ICTSD
International Centre for Trade and Sustainable Development

WORLD ECONOMIC FORUM
COMMITTED TO IMPROVING THE STATE OF THE WORLD

The E15 Initiative

STRENGTHENING THE GLOBAL TRADE AND INVESTMENT SYSTEM FOR SUSTAINABLE DEVELOPMENT

Export Restrictions in Relation to Extractive Industries

Ilaria Espa

November 2015

E15 Expert Group on
Trade and Investment in Extractive Industries

Think Piece

Co-convened with

iisd

ACKNOWLEDGMENTS

Published by

International Centre for Trade and Sustainable Development (ICTSD)
7 Chemin de Balexert, 1219 Geneva, Switzerland
Tel: +41 22 917 8492 – E-mail: ictsd@ictsd.ch – Website: www.ictsd.org
Publisher and Chief Executive: Ricardo Meléndez-Ortiz

World Economic Forum
91-93 route de la Capite, 1223 Cologny/Geneva, Switzerland
Tel: +41 22 869 1212 – E-mail: contact@weforum.org – Website: www.weforum.org
Co-Publisher and Managing Director: Richard Samans

Acknowledgments

This paper has been produced under the E15Initiative (E15). Implemented jointly by the International Centre for Trade and Sustainable Development (ICTSD) and the World Economic Forum, the E15 convenes world-class experts and institutions to generate strategic analysis and recommendations for government, business, and civil society geared towards strengthening the global trade and investment system for sustainable development.

For more information on the E15, please visit www.e15initiative.org/

The Expert Group on Trade and Investment in Extractive Industries is co-convened with the International Institute for Sustainable Development (IISD). http://www.iisd.org/

Ilaria Espa is the Marie Curie (COFIT) Senior Research Fellow at the World Trade Institute.

With the support of:

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Canada

And ICTSD's Core and Thematic Donors:

Department for International Development

SWEDEN

Ministry of Foreign Affairs

Ministry of Foreign Affairs of Denmark
Ministère des Affaires étrangères du Danemark

Ministry for Foreign Affairs of Finland

Citation: Espa, Ilaria. *Export Restrictions in Relation to Extractive Industries.* E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, 2015. www.e15initiative.org/

ISSN 2313-3805

ABSTRACT

The use of export restrictions in relation to extractive industries at the multilateral level has gained prominence in the international trade debate in the last few years due to their proliferating use on non-fuel minerals and metals and, to a lesser extent, energy commodities. Concerns arose in particular at the end of the 2000s, when the number of newly introduced and/or increased export restrictions peaked, representing the fastest-growing component of trade restrictions introduced during the economic and financial crisis according to the World Trade Organization (WTO). The use of export restrictions in the extractive sector has proved particularly controversial due to their ambivalence. On the one hand, they could in principle mitigate, under certain conditions, the negative environmental externalities linked to extractive activities by slowing the pace of extraction, and, consequently, the rate of depletion of finite resources. On the other hand, they may also serve industrial purposes inasmuch as they de facto subsidize domestic downstream producers to the detriment of foreign competitors. Due to this inherent duality, export barriers have been firmly contested by affected countries as beggar-thy-neighbour instruments distorting trade and competition. In contrast, resource-rich developing countries have defended the right to use such instruments as legitimate economic and sustainable development tools.

Recent trends show that export barriers are to remain critical for extractive industries. Sector-specific challenges make them particularly exposed to the "perverse" effects associated with export restrictions. Yet, current WTO rules on the export side are overall fragmented and under-implemented. As a result they do not always prove coherent with the basic principle of the General Agreement on Tariffs and Trade (GATT) system, according to which tariffs are the preferred and acceptable form of protection. Against this backdrop, the paper explores some avenues for improving multilateral disciplines on export restrictions in the direction of greater transparency, predictability, and flexibility. Although acknowledging that attempts at reform may encounter much scepticism, if not open resistance, it is argued that traditional opponents would actually be the first to gain from more comprehensive and balanced disciplines re-establishing a level playing field among all WTO Members. Further, a multilateral solution remains essential if one considers that the countries more actively engaging in the use of export restrictions, at least for what concerns the extractive sector (for example, China, the Russian Federation), have not yet concluded free trade agreements with those players, such as the EU, that systemically pursue a WTO-plus strategy based on the complete removal of export duties that systemically pursue a WTO-plus strategy when negotiating provisions on export restrictions in their bilateral and regional trade agreements.

The solutions proposed have the potential to be implemented independently from each other. At the same time, they are incremental in the sense that they could mutually reinforce and complement each other. In this respect, a reform addressing all three "dimensions" of transparency, predictability, and flexibility would have better chances to reach higher levels of commitment in each of the dimensions than if it tackled any of them individually. For these reasons, a new agreement, either focused exclusively on export barriers or addressing the issue of export restrictions among other regulatory challenges related to extractives on a (more or less) broader sectoral basis), remains the first-best solution to raise the ambition of any reform of WTO disciplines on the export side. Under such an agreement, WTO Members could agree on a centralized regime for administering notification and consultation requirements, clarify the applicability of the scheduling and binding procedure already envisaged for import tariffs under Article II:1(b) GATT to export duty concessions and commit to use it across-the-board to negotiate export tariff bindings in GATT schedules on a system-wide basis. They could also envisage flexibilities that go beyond those already available to export restrictions under the GATT. An agreement of this kind could represent a workable compromise between net-importing WTO Members and resource-endowed developing country Members, and dissipate the inconsistencies emanating from the WTO accession regime on export duties as revealed in *China – Raw Materials* and *China – Rare Earths.* Finally, by creating the conditions for the launch of multilateral negotiations on export duty concessions, and limiting the availability of additional flexibilities to export duty commitments included in GATT schedules, it would provide WTO Members with the right incentives to privilege export taxes over more trade-restrictive quantitative restrictions, in keeping with the spirit of the multilateral trading system.

CONTENTS

Introduction 1

Export Restrictions on Extractive Resources: Some Basic Features 1

Export Restrictions on Minerals and Metals 1

Export Restrictions on Energy Commodities 2

Problem/Opportunity 3

Lack of Transparency 4

Lack of Predictability 4

Lack of Flexibility 5

Responses 6

Transparency 6

Predictability 7

Flexibility 8

Conclusion 9

References 10

LIST OF ABBREVIATIONS

AB	Appellate Body
AoA	WTO Agreement on Agriculture
CDDCs	commodity-dependent developing countries
DoE	US Department of Energy
EU	European Union
FTA	free trade agreement
GATT	General Agreement on Tariffs and Trade
ITA	Information Technology Agreement
LDCs	least developed countries
MFN	most favoured nation
NAMA	non-agricultural market access
NGMA	Negotiating Group on Market Access
OECD	Organisation for Economic Co-operation and Development
QRs	quantitative restrictions
RTAs	regional trade agreements
SDT	special and differential treatment
SGGs	special agricultural safeguards
TPRB	WTO Trade Policy Review Body
TTIP	Transatlantic Trade and Investment Partnership
UNCTAD	United Nations Conference on Trade and Development
US	United States
WTO	World Trade Organization

INTRODUCTION

This paper considers concrete policy options to better regulate the use of export restrictions in relation to extractive industries at the multilateral level. The topic has gained prominence in the international trade debate in the last few years due to the proliferating use of export restrictions on non-fuel minerals and metals and, to a lesser extent, energy commodities. Concerns arose in particular at the end of the 2000s, when the number of newly introduced and/or increased export restrictions peaked, representing the fastest-growing component of trade restrictions introduced during the economic and financial crisis.[1] Still in 2013–2014, export restrictions accounted for 27 percent of the total number of trade-restrictive measures introduced by World Trade Organization (WTO) Members, the highest percentage ever registered since the beginning of the crisis.[2] The latest "Report on Potentially Trade-Restrictive Measures" prepared by the Directorate-General for Trade of the European Commission in November 2014 warns against the resurgence of exports restrictions, emphasizing that it is "particularly alarming as all countries are globally dependent on each other's natural resources" (European Commission 2014: 13).

The use of export restrictions in the extractive sector has proved particularly controversial due to their ambivalence. On the one hand, they could in principle mitigate, under certain conditions, the negative environmental externalities linked to extractive activities by slowing the pace of extraction and exploitation, and, consequently, the rate of depletion of finite resources (Korinek and Kim 2010: 119; Fung and Korinek 2014: 19–20). On the other hand, they may also serve industrial purposes inasmuch as they de facto subsidize domestic downstream producers to the detriment of foreign competitors (Fung and Korinek 2014: 34).

Due to this inherent duality, export barriers have been firmly contested by affected countries as beggar-thy-neighbour instruments distorting trade and competition.[3] In contrast, developing countries, be it resource-rich emerging economies or commodity-dependent developing countries (CDDCs), have defended the right to use such instruments as legitimate economic and sustainable development tools. According to this line of argument, export restrictions are not about achieving industrial promotion as a goal in and of itself. Rather, they are a means to move towards and/or consolidate a model of economic growth and sustainable development based on export diversification and industrial base growth, in accordance with the principle of sovereignty over natural resources.[4] The fact, however, remains that due to the high concentration of extractive resources, a relatively limited number of large suppliers detain substantial export market shares and are thus in a position to exert pressure on world prices and world supply through the use of export barriers (Fliess et al. 2014: 15–22). In many instances, these countries also use export restrictions as part of comprehensive industrial policy programmes (see, for example, European Commission 2012; Salzman and Wu 2014: 401).

Against this backdrop, this paper will first briefly describe recent trends in the use of export restrictions on mineral and energy resources (Section 2). Section 3 will give an account of the main shortcomings in the WTO legal treatment of export restrictions in terms of transparency, predictability, and flexibility. Section 4 will discuss possible avenues for designing more coherent and balanced disciplines capable of ensuring greater transparency and predictability in the interest of secure access to supplies, while still preserving policy space for host countries to use such measures as legitimate development tools under certain conditions. This will be followed by some conclusions on the opportunity for renewing engagement towards reforming WTO rules on export restrictions.[5]

EXPORT RESTRICTIONS ON EXTRACTIVE RESOURCES: SOME BASIC FEATURES

EXPORT RESTRICTIONS ON MINERALS AND METALS

The most frequently used types of export restrictions in the minerals and metals sector include export taxes, export bans, and export quotas.[6] Export taxes or duties, generally defined as "financial charge[s] or tax[es] on exported products, due because of their exportation" (Van den Bossche and Zdouc 2013: 470),[7] are the prevalent type of measure used to restrict exports of mineral products.

1 WTO Doc. WT/TPR/OV/14, 21 Nov. 2011, p. 17.

2 WTO Doc. WT/TPR/OV/W/8, 27 June 2014, p. 23.

3 See GATT Doc. MTN.GNG/NG2/W/40, 8 Aug. 1989; WTO Doc. TN/MA/W/11/Add. 6 , 27 Apr. 2006; WTO Doc. TN/MA/W/101 , 17 Jan. 2008.

4 See GATT Doc. MTN.GNG/NG2/W/40, 8 Aug. 1989; Radetzski (2010: 207–10); WTO Doc. WT/MIN(11)/ST/19, 16 Dec. 2011, cited in WTO Doc. WT/TPR/S/277, 13 Feb. 2013, p. 96; WTO Doc. WT/TPR/M/249/Add.2, 28 Oct. 2011, p. 45; Panel Reports, *China – Rare Earths,* paras. 7.364–615.

5 Overall, this paper draws from Espa.

According to the Organisation for Economic Co-operation and Development (OECD), 144 measures at the HS 6-digit level of product classification were applied on primary and/or semi-processed forms of minerals and metals and another 141 on metal waste and scrap (cumulatively affecting 55 groups of minerals and metals) by a total of 23 countries in the years 2009–2012 (Fliess et al. 2014: 11–12). The bulk of these measures were adopted after 2009, with the types of products subject to restrictions substantially remaining unchanged since then (Fliess et al. 2014: 7). The average export tax in 2012 was approximately 11 percent for both primary minerals and metals and waste and scrap products, although the highest tax rate significantly differed (respectively 30 percent and 50 percent) (Fliess et al. 2014: 29).

The majority of the measures in place are applied by a limited number of countries, including China, the Russian Federation, Argentina, India, and Vietnam. Often, these countries individually control a significant (if not dominant) share of world exports (OECD Inventory). Other large suppliers applying export duties on more than one group of minerals and metals include the Democratic Republic of the Congo, Malaysia, and Indonesia. Finally, a number of least developed countries (LDCs) and small developing countries also apply export taxes either on selected minerals products or on different waste and scrap metals (for example, Gabon, Zambia, Zimbabwe, Sri Lanka, Pakistan, Kazakhstan, Afghanistan) (OECD Inventory).

Export quantitative restrictions or QRs (that is, restrictions that operate by limiting the volume of exports) have been used somewhat more moderately. Use of absolute bans has been confined to a few countries prohibiting exports of specific types of minerals and metals. Examples include Zimbabwe, the Philippines, and Venezuela, which respectively ban exports of chromium ores and concentrates (since 2007), platinum group metals ores and concentrates (since the 1970s), and ash and residues containing antimony, beryllium, chromium, copper, and precious metals (since 2005).[8] In contrast, Indonesia has prohibited exports of unprocessed minerals altogether (with the exception of coal) since 12 January 2014 (European Commission 2014: 101; Ramdoo 2015). Export prohibitions are however on the rise in the waste and scrap metal sector. According to the OECD, "export prohibitions account for a much higher share of total export restrictions in this industry (8% in 2009 and 23% in 2012) than in the primary minerals and metals industry (5% in 2009 and 14% in 2012)" (Fliess et al. 2014: 19). Among the countries resorting to such measures are Azerbaijan, Burundi, Guyana, Jamaica, Kenya, Rwanda, Tanzania, Uganda, and Venezuela (OECD Inventory).

Export quotas (that is, numerical ceilings used to limit the maximum volume of exports of a certain product) (Fliess et al. 2014: 40) have reportedly been used by China, Ukraine, and Belarus since 2008 (OECD Inventory). Belarus has employed export quotas on various forms of ferrous and non-ferrous (copper, nickel and aluminium) waste and scrap (OECD Inventory), while Ukraine has imposed such measures on copper ash and residues, as well as on gold and silver waste and scrap forms (OECD Inventory). China accounts for the wide majority of export quotas currently in place on minerals and metals. In 2009–2012, exports of 44 groups of minerals were capped in China based on the OECD Inventory (Fliess et al. 2014: 13), corresponding to 193 tariff lines at HS 8-digit level, according to China's 2013 Trade Policy Review.[9]

Finally, WTO Members have predominantly tightened existing export restrictions in the last few years (for example, through export duty increases or, in the case of export quotas, cap reductions) (OECD Inventory). Sporadically, however, export restrictions were phased out or relaxed. China removed a number of export duties and quotas in accordance with the Appellate Body's rulings in the *China – Raw Materials* and *China – Rare Earths* disputes. Yet, in some cases it concurrently reinforced other types of export restrictions (for example, it announced tighter export licensing rules on rare earths after eliminating the export quotas). Other newly acceded WTO Members, including the Russian Federation, Vietnam, and Ukraine, have reduced and/or removed export duties on selected mineral products as agreed upon under their accession protocols.

EXPORT RESTRICTIONS ON ENERGY COMMODITIES

As with the minerals and metals sector, export taxes are the most commonly reported type of export restrictions applied on energy commodities. Countries generally use such measures in the attempt to reap the benefits of high energy prices and/or achieve price insulation goals for domestic consumers at times of price increases. Accordingly, several large energy exporters have raised export taxes on petroleum, natural gas, and/or related products in the last few years. The Russian government has, for instance, repeatedly increased the export duty rates applied on energy

6 According to the Organisation for Economic Co-operation and Development (OECD), non-automatic export licensing schemes are the most commonly used type of export restriction (Fliess et al.2014: 9). Non-automatic licensing schemes can be employed to administer export quotas or as an instrument in and of itself. Depending on how they operate, they may have a negative impact on export volumes (for example, when they result in excessively long processing times and/or impose discretionary requirements). Detailed information on the concrete functioning of these measures is, however, often hard to obtain (Fliess et al.2014: 33). As for WTO case law, non-automatic licensing schemes constitute a "restriction" within the meaning of Article XI:1 of the General Agreement on Tariffs and Trade (GATT) only insofar as they have a limiting effect on trade, that is, they must affect export volumes. See Panel Report, *China – Raw Materials,* paras. 7.915–8.

7 As measures levied at the customs level, they are also labelled export "tariffs" analogously to those applied on the import side.

8 Between 2010 and 2011, Zimbabwe substituted the export ban with an export tax (OECD Inventory).

9 WTO Doc. WT/TPR/S/300/Rev.1, p. 81.

products since the early 2000s (European Commission 2014: 103). Purportedly, such adjustments coincided with upward adjustments of world energy prices, although in some instances affected partners denounced them as prohibitive (European Commission 2014: 103). Since its accession to the WTO in 2011, the Russian Federation agreed to bind the export duty rates applied on oil and gas products on the basis of specific formulas incorporated into its Schedule of Concessions annexed to the General Agreement on Tariffs and Trade (GATT).[10] Other net-exporters that have introduced and/or tightened export duties applied on energy commodities lately are Kazakhstan (European Commission 2014: 102)[11] and Argentina.[12] Other WTO Members such as Nigeria[13], Mexico[14] and Malaysia[15] also tax exports of petroleum products, albeit not prohibitively.

Export quantitative restrictions are employed in the energy sector by relatively well-endowed net-importing countries to relieve import dependence and/or avoid supply shortages. Among them are large world energy producers and consumers such as the United States (US) and China. In China, exports of coal, crude oil, and processed oil are subject to state trading,[16] and to quotas administered through non-automatic export licensing.[17] According to the Chinese government, these restrictions purport to ensure adequate domestic supply and exhaustible natural resources conservation.[18] As the world's largest energy consumer and importer, China seems unlikely to phase out these restrictions in the near future.[19]

The US severely restricts exports of crude oil and natural gas. Crude oil exports are prohibited unless they fall under the scope of specific statutory control regimes provided in the Export Administration Regulations on Short Supply Controls of the US Bureau of Industry and Security (BIS).[20] In the affirmative, they may be authorized, provided that the US president specifically ascertains, in a report submitted to the Congress, that they will not diminish the total quantity or quality of petroleum available to the US and are in the national interest.[21] Natural gas exports are also strictly monitored through a non-automatic licensing scheme administered by the US Department of Energy (DoE). So far, the DoE has delayed the granting of the licenses and conditioned issuing them to a somewhat discretionary national interest test.[22] The US export regime was established in the 1970s in an attempt to avoid excessive dependence on Arab oil. Since then, however, the US shale revolution has gradually transformed the US, traditionally a top world energy importer, into the largest global producer of oil and natural gas (Sieminski 2014). Prospects of self-sufficiency have opened new scenarios for the US, which could possibly entail the removal of US export barriers on energy products. Consensus on the matter is, however, far from being reached (Espa and Holzer 2015). On a more general level, it also remains to be seen whether the recent trend of falling energy prices will affect the landscape of export restrictions on energy commodities (Plumer 2015).

PROBLEM/OPPORTUNITY

The proliferation of export restrictions on extractive resources creates a pressing need to enhance transparency and predictability in the regulation of export restrictions, not only at the level of regional trade agreements (RTAs) but also multilaterally. While the improvement of existing WTO disciplines on the export side may by some be considered sceptically as an option, it is important to note that, as they currently stand, WTO rules have created huge discontent due to wide disparities in the rights and obligations of different Members. The lack of flexibility in the commitments assumed individually by a number of newly acceded developing country Members has in particular come under the spotlight in the aftermath of the *China – Raw Materials* and *China – Rare Earths* Appellate Body rulings. The clarification and evolution of existing WTO disciplines may represent an opportunity for those developing country

10 See footnote # and footnote ## in Part V of the Russian Federation's Schedule, WTO Doc. WT/MIN(11)/2/Add.1, 17 Nov. 2011.

11 Kazakhstan also banned exports of various gas products from May 2010 to July 2012.

12 WTO Doc. WT/TPR/S/277, Trade Policy Review of Argentina, 13 Feb. 2013, p. 96, 145.

13 WTO Doc. WT/TRP/S/247, Trade Policy Review of Nigeria, 24 May 2011, p. 33.

14 WTO Doc. WT/TRP/S/279, Trade Policy Review of Mexico, 27 Feb. 2013, p. 84.

15 Chelliah (2011); WTO Doc. WT/TRP/S/292, Trade Policy Review of Malaysia, 27 Jan. 2014, pp. 58-59.

16 WTO Doc. WT/TPR/S/300, Trade Policy Review of China, 27 May 2014, p. 104.

17 The responsible institution is the Chinese Ministry of Commerce. Trade Policy Review of China, 27 May 2014, pp. 81–82.

18 Trade Policy Review of China, 27 May 2014, p.103.

19 Since 2010, China has been the top world energy consumer, accounting for 17.5 percent of global energy consumption (US Energy Information Administration 2014).

20 For a full account, see Espa and Holzer 2015.

21 The Congress has 60 days to veto the presidential authorization. Under the US Export Administration Act, the president may also restrict exports of refined petroleum products. However, this authority was not exercised since 1981 (Espa and Holzer 2015).

22 Exports to free trade agreement (FTA) partners are presumed to be in the public interest. However, there is no official list of eligibility requirements which should guide the process of approving applications involving exports to non-FTA trading partners (US Congressional Research Service 2013: 14-15).

Members traditionally resistant to change but currently penalized by the effects of their individual obligations (for example, China), as long as reform attempts provide secure policy space to address their economic and sustainable development concerns.

LACK OF TRANSPARENCY

Monitoring of export restrictions has increased in the last few years. Since the outbreak of the financial and economic crisis, in particular, a number of surveillance mechanisms were put in place, which cover export restrictions as well. These include the G20-mandated joint reports on trade and investment measures, released twice a year by the Secretariats of the WTO, the OECD and the United Nations Conference on Trade and Development (UNCTAD),[23] the reports on potentially trade-restrictive measures of the Directorate-General for Trade of the European Commission,[24] and the periodic trade monitoring reports issued by the WTO Director General to the Trade Policy Review Body (TPRB).[25] Recently, the OECD has compiled the first factual inventory of export restrictions, covering more than 80 industrial raw materials in their primary, semi-refined and waste and scrap forms at the HS6 level of product classification by 84 countries (including the five leading producers of each of materials considered) for the period 2009–2012.[26] Although such initiatives have contributed to mapping patterns of use of export restrictions, lack of transparency still stands as a major issue, particularly in the extractive sector—where uncertainty may be particularly detrimental due to the time disconnect between investment decisions and extraction itself (Fung and Korinek 2014: 27; Agatiello and Fliess 2013: 32; Fliess et al. 2014: 33). The OECD has in particular warned against the unavailability of systemic and comparable data due to the "relative paucity of information published on governmental websites and the fact that not all measures are notified in the WTO" (Fliess et al. 2014: 31).

Under the current WTO regime, there are no notification requirements specific to export restrictions. WTO Members introducing and/or modifying "export duties" and other types of "export restrictions" are bound by the general notification requirements established under the 1993 Uruguay Round Ministerial Decision on Notification Procedures inasmuch as such measures are listed in the List of Notifiable Measures annexed to the Decision. Yet, such requirements are formulated quite loosely, as WTO Members are obliged to notify, to the maximum extent possible, trade measures affecting the operation of GATT 1994 "guided, as appropriate, by the annexed list of measures." Accordingly, no compliance mechanism is envisaged, and WTO Members are simply reminded of their regular notification obligations each year by the WTO Secretariat and, eventually, solicited in the event of non-fulfilment.

A fairly stricter regime applies to quantitative export restrictions, which fall within the scope of the Decision on Notification Procedures for Quantitative Restrictions adopted by the Council for Trade in Goods on 1 December 1995.[27] The Decision was recently revised because of its modest level of implementation (Agatiello and Fliess 2013: 13–14). As of 2012, WTO Members are required to make complete notifications of all quantitative restrictions in force every two years, and to notify any variations as soon as possible, and in any case no later than six months from their entry into force. All information provided by Members is then merged into a public database compiled by the WTO Secretariat, which also circulates a report based on such information every year.[28]

LACK OF PREDICTABILITY

Under current WTO rules, Members enjoy different margins of manoeuvre depending on whether they apply export duties or quantitative export restrictions, and on whether they are exclusively bound by GATT obligations or have abided by specific obligations that exceed those arising under the GATT. Such "WTO-plus" commitments have been assumed by a number of newly acceded WTO Members in their post-1994 accession protocols.

As to GATT general disciplines, Article XI:1 distinguishes export duties or taxes from quantitative export restrictions. The latter are outlawed in the same way as import quantitative restrictions, whereas export duties or taxes fall outside the scope of the elimination obligation. In contrast to the legal treatment of import tariffs, however, the GATT does not explicitly envisage a mechanism for scheduling and binding export duties à la Article II:1 (b), although Article XXVIII (bis) encourages WTO Members to negotiate import and export duty commitments alike. WTO Members thus remain free to schedule and bind export duties in their GATT schedules following the same procedure used for import tariff

23 The first report was released in January 2009 and the most recent one on June 2015 (WTO 2015).

24 The first report was distributed in Nov. 2008 and the last report was released in Nov. 2014 (European Commission 2014).

25 The last report was issued in Nov. 2014 (see WTO Doc. WT/TPR/OV/17, 24 Nov. 2014). The WTO Secretariat has also created a database covering information on the trade-restrictive measures contained in the Trade Monitoring Reports ("Trade Monitoring Database," http://tmdb.wto.org).

26 The OECD Inventory also covers wood products (Fliess et al.2014: 22). According to the OECD, the Inventory "covers 80% of world production volume of minerals, metals and wood in their primary state and a large share of related global trade (67% of 2012 total value of exports of primary raw materials, 45% of total exports of primary and semi-processed materials combined, and over 90% of exports of metals waste and scrap)" (Fliess et al.2014: 22). Along the same lines, the OECD has also created an inventory for agricultural commodities (Liapis 2013).

27 WTO Doc. G/L/59, 10 Jan. 1996.

28 WTO Doc. G/L/59/Rev.1, 22 June 2012.

concessions. Once included in GATT schedules, export duty concessions would thus be binding and legally enforceable by virtue of Article II:1(a) and Article II:7 (Ehring and Chianale 2012: 112–117), and could be subject to the deconsolidation procedure under Article XXVIII (see, for example, Matsushita 2011: 273; Qin 2012: 1160–61).

However, WTO Members bound exclusively by GATT obligations have generally lacked the incentive to schedule and bind export duties. So far, only Australia has negotiated export duty concessions in its GATT schedule by inserting an ad-hoc note referring to 11 HS 8-digit tariff lines—accounting for a predominant share of its exports of mineral products (that is, iron ore, titanium ore, zirconium ore, coal, peat, coke, refined copper, unwrought nickel, nickel oxide, and lead waste and scrap)—in Section 2 of Part I of its Schedule on "MFN [most-favoured nation] import tariff commitments on non-agricultural products." The note states: "There shall be no export duty on this product."[29]

In the context of its WTO accession, the Russian Federation has also negotiated export duty concessions following the scheduling and binding procedure already envisaged in the GATT. In particular, it created a new Part in its GATT Schedule—Part V "Export Duties"—where it included export duty concessions on more than 700 tariff lines. In this respect, the Russian case represents the first example of systematic incorporation of export duty commitments in the form of concessions into a Member's GATT schedule as admitted by GATT provisions. Yet, it has so far remained an isolated case, even among the newly acceded WTO Members that did assume specific WTO-plus obligations on the use of export duties in their accession protocols.

Nine other WTO Members (Mongolia, Latvia, Croatia, China, Saudi Arabia, Vietnam, Ukraine, Montenegro, and Tajikistan) have assumed country-specific obligations on the use of export duties in the context of their accession to the WTO. These WTO-plus commitments are quite uneven in scope and coverage, with some countries abiding by general elimination obligations (for example, China) and others committing to phase down and bind the export duties applied on a specific list of products (for example, Saudi Arabia, Vietnam, Ukraine). In all cases, however, these obligations were not incorporated into the respective GATT schedules but rather assumed under individual accession protocol provisions. Accordingly, they cannot be adjusted in accordance with GATT-specific procedures in principle applicable to exports duty concessions included in GATT schedules (for example, Article XXVIII). The extent to which they can be modified and/or withdrawn depends on whether accession protocol provisions can be amended.[30]

Overall, the wide majority of WTO Members remains under no obligation as to the use of export duties. The paucity of commitments in the area of export duties makes it a key area to address in view of achieving greater predictability in the regulation of export restrictions.

LACK OF FLEXIBILITY

WTO Members seeking justification for export restrictions used in derogation from their commitments under legitimate circumstances are not always in the position to invoke existing GATT flexibilities. The most notable example concerns newly acceded WTO Members that assumed WTO-plus obligations on export duties in individual provisions of their accession protocols. As explained above, these Members cannot adjust such commitments as allowed by the deconsolidation procedure envisaged under Article XXVIII GATT. Moreover, these commitments are not necessarily subject to GATT general exceptions such as those recognized under Article XX. Based on the AB ruling in *China – Rare Earths,* export duties imposed in breach of an accession protocol provision may be justified by invoking GATT general exceptions only insofar as such a provision has an objective link to the GATT 1994 or to the exception sought (to be established on a case-by-case basis). In other words, the availability of GATT general exceptions depends on the specific language of the individual accession protocol provisions, interpreted in their relevant context and in light of the overall architecture of the WTO Agreement and the specific circumstances of each case.

Such conditionality in the applicability of GATT general exceptions may create the absurd incentive to substitute export duties with more trade-distortive, but GATT-inconsistent, quantitative types of export restrictions in WTO Members bound by WTO-plus obligations whose language excludes the availability of Article XX (for example, China) (in this sense, see also Baroncini 2011). Moreover, it widens the differences among WTO Members in terms of their rights and obligations with regard to the use of export duties, creating what Qin calls a "multi-tiered" membership (Qin 2012: 1161-62). Not surprisingly, the fragmentation of WTO disciplines on export duties has deepened the divide between import-dependent WTO Members and resource-endowed developing country Members. The latter have in particular contested the substantial inequalities created by the WTO accession regime on export duties, allegedly in contrast with "constitutional" WTO principles such as the principles of non-discrimination and reciprocity but also with general international law principles such as the principle of sovereignty over natural resources.

More generally, GATT-inconsistent export restrictions, be it Article XI-inconsistent QRs, export duties in excess of those set forth in GATT schedules, or export duties in violations of WTO-plus obligations contained in accession

29 Australia's Uruguay Schedule, AUS1-201 through AUS1-204. Such commitments were undertaken in exchange for certain import commitments of the European Communities, and then extended to all WTO Members under the MFN clause (Ehring and Chianale 2012: 114).

30 The matter is far from settled as explained by Qin (2012: 1158).

protocol provisions, are not subject to the whole range of exceptions available to GATT-inconsistent restrictions on the import side. Examples of import-specific exceptions include a number of economic development and emergency exceptions—(i) Article XVIII (c) GATT, which allows low-income developing country Members to deviate from import concessions in order to protect infant industries; (ii) Article XII and XVIII (b) GATT, which address temporary balance of payments disequilibria; and (iii) Article XIX GATT, which permits WTO Members to withdraw or modify tariff concessions if, as a result of unforeseen developments, a sudden, sharp and substantial surge of imports significantly impairs the position of a domestic industry.

The rigidity of GATT disciplines on the export side may be explained by the relative marginality of export restrictions at the time of the genesis of the GATT. Yet, inasmuch as the proliferation of export barriers creates a pressing need for stronger WTO rules, it may restrain WTO Members from accepting to raise their levels of commitment, particularly in the area of export duties where lack of engagement is already an issue. This all the more holds true for newly acceded WTO Members whose policy space is limited by the undertaking of inflexible WTO-plus obligations.

Flexibility therefore appears an essential element of any proposals aimed at initiating a discussion on how to reform current WTO rules on the export side. Any reassessment of existing WTO disciplines would have no chance to overcome the resistance of Members unless they can be reassured they would not irrevocably lose policy space to use export restrictions to pursue their own economic and sustainable development needs (see Liu and Maughan 2012).

RESPONSES

This section discusses possible avenues for enhancing transparency, predictability and flexibility of WTO disciplines on export restrictions. The options proposed are not mutually exclusive but incremental. They go in the direction of greater regulatory coherence while having in mind the need to restore a climate of trust among WTO Members as the necessary precondition for raising the level of ambition of any attempt at reform. Because of the limits of current WTO rules on export duties, and the inconsistencies emanating from the fragmentation of such disciplines, the options discussed address the area of export duties in particular.

TRANSPARENCY

Action on transparency remains crucial in the area of export restrictions in general (Bellmann and Wilke 2012: 200–201), and all the more so in the case of export restrictions applied in the extractive sector, where decision and implementation lags make industries more exposed to uncertainty risks (Fung and Korinek 2014: 19). Although recent initiatives have made considerable progress in monitoring export restrictions, the lack of transparency remains, in the words of the OECD, "disconcerting" (Fliess et al. 2014: 33), and has been attributed by it to the weakness of the notification requirements applicable to export restrictions in the WTO (Fliess et al. 2014: 31).

A possible way to remedy lack of information could be to put in place a centralized regime for the notification of all types of export restrictions at the WTO, to be administered by an ad hoc committee. Such a regime could build on the model established by the 2012 revision of the Decision on Notification Procedures for Quantitative Restrictions, and introduce stricter time limits and content requirements for WTO Members. For instance, WTO Members could be required to make complete notifications of all export restrictions (duties and QRs) in force every year, and to notify any new measures, or any variations thereof, within a reasonable period of time (for example, 60 days) before the effective date of entry into force.[31] Counter-notification could also be allowed.[32] The committee would regularly review the notifications and counter-notifications and make recommendations on the adequacy of the notifications and the need for further information, including on the effect of the notified measures on trade.[33] All information provided by Members would then be made available to the public. A report could also be circulated every year based on such information. The notification regime could be strengthened through the introduction of consultation requirements, also to be administered by the committee. An interesting model in this respect could be the Committee on Balance of Payments Restrictions.

The centralization of information regarding export restrictions, matched with standardized consultation procedures, would have the potential to ensure better and wider monitoring of export restrictions compared to the plethora of voluntary initiatives covering export restrictions. The implementation of such a regime could nevertheless benefit from close cooperation with institutions active

31 The limit of 60 days was, for instance, envisaged in the European Union (EU) proposal for a WTO Agreement on Export Taxes tabled in the context of the Doha Negotiating Group on Non-agricultural Market Access (NAMA). See WTO Doc. TN/MA/W/11/Add.6, 27 Apr. 2006, Article 7.

32 See WTO Doc. G/L/59/Rev.1, 22 June 2012, para. 5.

33 See Uruguay Round Understanding on the Interpretation of Article XVII of GATT 1994, para. 2.

in the area, such as the OECD, and be facilitated through passage of information. Importantly, strengthened rules on transparency of export restrictions could be part of a more comprehensive agreement covering other regulatory aspects, but also achieved independently by means of a decision adopted by the Ministerial Conference, which has the authority to take decisions "on all matters under any of the Multilateral Trade Agreements" in accordance with Article IV:1 of the Marrakesh Agreement. Pursuant to Article IV:7 of the Marrakesh Agreement, additional committees may also be established by the Ministerial Conference "with such function as it may deem appropriate." The General Council could also adopt such a decision in the intervals between the biennial meetings of the Ministerial Conference in accordance with Article IV:2 of the Marrakesh Agreement. A deal on transparency, although limited in scope, may, however, be conducive to foster action on the predictability side (Bellmann and Wilke 2012: 201).

PREDICTABILITY

Paucity of commitments in the area of export duties remains one of the main weaknesses in the WTO regulation of export restrictions. At the same time, WTO-plus obligations on export duties assumed by selected developing country Members in their post-1994 accession protocols, although in principle constituting a remedy to the general lack of predictability, have created substantial disparities among WTO Members, with the ensuing inconsistencies engendering growing mistrust in the system.

As a way to raise the level of commitment in this area while keeping in mind the need to identify an overarching principle governing the use of export taxes on a system-wide level, the European Union (EU) advanced a textual proposal in the Doha Negotiating Group on Non-agricultural Market Access (NGMA) centred on the principle of complete elimination of export duties.[34] The introduction of such a principle reflected the approach that the EU itself has successfully promoted, along with a number of other net-importing economies, in bilateral and regional trade agreements (see Fung and Korinek 2014). Yet, the opposition raised by the proposal made clear that WTO Members are not prone to accept a general prohibition obligation at the multilateral level.

A viable alternative may consist in launching multilateral negotiations of export duty concessions on a product-by-product basis following the scheduling and binding procedure already envisaged under Article II:1 (b) GATT for import tariff. Such a "negotiated solution" was generally advocated by the EU in its Revised Submission on Export Taxes although not sufficiently elaborated.[35] WTO Members could incorporate export tariff bindings in a new Part V devoted to "Export Duties" in accordance with the Russian model. Based on the same principle, export duty commitments already assumed under accession protocol provisions would also on the occasion be incorporated into Part V of the GATT schedules of the newly acceded WTO Members.[36] As such, the integration of WTO-plus obligations into GATT schedules would not increase their scope and coverage, although the Members concerned may also negotiate additional obligations (for example, increase the number of tariff lines scheduled and bound). Elimination commitments would correspond to zero bindings. Specific flexibilities could also be envisaged for LDCs and/or small and vulnerable economies. These countries could, for instance, schedule export taxes but maintain these export taxes unbound for all or only certain tariff lines depending on specific developing needs as suggested by the EU in its Revised Submission on Export Taxes.[37] A threshold could alternatively be set for according special and differential treatment (SDT), such as whether the country in question is a significant exporter (for example, accounting for more than 5 percent of world exports) of a specific product.

The negotiation of export duty concessions would be in keeping with GATT provisions, which admit the possibility for WTO Members to negotiate export duty concessions in their GATT schedules. Accordingly, negotiations could be envisaged in a post-2015 agenda without the need for formally amending the GATT or for concluding a new agreement, although an interpretative understanding could perhaps be useful to definitively clarify the applicability of the scheduling and binding procedure à la Article II:1(b) GATT to export duty concessions in light of Article II:1(a) and Article XXVIII (bis), including the deconsolidation procedure under Article XXVIII.

WTO Members could agree on specific modalities governing the negotiation of export duty concessions. Considering that a relatively limited number of WTO Members is currently responsible for a large share of the export taxes in place having beggar-thy-neighbour effects, at least in the extractive sector, modalities based on linear or tiered cuts would not necessarily provide such Members with the necessary incentive to engage in negotiations, whereas the "request-offer" modalities appear in principle more appropriate. Another viable solution would be to opt for the "sectoral approach," with product coverage limited to a specific list of raw materials, either solely of extractive origin or not. In theory, the larger the product

34 See WTO Doc. TN/MA/W/11/Add.6 27 Apr. 2006, Article 1. Specific flexibilities were, however, envisaged for developing country Members and especially LDCs (see Articles 2 and 3).

35 See WTO Doc. TN/MA/W/101, 17 Jan. 2008 paras. 8-9.

36 Qin argues that the inclusion of Part V into GATT schedules, incorporating existing WTO-plus commitments, would not require an amendment of the individual accession protocol provisions but just an amendment of the schedules. Accordingly, such commitments would constitute "new" concessions to be accommodated in accordance with internal GATT procedures used to record unilateral, bilateral and multilateral trade-liberalizing concessions. See Qin (2012: 1183), citing the Decision on Procedures for Modification and Rectification of Schedules of Tariff Concessions, 26 March 1980, GATT Doc. L/4962, BISD 27S/25.

37 See WTO Doc. TN/MA/W/101, 17 Jan. 2008, para. 9.

coverage, the greater the benefit WTO Members would get from negotiating export tariff bindings multilaterally, although it might be difficult to reach agreement on which raw materials to include.[38]

Independent of its concrete modalities, a negotiating solution would ensure greater levels of predictability while at the same time re-establishing a "level playing field" among WTO Members. By bringing all export duty commitments assumed by WTO Members into the GATT framework as per Article II:7, such a solution would in fact harmonize the procedure used to assume obligations in the area of export duties by all WTO Members and thus make available, automatically, relevant and applicable GATT adjustment procedures and exceptions across the board. WTO Members would thus be more inclined to accept lower levels of export tariff bindings as long as they are left with the right to renegotiate or derogate from scheduled commitments in accordance with the conditions set out under Article XXVIII and GATT general exceptions.[39] Accordingly, scheduling and binding export duties multilaterally could represent a workable compromise for various categories of WTO Members, from import-dependent countries advocating a stronger approach towards beggar-thy-neighbour export duties and newly acceded WTO Members currently constrained in their ability to resort to export taxes, to many developing countries whose aspiration to economic diversification may be hampered by abuses of such instruments by other countries.

FLEXIBILITY

The negotiation of export duty concessions at the multilateral level through a mechanism à la Article II:1(b) GATT would increase predictability in the area without compromising flexibility. WTO Members would be left with policy space to renegotiate their concessions in accordance with the deconsolidation procedure established under Article XXVIII GATT and/or use export taxes under the legitimate circumstances recognized under GATT general exceptions. Yet, a negotiating solution would not permit to extend flexibilities beyond those already envisaged under the GATT for imports and exports alike.

Support for such a solution in the area of export duties could increase, and the level of ambition of the negotiations be raised, if additional flexibilities were envisaged with the aim to reassure WTO Members that export duties could be used as development tools under specific circumstances. For instance, relevant import-specific exceptions available under the GATT could be extended to export duty concessions. In this respect, it is noteworthy that the EU proposal for a WTO Agreement on Export Taxes included an Article stating: "WTO Members, and in particular developing countries, may resort to export taxes by reference to Article XVIII GATT on governmental assistance to economic development and Article XII GATT on safeguarding the balance of payment." [40]

Confirming the availability of such exceptions would not frustrate predictability inasmuch as Article XII and Article XVIII GATT lay down specific conditions, rules, and procedures aimed at ensuring that import tariffs increases (or Article XI:1-inconsistent import restrictions) occur only after the WTO Member concerned has entered into negotiations or notified and consulted with affected WTO Members. Moreover, inasmuch as the extension of economic development exceptions would be conditioned to the negotiation of export duty concessions, the use of export tariffs over more trade-distortive QRs is in keeping with the spirit of the multilateral trading system.

In the same spirit, the introduction of an economic emergency exception could also work as a confidence-building mechanism. A safeguard clause applicable on the export side could ensure WTO Members maintain policy space in the event excessive surges of exports or price spikes caused by external upward shifts in world demand disrupt domestic supply and/or cause price volatility in domestic markets. Such a safety valve could, for instance, be based on price and quantity triggers similarly to what happens for the special agricultural safeguards (SSGs) envisaged under Article 5 of the WTO Agreement on Agriculture (AoA).[41] In other words, WTO Members scheduling and binding export duties could reserve the right to automatically increase them above negotiated levels when exports grow or domestic prices increase above a certain level.[42] Accordingly, WTO Members would once more be incentivized to engage in the negotiation of export duty concessions. The use of SSGs-like safeguards on the export side would, finally, need to comply

38 Should consensus on the reduction of export taxes through a negotiated solution fail multilaterally, a subset of WTO Members representing a "critical mass" could in principle still commit to schedule and bind export taxes along the lines just described on an agreed list of products, similarly to what happened in the case of the Information Technology Agreement (ITA). In such a case, a group of WTO Members would need to sign a Ministerial Declaration, whose provisions would come into effect upon acceptance by a number of Members collectively accounting for a sufficiently large percentage of world trade in raw materials as agreed on in the Declaration itself. The export tariff concessions would then be applied on a non-discriminatory basis (MFN).

39 Although potentially detrimental for affected partners, the renegotiation of export duty concessions would not alter the overall balance of concessions. According to Article XXVIII GATT, a WTO Member can modify or withdraw its concessions provided it guarantees compensatory adjustments. In the absence of compensatory adjustments, affected Members maintain the right to withdraw substantially equivalent concessions in order to "maintain a general level of reciprocal and mutually advantageous concessions not less favourable to trade than before." As to GATT general exceptions, the conditions set forth under Article XX are such as to ensure that WTO Members cannot legitimately derogate from their commitments unless legitimate circumstances require it and for the time strictly necessary, and only if alternative options are not reasonably available.

40 WTO Doc., TN/MA/W/11/Add. 6, 27 Apr. 2006, Article 5. The extension of such exceptions was envisaged as a way to mitigate the principle of complete elimination laid down under Article 1 of the proposed Agreement.

41 Price and/or quantity triggers could be modulated based on specific guiding criteria such as the development stage of WTO Members or the size of exports subject to taxes (and thus the impact of such measures).

42 See Article 5.1 AoA. SSGs can be employed only with respect to those products that were tariffed under Article 4 AoA.

with any notification requirements which might be agreed upon by WTO Members on the transparency side.[43]

Inasmuch as such flexibilities are either not envisaged in the GATT or import-specific only, they could be extended on the export side through amendment of the specific GATT provisions. They could also be incorporated into a new agreement, either devoted to regulating export taxes specifically or addressing, more or less comprehensively, the regulatory challenges emerging in the extractive sector, and including disciplines on export barriers. Accordingly, the requirements set forth in Article X of the Marrakesh Agreement would need to be fulfilled, namely acceptance by two-thirds of WTO Members for entry into force.[44]

CONCLUSIONS

The proliferation of export barriers is one of the greatest challenges of the 21th century. Recent trends show that the issue is to remain critical for extractive industries, which face sector-specific challenges that make them particularly exposed to the "perverse" effects associated with export restrictions.[45] Yet, current WTO rules on export restrictions are overall fragmented and under-implemented. As a result, they are at times not coherent with the basic principle of the GATT system, according to which tariffs are the preferred and acceptable form of protection.[46] Examples include those individual accession protocol provisions that impose export duty commitments on newly acceded WTO Members but do not have an 'objective link' to the GATT 1994.

Against this backdrop, this paper explored some avenues for improving multilateral disciplines on export restrictions in the direction of greater transparency, predictability, and flexibility. Although acknowledging that attempts at reform may encounter much scepticism, if not open resistance, it was argued that a closer look at the inconsistencies created by the existing regime suggests that traditional opponents would actually be the first to gain from more comprehensive and balanced disciplines re-establishing a level playing field among all WTO Members. Further, a multilateral solution remains essential if one considers that the countries more actively engaging in the use of export restrictions, at least for what concerns the extractive sector (for example, China, the Russian Federation), have not yet concluded free trade agreements with those players, such as the EU, that systemically pursue a WTO-plus strategy based on the complete removal of export duties in addition to QRs, matched with fewer exceptions than in the WTO, in their bilateral and regional trade agreements. Such a strategy has moreover proved difficult to implement even in some cases where regional trade agreements are negotiated between such players themselves (for example, the case of US export restrictions on crude oil and natural gas in the energy chapter of the Transatlantic Trade and Investment Partnership [TTIP] Agreement) (Espa and Holzer 2015).

The solutions proposed have the potential to be implemented independently from each other (for example, action on transparency does not need to happen concurrently with a deal on predictability; the latter can be achieved regardless of whether WTO Members agree upon additional flexibilities, and so on). At the same time, they are incremental in the sense that they could mutually reinforce and complement each other (for example, the expansion of import-specific GATT flexibilities to export duty concessions would make WTO Members more prone to accept lower levels of export tariff bindings). In this respect, a reform addressing all three "dimensions" of transparency, predictability, and flexibility would have better chances to reach higher levels of commitment in each of the dimensions than if it tackled any of them individually.

For these reasons, a new agreement, either focused exclusively on export barriers or addressing the issue of export restrictions among other regulatory challenges related to extractives on a (more or less) broader sectoral basis, and including disciplines on export restrictions, remains the first-best solution to raise the ambition of any reform of WTO disciplines on the export side. Under such an agreement, WTO Members could agree on a centralized regime for administering notification and consultation requirements for export restrictions, clarify the applicability of the scheduling and binding procedure already envisaged for import tariffs under Article II:1(b) GATT to export duty concessions and commit to use it across-the-board to negotiate export tariff bindings in GATT schedules on a system-wide basis. They could also envisage flexibilities that go beyond those already available to export restrictions under the GATT. An agreement of this kind could represent a workable compromise between net-importing WTO Members and resource-endowed developing country Members, and dissipate the inconsistencies emanating from the WTO accession regime on export duties as revealed in *China – Raw Materials* and *China – Rare Earths*. Finally, by creating the conditions for the launch of multilateral negotiations on export duty concessions, and limiting the availability of additional flexibilities to export tariff bindings included in GATT schedules, it would provide WTO Members with the right incentives to privilege export taxes over more trade-restrictive QRs, in keeping with the spirit of the multilateral trading system.

43 Under Article 5.7 AoA, WTO Members implementing SSGs shall give notice "in writing, including relevant data" to the Committee on Agriculture "as far in advance as may be practicable and in any event within 10 days of the implementation of such action."

44 Alternatively, a subset of WTO Members could in principle conclude a plurilateral agreement on export taxes to be added to Annex 4 of the WTO Agreement by consent of the Ministerial Conference expressed "exclusively by consensus." Such an Agreement would bind only adhering Members, and third parties would remain excluded from any benefits accruing from it according to Article X:9 of the Marrakesh Agreement.

45 See AB Report, *China–Rare Earths*, para. 5.156.

46 See Panel Report, *Turkey–Textiles,* para. 9.63.

REFERENCES

Agatiello, O. R. and Fliess, B. 2013. "Export Restrictions: Benefits of Transparency and Good Practices." OECD Trade Policy Papers No. 146, OECD Publishing, Paris.

Baroncini, E. 2011. "Obblighi WTO-Plus, tutela dell'ambiente, della salute e preservazione delle risorse naturali: il Report del Panel nel caso China–Raw Materials." *Diritto Comunitario e degli Scambi Internazionali,* 50, 627.

Bellmann, C. and Wilke, M. 2012. "Trade Policies for Resource Security: Rethinking Export Restrictions." in R. Meléndez-Ortiz, C. Bellmann, and M. Rodriguez Mendoza (eds.), *The Future and the WTO: Confronting the Challenges,* ICTSD, Geneva.

Chelliah, A. 2011. "Tax and the Upstream O&G Sector." *Malaysian Business,* 16 Aug, www.taxand.com.my/pdf/publications/Tax%20and%20the%20Upstream%20OnG%20Sector%20-Malaysian%20BusinessAugust.pdf.

Ehring, L. and Chianale, G. F. 2012. "Export Restrictions in the Field of Energy." In Y. Selivanova (ed.), *Regulation of Energy in International Trade Law: WTO, NAFTA and Energy Charter,* Kluwer Law International, The Netherlands.

Espa, I. *Export Restrictions on Critical Minerals and Metals: Testing the Adequacy of WTO Disciplines.* Cambridge University Press.

Espa, I. and Holzer, K. 2015. "Negotiating an Energy Deal Under TTIP: Drivers and Impediments to US Shale Exports to Europe?." *Denver Journal of International Law and Policy.*

European Commission. 2014. "Eleventh Report on Trade-Restrictive Measures Identified In The Context of the Financial and Economic Crisis." Directorate-General For Trade, http://horizon.hozint.com/2014/11/dg-trade-11th-report-on-potentially-trade-restrictive-measures/.

European Commission. 2012. "Ninth Report on Potentially Trade-Restrictive Measures Identified in the Context of the Financial and Economic Crisis." Directorate-General For Trade, http://trade.ec.europa.eu/doclib/docs/2012/june/tradoc_149526.pdf.

Fliess, B., Arriola, C. and Liapis, P. 2014. "Recent Developments in the Use of Export Restrictions in Raw Materials Trade." In *Export Restrictions in Raw Materials Trade: Facts, Fallacies and Better Practices,* OECD Publishing, Paris.

Fung, K. C. and Korinek, J. 2014. "Economics of Export Restrictions as Applied to Industrial Raw Materials." OECD Trade Policy Papers No. 155, OECD Publishing, Paris.

GATT Doc. MTN.GNG/NG2/W/40, "Export Restrictions and Charges," Background Note by the Secretariat, 8 Aug. 1989

Korinek, J. and Bartos, J. 2014. "Multilateralising Regionalism: Disciplines on Export Restrictions in Regional Trade Agreements." In *Export Restrictions in Raw Materials Trade: Facts, Fallacies and Better Practices,* OECD Publishing, Paris.

Korinek, J. and Kim, J. 2010. "Export Restriction on Strategic Raw Materials and their Impact on Trade and Global Supply." In *The Economic Impact of Export Restrictions on Raw Materials,* OECD Publishing, Paris.

Liapis, P. 2013. "How Export Restrictive Measures Affect Trade in Agricultural Commodities." OECD Food, Agriculture and Fisheries Papers No. 63, OECD Publishing, Paris.

Liu, H. W. and Maughan, J. 2012. "China's Rare Earths Export Quotas: Out of the *China–Raw Materials* Gate but Past the WTO's Finish Line?." *Journal of International Economic Law* 15, 971.

Matsushita, M. 2011. "Export Control of Natural Resources: WTO Panel Ruling on the Chinese Export Restrictions of Natural Resources." *Trade Law and Development* 3, 267.

OECD Inventory. "Restrictions on Exports of Raw Materials." http://qdd.oecd.org/subject.aspx?subject=8F4CFFA0-3A25-43F2-A778-E8FEE81D89E2#.

Plumer, B. 2015. "Why Oil Prices Keep Falling – and Throwing the World Into Turmoil." *Vox*, 23 Jan., www.vox.com/2014/12/16/7401705/oil-prices-falling.

Qin, J. Y. 2012. "Reforming WTO Discipline on Export Duties: Sovereignty over Natural Resources, Economic Development and Environmental Protection." *Journal of World Trade* 46, 1147.

Ramdoo, I. 2015. *Unpacking Local Content Requirements in the Extractive Sector: What Implications for the Global Trade Framework?.* E15 Initiative, International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, Geneva.

Radetzski, M. 2010. *A Handbook of Primary Commodities in the Global Economy*. Cambridge University Press.

Salzman, J. and Wu, M. 2014. "The Next Generation of Trade and Environment Conflicts: The Rise of Green Energy Policy." *Northwestern University Law Review,* 108.

Sieminski, A. 2014. "Implications of the US Shale Revolution." Presentation given at the Canada Energy Summit, Chicago, 17 Oct., www.eia.gov/pressroom/presentations/sieminski_10172014.pdf.

US Congressional Research Service. 2013. "US Natural Gas Exports: New Opportunities, Uncertain Outcomes." 8 April.

US Energy Information Administration. 2014. "Countries Profiles: China." www.eia.gov/countries/analysisbriefs/China/china.pdf.

Van den Bossche, P. and Zdouc, W. 2013. *The Law and Policy of the World Trade Organization.* 3rd edition, Cambridge University Press.

WTO. 2015. "Trade Monitoring." July, www.wto.org/english/news_e/archive_e/trdev_arc_e.htm.

WTO Appellate Body Reports, China – Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum, WT/DS431/AB/R, WT/DS432/AB/R WT/DS433/AB/R, 29 Aug. 2014

WTO Doc. TN/MA/W/101, "Revised Submission on Export Taxes: Communication from the European Communities," 17 Jan. 2008

WTO Doc. TN/MA/W/11/Add. 6, "Negotiating Proposal on Export Taxes: Communication from the European Communities," 27 April 2006.

WTO Panel Reports, China – Measures Related to the Exportation of Various Raw Materials, WT/DS394/R/, WT/DS395/R/, WT/DS398/R/Add.1 and Corr.1, adopted 22 Feb. 2012, as modified by Appellate Body Reports WT/DS394/AB/R, WT/DS395/AB/R WT/DS398/AB/R.

WTO Panel Reports, China – Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum, WT/DS431/R/, WT/DS432/R/, WT/DS433/R/Add.1, adopted 29 Aug. 2014, as modified by Appellate Body Reports WT/DS431/AB/R, WT/DS432/AB/R WT/DS433/AB/R.

Implemented jointly by ICTSD and the World Economic Forum, the E15Initiative convenes world-class experts and institutions to generate strategic analysis and recommendations for government, business, and civil society geared towards strengthening the global trade and investment system for sustainable development.

ICTSD
International Centre for Trade and Sustainable Development

WORLD ECONOMIC FORUM
COMMITTED TO IMPROVING THE STATE OF THE WORLD