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Export restrictions and policy space for sustainable development: Lessons from trends in the regulation of export restrictions (2012-2016)

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Export restrictions and policy space for sustainable development:

Lessons from trends in the regulation of export restrictions (2012-2016)

Fengan Jiang

ASIA-PACIFIC RESEARCH AND TRAINING NETWORK ON TRADE

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ASIA-PACIFIC RESEARCH AND TRAINING NETWORK ON TRADE

WORKING PAPER

Export restrictions and policy space for sustainable development: Lessons from trends in the regulation of export restrictions (2012-2016)

Fengan Jiang†

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Abstract

The General Agreement on Tariffs and Trade 1994 (GATT 1994) generally prohibits the World Trade Organization (WTO) members from using export quotas and other quantitative restrictions with certain exceptions. By contrast, export duties are not regulated under the GATT 1994 though a few WTO members such as China commit to restricting the use of export duties in their WTO accession protocols. Given the plethora of regional trade agreements (RTAs) and the slow progress of the WTO Doha Round of multilateral trade negotiations, the incorporation of WTO-plus provisions into RTAs that regulate export restrictions in a more effective manner could contribute to a transparent and predictable trade regime. In a series of WTO cases about export restrictions, namely *China—Raw Materials (DS394/ DS395/ DS398)*, *China—Rare Earths (DS431/ DS432/ DS433)*, and most recently *China—Raw Materials II (DS508/ DS509)*, China claimed that its export restrictive measures on various industrial inputs were adopted for protecting the environment. Although China's arguments failed to convince the panel and the Appellate Body in the first two cases, these cases raise the question of how to effectively regulate export restrictions without constraining countries' policy space to pursue legitimate policy goals. This paper seeks an answer from the perspective of sustainable development as export restrictions could contribute to ensuring food security, reducing pollution, and conserving exhaustible natural resources when the better options are not financially or practically available. By examining 11 WTO accession protocols and 50 regional trade agreements that have entered into force in the period from 2012 to 2016, this paper reveals recent trends in the regulation of export restrictions and their implications on countries' policy space to achieve sustainable development goals. An analysis is offered of the major approaches to incorporating WTO-plus provisions, and better options to replace export restrictions for achieving sustainable development are also discussed.

Keywords: Export restrictions, Sustainable development, WTO, Regional trade agreements

JEL codes: K33, Q01

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1. Introduction

Export restrictions can be imposed either in the form of quantitative restrictions or through fiscal policies including taxes on exports. Typical quantitative restrictions include export bans or allowing a fixed quota of quantity for exports through export license requirements as well as minimum export prices with the intention to restrict and reduce the flow of exports of a given product. Fiscal restrictions involve customs duties on exports, often known as export duties, which reduce the volume of exports due to increased cost of export products since the value of the duties or taxes get included.

Governments have traditionally imposed export restrictions in the pursuance of economic goals; for many, export duties on raw materials are considered an important means of increasing revenue.[1] Another major economic objective of such restrictions is to increase the value-added content of exports. Thus, for instance, the government of Indonesia proposed a ban on unprocessed exports of raw minerals in 2014 with the aim of supporting that country's manufacturing sector.[2]

Until relatively recently, the frequently-cited policy objectives of export restrictions were extended to non-economic areas ranging from environmental protection to food security.[3] According to the WTO Trade Policy Reviews, countries commonly impose export restrictions on certain products in order to fulfill obligations under various multilateral environmental agreements, such as the Montreal Protocol on Substances that Deplete the Ozone Layer (the 'Montreal Protocol'). Governments also on occasion use export restrictions in a unilateral manner to protect the environment; thus at least six have claimed to have imposed export duties in order to conserve natural resources and reduce

[1] Fung, K.C. and Jane Korinek, 2014. "Economics of Export Restrictions as Applied to Industrial Raw Materials" in *Export Restrictions in Raw Materials Trade: Facts, Fallacies and Better Practices* (p. 82), OECD Publications.
[2] Parisotto, L, Daniela García Santibáñez Godoy, and Adam Heal, 2016. "Adding value to Indonesian mining exports: Time to revisit export restrictions?", UN ESCAP Trade Insights, No. 19, August, p. 1.
[3] Fliess, B, Christine Arriola and Peter Liapis, 2014. "Recent Developments in the Use of Export Restrictions in Raw Materials Trade", in in *Export Restrictions in Raw Materials Trade: Facts, Fallacies and Better Practices* (pp. 40-41), OECD Publications.

pollution.[4] As for food security, it was cited as a motivation for imposing export restrictions, for example, during the rice crisis of 2008, when several countries acted to stem instability in and upward pressure on domestic prices.[5]

Stated policy objectives aside, economists have long argued that countries should replace export restrictions with alternative measures, citing two major reasons. First, such restrictions, because they distort prices, cause inefficiencies that reduce global welfare.[6] Second, even if the loss of global welfare could be justified in the legitimate use of export restrictions, export restrictive measures can be replaced by other policy instruments that are more effective in achieving the same goals.[7]

Against this background, several countries have proposed strengthening the controls over export restrictions in the WTO. Thus, for instance, the European Union (EU), in the course of non-agricultural market access negotiations under the Doha Development Agenda, has suggested negotiating a multilateral regime to regulate export duties that are not covered under WTO law, though this proposal was rejected by certain WTO member states that desired to preserve the policy space represented by export duties.[8]

Responding to the WTO's failure to strengthen the rules on export restrictions at the multilateral level, some WTO members have tried to incorporate WTO-plus provisions

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[4] Sri Lanka (WT/TPR/S/237), Angola (WT/TPR/S/278), Thailand (WT/TPR/S/191), China (WT/TPR/S/199/Rev.1 and WT/TPR/S/230), Indonesia (WT/TPR/S/278), and Gabon (UNEP, 'An Analysis of Economic Instruments in Sound Management of Chemicals', http://www.unep.org/chemicalsandwaste/chemicalsandwaste/UNEPsWork/Mainstreaming/UNEPLIRAGuidance/Background/DevelopmentofGuidanceonEconomicInstruments/tabid/79273/Default.aspx, at 26).
[5] Anania, G, 2013. "Agricultural export restrictions and the WTO: What options do policy-makers have for promoting food security?", ICTSD, June, p. 3.
[6] Piermartini, R, 2004. "The Role of Export Taxes in the Field of Primary Commodities", WTO Publications, p. 20.
[7] Korinek, j, 2014. "Mineral Resource Policies for Growth and Development: Good Practice Examples", in in *Export Restrictions in Raw Materials Trade: Facts, Fallacies and Better Practices*, OECD Publications.
[8] Crosby, D, 2008. "WTO Legal Status and Evolving Practice of Export Taxes", ICTSD Bridges, vol. 12, No. 5, November.

regarding the regulation of export restrictions into regional trade agreements (RTAs) or WTO accession protocols. In practice, however, the former alternative faces challenges that are evident in, for instance, opposition to certain WTO-plus provisions regarding export restrictions in several Economic Partnership Agreements and the Trans-Pacific Partnership.[9] Moreover, the WTO-plus provision on export duties in China's Protocol of Accession has been persistently challenged by China in several disputes, namely *China—Raw Materials*, *China—Rare Earths*, and most recently *China—Raw Materials II*, in the name of sustainable development.[10]

These cases raise the question of how to regulate export restrictions beyond WTO law. This paper seeks an answer from the perspective of sustainable development. The following section (Section 2) illustrates the WTO limits on export restrictions and potential links between export restrictions and sustainable development. Section 3 shows the recent trends in the regulation of export duties under WTO law. Section 4 examines 50 RTAs that have entered into force in the period from 2012 to 2016 in order to reveal recent trends in the regulation of export restrictions at the regional level. In Section 5, an analysis is offered of the major approaches to incorporating WTO-plus provisions, and options for better accommodating the use of export restrictions to promote sustainable development are discussed. Section 6 offers conclusions and suggestions regarding the potential negotiation of WTO-plus provisions governing the regulation of export restrictions.

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[9] Business Daily. Relief for exporters as Kenya signs new trade deal with EU, 14 October 2014. Available from http://www.businessdailyafrica.com/Kenya-signs-new-trade-deal-with-EU/-/539546/2486754/-/r1yrgp/-/index.html. Institut Rakyat. TPPA Export Tax Clause Will Sink Malaysia, 30 July 2013. Available from http://www.institutrakyat.org/1299tppa-export-tax-clause/.

[10] WTO DISPUTE DS394, 'China — Measures Related to the Exportation of Various Raw Materials'; WTO DISPUTE DS431, 'China — Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum'.

2. WTO limits on export restrictions and potential links between export restrictions and sustainable development

Export restrictions are regulated under WTO law with certain flexibilities. These flexibilities could provide WTO members with policy space to use export restrictions for sustainable development under certain circumstances. This section introduces the WTO provisions on export restrictions in general and discusses the potential links between export restrictions and sustainable development.

2.1. Regulation of export restrictions under WTO law

GATT Article XI generally prohibits WTO members from using quantitative export restrictions, which usually take the form of export quotas or bans.[11] Other export measures like export licensing requirements or minimum export pricing, can also constitute quantitative export restrictions when they have a limiting effect on the volume of exports. For instance, China in 2008 started to impose export quotas, export quotas management, minimum export price requirements and export licensing requirements on various raw materials including bauxite, coke, fluorspar, magnesium, manganese, silicon carbide, silicon metal, yellow phosphorus, and zinc. Those export restrictive measures were found to be prohibited under GATT Article XI in the *China—Raw Materials* case.[12]

It is noteworthy that China in this case invoked three provisions to justify its violation of GATT Article XI. The first one is GATT Article XI:2(a), a specific exception to the general

[11] By contrast, export duties are not regulated under the GATT 1994. The regulation of export duties under WTO law is discussed in the next section.
[12] WTO DISPUTE, above n 10.

ban on export quantitative restrictions, which allows countries to impose export restrictions 'temporarily' in order to prevent or provide relief for 'critical shortages' of foodstuffs or other essential products. For China, its export quota on refractory-grade bauxite should be justified under this provision because the application of the quota was to prevent or relieve 'critical shortages' of refractory-grade bauxite in China.[13] This argument was rejected by the panel which found that 'critical shortages' should constitute 'extraordinary conditions' and 'temporary' export restrictions must be removed by a country when a critical shortage has passed.[14] In the panel's view, although refractory-grade bauxite was 'essential' to China, China failed to demonstrate the export quota at issue is 'temporarily applied' to either prevent or relieve a 'critical shortage'.[15]

The second provision that China invoked in *China—Raw Materials* is GATT Article XX(b) which permits WTO members to adopt export or import restrictions that are 'necessary to protect human, animal or plant life or health'. For China, its export quotas on coke and silicon carbide should be justified under Article XX(b) because these quotas were adopted for reducing the pollution caused by the manufacture of coke and silicon carbide products. In order to make a successful claim under Article XX(b), China must first show that the quotas being challenged were designed specifically to protect the environment and/or public health by reducing the manufacture of the products at issue. Moreover, China's export quotas on coke and silicon carbide should be necessary to fulfil the stated environmental objectives, which requires a balance between the environmental interests at stake and the contribution of the export quotas to the claimed environmental objectives. If the restrictions are proved to be necessary on a provisional basis, a further comparison is to be made with possible alternative measures. China's export quotas at

[13] Panel Report, *China – Raw Materials*, para 7.239.
[14] Ibid. para 7.354.
[15] Ibid. para 7.355.

issue failed to meet any of the above requirements largely due to the lack of equivalent restrictions on domestic consumption of the same products. Without those domestic restrictions, the effectiveness of export quotas in controlling the production of coke and silicon carbide would be offset by increased domestic consumption.

The third GATT exception that China invoked is Article XX(g) which permits WTO members to adopt WTO-inconsistent measures relating to 'the conservation of exhaustible natural resources'. For China, its export quota at issue was adopted to prevent the overexploitation of refractory-grade bauxite. In order to be justified under Article XX(g), China's export quota must be 'made effective in conjunction with restrictions on domestic production or consumption'. The rationale behind this requirement is that export restrictions applied in isolation, without domestic restrictions, may increase domestic consumption and thereby undermine their own effectiveness in conserving exhaustible natural resources. In the absence of accompanying domestic restrictions, as mentioned above, China's export quota on refractory-grade bauxite was found not to be justified under Article XX(g).

Except for the above three exceptions, another two provisions in GATT 1994 could also be relevant to the use of export restrictions for achieving sustainable development. The first one is GATT Article XX(i) which permits the use of export restrictions that have been implemented in an effort to keep the domestic price of certain raw materials below the world price as 'part of a governmental stabilization plan' aimed at ensuring the availability of essential quantities of raw materials for domestic industries. Because such export restrictions are not intended to be used to 'protect or promote' a domestic industry, however, Article XX(i) cannot be invoked in order to help countries to achieve the goal of

economic diversification by imposing export restrictions that indirectly subsidize domestic firms.[16]

The second one is GATT Article XX(j) which permits WTO members to impose export restrictions on certain products in the event of ‘local short supply’ provided that all members are able to obtain an ‘equitable share’ of these products. Although this exception is intended to help countries to cope with shortages of raw materials, it could be interpreted as justification for export restrictions on foodstuffs that are involved in achieving food security.[17] The definition of ‘equitable share’ has been further interpreted as distinct from that of ‘non-discriminatory share’. Compared with Article XI:2(a), which allows export restrictions under circumstances of ‘critical shortages’, Article XX(j) is broader in scope, requiring only the circumstance of ‘short supply’.[18] Compared with Article XX(b) and Article XX(g), more uncertainties are associated with Article XX(i) and Article XX(j) because these exceptions have not yet been invoked in any WTO dispute.

After export restrictions have been provisionally justified under Article XX(b), XX(g), XX(i), or XX(j), they must further meet the requirements under the chapeau of Article XX, the aim of which is to prevent abuse of the exceptions described in the article. One major requirement under the chapeau is to prohibit WTO members from applying a measure in a manner that constitutes either 'arbitrary or unjustifiable discrimination between countries where the same conditions prevail'. This means that the difference between restrictions on products destined for domestic consumption and those destined for export causes national treatment-type discrimination, which could be prohibited under the chapeau of Article XX.

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[16] Korinek, J. and Jessica Bartos, 2012. “Multilateralising Regionalism: Disciplines on Export Restrictions in Regional Trade Agreements”, OECD Trade Policy Papers, No. 139, June, p. 12.
[17] Ibid., p. 13.
[18] Howse, above n 12, p. 14.

2.2. Potential links between export restrictions and sustainable development

As part of the 2030 Agenda for Sustainable Development, a set of 17 goals and 169 targets known as the Sustainable Development Goals came into force on 1 January 2016.[19] In order to achieve these goals, governments are expected to establish national frameworks for implementing and reviewing the progress of sustainable development policies. In this context, five goals are identified as relevant to the cited policy objectives of export restrictions, namely food security, public health, sustainable economic growth, sustainable production, and climate change. In what follows, the potential links between each of the five Sustainable Development Goals and export restrictions will be discussed in turn.

2.2.1. Food security

When adverse weather conditions reduced harvests in several countries in 2007, food prices rose sharply the following year to twice their levels in 2004.[20] Such volatility in food prices has significant implications for food security, especially in countries characterized by a large proportion of low-income, non-rural households. In order to address this concern, many countries imposed export restrictions at that time as an interim measure to prevent the extraordinary rise in international prices from being transmitted to domestic prices. Thus, for instance, China, India, and Indonesia successfully stabilized their domestic rice prices by using export restrictive measures during the rice crisis of 2008.

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[19] United Nations. Sustainable Development Goals. Available from http://www.un.org/sustainabledevelopment/sustainable-development-goals/.

[20] Howse, R. and Tim Josling, 2012. "Agricultural Export Restrictions and International Trade Law: A Way Forward", IPC Position Paper, September, p. 4.

Although export restrictions have proved effective in reducing upward price pressures in domestic markets,[21] they may actually increase the global price of food, thereby creating challenges to food security in other countries, particularly those that are less developed and net importers of food. In times of crisis, export restrictions can exacerbate the situation by restricting the supply of food. Moreover, in the medium-term, export restrictions would reduce the profits of food producers, who could in response decrease production.[22]

Given the negative impacts of export restrictions, countries are advised to adopt policies less apt to distort markets in order to achieve the objective of food security. Thus, for instance, when domestic food prices rise above certain levels, countries could provide non-farming poor householders with cash subsidies or with food at subsidized prices or in exchange for work.[23] These options, however, require a well-functioning public sector, substantial financial means, and a well-developed delivery system, institutions that are not always available in some countries. In this latter case, export restrictions remain a necessary instrument for ensuring food security.[24]

2.2.2. Public health and climate change

Some multilateral environmental agreements authorize the contracting parties to impose export restrictions in order to achieve environmental goals. The Montreal Protocol, for example, allows for trade restrictive measures against non-parties, including export bans on major ozone-depleting substances. One important motivation for countries to use

[21] Anania, above n 5, p. 5.
[22] Anania, above n 5, p. 3.
[23] Ibid.
[24] When a country imposes export restrictions on foodstuffs under GATT XI:2(a), Article 12 of the Uruguay Round Agreement on Agriculture requires that it give due consideration to the potential negative impact of such restrictions on the food security of food-importing countries. Moreover, a country seeking to impose restrictions must also fulfil certain procedural requirements, including notifying the Committee on Agriculture and consulting with affected WTO members.

export restrictions as an environmental policy instrument is, then, to achieve the objectives of multilateral environmental agreements.

Another important environmental concern that can justify the use of export restrictions is coping with the problem described by the so-called ‘pollution heaven hypothesis,’ which suggests that polluting industries tend to relocate to jurisdictions with less stringent environmental regulations. As a result, counties with relatively weak environmental policies are relatively more likely to export polluting products or products that have been produced through a higher carbon emission. In an effort to discourage the development of polluting industries, export restrictions can thus be used to reduce the export of polluting products. China, for instance, has claimed that it imposed export duties from 2007 to 2008 in order to ‘improve the environment by reducing exports of products considered to be highly energy consuming or polluting’.[25]

It is noteworthy that a more effective approach than the imposition of export restrictions to discourage the development of polluting industries is to adopt appropriate domestic policies.[26] For instance, countries may impose environmental or pollution taxes on the production of certain products or restrict the investment in polluting industries. This option is not, however, always financially or practically available in developing and less-developed countries. Instructive in this context is a 2003 research study suggesting that the MERCOSUR could apply export duties if the implementation of pollution taxes should prove difficult or ineffective.[27] Under these circumstances, then, export restrictions can serve as an interim measure.

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[25] Trade Policy Review Body, Trade Policy Review, People's Republic of China, Report by the Secretariat, Revision, WT/TPR/S/199/Rev.1 (12 August 2008), para 112.
[26] WTO, 2010. “World Trade Report 2010”, WTO Publications, pp. 8-9.
[27] Gómez, C. M., 2003. “Could the desire for a better environment lead to political options against free trade?: Insights from MERCOSUR”, October p. 17.

A phenomenon similar to the creation of a 'pollution heaven' can occur when states introduce carbon pricing policies and their energy-intensive industries in response shift production to states that have weaker or no such controls.[28] As a result of this 'carbon leakage,' global efforts to reduce carbon emissions are undermined. Carbon leakage is thus a consequence of unequal carbon prices around the world, and three main options have been proposed to address the problem.[29]

The first is a global agreement to equalize carbon costs, something that, unfortunately, is not realistic in the near future. The second option is a free allowance mechanism for decreasing domestic carbon costs, but this approach risks undermining climate policy. The third option is a border-leveling mechanism for imposing restrictions on the import or export of energy-intensive products. For developing countries, export duties are clearly preferable to the import restrictions on energy-intensive products that have been proposed by developed countries, since they stand to benefit from the resulting tax revenue. In this context, a 2012 World Bank research paper has suggested that export duties could play a positive role in future negotiations aimed at reducing carbon leakage.[30]

Commentators, however, question the determination of developing countries to impose export duties on a wide range of energy-intensive products. Thus, for instance, although China describes export duties as a type of instrument to 'effectively control greenhouse gas emissions' in its second communication to the Nations Framework Convention on Climate Change,[31] the export duties that China imposed on several energy-intensive

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[28] Pachauri, R.K. and Reisinger, A. (eds), 2007. *Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, IPCC Publications.
[29] Grubb, M. and Thomas Counsell, 2010. "Tackling Carbon Leakage: Sector-Specific Solutions for a World of Unequal Carbon Prices", Carbon Trust Report, p. 30.
[30] Copeland, B. R., 2012. "International Trade and Green Growth', No. 6235 World Bank Policy Research Working Paper", p. 41.
[31] UNFCCC. "Second National Communication on Climate Change of the People's Republic of China", 2004. Available from http://unfccc.int/resource/docs/natc/chnnc1exsum.pdf.

products in 2007 target only a small fraction of the emissions that result from its exports.[32] If the problem of carbon leakage is to be tackled effectively, China needs to impose export duties on more energy-intensive products, including electronics, machinery, metal products, and textiles.[33]

2.2.3. Sustainable production and sustainable economic growth

The issue of sustainability is well illustrated by the example of Nauru, an island in the South Pacific. Nauru possessed large reserves of phosphate, a mineral used in the production of fertilizer production, exports of which once gave it the highest income per capita in the Pacific region and perhaps in the world.[34] However, the island's phosphate reserves had been exhausted at the beginning of 21st century[35] and, in the absence of other economic alternatives, Nauru has become a failed state.

This scenario can be explained in terms of the 'resource curse hypothesis', according to which countries that are abundantly endowed with natural resources, such as minerals, often encounter undesirable side effects.[36] One of these side effects is the resource depletion that results from unsustainable production. Natural resources are often over-exploited when access to them is open because property rights are poorly protected.[37] In an open-access situation, increased trade can exacerbate over-exploitation, and this is one motivation for governments to impose export restrictions on natural resources.

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[32] Petersb, G. P., Dabo Guanc, Klaus Hubacekd, 2008. "The Contribution of Chinese Exports to Climate Change" Energy Policy vol. 36 No. 9.
[33] Dröge S., 2009. "Tackling Leakage in a World of Unequal Carbon Prices", Climate Strategies Working Paper, p. 67.
[34] Connell, J., 2006. "Nauru: The first failed Pacific State?", The Commonwealth Journal of International Affairs vol. 95, Issue 383, p. 49.
[35] Ibid, p. 54.
[36] WTO, above 17, p. 9.
[37] Ibid.

The imposition of export restrictions cannot, however, solve the fundamental problem of open access. Therefore, governments are advised to replace export restrictions with regulations that reinforce property rights or with resources taxes.[38] If these options are not financially or practically feasible, countries may still temporarily impose export restrictions as a second choice. Thus, for instance, a 2005 International Monetary Fund (IMF) study recommended that Liberia impose an export duty in order to achieve sustainable logging levels.[39]

Also from the perspective of the 'natural resource hypothesis', countries may become heavily reliant on revenues generated by exports of natural resources and seek to promote domestic processing of them by imposing export restrictions on raw materials. It is, however, doubtful whether such restrictions have the desired effect, for other countries in reaction frequently choose to impose or to increase import duties on the processed products.[40] Moreover, export restrictions may also hurt the economy of the exporting country, as was the case in 2014 when the Indonesian government imposed a ban on certain raw materials with the aim of supporting its manufacturing sector that resulted in a rapid decrease not only in the export of minerals but also in direct foreign investment in the mining sector.[41]

In short, although export restrictions could arguably be used to pursue certain sustainable development goals including food security, public health, climate change, and sustainable production, those goals would be achieved more effectively through

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[38] WTO, above 17, p. 8.
[39] Schwidrowski, A and Saji Thomas, 2005. "Forestry taxation in Africa: the case of Liberia", International Monetary Fund Publications, August.
[40] Kim, J., 2010. "Recent Trends in Export Restrictions", OECD Trade Policy Working Paper No. 101, July, p. 14.
[41] Parisotto, above n 2.

domestic measures such as providing non-farming poor householders with cash subsidies or with food at subsidized prices or in exchange for work, and targeting the polluting or natural resource-based industries directly by restricting the investment in those industries or imposing taxes on the production of high-polluting or resource-based products. When those domestic measures are not financially or practically available, countries may choose to adopt export restrictions temporarily as a second-best option. To do so, WTO members may adopt quantitative export restrictions, which are prohibited by GATT Article XI, by invoking five major GATT exceptions, namely Article XI:2(a), Article XX(b), XX(g), XX(i) and XX(j). Moreover, WTO member could also use fiscal export restrictions depending on its specific commitment on the use of export duties which is discussed in the next section.

3. Recent trends in the regulation of export duties in the accession protocols (2012 to 2016)

Most of the original WTO members can impose export duties, the exception being Australia, which committed to refraining from export duties on certain mineral products in the Goods Schedules annexed to the GATT 1994. New acceding members to WTO are sometimes required to make additional commitments to restrict the use of export duties during the accession process. In the period before 2011, this additional obligation to restrict the use of export duties were incorporated into the accession protocols of six acceded members, including WTO-Mongolia (1997),[42] WTO-Latvia (1999),[43] WTO-China (2001), [44] WTO-Saudi Arabia (2005), [45] WTO-Vietnam (2007), [46] and WTO-Ukraine (2008).[47]

Like the commitments made by Australia, most of these additional obligations provide a list of products which will not be subjected to export duties (‘positive list’).[48] By contrast, China's Protocol of Accession provides a list of 84 items on which export duties can be imposed within a maximum level after China consulting its trade partners (‘negative list’).[49]

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[42] Report of the Working Party on the Accession of Mongolia to the World Trade Organization, WT/ACC/MNG/9, 27 June 1996.
[43] Report of the Working Party on the Accession of Latvia to the World Trade Organization, WT/ACC/LVA/32, 19 February 1999.
[44] Protocol on the Accession of the People’s Republic of China, WT/L/432, 23 November 2001.
[45] Report of the Working Party on the Accession of Saudi Arabia to the World Trade Organization, WT/ACC/SAU/61, 11 December 2005.
[46] Report of the Working Party on the Accession of Viet Nam to the World Trade Organization, WT/ACC/VNM/48, 11 January 2007.
[47] Report of the Working Party on the Accession of Ukraine to the World Trade Organization, WT/ACC/UKR/152, 16 May 2008.
[48] This term was borrowed from the use of 'positive' and 'negative' lists in the context of trade in services and investment. See European Commission, ‘Services and investment in EU trade deals Using 'positive' and 'negative' lists’, April 2016.
[49] Ibid.

Compared with the above accession protocols, the 11 that entered into force in the period from 2012 to 2016 reflect a tough approach to export duties,[50] in that 5 of them, namely WTO-Russia (2012),[51] WTO-Montenegro (2012),[52] WTO-Tajikistan (2013),[53] WTO-Kazakhstan (2015),[54] and WTO-Afghanistan (2016),[55] include provisions regulating export duties (table 1). In these provisions, the earlier practice of providing a positive list that prohibits countries from imposing export duties on certain products has been gradually replaced by a negative list that specifies the products on which countries are permitted to impose export duties. However, in case of WTO-Montenegro (2012),[56] the accession commitment prohibits Montenegro from imposing export duties in general.

Unlike quantitative export restrictions, which are regulated by Article XI of the GATT 1994, export duties are regulated by member-specific accession protocols.[57] This form of regulation raises the question of whether the 11 acceded WTO members, which have committed to restrict the use of export duties, could invoke the exceptions under GATT Article XX in order to justify their use for environmental protection and thus achieve the

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[50] Russia (2012), Montenegro (2012), Vanuatu (2012), Samoa (2012), Lao (2013), Tajikistan (2013), Yemen (2014), Kazakhstan (2015), Seychelles (2015), Afghanistan (2016), and Liberia (2016).

[51] Report of the Working Party on the Accession of the Russian Federation to the World Trade Organization, WT/ACC/RUS/70, 17 November 2011.

[52] Report of the Working Party on the Accession of Montenegro to the World Trade Organization, WT/ACC/CGR/38, 5 December 2011.

[53] Report of the Working Party on the Accession of Tajikistan to the World Trade Organization, WT/ACC/TJK/30, 6 November 2012.

[54] Report of the Working Party on the Accession of the Republic of Kazakhstan to the World Trade Organization, WT/ACC/KAZ/93, 23 June 2015.

[55] Report of the Working Party on the Accession of the Islamic Republic of Afghanistan to the World Trade Organization, WT/ACC/AFG/36; WT/MIN(15)/6, 13 November 2015.

[56] According to Paragraph 132 of its Working Party Report, Montenegro committed not to apply or reintroduce any export duty as from the date of accession. See Report of the Working Party on the Accession of Montenegro to the World Trade Organization, WT/ACC/CGR/38, 5 December 2011.

[57] Any other original WTO Member apart from Australia remain free to use export duties as long as these duties consistent with GATT Article XI which is likely to prohibit WTO members from imposing excessively high export duties amounting to an export ban.

SDGs. This question has been examined by the panels and the Appellate Body in *China—Raw Materials*(DS394; DS395; DS398) and *China—Rare Earths* (DS431; DS432; DS433)

According to the decisions of *China—Raw Materials* and *China—Rare Earths*, a WTO member may indeed invoke GATT Article XX to justify the use of export duties, provided that there is a textual reference to it in the provision on export duties. This does not necessarily require a WTO member to make an explicit reference to GATT Article XX, for certain language, such as 'without prejudice to the right to regulate trade in a manner consistent with the WTO Agreement', can also be interpreted as a reference to the article.[58]

In the case of China, however, the Appellate Body did not find any language that could be interpreted as a reference to GATT Article XX. As a result, China is not entitled to justify the use of export duties for environmental purposes under the article. Following the approach of the Appellate Body, five other WTO members, Mongolia, Latvia, Saudi Arabia, Montenegro, and Tajikistan, are also prohibited from imposing export duties in any event. Having learned the lessons of the above disputes, several recently acceded members, including Russia and Afghanistan, have made explicit reference to GATT Article XX in their commitments on export duties.

[58] WTO DISPUTE, above n 10.

Table 1 – WTO limits on export duties

No.	(1994-2011)	Export Duties		
		Scope	Specific Exception	General Exception
1	GATT 1994	Allow		
2	GATT Australia Goods Schedules	Positive list	No	GATT Article XX
3	WTO–Mongolia (1997)	Positive list	No	No
4	WTO–Latvia (1999)	Positive list	No	No
5	WTO–China (2001)	Negative list	Yes	No
6	WTO–Saudi Arabia (2005)	Positive list	No	No
7	WTO–Vietnam (2007)	Positive list	No	GATT Article XX
8	WTO–Ukraine (2008)	Positive list	No	GATT Article XX
	(2012-2016)			
9	WTO–Russia (2012)	Positive list	No	GATT Article XX
10	WTO–Montenegro (2012)	Ban	No	No
11	WTO–Tajikistan (2013)	Negative list	No	No
12	WTO–Kazakhstan (2015)	Negative list	No	GATT Article XX
13	WTO–Afghanistan (2016)	Negative list	Yes	GATT Article XX

When it comes to a situation that interim export restrictions are necessary to achieve certain objectives as prescribed under GATT Article XX, China, Montenegro, Mongolia, Latvia, Saudi Arabia, and Tajikistan have to choose quantitative export restrictions such as export quotas. A significant difference between the two types of export restrictions is that export quotas have to be allocated to various exporting firms, which thus have a great incentive to obtain the privilege to trade, for such quotas often make a product's world

market price higher than the domestic price. As a result, exporting firms may waste additional resources in rent-seeking activities.[59]

Rent-seeking activities may also increase the chances of corruption. For example, in 2004, as part of its efforts to protect the environment, the Chinese government imposed export quotas on coke that resulted in the doubling of the world market price for this commodity; as a consequence, many Chinese firms bribed officials in order to obtain the export quotas and thus reap the benefits of the higher international price.[60] Moreover, Ukraine's export quotas on grain in 2006 raised such concerns, with a Working Paper from the World Bank suggesting that the export quotas should be replaced with export duties.[61]

Compared with export duties, export quotas may also result in a greater loss of government revenue.[62] When a government imposes export duties, it enjoys the benefits of the tax; but it cannot always acquire the quota rent from export quotas, even when they are auctioned.[63] Therefore, if a country replaces export duties with export quotas, it stands to lose a large amount of tax revenue, money that could have been used to achieve other SDGs. Thus, for example, environmental experts suggested that China could use the revenue of export duties to establish an environmental protection fund that support clean production in China.[64] This suggestion has, however, not been adopted by China.

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[59] Devarajan, S., Delfin Go, Maurice Schiff, Sethaput Suthiwart-Narueput, 1996. "The Whys and Why Nots of Export Taxation", World Bank Policy Research Working Paper Series, No.1684, November, p. 10.
[60] EEO. Corruption Scandals Concerning Export Quotas on Coke in Shanxi, 19 June 2006. Available from http://www.eeo.com.cn/eeo/jjgcb/2006/06/17/33805.shtml.
[61] Cramon, S. v., Martin Raiser. 2006, "The Quotas on Grain Exports in Ukraine: Ineffective, Inefficient, and Non-transparent", World Bank Working Paper, No. 38596, November, p. 10.
[62] Fung, K.C. and Jane Korinek, 2010. "Economics of Export Restrictions as Applied to Industrial Raw Materials", OECD Trade Policy Papers No. 155, May, p. 18.
[63] Ibid.
[64] CENEWS, 'How to Use Green Trade to Protect the Environment?', Available from: http://www.cenews.com.cn/xwzx/dh/200810/t20081013_590389.html.

Aside from the three major drawbacks just detailed—the loss of resources through rent-seeking activities, the risk of corruption, and the loss of government revenue—the replacement of export duties with export quotas would entail losses for importing countries. Export quotas, almost by definition, do not allow for a supply response to an increase in demand, and as a result they create larger welfare losses than export duties when the targeted products are inelastic staple goods, such as industrial raw materials.[65] It is for this reason that there was no strong objection to China's export duties on rare earths, while global markets responded strongly when the export quotas were subsequently introduced on these goods.[66] Another reason behind the preference of importing countries to export duties than export quotas is that duties are more transparent than quotas. The latter one provides exporting countries with discretionary powers to control the supply of the targeted products. Therefore, if the six WTO members replace export duties with export quotas, theirs trading partners may find it more difficult to obtain industrial inputs that are necessary for manufacturing supply chains.

Except for the above difference between export duties and export quotas, export restrictions in general have negative impacts not only on importing countries but also on exporting countries themselves because the targeted exports will decline. This would cause surpluses in domestic market which reduces the price of the targeted products. Although this might benefit the consumers in the exporting countries, the profits of producers would go down. Due to those negative impacts, there is a trend to further limit the use of export restrictions at the regional level which is discussed in the next section.

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[65] Mitra, S. and Tim Josling, 2009. "Agricultural Export Restrictions: Welfare Implications and Trade Disciplines", IPC Position Paper, January, p. 9.
[66] Fung, above n 44, p. 32.

4. Recent trends in the regulation of export restrictions at the regional level (2012 to 2016)

In light of the above discussion of the WTO provisions regarding export restrictions and recent attempts to regulate export duties through accession protocols, the trends in the regulation of export restrictions through regional trade agreements (RTAs) can now be appreciated in their proper context. There are 61 RTAs that have entered into force in the period from 2012 to 2016, of which 50 RTAs provide texts in English. What follows is a survey of the 50 RTAs that highlights the various means of regulating quantitative export restrictions and export duties and identifies a basic approach to doing so outside the strictures of WTO law.

4.1. Limits on quantitative export restrictions

Many RTAs directly incorporate GATT Article XI, a WTO provision that prohibits countries from using quantitative export restrictions in general. Again, the relatively broad scope of this prohibition is narrowed in some RTAs through the use of either positive lists, which allow a party to restrict the export of certain products, or negative lists, which prohibit a party from imposing export restrictions on certain products (table 2). Examples of positive lists in RTAs include Japan-Peru (2012), Canada-Panama (2012), Ukraine-Montenegro (2013), Canada-Honduras (2014), Chile-Viet Nam (2014), Canada-Korea (2015), and Korea-Colombia (2016). European Free Trade Agreements (EFTAs) are examples of RTAs that feature negative lists, namely EFTA-Hong Kong (2012), EFTA–Montenegro (2012), EFTA–Ukraine (2012), EFTA–Central America (2014), and EFTA–Bosnia and Herzegovina (2015).

By incorporating GATT Article XI, the RTAs automatically include the XI:2(a) exception in the absence of an explicit provision to exclude it. The exception can also be available to an RTA that does not incorporate GATT Article XI but nevertheless refers generally to exceptions under WTO law, an example being Gulf Cooperation Council (GCC)-Singapore (2013).[67]

It is noteworthy that application of GATT Article XI:2(a) is restricted or excluded in some RTAs. With regard to its restriction, several RTAs specify the conditions under which article is to be invoked. Thus, for instance, Korea–Australia (2014) requires a party that proposes adopting an export restriction on foodstuffs or on energy and mineral resources under Article XI:2(a) to provide opportunities for due consideration, notice in writing, and consultation.[68] Similar provisions can also be found in Korea–New Zealand (2015) and Japan–Australia (2015).

Explicit exclusion of GATT Article XI:2(a) can be found in some of the RTAs signed by the EU, namely EU–Eastern and Southern Africa (ESA) (2012), EU–Serbia (2013), EU–Cameroon (2014), EU–Bosnia and Herzegovina (2015), and EU–Côte d'Ivoire (2016). Other examples include EFTA–Central America (2014), Eurasian Economic Union (EAEU) (2015), and Southern African Development Community (SADC)–Accession of Seychelles (2015). By restricting or excluding Article XI:2(a) in the RTAs, the contracting parties cannot impose quantitative export restrictions 'temporarily' to each other in order to prevent or provide relief for 'critical shortages' of foodstuffs or other essential products.

[67] Article 2.6 of GCC-Singapore (2013).
[68] Article 2.6(2) of Korea–Australia (2014).

Table 2 – RTAs limits on quantitative export restrictions

No.	RTAs	Quantitative Export Restrictions		
		Scope	Specific Exception	General Exceptions
2012				
1	Canada–Jordan	General ban	GATT Article XI:2(a)	GATT Article XX
2	Chile–Malaysia	General ban	GATT Article XI:2(a)	GATT Article XX
3	EFTA–Hong Kong	General ban	GATT Article XI:2(a)	GATT Article XX
4	EFTA–Montenegro	General ban	GATT Article XI:2(a)	GATT Article XX
5	EFTA–Ukraine	General ban	GATT Article XI:2(a)	GATT Article XX
6	EU–ESA	Negative list	No	Yes
7	Japan–Peru	Negative list	GATT Article XI:2(a)	GATT Article XX
8	Korea–United States	General ban	GATT Article XI:2(a)	GATT Article XX
9	CIS	General ban	GATT Article XI:2(a)	GATT Article XX
10	United State –Colombia	General ban	GATT Article XI:2(a)	GATT Article XX
11	United States–Panama	General ban	GATT Article XI:2(a)	GATT Article XX
	2013			
12	Canada–Panama	Negative list	GATT Article XI:2(a)	GATT Article XX
13	Costa Rica–Singapore	General ban	GATT Article XI:2(a)	GATT Article XX
14	EU–Central America	General ban	GATT Article XI:2(a)	GATT Article XX
15	EU–Colombia and Peru	General ban	GATT Article XI:2(a)	Yes
16	EU–Serbia	General ban	No	Yes
17	GCC–Singapore	General ban	Yes	Yes
18	Korea–Turkey	General ban	GATT Article XI:2(a)	Yes
19	Malaysia–Australia	General ban	GATT Article XI:2(a)	Yes
20	New Zealand–Chinese Taipei	General ban	GATT Article XI:2(a)	GATT Article XX
21	Turkey–Mauritius	General ban	GATT Article XI:2(a)	Yes
22	Ukraine–Montenegro	Negative list	GATT Article XI:2(a)	Yes
2014				
23	Canada–Honduras	Negative list	GATT Article XI:2(a)	GATT Article XX
24	Chile–Viet Nam	Negative list	GATT Article XI:2(a)	GATT Article XX

25	EFTA-Central America	General ban	No	GATT Article XX
26	EU–Cameroon	General ban	No	Yes
27	EU–Georgia	General ban	GATT Article XI:2(a)	GATT Article XX
28	EU–Moldova	General ban	GATT Article XI:2(a)	Yes
29	EU–Ukraine	General ban	GATT Article XI:2(a)	GATT Article XX
30	Hong Kong–Chile	General ban	GATT Article XI:2(a)	GATT Article XX
31	Iceland–China	General ban	GATT Article XI:2(a)	GATT Article XX
32	Korea–Australia	General ban	Yes	GATT Article XX
33	Singapore–Chinese Taipei	General ban	GATT Article XI:2(a)	GATT Article XX
34	Switzerland–China	General ban	GATT Article XI:2(a)	GATT Article XX
2015				
35	ASEAN–India	General ban	GATT Article XI:2(a)	GATT Article XX
36	Australia–China	General ban	GATT Article XI:2(a)	Yes
37	Canada–Korea	Negative list	GATT Article XI:2(a)	GATT Article XX
38	China–Korea	General ban	GATT Article XI:2(a)	GATT Article XX
39	EFTA–Bosnia and Herzegovina	Positive list	GATT Article XI:2(a)	GATT Article XX
40	EU–Bosnia and Herzegovina	General ban	No	Yes
41	EAEU	General ban	No	Yes
42	Japan–Australia	General ban	Yes	GATT Article XX
43	Korea–New Zealand	General ban	Yes	GATT Article XX
44	Korea–Viet Nam	General ban	GATT Article XI:2(a)	GATT Article XX
45	SADC–Accession of Seychelles	General ban	No	Yes
46	Turkey–Malaysia	General ban	GATT Article XI:2(a)	GATT Article XX
2016				
47	EU–Côte d'Ivoire	General ban	No	Yes
48	Japan–Mongolia	General ban	GATT Article XI:2(a)	GATT Article XX[69]
49	Korea–Colombia	Negative list	GATT Article XI:2(a)	GATT Article XX

[69] Japan–Mongolia (2016) has additional exception clauses that allow either party to consult with the other regarding the imposition of export restrictions for the purpose of stabilizing the prices of primary commodities or promoting a particular industry 'with a view to raising the general standard of living of its people'.

50	Turkey–Moldova	General ban	GATT Article XI:2(a)	GATT Article XX[70]

4.2. Limits on export duties

As introduced in the previous section, accession protocols have begun to add more regulations regarding the use of export duties over the past five years, and this trend is apparent in RTAs (table 3). Among the 50 RTAs examined here, only 15 lack provisions that restrict the use of export duties. Most of the RTAs that do not limit export duties involve at least one party from Asia, including Chile–Malaysia (2012), GCC–Singapore (2013), Malaysia–Australia (2013), New Zealand–Chinese Taipei (2013), Chile–Viet Nam (2014), Hong Kong–Chile (2014), Iceland–China (2014), Switzerland–China (2014), Association of Southeast Asian Nations (ASEAN)–India (2015), Australia–China (2015), Korea–Viet Nam (2015), Turkey–Malaysia (2015), and Japan–Mongolia (2016).

The other 35 RTAs prohibit contracting parties from using export duties in three ways. The first is a general prohibition on export duties, which is in force in 22 of the RTAs examined here. It is noteworthy that 6 of 10 RTAs involving the EU, namely EU–Central America (2013), EU–Colombia and Peru (2013), EU–Serbia (2013), EU–Georgia (2014), EU–Moldova (2014), and EU–Bosnia and Herzegovina (2015), generally prohibit export duties. The EU's preference for this approach is thus apparent.

The second type of prohibition takes the form of a negative list that allows the contracting parties to impose export duties on certain products. Nine of the RTAs adopt this approach,

[70] Turkey–Moldova (2016) has additional exception clauses that allow either party to impose export restrictions in accordance with procedures set out in the dispute settlement clause in circumstances in which compliance with the limits on export restrictions leads to a serious shortage of one of the exporting country's essential products.

namely EU–ESA (2012), Free Trade Agreement of the Commonwealth of Independent States (CIS) (2012), Costa Rica–Singapore (2013), Ukraine–Montenegro (2013), EFTA–Central America (2014), EU–Cameroon (2014), EU–Ukraine (2014), EU–Côte d'Ivoire (2016), and Korea–Colombia (2016).

The third such approach is to provide a positive list that prohibits the contacting parties from imposing export duties on certain products, which usually allows countries to impose export duties on more products than is the case with positive lists. The relative unpopularity of this least restrictive approach is reflected in the fact that positive lists have been adopted in only four RTAs, all of which involve the EFTA, namely EFTA–Hong Kong (2012), EFTA–Montenegro (2012), EFTA–Ukraine (2012), and EFTA–Bosnia and Herzegovina (2015).

While 35 of 50 the RTAs examined here include provisions restricting the use of export duties, 16 RTAs specifically allow countries to use export duties under certain circumstances through the incorporation of a specific exception clause. The most popular of these clauses, adopted in 13 RTAs, allows a contacting party to impose export duties provided that they are also adopted for domestically-consumed goods or are not in excess of duties imposed on similar products for domestic consumption.[71]

Another type of specific exception is used by three RTAs involving the EU, namely EU–Ukraine (2014), EU–Cameroon (2014), and EU–Côte d'Ivoire (2016). EU–Ukraine (2014) allows Ukraine to apply a safeguard measure in the form of a surcharge to the export duty on certain products when the cumulative volume of the exports of these products exceeds

[71] EU–ESA (2012), Japan–Peru (2012), Korea–United States (2012), United State–Colombia (2012), United States–Panama (2012), Canada–Panama (2013), Korea–Turkey (2013), Canada–Honduras (2014), Korea–Australia (2014), Canada–Korea (2015), Japan–Australia (2015), Korea–New Zealand (2015), Korea–Colombia (2016).

a trigger level.[72] Similarly, EU–Cameroon (2014) allows Cameroon to impose export duties on ‘a limited number of additional goods’ in the event of ‘serious public finance problem’ or ‘the need for greater environmental protection’ after consultation with the EU. Likewise, EU–Côte d'Ivoire (2016) allows Côte d'Ivoire to impose export duties on a temporary basis for ‘income, protection for infant industry or environmental protection’ after consultation with the EU. The last two agreements also require the EPA Committee to evaluate on a regular basis the impact of any export duties imposed under a specific exception.

Table 3 – RTAs limits on export duties

No.	RTAs	Export Duties		
		Scope	Specific Exception	General Exception
		2012		
1	Canada–Jordan			
2	Chile–Malaysia			
3	EFTA–Hong Kong	Positive list	No	GATT Article XX
4	EFTA–Montenegro	Positive list	No	GATT Article XX
5	EFTA–Ukraine	Positive list	No	GATT Article XX
6	EU–ESA	Negative list	Yes	Yes
7	Japan–Peru	General ban	Yes	GATT Article XX
8	Korea–United States	General ban	Yes	GATT Article XX
9	CIS	Negative list	No	GATT Article XX
10	United State –Colombia	General ban	Yes	GATT Article XX
11	United States–Panama	General ban	Yes	GATT Article XX
		2013		
12	Canada–Panama	General ban	Yes	GATT Article XX
13	Costa Rica–Singapore	Positive list	No	GATT Article XX

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14	EU–Central America	General ban	No	GATT Article XX
15	EU–Colombia and Peru	General ban	No	Yes
16	EU–Serbia	General ban	No	Yes
17	GCC–Singapore			
18	Korea–Turkey	General ban	Yes	Yes
19	Malaysia–Australia			
20	New Zealand–Chinese Taipei			
21	Turkey–Mauritius	General ban	No	Yes
22	Ukraine–Montenegro	Negative list	No	Yes
2014				
23	Canada–Honduras	General ban	Yes	GATT Article XX
24	Chile–Viet Nam			
25	EFTA-Central America	Negative list	No	GATT Article XX
26	EU–Cameroon	Negative list	Yes	Yes
27	EU–Georgia	General ban	No	GATT Article XX
28	EU–Moldova	General ban	No	Yes
29	EU–Ukraine	Negative list	Yes	GATT Article XX
30	Hong Kong–Chile			
31	Iceland–China			
32	Korea–Australia	General ban	Yes	GATT Article XX
33	Singapore–Chinese Taipei	General ban	No	GATT Article XX
34	Switzerland–China			
2015				
35	ASEAN–India			
36	Australia–China			
37	Canada–Korea	General ban	Yes	GATT Article XX
38	China–Korea			
39	EFTA–Bosnia and Herzegovina	Positive list	No	GATT Article XX
40	EU–Bosnia and Herzegovina	General ban	No	Yes
41	EAEU	General ban	No	Yes
42	Japan–Australia	General ban	Yes	GATT Article XX

43	Korea–New Zealand	General ban	Yes	GATT Article XX
44	Korea–Viet Nam			
45	SADC–Accession of Seychelles	General ban	No	Yes
46	Turkey–Malaysia			
2016				
47	EU–Côte d'Ivoire	Negative list	Yes	Yes
48	Japan–Mongolia			
49	Korea–Colombia	Negative list	Yes	GATT Article XX
50	Turkey–Moldova	General ban	No	GATT Article XX

4.3. General exceptions

Thirty-nine out of the 50 RTAs examined here directly incorporate GATT Article XX as the general exception clause, thus providing a basis for the justification of export and import restrictions. Beyond these, two RTAs include additional exception clauses on export restrictions. One is Japan–Mongolia (2016), which allows either party to consult with the other regarding the imposition of export restrictions for the purpose of stabilizing the prices of primary commodities or promoting a particular industry 'with a view to raising the general standard of living of its people'.[73] The second such RTA is Turkey–Moldova (2016), which allows either party to impose export restrictions in accordance with procedures set out in the dispute settlement clause in circumstances in which compliance with the limits on export restrictions leads to a serious shortage of one of the exporting country's essential products.[74]

[73] Article 1.10(3) of Japan–Mongolia (2016).
[74] Article 21 of Turkey–Moldova (2016).

The other 11 RTAs include two types of general exception clauses that narrow the scope of GATT Article XX. The first involves exclusion of certain exceptions under GATT Article XX. Thus, GATT Article XX(i), the exception permitting countries to impose export restrictions according to a price stabilization scheme, has been excluded in 7 RTAs, namely EU–ESA (2012), EU–Serbia (2013), EU–Cameroon (2014), Australia–China (2015), EAEU (2015), EU–Bosnia and Herzegovina (2015), SADC–Accession of Seychelles (2015). One agreement, EU–Côte d'Ivoire (2016), also excludes GATT Article (j), the exception permitting countries to impose export restrictions in the event of a shortage of essential goods. This agreement, however, provides an additional exception that allows Côte d'Ivoire to impose export restrictions deemed necessary to ensure food security in accordance with certain procedures.[75]

The second type of general exception clause sets out conditions under which GATT Article XX(i) or (j) may be invoked. Thus, in the cases of EU–Serbia (2013) and EU–Bosnia and Herzegovina (2015) a party may impose export restrictions in the event of critical shortages of foodstuffs or other products essential to the exporting party by informing the Stabilisation and Association Council. In the event that no agreement is reached by the parties in the context of the Stabilisation and Association Council within 30 days, the exporting party may, following notification, immediately impose export restrictions deemed necessary to respond to a crisis.

Similarly, under Korea–Turkey (2013), EU–Colombia and Peru (2013), and EU–Moldova (2014), the parties must attempt to reach a settlement through consultation before taking any measures provided for in GATT Article XX(i) and (j). Again, if no agreement is reached within 30 days, a party may in good faith apply export restrictions. Also, one party may,

[75] Article 20 of EU–Côte d'Ivoire (2016).

under extreme circumstances, apply immediate export restrictions after notifying the other party.

4.4. A comparison between WTO and RTAs limits on export restrictions

This survey of RTAs makes clear that they regulate export restrictions in respect to the scope of products subject to export restrictions, specific exceptions to quantitative export restrictions or export duties, and general exceptions to export restrictions (table 4). Regarding the scope of products subject to export restrictions, countries are commonly prohibited from using export restrictions in general. Among 50 RTAs that include regulations on quantitative export restrictions, 38 RTAs generally prohibit RTA parties from using quantitative export restrictions by directly incorporating GATT Article XI. There are 35 out of 50 RTAs that include regulations on export duties whereas these duties are generally allowed under WTO law. Among them, 22 RTAs generally prohibit contracting parties from using export duties against each other.[76] This approach is used by only one WTO accession protocol.[77]

Regarding the specific exceptions to allow quantitative restrictions on exports in view of GATT Article XI:2(a), 42 out of 50 RTAs studied allow parties to take such a measure if the objective is food security. Some countries prefer to choose a WTO-plus approach by excluding or restricting the application of GATT Article XI:2(a); thus 5 of 8 RTAs that exclude this specific exception involve the EU.[78] This restricts the policy space of those contracting parties to impose quantitative export restrictions in order to address the

[76] These countries can still impose export duties on products destined for non-contracting parties.
[77] WTO-Montenegro (2012).
[78] EU–ESA (2012), EU–Serbia (2013), EU–Cameroon (2014), EU–Bosnia and Herzegovina (2015), and EU–Côte d'Ivoire (2016).

problem of ‘critical shortages’ of foodstuffs or other essential products though they can still invoke Article XI:2(a) against non-contracting WTO members.

The most frequently used clause—found in 13 of 35 RTAs that include regulations on export duties—regarding specific exceptions to export duties allows countries to impose them provided that equivalent taxes are imposed on similar products for domestic consumption. Other specific exceptions involve public finance, environmental protection, and support for new industries.[79] It is noteworthy that most of the WTO accession protocols do not provide any specific exception to export duties, in which cases governments can only justify the use of export duties with reference to general exceptions.

All 50 RTAs examined here include general exceptions, and most—39—directly incorporate GATT Article XX. It is noteworthy that two of the 39 RTAs include new general exceptions relating to the policy objective of promoting a specific industry and preventing a serious shortage of essential products.[80] Although GATT Article XX is not fully incorporated in 11 of the RTAs, these latter agreements include general exceptions that are similar to GATT Article XX(a) to XX(h) while excluding or restricting application of Article XX (i) and (j). This restricts the policy space of those contracting parties to impose export restrictions in order to implement ‘governmental stabilization plan’ and address the issue of ‘local short supply’ though these countries can still invoke Article XX (i) and (j) against non-contracting WTO members.

[79] EU–Ukraine (2014), EU–Cameroon (2014), and EU–Côte d'Ivoire (2016).
[80] Japan–Mongolia (2016) and Turkey–Moldova (2016).

5. New implications of the RTAs on sustainable development

Sections 2 and 3 shows countries' policy space for the use of export restrictions to achieve sustainable development goals under WTO law. Compared with WTO law, some RTAs take new approaches to regulate export restrictions. These approaches include a general ban on export duties, a specific exception to export duties, and an exclusion or restrictions on the use of GATT Article XI:2(a), as a specific exception to quantitative export restrictions, and GATT Article XX(i) or (j). This section analyses the new implications of these changes on sustainable development.

5.1. General ban on export duties and specific exception to export duties

Export duties are generally allowed under WTO law. Although some accession protocols include limitations on export duties, most of the affected members are still allowed to impose export duties on certain products. In this context, many RTAs take a further step by prohibiting contracting parties from adopting export duties on any product. This approach, however, would not have negative effects on sustainable development if there are exceptions that provide countries with sufficient policy space to use export duties for achieving sustainable development goals.

As a typical exception to export duties, some RTAs permit countries to impose export duties that are not in excess of duties imposed on similar products for domestic consumption. This non-discrimination requirement will not prevent countries from using export duties to achieve environmental goals. In fact, export duties applied in isolation, without domestic restrictions, may increase domestic consumption and thereby undermine their own effectiveness in reducing pollution or conserving exhaustible natural

resources. For instance, China imposed export restrictions including export duties on molybdenum in 2008 in order to reducing the pollution from the mining industry. The production of molybdenum, however, has risen after the implementation of export restrictions due to a lack of domestic restrictions.[81] In this sense, the effectiveness of export duties as an environmental policy instrument requires a non-discrimination between exported goods and domestically-consumed goods.

In contrast, the non-discrimination requirement prevents countries from using export duties to ensure food security or subsidize domestic industries because the effectiveness of export duties to achieve these goals requires a discrimination between exported goods and domestically-consumed goods. In this way, a country can reduce upward price pressures in domestic markets or provide domestic industries with raw materials that are cheaper than those in the international market. The objective to subsidize domestic industries may be achieved under a specific exception provided by EU–Côte d'Ivoire (2016) which permits Côte d'Ivoire to impose export duties on a temporary basis for ‘protection for infant industry’. That RTA together with EU–Cameroon (2014) also permit Côte d'Ivoire and Cameroon to impose export duties for environmental protection, which does not require a non-discrimination between exported goods and domestically-consumed goods. Under these exceptions, it might be necessary to adopt complementary domestic policies in order to avoid the increased domestic consumption that undermines the effectiveness of export duties to achieve environmental goals.

[81] Fung, above n 43, p. 19.

5.2. Ensuring food security: Excluding or restricting GATT XI:2(a) or Article XX(j)

Some RTAs exclude GATT XI:2(a) which permits countries to impose temporary quantitative export restrictions in order to prevent or provide relief for ‘critical shortages’ of foodstuffs. In this situation, if governments still intend to ensure food security by using export restrictions, they can either justify the use of export quotas or bans with reference to GATT Article XX(j), a general exception permits WTO members to impose export restrictions on certain products in the event of ‘local short supply’, or replace quantitative export restrictions with export duties.

In the former case, countries’ policy space for the use of quantitative export restrictions to ensure food security is not constrained. Compared with GATT XI:2(a) which allows quantitative export restrictions under circumstances of ‘critical shortages’, GATT XX(j), requiring only the circumstance of ‘short supply’, is broader in scope. GATT XX(j), however, has not yet been invoked in any WTO dispute which may increase more uncertainties in practice. In the latter case, most of the RTAs that exclude GATT XI:2(a) also generally prohibit contracting parties from imposing export duties. As a result, if governments replace quantitative export restrictions with export duties, they still need to justify the use of export duties by invoking GATT XX(j).

When it comes to a choice between quantitative export restrictions such as export quotas and export duties, countries may consider the latter ones. Compared with export duties, export quotas have three major drawbacks, namely the loss of resources through rent-seeking activities, the risk of corruption, and the loss of government revenue which can be provided to non-farming poor householders as cash subsidies in a food crisis. Moreover, quantitative export restrictions, almost by definition, do not allow for a supply

response to an increase in demand which may create more challenges to food security in other countries.

It is noteworthy that one agreement, EU–Côte d'Ivoire (2016), excluded both GATT XI:2(a) and GATT Article (j) which, however, provides a specific exception to export restrictions that allows Côte d'Ivoire to impose export restrictive measures deemed necessary to ensure food security in accordance with certain procedures.[82] In this case, Côte d'Ivoire's policy space to immediately impose export duties on foodstuff will be affected by the specific procedures set out in the agreement. The similar procedural conditions can also be found in some RTAs that restrict the use of Article XI:2(a) or GATT Article XX(j) by requiring the contracting parties to have a consultation before taking any measures provided for in these exceptions.

5.3. Subsidizing domestic industries: Excluding or restricting GATT Article XX(i)

GATT Article XX(i) permits the use of export restrictions that have been implemented in an effort to ensuring the availability of essential quantities of raw materials for domestic industries. This raises the concerns that such exception could be abused to protect domestic industries. Although the 1950 Report of the Working Party on 'The Use of Quantitative Restrictions for Protective and Other Commercial Purposes' interpreted this exception as such cannot be used to protect or promote a domestic industry 'whether by affording a price advantage to that industry for the purchase of its materials, or by reducing the supply of such materials available to foreign competitors',[83] some RTAs still

[82] Article 20 of EU–Côte d'Ivoire (2016).
[83] Korinek, above n 35, p. 12.

exclude or restrict the application of GATT XX(i) with the aim to prevent contracting parties from using export restrictions to subsidize domestic industries.

There are two RTAs, however, provide exceptions to export restrictions for subsidizing domestic industries. The first one is Japan–Mongolia (2016) which permits the use of export restrictions to 'promoting a particular industry'. The second one, EU–Côte d'Ivoire (2016), permits the use of interim export duties for 'protection for infant industry'. Compared with Japan–Mongolia (2016), EU–Côte d'Ivoire (2016) limits the choices of export restrictive measures to export duties which are less trade restrictive than quantitative export restrictions.[84]

Although the above two RTAs condone the use of export restrictions for subsidizing domestic industries, countries should think twice before taking such restrictions for two major reasons. First, the effectiveness of using export restrictions to promote domestic industries is unclear. Second, the use of export restrictions to subsidizing domestic industries requires a discrimination between exported goods and domestically-consumed goods which is in contradiction with other SDGs such as reducing pollution or conserving exhaustible natural resources. As shown in the above case of China's export restrictions on molybdenum in 2008, export restrictions applied in isolation may even create more environmental problems.

[84] After the government of Indonesia proposed a ban on unprocessed exports of raw minerals in 2014 with the aim of supporting that country's manufacturing sector, it was advised to replace the export bans with export duties. See above n 2, p. 11.

6. Conclusion

Export restrictions, because they distort prices, cause inefficiencies that reduce global welfare. Although the loss of global welfare could be justified in the use of export restrictive measures to achieve three major sustainable development goals, namely ensuring food security, reducing pollution, conserving exhaustible natural resources, these objectives could be achieved by other policy instruments that are more effective than export restrictions. Thus, one important reason behind China's failure to justify its export restrictions on various raw materials in *China – Raw Materials* case is that China could achieve the same environmental goal by replacing export restrictive measures at issue with various alternative measures such as pollution taxes or resources taxes on the production of certain products. Moreover, when it comes to ensure food security, rather than applying export restrictions, countries could provide non-farming poor householders with cash subsidies or with food at subsidized prices or in exchange for work in a manner consistent with the Agreement on Agriculture.

Admittedly, the better options are not always financially or practically available in some countries. Under certain circumstances, export restrictions remain a necessary instrument for achieving sustainable development goals in short term. However, as shown in the case of China's export restrictions on molybdenum in 2008, without appropriate domestic restrictions, export restrictions may increase domestic consumption and thereby undermine their own effectiveness in reducing pollution or conserving exhaustible natural resources.[85]

[85] Fung, above n 43, p. 19.

The legitimate use of export restrictions is recognized at the regional level. All of the 50 RTAs examined in this paper provide exceptions to export restrictions for ensuring food security, reducing pollution, conserving exhaustible natural resources. Compared with WTO law, some RTAs impose more limitations on the use of export restrictions for ensuring food security by excluding or restricting the application of GATT Article XI:2(a) or Article XX(j). This approach shows the concerns that export restrictions may create challenges to food security in other importing countries and exacerbate the situation of food crisis. Following this approach, exporting countries need to give due consideration to the potential negative impact of such restrictions on the food security of food-importing countries and cannot apply immediate export restrictions on foodstuff unless under extreme circumstances.

RTAs do not pay special attention to the use of export restrictions as an environmental policy instrument. All of the 50 RTAs examined in this paper directly incorporate GATT Article XX(b) and XX(g) or have equivalent exceptions that permit contracting parties to use export restrictions for reducing pollution and conserving exhaustible natural resources. There is a concern that these environmental goals might be used as a mask for subsidizing the industries in exporting countries. Thus, for instance, some RTAs have a non-discrimination requirement that permits countries to impose export duties that are not in excess of duties imposed on similar products for domestic consumption. Such non-discrimination requirement can in fact guide the exporting countries to properly using export restrictions for achieving environmental goals.

The concern of using export restrictions to subsidize domestic industries is also reflected by some RTAs that exclude or restrict the application of GATT Article XX(i) though this exception cannot be used to protect or promote domestic industries. Arguably, the use of export restrictions for subsidizing domestic industries may relate to sustainable

development. To impose export restrictions on certain raw materials, some exporting countries seek to promote domestic processing of these raw materials with the aim of increasing economic diversification. It is, however, doubtful whether such restrictions can have the desired effect. As shown in the case of Indonesia's export bans on unprocessed raw minerals in 2014, export restrictions may hurt the economy of exporting countries. Moreover, export restrictions may rapidly increase domestic consumption of natural resources which causes more environmental problems. Thus, as discussed above, if export restrictions are adopted for achieving environmental purposes, corresponding measures that restrict domestic consumption are necessary. Moreover, countries may also replace export restrictions with other more effective measures. For instance, in order to reduce the environmental damage associated with mining activity, rather than using export restrictions, countries are advised to directly restrict mining activity or tackle the environmental problems by adopting environmental measures.

It is noteworthy that, compared with WTO law, whereas many RTAs restrict or exclude GATT Article XI:2(a), a specific exception to quantitative export restrictions, some RTAs create new specific exceptions to export duties. These specific exceptions permit the use of export duties in a non-discriminatory manner or in the event of 'serious public finance problem' or 'the need for greater environmental protection', which may encourage countries to choose export duties rather than quantitative export restrictions for achieving necessary policy objectives. This, however, could undermine the efforts to eliminate import duties because those duties from importing counties might be replaced by export duties from exporting countries which reduces the welfare that could have been achieved by RTAs.

Contrary to the trend at the regional level, a few members have to replace export duties with quantitative export restrictions under WTO law. According to the rulings of *China—Raw Materials* and *China—Rare Earths*, six WTO members, China, Montenegro,

Mongolia, Latvia, Saudi Arabia, and Tajikistan, are prohibited from imposing export duties in any event. When it comes to a situation that interim export restrictions are necessary to achieve certain sustainable development goals, these countries have to choose quantitative export restrictions such as export quotas and bans which are more trade restrictive than export duties. But again, as discussed in this paper, countries are not advised to impose export restrictions for achieving sustainable development goals as long as the better options are financially and practically available.

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