agreement, a number of negotiators, including Canada, introduced the financial contribution concept[677] as opposed to the very broad proposal of the United States of "any government action or combination of government actions."[678] This concept was finally approved as one of the gateways to the subsidy definition. However, its scope was narrowed during the negotiating process to result in an exhaustive definition. In *US – Export Restraints*, Canada explained:[679]

> The list of types of "financial contributions" in subparagraphs (i) to (iv) of Article 1.1(a)(1) is introduced by "i.e. where," meaning "that is." This restricting term makes clear that the list is exhaustive**,** not illustrative [⋯] Successive, drafts of the Agreement text confirm this, showing an early shift from illustrative ("such as where") language to the definitive "i.e. where" that appears in the final text. (Footnote omitted.)

In the end, the Panel confirmed the exhaustive nature of the financial contribution concept "as a means of limiting the universe of government actions that could be considered a subsidy (the position taken by essentially all other participants), on the other, was articulated with some precision."[680]

In *Softwood Lumber IV*, the Appellate Body endorsed an expansive reading of the term "provides goods" to include intangible property rights. The "reasonable proximate relationship" test would then be used to examine whether the exercise of such intangible rights could make goods available to respective recipients. If this test is satisfied, the financial contribution element is proved to exist. The right to exploit natural sources is a well-suited

[677] GATT, Framework for Negotiations – Communication from Canada, MTN.GNG/NG10/W/25, June 28, 1989.
[678] GATT, above n 198.
[679] Panel Report, *US – Export Restraints*, para 5.19.
[680] Panel Report, *US – Export Restraints*, para 8.68.

example for this jurisprudence since it potentially makes unexploited natural resources available to the contracted rights holders. As a result, under the existing jurisprudence, the multilateral subsidy regime might directly collide with the sovereign rights over natural resource exploitation as recognized in international law.[681] This means that the subsidy capture toward unexploited natural resources as a potential good might not only be incompatible with the WTO law's usual approach but also potentially conflict with the principle of natural resource sovereignty.

5.1.4. WTO Subsidy Agreement and the question of natural resource sovereignty

As mentioned in the Introduction, there are two principal questions that should be answered if natural resources are placed under the international trade context. First is the issue of the comparative advantage created by the natural resource endowment, which critically constitutes the engine of international trade relations. A "traditional" argument is that the WTO subsidy rules should not be used to countervail the comparative advantage of WTO members.[682] The Appellate Body resolved this question in *Softwood Lumber IV* by determining that the prevailing market conditions in the subsidy-provision country are deemed to reflect the comparative advantage enjoyed by domestic producers in that country.[683] As long as the subsidy calculation can reflect the prevailing market conditions in the country of provision as required by Article 14(d) of the Subsidy Agreement, the comparative advantage question might not be of concern.[684]

Second is the natural resource sovereignty question. Surprisingly, neither the complainant in *Softwood Lumber IV* nor in *US – Carbon Steel (India)* invoked the natural resource sovereignty argument to defend its natural resource allocation programs. Only Saudi

[681] United Nations General Assembly (UNGA), above n 424.
[682] Appellate Body Report, *US – Carbon Steel (India),* para 2.81.
[683] Appellate Body Report, *Softwood Lumber IV,* para 109.
[684] Appellate Body Report, *US – Carbon Steel (India),* para 4.258.

Arabia – the third party to *US – Carbon Steel (India)* – formulated such a sovereignty argument to shield the natural resource exploitation rights against the subsidy capture. This country reasoned that the grant of natural resource exploitation rights is a sovereign function that "should distinguish from the government's actual provision of those resources."[685] As a result, "a determination that the granting of intangible extraction rights alone constitutes a financial contribution would infringe upon the public international law principle that each State enjoys permanent sovereignty over its natural resources (PSNR)."[686] Because the disputing parties did not bring up the natural resource sovereignty question, the WTO judiciary was simply silent on the issue.

The sovereignty argument has not been an unusual feature in WTO dispute settlement practice. At least one WTO panel recognized it as an additional argument of disputing parties in the WTO litigation process.[687] In its very first report, the Appellate Body demanded WTO agreements "not to be read in clinical isolation from public international law."[688] The sovereignty argument might enter into the WTO dispute's legal analysis according to Article 31(3)(c) of the Vienna Convention as "any relevant rules of international law applicable in the relations between the parties."[689] As part of the interpretative process, a contingent question could be: To what extent should the WTO judiciary pay deference to the sovereignty of WTO

[685] Appellate Body Report, *US – Carbon Steel (India),* para 2.397.
[686] Appellate Body Report, *US – Carbon Steel (India),* para 2.397.
[687] Panel Report, *US – Shrimp (Article 21.5)*, para 5.103.
[688] Appellate Body Report, *US – Gasoline*, p.17. This perspective was supported by the Study Group of International Law Commission on fragmentation of international law. See Martti Koskeniemi, Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, United Nations General Assembly, A/CN.4/L.682, April 13, 2006, at 99–101.
[689] Appellate Body Report, *US – AD/CVD (China)*, para 308. See Joost Pauwelyn, 'The Role of Public International Law in the WTO: How Far Can We Go?', 95(3) American Journal of International Law 797 (2001), at 543.

members?[690] The Appellate Body in *Japan - Alcoholic Beverages II* provided this answer to the question:[691]

> It is self-evident that in an exercise of their sovereignty, and in pursuit of their own respective national interests, the Members of the WTO have made a bargain. In exchange for the benefits they expect to derive as Members of the WTO, they have **agreed to exercise their sovereignty according to the commitments they have made in the WTO Agreement**. (Emphasis added.)

The Panel in *China – Raw Materials* provided an analysis in line with this AB reasoning with respect to sovereignty over natural resources. In the dispute, China argued that its export restraints against disputed minerals fell exclusively under its sovereignty over natural resource conservation and management.[692] It demanded the panel to consider the customary international law[693] of natural resource sovereignty in interpreting GATT Article XX(g). Nevertheless, the Panel required China to observe the obligation derived from GATT Article XX(g) when exercising its sovereignty over natural resources.[694] In other words, WTO members can exercise their sovereign rights over natural resources to the extent that such rights are compatible with relevant WTO obligations. In this case, GATT Article XX(g) imposes an obligation on WTO members that any trade measure aimed at conserving natural resources must be made effective *in conjunction* with restrictions on domestic production or

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[690] John H. Jackson, above n 629, at 236. Assessing the WTO dispute settlement practice in its first decade, Professor Asif Qureshi opined that the WTO judiciary evidently paid deference to both the substantive sovereignty of WTO members and the external sovereignty within the WTO, at Asif H. Qureshi, 'Sovereignty Issues in the WTO Dispute Settlement – A "Development Sovereignty" Perspective', in Wenhua Shan, Penelope Simons, and Dalvinder Singh (eds), *Redefining Sovereignty in International Economic Law* (Hart Publishing, 2008), at 163–66. However, Professor Richard H. Steinberg observed that the Appellate Body has leaned toward a less deferential approach to WTO members' sovereignty by favoring the gap-filling or ambiguities clarification scheme, at Richard H. Steinberg, 'Judicial Lawmaking at the WTO: Discursive, Constitutional, and Political Constraints', 98(2) The American Journal of International Law 247 (2004), at 260.

[691] Appellate Body Report, *Japan – Alcoholic Beverages II*, at 15.

[692] Panel Report, *China – Raw Materials*, para 7.356.

[693] ICJ, *Congo v. Uganda (2005),* para 244.

[694] Panel Report, *China – Raw Materials*, paras 7.378, 7.379, 7.382.

consumption. With this reasoning in mind, the Panel rejected China's resource sovereignty argument as an excuse for its uneven export restraint measures.[695]

In fact, state sovereignty has to be subordinate to international law as the latter represents the collective expression of sovereignty's will.[696] State sovereignty is also submitted to real constraints by the coexistence among interdependent sovereignties.[697] The GATT/WTO institution has led international trade cooperation for more than a half century. It is widely recognized as part of the international law family.[698] Therefore, its legal domain retains supremacy over state sovereignty through the virtue of WTO membership. This means that a WTO member limits its own sovereign powers to the extent *consented*[699] under the WTO legal texts (and its accession protocol).

But questions remain. WTO agreements have been gradually elaborated through voluminous jurisprudence, which evidently represents the so-called "judicial lawmaking."[700] Therefore, the underlying question is whether member consent to WTO commitments could be further understood to *implicitly* accept the evolution of future jurisprudence, which in several cases may result in unexpected directions or "surprises" to WTO members at the time of treaty

[695] Panel Report, *China – Raw Materials*, para 7.466. In line with his sympathy toward natural resource dependency of developing countries, Manjiao Chi criticized such a restrictive approach by the WTO dispute settlement toward natural resource sovereignty as a "pro-trade bias," at Manjiao Chi, 'Resource Sovereignty in the WTO Dispute Settlement: Implications of China-Raw Materials and China-Rare Earths', 12(1) Manchester Journal of International Economic Law 2 (2015), at 13–15.

[696] International Law Commission, Draft Declaration on Rights and Duties of States (1949), Article 14. See Samantha Besson, 'Sovereignty, International Law and Democracy', 22(2) European Journal of International Law 373 (2011), at 377.

[697] Vaughan Lowe, 'Sovereignty and International Economic Law', in Wenhua Shan, Penelope Simons, and Dalvinder Singh (eds), *Redefining Sovereignty in International Economic Law* (Hart Publishing, 2008), at 80.

[698] Pascal Lamy, 'The Place of the WTO and Its Law in the International Legal Order', 17(5) European Journal of International Law 969 (2006), at 969–84.

[699] PCIJ, *The S.S. "Lotus" (1927)*, at 18: "International law governs relations between independent States. The rules of law binding upon States therefore emanate from their own free will as expressed in conventions or by usages generally accepted as expressing principles of law and established in order to regulate the relations between these CO-existing independent communities or with a view to the achievement of common aims."

[700] R Rajesh Babu, 'Decision Making in the WTO From Negotiated Law-Making to Judicial Law-Making', in Julien Chaisse and Tsai-yu Lin (eds), *International Economic Law and Governance: Essays in Honour of Mitsuo Matsushita* (Oxford University Press, 2016), at 504–08.

acceptance.[701] This question seems to be crucial in considering natural resource sovereignty *vis-à-vis* the Subsidy Agreement. The main reason is that the latter textually says nothing relevant to the former. The subject is thus whether it is acceptable for the Subsidy Agreement to impose certain constraints on WTO members' sovereignty over natural resource exploitation through the development of its jurisprudence.

Discussions of the judicial deference of the dispute settlement mechanism to WTO members' sovereignty is highly controversial.[702] It inevitably involves the problem of the interpretation of gaps or silences in WTO agreements.[703] The AB guidance in *Japan – Alcoholic Beverages II* seems not to be sufficiently clear regarding how broadly the word "commitments" should be read. Can this word be understood to require further commitments to legal substance developed by WTO panels and the Appellate Body? It is noted that DSU Article 3.2 designates the authority to clarify WTO agreements to the dispute settlement mechanism. Consistency is sought in the clarification task through well-reasoned judicial explanations to serve the security and predictability of the trading system.[704]

However, it is equally noted that the dispute settlement mechanism was created to preserve the rights and obligations of Members under the covered agreements. This judiciary "cannot add to or diminish the rights and obligations provided in the covered agreements."[705] That means the dispute settlement's fundamental purpose should be to preserve as far as

[701] John H. Jackson, *Sovereignty, the WTO and Changing Fundamentals of International Law* (Cambridge University Press, 2006), 136.
[702] Peter Sutherland et al., *The Future of the WTO: Addressing Institutional Challenges in the New Millennium*, (WTO, 2004), 29.
[703] The Appellate Body has in practice been inconsistent in its treatment of gaps or silences in WTO agreements. For example, in *US – Carbon Steel* (para 65), the Appellate Body understood that silence in a treaty must have some meaning. By contrast, silence in a treaty could be read as "simply that is not there" in *Canada –Patent Term* (para 78). See Isabelle Van Damme, *Treaty Interpretation by the WTO Appellate Body* (Oxford University Press, 2010), 126–28.
[704] Dispute Settlement Understanding (DSU), Article 3.2. See James Bacchus and Simon Lester, 'The Rule of Precedent and the Role of the Appellate Body', 54(2) Journal of World Trade 183 (2020), at 183–98.
[705] Ibid.

possible the contractual nature[706] of WTO agreements. It is "a better approach for reconciling democratic legitimacy, national sovereignty, and social policy claims"[707] of the multilateral trading institution. The judicial branch is expected not to be too active to cross the delicate political balance struck by its negotiators.[708] Indeed, it seems that the WTO judicial body has been placed under a self-contradictory position in carrying out its dispute settlement function.

Professor John H. Jackson supported certain gap-filling by the WTO judiciary in the context of an "institution-created" treaty like the WTO Agreement. He contended that certain leeway for the judicial lawmaking function could enable this "large membership" institution to adapt to future changing conditions so as to maintain its mission.[709] This supporting argument seems to be in alliance with the constitutionalism approach to international trade governance, which favors a more independent and active WTO dispute settlement.[710] Professor Jackson opined that: [711]

> For the broad multilateral treaty, particularly those establishing an international organization, […] so as to best achieve the underlying policy goals of the organization, it is necessary to understand that **some situations** will call for interpretations and "gap" filling which will not be entirely congruent with the views of one particular member, or a few members, of the organization, at the time of drafting the treaty or later. Indeed, since the large treaty members should be presumed to accept policies ("good faith"?) […] it can (and should) be argued that the treaty members **have "consented" to the gap-filling** which is necessary to fulfill that goal. (Emphasis added.)

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[706] Appellate Body Report, *Japan – Alcoholic Beverages II*, at 15.
[707] J. Kelly, 'Judicial Activism at the World Trade Organization: Developing Principles of Self-Restraint', 22(3) Northwestern Journal of International Law & Business 353 (2002), at 358.
[708] Richard H. Steinberg, above n 691, at 250–57.
[709] John H. Jackson, above n 702, at 185.
[710] Ernst Ulrich Petersmann, 'Human Rights, Constitutionalism and the World Trade Organization: Challenges for World Trade Organization Jurisprudence and Civil Society', 19(3) Leiden Journal of International Law 633 (2006), at 642–46.
[711] John H. Jackson, above n 702, at 185–216.

Notwithstanding the merits of such sympathy given to WTO dispute settlement, the current crisis on the operation of this judicial body might expose a real concern over the judicial lawmaking function. The U.S. impatience with the more active Appellate Body[712] highlights the fact that WTO dispute settlement has to be sensitive to the need to balance the interests of member states with the judicial function. Professor Mitsuo Matsushita emphasized that by twice noting the "not add to or diminish" obligation "the negotiators wanted to ensure that the rights and obligations of WTO members should be jealously safeguarded against the encroachment of the dispute settlement bodies of the WTO."[713] Therefore, the WTO judiciary should reposition itself as an auxiliary organ in the WTO institutional context and exercise necessary restraint toward WTO members' sovereign rights.[714] This means that the dispute settlement mechanism should be *realistic* toward its own politically delicate position under a so-called member-driven organization.[715] In fact, the Appellate Body appears to invest much more confidence in maintaining the security and predictability of the system through the judicial lawmaking function than in preserving the "fine-balance" reached by the WTO negotiators.[716]

This argument might not help much in the case of the Subsidy Agreement even with the acceptance of certain judicial gap-filling to secure the treaty's goals. This legal text is famous for not having a preamble which would typically spell out its object and purpose. The Appellate Body did construct the object and purpose for the Subsidy Agreement by second

[712] United States Trade Representative (USTR), above n 7, at 74–80 .

[713] Mitsuo Matsushita, 'Reforming the Appellate Body', in Chang-fa Lo, Junji Nakagawa, and Tsai-fang Chen (eds), *The Appellate Body of the WTO and its Reform* (Springer, 2020), 47.

[714] Ibid, at 45–46, 51.

[715] R. Rajesh Babu, 'WTO Appellate Body Overreach and the Crisis in the Making: A View from the South', in Chang-fa Lo, Junji Nakagawa, and Tsai-fang Chen (eds), *The Appellate Body of the WTO and its Reform* (Springer, 2020), at 99–104.

[716] The scholastic writings of three former Appellate Body members, Professor Claus-Dieter Ehlermann, Professor Merit Janow, and Professor Yuejiao Zhang, might intentionally place a greater emphasis on maintaining the security and predictability of the trading system. See Claus-Dieter Ehlermann, 'Experiences from the WTO Appellate Body', 38 Texas International Law Journal 469 (2003), at 470; Merit E. Janow, above n 628, at 294; Yuejiao Zhang, above n 584, at 572.

guessing,[717] but its statement seems to be ambivalent. Without a clear, articulated object and purpose or goal, how could we convincingly draw a line between accepted and unaccepted judicial gap-filling in the Subsidy Agreement? It is reiterated that this agreement is entirely silent on the natural resource exploitation issue in terms of the subsidy transaction. As discussed in 5.1.1.2, the negotiating history might support the supposition that the subsidy question of natural resource exploitation was dropped from the final draft text or at least left undecided. This means a judicially expansive reading of the Subsidy Agreement to implicitly limit WTO members' natural resource sovereignty might be inappropriate.

Professor Chang-fa Lo also supports this limited gap-filling function in his recent scholarship regarding the AB crisis.[718] However, the overall approach he suggests is that the Appellate Body "must be very careful" in conducting its judicial activism.[719] Professor Lo distinguishes between desirable and undesirable judicial activism, which might shed some light on Professor Jackson's supporting argument.[720] He advises that if the Appellate Body is called to decide a dispute which involves maintaining "fundamental norms of the WTO and key values embedded in the multilateral trading system," such as safeguarding important human values or avoiding a major leak or disruption to the system's operation, such an active role by the Appellate Body should be appreciated. By contrast, in a case involving merely technical issues and commercial interests, the Appellate Body should avoid crossing the negotiated compromise as enshrined in the legal texts.[721]

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[717] Appellate Body Report, *Softwood Lumber IV*, para 64: "… which is to strengthen and improve GATT disciplines relating to the use of both subsidies and countervailing measures, while, recognizing at the same time, the right of Members to impose such measures under certain conditions."

[718] Chang Fa Lo, 'A Proper Balance between WTO's Members-Driven Nature and the Appellate Body's Role as an Adjudicator – Careful Exercise of Judicial Activism', in Chang-fa Lo, Junji Nakagawa, and Tsai-fang Chen (eds), *The Appellate Body of the WTO and Its Reform* (Springer, 2020), at 125–39.

[719] Ibid, at 138.

[720] Ibid, at 134–135

[721] Ibid, at 138.

Even applying Professor Lo's proposition to the subsidy question of natural resource exploitation rights, it still might not be easy to support the existing jurisprudence. Keeping natural resource exploitation rights outside the Subsidy Agreement could hardly be considered a *major* leak or disruption to the WTO's operation instead of a mere circumvention as recognized by the Appellate Body.[722] The negotiating history might suggest that the natural resource exploitation issue was a "deliberate omission" from the Subsidy Agreement. Therefore, the Appellate Body should not add its own judgment to this document by considering the drafters' deliberate omission as circumvention. In addition, the subsidy question of natural resource exploitation is considered in this dissertation to be a merely technical matter of commercial interests. It could be neither an aspect of fundamental human values nor a quest to uphold the constitutionalism of the international trading system.[723] Its textual absence from the Subsidy Agreement simply reflects the negotiators' indecision at the time of treaty making. Therefore, according to Professor Lo's distinction, the Appellate Body should exercise self-restraint in justifying this commercial matter.

The AB's worries about circumvention of the Subsidy Agreement were not solely limited to the harvesting rights issue in *Softwood Lumber IV*.[724] If the Appellate Body is really worried about the harvesting rights or natural resource exploitation problem as a loophole in the Subsidy Agreement, then it should demand the investigating authority to confirm the *actual* object as literally provided in natural resource exploitation contracts/licenses (between the government and eligible exploiters). Is a natural resource in the form of the goods being provided by such exploitation contracts or is it simply a right to exploitation? At this juncture,

[722] Appellate Body Report, *Softwood Lumber IV*, para 64.

[723] Chang Fa Lo, above n 719, 136.

[724] For example, the Appellate Body in *US – FSC* was concerned about the possibility of circumvention of the "but for" test suggested by the panel: "It would, we believe, not be difficult to circumvent such a test by designing a tax regime under which there would be no general rule that applied formally to the revenues in question, absent the contested measures. We observe, therefore, that, although the Panel's "but for" test works in this case, it may not work in other cases," at Appellate Body Report, *US – FSC*, para 91.

the uncertainty and complexity of the exploitation process as discussed in *US – Carbon Steel (India)*, might be at the center of consideration. As a consequence, the difference in exploitation patterns of each type of natural resource may tell the *actual* object which is possibly being transferred by the resource exploitation contracts.[725]

It is a clear possibility that the timber harvesting contracts can *proximately* provide harvested timber as goods with less uncertainty and complexity.[726] However, this might hardly be the case for mining rights or fishing rights when mining or fishing activities are full of uncertainty and complexity.[727] This means a subsidy dispute over natural resource exploitation should substantially depend on its own facts, or truly be on a *case-by-case* basis, thereby lending less precedential value to the jurisprudence in *Softwood Lumber IV*. This seems to be a "temporary" solution to the natural resource exploitation problem under WTO subsidy law until a negotiated answer from WTO members emerges.

In short, the subsidy capture toward natural resource exploitation rights directly touches on the natural resource sovereignty question. Despite being recognized as a principle of international law, WTO case law limits the exercise of this sovereign privilege to the extent it is compatible with WTO commitments. The Subsidy Agreement does not textually mention natural resource exploitation rights as a subsidy transaction's object; therefore, this agreement should not be read to limit WTO members' sovereign rights over natural resource exploitation. However, the question of whether or not it is acceptable to impose a limitation on natural resource sovereignty by virtue of the treaty interpretation can be raised, as observed in *Softwood Lumber IV*. The dissertation asserts the view that the dispute settlement mechanism should exercise self-restraint in approaching this sovereign matter. Given the fact that it is

[725] The Panel also noted this distinctive point of the subsidy assessment of natural resource exploitation rights. Panel Report, *Softwood Lumber IV,* footnote 99.
[726] Henrik Horn and Petros C. Mavroidis might agree with the "economic logic" of stumpage rights transactions, see Henrik Horn and Petros C. Mavroidis, above n 81, at 227.
[727] See the subsidy analysis of fishing rights in Chapter 4, at 4.3.3.

difficult to draw a line between desirable and undesirable gap-filling, especially in an improperly drafted document like the Subsidy Agreement, the WTO judiciary should place greater emphasis on preserving the negotiated compromise as *explicitly* agreed upon in the legal text. As customary international law, natural resource sovereignty should not be effortlessly undercut by such an unpredictable development from the judiciary when WTO Agreements do not explicitly authorize this function.[728]

5.1.5. Concluding remarks

The subsidy capture over natural resource exploitation rights by the WTO judiciary might be questionable on **three** grounds. First, the existing jurisprudence (in *Softwood Lumber IV*) is based upon an expansive interpretation of the term "provides goods," which might not reflect the ordinary meaning of this term in international trade or the economic context. The Appellate Body seemed to consider natural resource exploitation rights as a mechanism of the economic resource transfer rather than an economic resource by itself. This judgment appears to contradict the common perception that natural resource exploitation rights are considered an intangible property – a kind of economic resource.

Second, the Subsidy Agreement's negotiation history might imply that the subsidy question of natural resource exploitation rights was left undecided by the negotiators. However, given the controversial nature of the subsidy rules' negotiation, this historical argument might be nothing more than prepositions and logic. Thus, the drafting history of the Subsidy Agreement is worth examining as a mere academic discourse rather than a persuasive argument.

[728] It is noted that the exclusive authority to interpret WTO agreements belongs to the Ministerial Conference and the General Council (Article XI (2) of the Agreement Establishing the World Trade Organization 1994). However, the high threshold for the adoption of authoritative interpretations (three-fourths majority) has long been criticized as undermining this formal interpretative function. See, for example, Yuka Fukunaga, above n 658, at 169–71.

Third, by judicially capturing the natural resource exploitation matter, the WTO subsidy regime regulates the governmental allocation of unexploited or natural resources under their natural state. This legal endorsement might directly collide with the principle of natural resource sovereignty enjoyed by WTO members. The politically delicate position of WTO dispute settlement may not encourage any expansive encroachment on this sovereignty matter without a clear textual basis. Therefore, all three reasons may support the argument that the subsidy question of natural resource exploitation should be discussed by further negotiations rather than through current judicial endorsement.

In terms of the benefit calculation in a resource exploitation subsidy dispute, the Appellate Body in *US – Carbon Steel (India)* permitted the use of values accruing to the exploited resources rather than to the natural resource exploitation rights. However, this subsidy calculation method might arrive at a less accurate subsidy amount due to the extremely challenging adjustment requirement. This jurisprudence seems not to follow the *ratio decidendi* of its precedent – *Softwood Lumber VI* – instead of premising it on a so-called *orbiter dictum* therein. This course of treaty interpretation may undermine the security and predictability of the multilateral trading system.

5.2. Problems of the market value concept as applied to natural resources

The WTO judiciary has reiterated several times that the marketplace is the appropriate benchmark to detect a benefit conferred, thus the subsidy amount. As a result, if the market conditions in the subsidy-provision country are found to be distorted by the government's predominance, current jurisprudence arguably permits choosing alternative benchmarking values for the subsidy calculation.[729] This jurisprudence was invented to facilitate the market-based subsidy regime in dealing with the government's predominant role in natural resource markets, as observed in *Softwood Lumber IV*.

[729] See Chapter 2, at 2.2.1.2.

The subsidy rules' market-based demand might find itself in an intricate position in the natural resource subsidy situation. The concept of market value or market benchmark involves indeterminacy itself.[730] Though natural resources are vital for production and consumption, they are also a component of the "natural" comparative advantage.[731] The WTO judiciary has itself confirmed that the anti-subsidy rules should not be used to offset the comparative advantage of a trading nation;[732] however, permitting countervailability of the below-market natural resource allocation of a trading nation seems to be at odds with this statement.

The United States, as the sole fighter against foreign underpriced natural resource allocation by the anti-subsidy instrument, might accept the natural resource endowment's normative value. However, it appears to express concerns over how such a natural advantage element should be exploited. It seems to suggest that any governmental intervention into the natural resource allocation could amenably create an "unnatural" comparative advantage. As a result, such "unnatural" manipulation should be attacked.[733] In its submission to the Uruguay Round, the United States asserted:[734]

> This is a legitimate and appropriate exercise of sovereignty recognized by the GATT. Unfortunately, governments tend to be less flexible than privately-owned enterprises when it comes to adjusting plans to reflect changing market conditions. Thus, their actions may worsen market trends and hinder the self-correcting tendencies of the market.

[730] Andrew Lang, above n 83, at 139–40.
[731] Jon Harkness, 'Factor Abundance and Comparative Advantage', 68(5) The American Economic Review 784 (1978), at 784–800.
[732] Appellate Body Report, *Softwood Lumber IV,* para 109.
[733] But the effort to distinguish between natural and unnatural advantages should be based on the *perception* of what is wrong in differences between national systems. Such perception connotes ethical preferences and uneven judgements, which have been subject to heavy criticism from both trade economists and lawyers. See Jagdish Bhagwati and T. N. Srinivasan, above n 98,179–88.
[734] GATT, above n 190, at 3.

Its demand for a market-based allocation of natural resources under the anti-subsidy challenge might be counterproductive for the United States if it looks back itself. In a thorough study, Bruce R. Huber uncovered a mixed picture of public natural resource pricing in the United States.[735] This scholar showed a few areas of public natural resources in which U.S. laws require to steer clear of the fair market value standard. Two common examples are the federal timber harvest and the public land leases for commercial projects (e.g., ski resorts).[736] By contrast, a large number of public natural resources, such as hard rock mining or grass grazing, are kept mostly in free access. The main reasons for the nonexistence of fair-market value demand are public policy functions and the influence of rural politics.[737] As presented in Chapter 4, fish are also a kind of "public-oriented" resource, which is very difficult to put into the fair market standard of allocation. Bruce R. Huber finally concluded:[738]

> In public resource management, it is seldom the case that managers are tasked straightforwardly to maximize the monetary value of a given resource. Instead, federal agencies must manage public lands for multiple and sometimes conflicting purposes. Public land policies often represent an odd amalgamation of public and private interests.

In the instance of timber resources, the reason for demanding the fair-market standard is simply that private timber dominates the U.S. timber markets.[739] The profit-seeking motivation entrenched in the private timber segment means that the public timber allocation has no choice but to accept the market mechanism. But if U.S. public timber dominates its domestic markets, as in the case of Canada, could the United States still sustain the fair market

[735] Bruce R. Huber, 'The Fair Market Value of Public Resources', 103(6) California Law Review 1515 (2015), at 1515–60.
[736] Ibid, at 1545–51.
[737] Ibid, at 1542–45.
[738] Ibid, at 1559.
[739] Daowei Zhang, above n 80, at 19–21.

standard in this industry? Should the United States still "aggressively" employ the market-based anti-subsidy instrument against Canada's timber harvesting rights?

Contrary to the U.S. market-based timber allocation, federal coal lease programs in the United States have long been criticized as being undervalued.[740] Jackson Erpenbach even argued that this below-market natural resource pricing practice could constitute an actionable subsidy under existing WTO subsidy jurisprudence. As a consequence, this coal underpricing practice could be countervailed.[741] Here the hypocrisy of U.S. trade politics is shown. On the one hand, the United States challenged India's underpriced coal mining programs (the USDOC determinations in 2008); on the other hand, it has not adequately upheld the fair-market standard in its coal mining leases. Does the United States fear an anti-subsidy repercussion from India?

Choosing the market, non-market, or quasi-market as a natural resource governance mechanism exclusively falls into the sovereign powers. Economists might invest much more confidence in the marketplace as an effective tool for natural resource efficiency, but national development policies are not just about economics. Fairness, trade-off, wealth distribution, development strategies, and social and environmental sustainability must be considered for more balanced, sustainable natural resource governance.[742] Natural resource sustainability is the world's desire; however, the sustainability concept does not necessarily mean only

[740] Mark Squillace, 'The Tragic Story of the Federal Coal Leasing Program', 23(3) Natural Resources and Environment 29 (2013), at 29–37.
[741] Jackson Erpenbach, above n 102, at 503–29.
[742] David Pearce, 'Public Policy and Natural Resources Management: A Framework for Integrating Concepts and Methodologies for Policy Evaluation', September 2000, https://ec.europa.eu/environment/enveco/resource_efficiency/pdf/studies/rmpearce.pdf (visited November 5, 2021).

efficiency – an indication of the economic judgment.[743] Admittedly, natural resource policies are hardly free from rent-seeking motivations and institutional failures.[744]

Even a "champion" of the market economy like the United States is not immunized from such political economy constraints. The market mechanism does not and certainly will not be a panacea for natural resource allocation with plenty of sovereign dimensions. This also means the market-based subsidy regime could be at odds with the natural resource management practice if we put the latter into the former.

From the ownership perspective, given the fact that most parts of our world perceive governments as the representatives of national ownership over natural resources,[745] it seems unreasonable to require a country's citizens to pay a profitable price for using their own national assets. A country's people could be considered the indirect shareholders of such national wealth in the ownership context. The 1962 Declaration of natural resource sovereignty apparently endorsed "The right of peoples and nations to permanent sovereignty over their natural wealth and resources." Therefore, the subsidy regime's market-based application could be incompatible with the non-market nature of government ownership over natural resources.

The conflict of market demand as applied to the natural resource sector was historically observed when the natural resource subsidy problem first emerged in U.S. trade politics in the 1980s.[746] At that time, the U.S. Administration was ironically a "stubborn" protector of foreign natural resource underpricing practices against U.S. countervailing attacks. In academic discourse, numerous scholars rejected such sensitive countervailing proposals because they

[743] Karin Beland Lindahl and others, 'Theorising Pathways to Sustainability', 23(5) International Journal of Sustainable Development and World Ecology 399 (2016), at 399–411.
[744] James M. Acheson, 'Institutional Failure in Resource Management', 35 Annual Review of Anthropology, 117 (2006), at 117–34.
[745] M Patricia Marchak, 'Who Owns Natural Resources in the United States and Canada', Working Paper No.20, Univeristy of Wisconsin–Madison 1 (1998), at 3–4.
[746] See Chapter 1, at 1.2.

misperceived "the vital role of government in the utilization and development of a country's natural resources"[747] *vis-à-vis* private profit-seeking behaviors.

The WTO judiciary now seems to somehow support the U.S. anti-subsidy movement since it formally placed natural resource exploitation rights under the WTO subsidy regime. Consequently, the current problem that the WTO judiciary has to confront is precisely what history foretold: the subsidy regime's market-based rationale might collide with the natural resource governance's non-market nature. It is thus difficult to acknowledge whether such jurisprudence of the WTO judiciary is the development of subsidy law or the devolution of WTO legitimacy.

In short, natural resources have their own sovereign nature in the legal sense. The role of these vital materials for social–economic development supports the government's predominant presence in natural resource allocation and management. From a practical standpoint, the market mechanism does not secure a solid position in natural resource allocation. This resource-efficient mechanism exists in very few natural resource segments with a close connection to the private sector. The principal–agent relationship of government ownership over national natural resources might not support profit-based natural resource distribution to domestic users. All these hurdles should dispirit the United States in its anti-subsidy challenge for market-based natural resource allocation.

5.3. The natural resources problem in the market-based subsidy regime

The first problem in applying the market-based subsidy rules to the natural resource subsidy situation is understanding the term "market." The Appellate Body explained the market as "a place [...] with a demand for a commodity or service"; "a geographical area of demand for commodities or services"; or "the area of economic activity in which buyers and sellers

[747] See Committee Report (American Bar Association), above n 182, at 320.

come together and the forces of supply and demand affect prices."[748] Perhaps Professor Julia Qin was right to doubt whether this clarification could have any meaning in the situation of "a sole supplier and multiple buyers."[749] Can this model of economic transactions be approximately characterized by the term "market"?

This economic mechanism is commonly observed in the natural resource sector with the predominance of government ownership.[750] Reading the AB's interpretation, this "one supplier and multi-buyers" mechanism could be understood to generally fit the term "market" as a place of interaction between supply and demand forces. However, the United States does not seem to agree. It believed that the dominance of the Canadian provincial governments in timber supply could create difficulty in establishing an independently functioning market.[751] Thus, the United States seems to believe that the term "market" should be understood to facilitate a "proper competition" environment rather than simply the interaction between supply and demand factors.

The inconsistency in understanding the market concept could jeopardize the underlying market benchmark debate. To make the matter more complicated, the United States has claimed that the market under consideration should be "fair" or perfectly competitive.[752] Fortunately, the Appellate Body in *Softwood Lumber IV* promptly rejected this "utopian" understanding of the term "market."[753] Professor Gilbert Gagné criticized this by stating that the "mercantilist" approach to natural resources persisted in by the United States has simply been an exposition of its arrogant unilateralism and self-righteousness.[754] In short, the divergence in the

[748] Appellate Body Report*, US – Carbon Steel (India),* para 4.150.
[749] Y. Qin, above n 75, at 600.
[750] Naazneen H Barma and others, *Rents to Riches: The Political Economy of Natural Resoure-Led Development* (World Bank, 2012), 85–88.
[751] United States Department of Commerce (USDOC), above n 463, at 37462.
[752] Panel Report, *Softwood Lumber IV,* paras 4.74-4.76.
[753] Appellate Body Report, *Softwood Lumber IV,* para 87.
[754] Gilbert Gagné, above n 79*,* at 724.

understanding of the term "market" in the natural resource sector might cause the market-based subsidy regime to be more controversial.

The following question can also be raised: Is the market standard the only panacea for testing all allegedly subsidizing situations or are market values the sole acceptable yardstick to discern a subsidy? Since natural resources and the ways in which they are allocated inevitably connect to governmental functions toward the economy and society at large, the market mechanism could lose its unique acceptance as a point of reference in this sector. Even though the WTO subsidy regime embraces the marketplace as a benchmark to identify a distorted subsidy, most prominent scholars still lack a coherent means to define a subsidy.[755] This means the marketplace might not be the sole standard to discern a subsidy. Therefore, one should not premise a subsidy only on the market power to calculate the subsidy bestowed by the governmental provision of natural resources.

The government's predominance in natural resource markets reveals legal challenges of the Subsidy Agreement. As the WTO judiciary pointed out, a market predominance position in the natural resource sector might make in-country prices for the subsidy calculation circular.[756] This means that reliance on only in-country prices might keep the natural resource subsidy from being discerned. Up to now, existing WTO jurisprudence has offered five alternative proxies[757] to deal with the situation of governmental market predominance. One of these alternative benchmarking values is prices in an out-of-country market which might be extremely difficult to reflect the market conditions in the subsidizing country (required by the

[755] Andrew Lang, above n 83, at 148–49.
[756] Appellate Body Report, *Softwood Lumber IV,* para 93.
[757] They are comprised of the **export price** of a like product of the government-provided good, **constructed price** on the basis of production costs plus a suitable profit, **import price** of a foreign like product, **world market price**, and **foreign country price** (out-of-country benchmark). See Y.Qin, above n 75, at 602–06.

second sentence of the SCMA Article 14[d]).[758] A question may be: Does the Subsidy Agreement allow the use of an out-of-country market to discern an "in-country'" subsidy?

When the out-of-country market is not textually indicated in the Subsidy Agreement, the "in the country of provision" market is used. Unfortunately, the choice of the marketplace is the crux of the subsidy rules, which directly affects the subsidy determination. Thus, a contingent question is: Would WTO members permit such a "transformative" amendment to the Subsidy Agreement by means of the judicial function which might not have a formal legislative power?[759] Numerous trade law scholars do not fully agree with the out-of-country benchmark jurisprudence of the WTO judiciary from either the legal or economic perspective.[760] It can thus be concluded that the natural resource factor inflicts uncertainty into the WTO subsidy regime as it precisely attacks a "loophole" in the legal text.

The preceding section shows the possible collision between the market-based subsidy regime and the natural resource endowment. Market-based demand toward natural resource allocation in a foreign country cannot overcome insurmountable questions of sovereignty. Such a natural resource fair-trade demand might generally be at odds with the natural resource allocation practice. The natural resource factor has caused uncertainty in the multilateral subsidy regime regarding the benchmarking problem because this regime is constrained by the limitations in the current legal text. What would be a more appropriate benchmarking mechanism if we have to put a trading country's natural resource allocation under the realm of the existing subsidy rules?

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[758] Canada explained the "remoteness" problem at Panel Report, *Softwood Lumber IV,* para 4.26. See an economic critique of the alternative benchmark concept at Wentong Zheng, above n 83, at 40–45.

[759] Dispute Settlement Understanding (DSU), Article 3.2.

[760] For criticism, see Henrik Horn and Petros C. Mavroidis, above n 83*,* at 138–39; For a summary of academic debates against the out-of-country benchmarking jurisprudence, see Eugene Beaulieu and Denise Prévost, above n 85, at 221–24.

5.4. The search for a benchmarking mechanism for natural resources

It appears that only the scholarship by Professor Julia Qin has proposed an alternative benchmarking mechanism for the natural resource subsidy problem which is not based on the "pure" market rationale. According to Professor Qin, the market-based benchmarking mechanism as upheld by the Appellate Body means that the Subsidy Agreement was designed to identify and correct the subsidizing transaction's trade distortion potential.[761] Therefore, she has proposed a proxy which is constructed based on natural resource efficiency in order to discern the natural resource subsidy. Economic modeling is expected to construct this proxy based on the subsidizing country's data and conditions. Thus, this econometric benchmark can highly reflect the prevailing market conditions of the country of provision. [762]

However, this innovative suggestion seems to be worthy of academic discourse rather than to serve as a practical solution. She argued that the Appellate Body and talented economists have lent support to the use of econometric modeling (to construct this innovative benchmark). She also showed that the technical capacity needed to use this "efficient natural resource allocation" benchmark could reasonably be afforded by top users of the countervailing instrument (the United States, the European Union, Australia, and Canada).[763] She seems to have ignored the developing world's potential use and the lack of adequate capacity they might confront. Given the increasing use of this trade defense instrument by third world countries,[764] any proposed benchmarking mechanism should be designed to be used by all trading countries when possible.

[761] Y.Qin, above n 75, at 622–28.
[762] Y.Qin, above n 75, at 631.
[763] Y.Qin, above n 75, at 638.
[764] Luisa Kinzius, Alexander Sandkamp, Erdal Yalcin, 'Global Trade Protection and Non-tariffs Barriers, VoxEU & CEPR', September 16, 2019, https://voxeu.org/article/global-trade-protection-and-role-non-tariff-barriers (visited November 5, 2021).

Premised on the non-profit nature of the natural resource allocation, it should be presumed and expected that the government's remuneration in providing or allocating its natural resources is equivalent to **the costs** that the government has borne. Therefore, production costs should be used as an appropriate benchmark for the benefit determination in the case of governmental provision of natural resources. The subsidy regime should capture the below-cost provision of natural resources rather than the below-market provision. In this case, the natural resource subsidy is discerned by comparing the price paid by the recipient to the government (for obtaining natural resource inputs) with the costs that the government has borne in the provision of such resources. Professor Wentong Zheng might support this benchmarking proposal because of its objectiveness and its ability to inherently reflect the prevailing market conditions of the subsidizing country.[765]

If the subsidy-alleged government provides exploited resources (input products) to its domestic producers, the benchmarking value should be governmental costs for managing, exploiting, and providing such exploited resources. However, if the government provides only exploitation rights to natural resources, the benchmarking value should be governmental costs for managing and conserving such unexploited resources. This "pure" cost-based benchmark neither includes a suitable profit (costs-plus benchmark) as suggested by the Appellate Body (in *Softwood Lumber IV*) nor demands the econometric complexity as of Professor Qin's proposal. This proposal seems to be more doable for both the WTO adjudicators and the investigating authorities in a case which deals with a natural resource subsidy dispute. The reason is that it might simply require a proper check of the accounting evidence presented by the disputing parties.

What should be another alternative if efforts to verify such a pure cost-based benchmark are impossible? The past might give us a prospective answer. The evolution of the

[765] Wentong Zheng, above n 83, at 51.

benchmarking concept under the subsidy regime has gradually favored the market idea, specifically for the governmental provision of goods or services.[766] Indeed, the historical use of the benchmarking value in this situation was the preferentiality criterion rather than commercial considerations.[767] To the extent that the government does not prefer some over others in providing natural resource products or natural resource exploitation rights, such transactions should not constitute a countervailable subsidy. This suggestion reiterates the wisdom of the Draft Article 14(e)[768] (Uruguay Round). Professor Robert Howse appears to support this alternative benchmarking mechanism as a practical solution to China's current subsidy problem. He has explained that "in general domestic policy choices that are not discriminatory should not be banned or disciplined under WTO rules." [769]

Therefore, attention should be paid to the process of the governmental provision of exploited natural resources or the grant of natural resource exploitation rights based on nondiscrimination and transparency principles. As long as the process of natural resource allocation is compatible with the nondiscrimination and transparency requirements, this practice should not be considered a subsidy. Placing such "due-process" requirements in the hands of the WTO adjudicators appears to demand less expertise than relying on econometric assessments as in Professor Qin's proposal. In practice, nondiscrimination and transparency in the bidding process for allocation of natural resources should be the objects for assessing this nondiscrimination benchmark.

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[766] Wentong Zheng, above n 83, at 8–21.

[767] Wentong Zheng, above n 83, at 10–11.

[768] GATT, above n 199, Draft Article 14(e): "When the government is the sole provider or purchaser of the good or service in question, the provision or purchase of such good or service shall not be considered as conferring a benefit, unless the government **discriminates** among users or providers of the good or service. Discrimination shall not include differences in treatment between users or providers of such goods or services due to normal commercial considerations" (emphasis added).

[769] Robert Howse, 'Making the WTO (Not So) Great Again: The Case against Responding to the Trump Trade Agenda through Reform of WTO Rules on Subsidies and State Enterprises', 23(2) Journal of International Economic Law 371 (2020), at 380.

A final question is perhaps: Do these two proposed benchmarking methods require a hierarchical application? Given the inevitable demand for transparency, nondiscrimination, and accountability in natural resource allocation,[770] the latter benchmarking method should be prioritized in the assessment. First, one should test whether the government's natural resources provision is transparent and nondiscriminatory. If the answer is negative, the pure cost-based benchmark should be used. If the answer is positive, a governmental transaction of a resource product or the right to exploit a resource should be compared to the transparent and nondiscriminatory transaction of a like product of the resource at issue (in the country of provision). If such an nondiscriminatory and transparent proxy cannot be found, one should return (again) to the pure cost-based benchmark.

5.5. Natural resources as placed under the multilateral subsidy regime: a proposal

Natural resources commonly enter into international trade in the exploited form, and they are usually going through minor processing activities. For example, raw coal is extracted from a surface or underground mine and then goes through coal processing to become ready-to-use products.[771] In this situation, natural resources lose their natural pristine state to become "natural resource-based products" as they were called in the Uruguay Round.[772] In addition, through the expansive interpretation of the Appellate Body in *Softwood Lumber IV*, natural resources in their natural states (unexploited), such as standing timber, could be subject to trade law scrutiny. As discussed in Chapter 2, the invention of the "reasonable proximate relationship" test allowed the WTO judiciary to perceive the governmental provision of a right to exploit a natural resource (in its natural state) as equivalent to the governmental provision

[770] Levon Epremian and others, 'High-Value Natural Resources and Transparency: Accounting for Revenues and Governance', Oxford Research Encyclopedia of Politics, Oxford University 1 (2016), at 1–33; Andrew Williams, 'Shining a Light on the Resource Curse: An Empirical Analysis of the Relationship Between Natural Resources, Transparency, and Economic Growth', 39(4) World Development 490 (2011), at 490–505.
[771] National Research Council, *Coal: Research and Development to Support National Energy Policy* (Washington, DC: The National Academic Press, 2007), 160–66.
[772] Patrick J. McDonough, above n 151, at 459–22.

of the unexploited resource.[773] This jurisprudence permits the WTO subsidy regime to capture "pristine" natural resources even though these natural assets do not come into the market as production inputs.[774] The Appellate Body in *US – Carbon Steel (India)* further justified the governmental provision of mining rights as equivalent to the governmental provision of the extracted minerals by considering the uncertainty and complexity of the exploitation activities.

As with other traded goods, the governmental provision of underpriced exploited natural resources could be a subsidy. However, the subsidy capture of below-market natural resource exploitation rights (unexploited resources) might be a brave move under the limits of the current legal text. WTO subsidy law endorses market standards to identify a distorted subsidy provided by the government. The collision here between the market-based subsidy regime and the "non-market" natural resource endowment comes into play in accordance with the game that was started in the softwood lumber disputes. By touching on the natural resource factor, the market-based subsidy regime has to confront three obstacles: the comparative advantage argument as a tenet of international trade relations, the natural resource sovereignty argument as upheld by international law, and the public policy argument to underscore the economic–social importance of natural resources. Therefore, it might be risky for the market-based subsidy regime to approach such "sovereign" merchandises under the current legal context.

Countervailability by use of the market-based subsidy instrument against below-market natural resource allocation could create a real threat to developing countries. From an ethical perspective, given the fact that they are primarily natural resource-based economies,[775] no one can ensure that market-based demand is superior to their below-market or quasi-market

[773] See Chapter 2, at 2.2.1.1.
[774] Appellate Body Report, *Softwood Lumber IV*, para 57.
[775] See Tamer ElGindi, 'Natural Resource Dependency, Neoliberal Globalization, and Income Inequality: Are They Related? A Longitudinal Study of Developing Countries (1980–2010)', 65(1) Current Sociology 21 (2017), at 21–53.

approach to natural resource allocation.[776] In addition, putting developing countries' natural resource endowments at risk by means of a market-based anti-subsidy could worsen the image of this trade defense tool as an uncontrolled protectionist weapon.

Relying on the jurisprudence in *Softwood Lumber IV*, the United States has employed the anti-subsidy instrument to challenge India's iron ore/coal mining rights, Indonesia's timber harvesting rights, and even the inherent sovereign nature of land-use rights in China. Thus, the question here is: Which natural resources will be the next target of U.S. market idealism? Who could be the next victim of U.S. fair-market demand in natural resource allocation? Given that more than twenty economies that are now under the WTO accession process are all developing countries,[777] the expected newcomers to the multilateral trading system should not ignore this "acute" development of subsidy law against their natural resource sovereignty.

However, natural resources should be conferred a *lex specialis* treatment under the current subsidy regime regardless of whether they are the exploited resources or the right to exploit resources. This special regime should be incorporated into a footnote added to Article 14(d) of the Subsidy Agreement. The footnote should at minimum contain two elements: (1) the special benchmarking mechanism to calculate the benefit conferred in the case of governmental provision of natural resources and (2) how to identify a subsidy dispute involving natural resources in order to apply such a special benchmarking mechanism.

For the first element, two prospective benchmarking methods were proposed in Section 5.4: the pure cost-based proxy and the nondiscrimination proxy. This "non-market" benchmarking mechanism should be included in the footnote.

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[776] Carmen G. Gonzalez, 'Beyond Eco-Imperialism: An Environmental Justice Critique of Free Trade', 78(4) Denver University Law Review 979 (2001), at 979–1015.

[777] WTO, Members and Observers, https://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm (visited November 5, 2021). Some of these "in-process" countries to the WTO are recognized as resource-rich nations, such as Iran, Iraq, or Algeria.

For the second element, if the subsidy-alleged producer/country wants the investigating authority/the WTO judiciary to apply the special benchmarking mechanism, this producer/country should at the outset demonstrate that the government-provided good is a natural resource. In this case, the natural resource definition in the WTO 2010 Report could be referenced:[778] "stocks of materials that exist in the natural environment that are both scarce and economically useful in production or consumption, either in their raw state or after a minimal amount of processing."

According to this designated definition, the subsidy-alleged producer/country must demonstrate its subsidy situation involving a natural resource. In turn, the investigating authority/WTO judiciary would consider the subsidy situation on a *case-by-case* basis relying on the definition and the evidence presented. In short, the footnote to SCMA Article 14(d) should be written as follows (or other words deemed to be equivalent):

> In case the good provided by the government is a natural resource, the investigating authority shall make the comparison between the price of such good paid by the recipient to the government and the price of a like good derived from a nondiscriminatory transaction. Failing that, the investigating authority shall compare the price of such good paid by the recipient to the government with the government costs in provision of such good. For clarification, the term "natural resource" is understood as stocks of natural materials used in production or consumption either in their raw state or after a minimal processing amount. The producer subjected to the countervailing investigation bears the obligation to demonstrate whether the government-provided good is a natural resource. The investigating authority shall consider the underlying situation on a case-by-case basis.

[778] WTO, above n 27, at 46.

Conclusion of Chapter 5

The WTO adjudicators' attempt to place natural resource exploitation rights into the current subsidy regime is a brave move. As commonly traded goods, the government provision of exploited natural resources or natural resource products to downstream industries at below-market value is undoubtedly a subsidy concern. However, the case of governmental provision of below-market natural resource exploitation rights (natural resources under their natural state) might be too remote to constitute a subsidy transaction under the Subsidy Agreement. Legal problems have been gradually uncovered through arguments of the subsidy-alleged parties involved in WTO litigation. Canada and India have consistently referred to the negotiating history to explain that governmental provision of natural resource exploitation rights is outside the current legal text.

WTO jurisprudence toward natural resource exploitation rights might be premised on a manipulation of treaty interpretation. An expansive reading of the term “provides goods” by the Appellate Body may not reflect its ordinary meaning in the context of international trade or economic activities. This extensive interpretation seems to undermine the security and predictability of the Subsidy Agreement by broadening its scope toward virtually unlimited economic resources. The history of the negotiation was subordinated in the judicial examination, but it might indicate that the natural resource exploitation issue was intentionally left undecided by the negotiators. In addition, the subsidy capture toward natural resource exploitation rights seems to collide with the natural resource sovereignty of WTO members since the latter is not constrained by the wording of the current legal text. In this situation, the WTO judiciary should preserve the delicately negotiated balance as literally shown in the Subsidy Agreement rather than to try to prevent an unjustified circumvention. Further negotiations to the Subsidy Agreement should be used to resolve the natural resource exploitation issue.

It can also be argued that the existing market-based benchmarking mechanism might be inappropriately applied to the case of a natural resource subsidy. Given the inseparable nature of the government's predominance in the natural resource sector, the market-based demand of the subsidy rules against the government's natural resource allocation would confront inherent sovereignty questions. The vital role of these national assets may invite certain public policy concerns in opposition to such a subsidy capture. In other words, the market-based subsidy regime might collide with the non-market natural resource endowment of a trading country. To overcome such "rationale collision," the pure cost-based and nondiscrimination benchmarks should be employed in the natural resource subsidy context. Therefore, natural resources should be given the *lex specialis* treatment under the current subsidy regime. A footnote should thus be added to Article 14 (d) of the Subsidy Agreement to incorporate these special benchmarking methods that are exclusively used in the natural resource subsidy dispute. However, the situation needs to be considered on a *case-by-case* basis in applying this non-market benchmarking mechanism.

CONCLUSION

Summary and Perspectives

The focus of this dissertation was the study of natural resources under the GATT/WTO subsidy regime and its implications for natural resource conservation. Natural resources are the connecting piece at the intersection of trade and the environment. On the one hand, natural resources are essential inputs for most manufacturing industries. On the other hand, they are an element of the natural environment. Any legal discipline on the use of natural resources inevitably affects these dimensions. The international subsidy regulation is no exception.

(i) Natural resources under international trade law: the subsidy context

Natural resources are the primary commodity in international trade. They are even the first bricks of world production chains. Therefore, any shortage or crisis in upstream natural resource supplies is likely to generate severe downstream consequences. High-tech products, such as smartphones, electric cars, or satellites are currently more vulnerable than ever because they technically depend on a small group of rare minerals for production and development. However, natural resources are not human-made but are being exploited from the natural environment. This means that for productive and trading purposes, natural resources have to be transformed from their natural state to tradable goods or natural resource products. The term "natural resources" in this dissertation means both the natural resources in their natural state (e.g., standing trees, coal deposits) and the exploited resources or natural resource products (e.g., timber, coal).

Natural resources are unevenly distributed among countries and even among regions within a country. This situation creates a "natural" comparative advantage for the resource-endowed countries. The comparative advantage concept is the theoretical foundation of international trade relations. However, countries are still debating the ways to utilize such an advantage in international trade practices. Natural resources are a cornerstone of inconclusive

debates between resource-rich countries and countries in need. Therefore, the first concern regarding natural resources in international trade affairs is access to resource supplies. This supply access issue is opposed to demand access as commonly observed in trade law negotiations.

As the United States (and the European Union) has consistently put forward, if the government treats the resource access issue indiscriminately between domestic and foreign users, perhaps no problem arises. Unfortunately, all countries need natural resources for industrialization and development, and such natural assets are generally exhaustible. The access problem is even more severe when many growing industrial centers in the developing world (especially China) have gradually hastened global natural resource competition. International trade rules traditionally lean toward the demand-access or market-access side, leaving the supply-access side underregulated. Recent natural resource export restraint disputes at the WTO brought by industrial powers against China reflect the reemergence of legal conflicts in this area.

The second trade concern with respect to the natural resource factor is foreign "manipulation" of the natural resource endowment to enhance a downstream trade advantage. This issue has become known as the natural resource underpricing phenomenon or, in legal terms, the natural resource subsidy practice. The underlying issue is how the subsidy rules deal with the underpriced natural resource allocation of a trading country. Suppose the government provides its own natural resource products at a preferential price to support its downstream industries. This might be normal at first glance much like the governmental provision of other goods to its nationals. However, the government can provide the right to exploit natural resources (e.g., mineral mines or forests) to its domestic exploiters at below-market charges. This is the distinct feature of natural resources in the subsidy context. The term "natural resource subsidy" or "natural resource underpricing" is defined herein as the governmental

provision of exploited natural resources or the right to exploit natural resources directly or indirectly at below-market value to its domestic downstream producers that make the subsidy-alleged merchandise.

If the government provides exploited natural resources or the right to exploit natural resources at below-market value to domestic downstream producers to produce the allegedly subsidized merchandise, this situation can be referred to as a "direct natural resource subsidy." If the government provides the right to exploit natural resources at below-market value to upstream resource exploiters and the exploited resources then flow through downstream production of the subsidy-alleged merchandise, this can be referred to as an 'indirect natural resource subsidy' (the input subsidy situation).

Natural resources are too controversial to be placed under the subsidy disciplines. Chapter 1 demonstrated that natural resource underpricing was one of the most contentious topics in U.S. trade politics in the 1980s. At that time, the USDOC was a stubborn fighter against any subsidy proposals toward foreign natural resource underpricing practices. This authority worried about *inter alia* possible backfires from foreign mirror legislation against the U.S. exports. Numerous scholars also criticized this protectionist countervailing idea as a misperception of the government's legitimate role in natural resource management. However, U.S. downstream industries appeared to prevail in the natural resource subsidy debate since U.S. subsidy law had been changed to accommodate the natural resource subsidy allegations.

The United States simultaneously brought the natural resource underpricing problem to the Uruguay Round, seeking a multilateral solution. However, the topic was too controversial to result in any legal substance. The debate reached its climax on the negotiating tables when the "industrialist" group supported a multilateral discipline against the natural resource subsidy; by contrast, the "sovereigntist" group found this proposal to be a real threat to its trade interests and natural resource sovereignty. As a result, the current multilateral subsidy rules –

the Subsidy Agreement – do not have any special endorsement regarding the natural resource subsidy practice.

However, trade disputes regarding the natural resource subsidy have gradually been brought to GATT/WTO dispute settlement. Here, trade law adjudicators have employed their legal interpretation skills to develop legal standards for natural resources in the subsidy context. It should be noted that the government provision of natural resource exploitation rights has been the heart of the subsidy debates here. The natural resource subsidy problem has been brought to the current Doha Round to renegotiate the subsidy rules (Chapter 3, at 3.3). Unfortunately, the existing WTO jurisprudence seems to have contributed to the current impasse of the subsidy law renegotiation.

This short history demonstrates that the natural resource factor has been a controversial subject in the subsidy rules, regardless of whether it is at the domestic or international level. It is well known that a country uses its natural resource advantage to support its downstream industries, and that this upstream manipulation can cause downstream distortions. But why does this apparent "state aid" practice become so complicated when it is placed under the subsidy law? As noted, Professor John H. Jackson recognized the natural resource subsidy as a problem in the existing subsidy regime. But why is it troublesome?

Leaving the natural resource underpricing issue outside the WTO subsidy rules might not please industrialist members like the United States or the European Union. However, putting a trading country's natural resource allocation into the multilateral subsidy regime can hardly stand up against opposition from the natural resource-endowed countries. Natural resources are a unique domain: they have plenty of sovereign characteristics and are directly connected to the government's role in the economy and society. But the primary question is: Can the Subsidy Agreement adequately deal with these sovereign goods when, in the past, its

drafters intentionally avoided such a sensitive topic. In the Introduction, two research questions regarding natural resources in the subsidy context were identified:

> (1) To what extent does the WTO subsidy regime regulate the natural resource underpricing practice as a form of governmental subsidy?
>
> (3) Given the sovereign nature and public policy functions of natural resources, what problems result from placing natural resources under the market-based WTO subsidy regime? If problems exist, what are their solutions?

Here are the answers.

(1) To what extent does the WTO subsidy regime regulate the natural resource underpricing practice as a form of governmental subsidy?

Natural resources are essential inputs to downstream production. The subsidy rules can capture the governmental provision of natural resource products at below-market value through the form of governmental provision of goods. If such a natural resource provision is proven to fulfill other subsidy requirements, it can be countervailed. To the extent that this natural resource underpricing practice meets the conditions of Annex 1(d) of the Subsidy Agreement (in favor of export-oriented producers), it may be prohibited. Therefore, the government subsidy due to the provision of natural resource products might not be a problem under the multilateral subsidy rules.

By contrast, the governmental provision of natural resource exploitation rights is a problem under the current subsidy regime. With power of ownership over national natural resources, the government can provide the right to exploit natural resources at free or below-market charges to its domestic industries. Can such an underpriced allocation of natural resource exploitation rights be justified as a subsidy under the Subsidy Agreement? This has been the crux of a series of timber harvesting rights disputes between the United States and Canada before the GATT/WTO.

It should be noted that the Subsidy Agreement does not textually mention the governmental transfer of natural resource exploitation rights (or the transfer of property rights in general) as a subsidy transaction (the financial contribution element). However, the WTO judiciary in *Softwood Lumber IV* equated the governmental provision of natural resource exploitation rights to the governmental provision of goods by inventing the "reasonably proximate relationship" test. The WTO judiciary thus formally put natural resources in their natural state (unexploited) into the WTO subsidy regime even though the legal text says nothing on this matter. It seems the WTO judiciary's interpretative assumption was that if some things are missing in the legal text, this does not mean the legal text excludes such things. Can this pattern of treaty interpretation be viewed as doubtful when used to capture some things on which the drafters could not agree? If the *nulla poena sine lege* principle[779] usually observed in criminal law is applied to this interpretative context, it seems the WTO judiciary did abuse its interpretive power. In fact, the natural resource exploitation rights issue had already been brought to the Uruguay Round, but it was too controversial to achieve a multilateral solution.

Whether desirable or not, the jurisprudence in *Softwood Lumber IV* has the power of precedent. The United States has confidently relied on it to challenge the foreign allocation of natural resource exploitation rights by means of the anti-subsidy instrument. The targeted countries have brought their trade complaints to the WTO: the land-use rights of China (2010), the mining rights of India (2014), the forest rights of Indonesia (2017), and again the timber rights of Canada (2020). The "past" jurisprudence in *Softwood Lumber IV* has been applied and refined in these subsequent natural resource subsidy disputes.

From an economic perspective, Henrik Horn and Petros C. Mavroidis have supported the WTO jurisprudence by considering the factual circumstances of the timber harvesting rights

[779] Jerome Hall, 'Nulla Poena Sine Lege', 47(2) The Yale Law Journal 165 (1937), at 165–93.

dispute.[780] Nevertheless, such resource exploitation rights jurisprudence is perceived herein as formulated by an improper legal interpretation which causes applicable problems and directly encroaches the natural resource sovereignty of a trading nation (arguments in Chapter 5, 5.1).

The WTO judiciary might manipulate its judgment on the ordinary meaning of the interpreted terms. It might subordinate the negotiation history with regard to the natural resource exploitation issue. In fact, in the Uruguay Round, the United States recognized the governmental provision of natural resource exploitation rights as distinctive from the governmental provision of natural resource products (goods). The drafting process of the subsidy definition appears to support this distinction. But for now, the WTO judiciary reassembles the two concepts through its expansive legal interpretation.

The WTO judiciary considered natural resource exploitation rights as a mechanism to transfer economic resources rather than as an economic resource by itself. This understanding appears to contradict the common perception that the right to exploit natural resources is intangible property (an economic resource). As a result, the right should be distinguished from goods as an object of a subsidy transaction under the Subsidy Agreement. Such expansive jurisprudence seems to go against international trade law's general tendency not to capture natural resources before they are exploited (natural resources in their natural state). Therefore, contrary to the existing WTO jurisprudence, the multilateral subsidy regime should not capture natural resource exploitation rights due to its textual limits. The issue should be forwarded to the legislative agenda in the Doha Round (with full recognition that reaching a negotiated solution now is hopeless).

In summary, the answer to the first research question is:

- The governmental provision of underpriced natural resource products (exploited natural resources) can be captured by the multilateral subsidy rules through the

[780] Henrik Horn and Petros C. Mavroidis, above n 81, at 226–29.

government provision of goods. This might not be a subsidy problem because natural resources are traded goods.

- The governmental provision of natural resource exploitation rights is not explicitly subscribed to in the Subsidy Agreement as a governmental subsidy transaction. However, since *Softwood Lumber IV,* the WTO judiciary has permitted the multilateral subsidy rules to capture the governmental provision of natural resource exploitation rights. This means permitting subsidy law to capture natural resources in their natural state (unexploited natural resources). This exploitation rights jurisprudence is a brave move by the WTO judiciary. It is based on improper legal interpretation, creates certain application problems, and directly collides with the principle of natural resource sovereignty. The legislative function should thus handle the natural resource exploitation issue rather than the existing judicial endorsement.

(3) Given the sovereign nature and public policy functions of natural resources, what problems result from placing natural resources under the market-based WTO subsidy regime? If problems exist, what are their solutions?

Regulating natural resource rights allocation under the subsidy context creates a legal problem in the multilateral subsidy regime. The government ownership over natural resources likely results in the government's predominance in natural resource markets. This situation might be at odds with the Subsidy Agreement's textual endorsement of the marketplace in the subsidy-provision country to recognize a distorted subsidy. In other words, the government's predominant role in the natural resource sector can inactivate the subsidy calculation because all domestic prices used in calculating the alleged subsidy might be circular or be influenced.

To overcome such an "inutile status" of the subsidy rules, the WTO judiciary in *Softwood Lumber IV* expanded its jurisprudence a second time to permit the use of alternative

benchmarks to the private prices in the country of provision to calculate the alleged subsidy. Professor Wentong Zheng referred to this jurisprudence as "the floodgate is opened" to describe the U.S. anti-subsidy practice which exploited the endorsement of the alternative benchmark.[781] Subsequent natural resource subsidy cases at the WTO have provided, on the one hand, more options for the alternative benchmarking choice (including out-of-country values). On the other hand, the cases have imposed more burdens on getting permission to use the alternative benchmark privilege. It seems that numerous trade law scholars cannot fully agree with the WTO alternative benchmark jurisprudence. Henrik Horn and Petros C. Mavroidis even criticized this "generous" jurisprudence as impermissible judicial activism.[782]

The United States might support this "innovative" benchmarking jurisprudence because by relying on it, it can legally challenge China's current trade distortive practices. China's state-led economy is very similar to the government's predominance in the natural resource sector. Thus, WTO jurisprudence regarding the natural resource subsidy practice may be a precursor to the anti-subsidy response against China. This might be the reason the United States is critical of the recent benchmarking jurisprudence in which the WTO judiciary has imposed stricter requirements on the employment of alternative benchmarking.[783]

This judicial body might have overlooked the controversial nature of the natural resource issue in the formation of the current subsidy rules. Indeed, the past proposed benchmark for recognizing a distorted subsidy in case of a government's natural resource monopoly is the nondiscrimination standard (Draft Article 14(e) to the Subsidy Agreement) rather than the market yardstick under the current legal regime. Although this draft benchmarking text was soon omitted, it could imply that the market benchmark was not specifically prescribed for the government's predominance in the natural resource sector. At

[781] Wentong Zheng, above n 83, at 28–35.
[782] Henrik Horn and Petros C. Mavroidis, above n 83, at 139.
[783] United States Trade Representative (USTR), above n 7, at 105–09.

least one scholar has recently suggested the use of the nondiscrimination standard as a temporary solution to China's subsidy problem.[784] This means that any multilateral answer to the natural resource subsidy practice is likely meaningful to the current debates on China's trade-distortive practices.

Putting natural resources, regardless of whether they are exploited resources or the right to exploit natural resources, under the market-based subsidy regime means using the market mechanism to intrude into a trading country's natural resource allocation. From the policy perspective, a question may be raised as to whether such a market-based demand is compatible with the sovereign nature and public policy dimensions of natural resources. As explained in Chapter 5 (at 5.2), the market mechanism for natural resource allocation might exist in very few natural resource segments which have either a high concentration of private ownership (e.g., the timber industry in the United States) or in which the political economy tends to demand market principles (e.g., extractive industries). Most governments perceive natural resource allocation as a tool of public policy rather than a profit-seeking instrument. The United States has been the pioneer in using the market-based subsidy rules to challenge foreign countries' natural resource allocations. Still, the United States itself has not been an excellent example of market-based natural resource allocation. All of these arguments might support the conclusion that if natural resources are placed under the WTO subsidy rules, the inherent problem could be a collision between the market-based subsidy regime and the non-market natural resource endowment.

But if we accept the *status quo* of the existing subsidy jurisprudence, then what is the solution to such a "rationale collision"? Only the scholarship of Professor Julia Qin appears to offer a brilliant solution to the benchmarking problem toward natural resources[785] which is

[784] Robert Howse, above n 770.
[785] Y.Qin, above n 75, at 622–38.

different from the solutions suggested by the WTO judiciary. She has proposed the use of an econometric benchmark to discern a distorted natural resource subsidy in light of natural resource efficiency. This creative benchmarking mechanism can be appreciated as an academic product but it raises doubt as to whether it is a practical solution. The technical burdens of this benchmarking solution might hinder its pragmatic acceptance. If the disputing parties present different or even contrasting econometric results for the subsidy calculation, how should the WTO adjudicators deal with this situation in the context of scientific uncertainty?

In this dissertation, I have attempted to search for a feasible solution to the benchmarking problem of natural resources. I suggest the use of the "pure" cost-based benchmark and the nondiscrimination benchmark (not market-based values) to measure the distorted subsidy from the governmental provision of natural resources (Chapter 5, at 5.4) rather than the benchmark suggested by Professor Qin (and is undoubtedly different from the existing jurisprudence of the WTO judiciary). The pure cost-based proxy is based on the rationale that the subsidy rules should only capture the below-cost provision of natural resources rather than the below-market provision as under the current jurisprudence. The nondiscrimination proxy is based on the past wisdom of Draft Article 14(e) to the Subsidy Agreement.

These proposed benchmarks should be incorporated into a footnote to Article 14 (d) of the Subsidy Agreement to set up the *lex specialis* treatment of natural resources in the subsidy context (Chapter 5, at 5.5). This *lex specialis* regime is expected to accommodate both the "industrialist" and the "sovereigntist" interests toward the natural resource subsidy problem: the industrialist can still use the anti-subsidy instrument against distorted natural resource allocations abroad, while the sovereigntist will feel less intrusion into its natural resource sovereignty. Therefore, it offers a *status quo* solution to the collision between the market-based subsidy regime and the non-market natural resource endowment.

In summary, the answer to the third research question is:

- The government's predominance in the natural resource sector exposes a legal problem in the multilateral subsidy rules related to finding the market-based benchmark in order to discern a natural resource subsidy. To overcome this obstacle, the WTO judiciary had to stretch the legal text to permit the use of alternative benchmarking values, including the value in a foreign country, for the subsidy calculation. However, this judicial approach has been criticized by some trade law scholars as judicial activism.
- The natural resource sovereignty and public policy dimensions likely collide with the multilateral subsidy rules' market-based rationale. Using the anti-subsidy instrument with the marketplace's power to challenge foreign natural resource allocations might be incompatible with the government's role in natural resource management. This collision can create a tense political situation, as observed in U.S. practices and their aftermath. It thus may inflict uncertainty and insecurity into international trade relations.
- The use of the cost-based and the nondiscrimination benchmarks are proposed for the purpose of identifying the natural resource subsidy as a *status quo* solution to the identified collision. As a result, natural resources should be conferred the *lex specialis* treatment in the Subsidy Agreement.

(ii) Trade and the environment: countervailability of natural resource subsidies for natural resource conservation

There is primary agreement among natural resource economists that free or below-market natural resource allocation is an environmentally harmful practice. The market mechanism is thought to be an effective tool for allocating these natural assets. The natural resource underpricing practice is also considered to be a failure of the property rights regime

in natural resource governance. Under Professor Graciela Chichilnisky's theory on the relationship between international trade and natural resource conservation through the property rights factor, such wasteful natural resource allocation can hasten natural resource depletion by creating a disguised trade advantage. This means that a country with an improper property rights regime over natural resources may exploit more natural resources for export as if it has a comparative advantage over them though actually it does not. In connection with the development of WTO subsidy law, the second research question was posed in the Introduction:

(2) Given that the governmental provision of underpriced natural resources may exacerbate natural resource disposals, can countervailing duties be invoked for natural resource conservation?

Chapter 4 extensively investigated this question. This question was answered positively due to the development of WTO subsidy jurisprudence related to natural resource exploitation rights. Countervailing duties or green CVDs can currently be used to attack the government provision of natural resource exploitation rights at below market value. Consequently, such green offsetting duties can reduce the import demand for underpriced natural resources and promote their market-based allocation. Countervailing duties can thus be a proactive tool for natural resource conservation. The U.S. anti-subsidy practice against foreign below-market natural resource exploitation is vivid evidence of the need for such a green trade instrument. Indeed, Jackson Erpenbach in 2020 also argued in this direction for a subsidy challenge against the U.S. coal leasing program. Beyond this similar conclusion, the underlying discussion is expanded in three directions.

First, the past inconclusive debate on the use of countervailing duties for environmental protection has been revisited. This environment-competitiveness debate may have reemerged as a contemporary issue because the United States revived this green offsetting instrument at

the WTO in 2020.[786] Environmentalists have been very supportive of this green anti-subsidy proposal. However, most trade law scholars have doubted that the WTO subsidy rules could not allow countervailability of a national environmental policy. Nevertheless, Professor Robert M. Hudec predicted that the future subsidy rules could be changed to facilitate such a green offsetting idea. With the development of the WTO subsidy jurisprudence, the idea of green CVDs is now verified, not against weak environmental standards but for the below-market allocation of natural resources. Therefore, a perspective is added to the past debate, and the wisdom of Professor Hudec is confirmed.

Second, given the fact that all natural resource subsidy disputes at the WTO have concerned *in situ* natural resources (forest, minerals), can such green CVDs be employed against underpriced fishing rights (Chapter 4, at 4.3)? Under the current legal bases, the tentative conclusion is that countervailing duties can theoretically be used to attack the governmental provision of underpriced fishing rights. However, this idea might be impractical because the issue of underpriced fishing rights is likely to go unnoticed. The subsidy law's technical difficulties may also discourage a challenge to underpriced fishing rights. Opening an anti-subsidy war against fishing rights can be counterproductive for all fishing countries. Nevertheless, it should be possible to employ countervailing duties against the government's inadequate collection of fishing rights costs (underpriced fishing rights) in a government-paid fishing access agreement.

Third, an observation on the applicability of green CVDs has been provided. Though currently supported by WTO subsidy jurisprudence, this green trade instrument is unstable because its legal foundation comes from the WTO judiciary rather than treaty language. This means such legal foundation could be altered or even dismissed in the future; consequently, the permission to use countervailing duties against the underpriced natural resource allocation

[786] WTO, above n 11.

might be abolished. Further, this green trade instrument's applicable scope might be limited only to "industrial" resources, such as commercial forests or minerals, but it might not apply to "consumer" resources such as fisheries or public grasses. Indeed, no one has had sufficient political and ethical courage to impose countervailing duties against the below-market allocation of such public policy resources.

(iii) Contribution to the field

The dissertation is expected to contribute to the current scholarship in two domains.

In international trade law, a comprehensive picture of natural resources under the GATT/WTO subsidy regime has been investigated – a troublesome issue as observed by Professor John H. Jackson. Most literature concerns the legal foundation set in *Softwood Lumber IV*; the jurisprudential development since this landmark dispute has been further sketched. It has been argued that placing natural resource exploitation rights under the WTO subsidy regime might result in abuse under the existing jurisprudence. There may be a collision between the market-based subsidy regime and the non-market natural resource endowment. To get rid of this potential rationale collision, the non-market benchmarking mechanism should be used to create the *lex spcialis* treatment of natural resources under WTO subsidy law.

In trade and the environment, it has been demonstrated that the WTO subsidy law's development can facilitate countervailing duties for natural resource sustainability. This adds a perspective to the past debate on the use of this offsetting instrument for environmental protection. However, there may be limited applicability of this green trade instrument for natural resource conservation. Its legal foundation is unstable, so it can be inactivated in the future. It can be effective for specific industrial resources, such as commercial forests or minerals, but ineffective for consumer resources like fisheries.

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