Introduction

I.1 Historical trends in the use of export restrictions

Today international commodity markets are being affected by the longest and most pervasive 'wave' of export restrictions since the Second World War.¹ The origin of this phenomenon can be traced back to the 2000s commodity boom,² and its endurance to an exceptional mix of concurring factors affecting patterns of world supply and demand for primary products.³ The explosion of attention towards export restraints directly stems from the unique scope and length of the present wave. Yet, export restrictions are not a recent practice. Their use has varied in scale and intensity throughout the centuries. Governments have used export restrictions since at least the eleventh century, mainly as a tool of industrial policy.⁴ The British Empire was, in particular, the first great

- ¹ The use of export restrictions since the Second World War has intensified at particular points in time, giving rise to what could conventionally be called 'waves'. In the most recent decades, these waves have coincided with periods of commodity boom. M. Radetzki, A Handbook of Primary Commodities in the Global Economy (Cambridge University Press, 2010), pp. 66–72.
- ² The third since the Second World War, the 2000s commodity boom or, as it is often called, the 2000s 'super-cycle' started in 2002–2003 and came to an end after more than a decade due to the effects of the global financial and economic crisis. Radetzki, A Handbook of Primary Commodities, pp. 70–2; C. A. Carter, G. C. Rausser and A. Smith, 'Commodity Booms and Busts', Annual Review of Resource Economics 3 (2011), 87, pp. 90–1; D. S. Jacks, 'From Boom to Bust: A Typology of Real Commodity Prices in the Long Run', US National Bureau of Economic Research (NBER) Working Paper No. 18874, 2013 (Cambridge, Massachusetts: National Bureau of Economic Research), http://www.nber.org/papers/w18874.pdf (accessed July 2014).
- ³ These include a profound structural transformation of geopolitical and geoeconomic determinants of international trade in primary supplies and the macroeconomic down-turn associated with the outbreak of the global financial crisis towards the end of the decade. For a detailed account see below, Section I.2.
- ⁴ For an historical overview see J. Gorton, 'British Preferential Export Taxes', American Economic Association 14 (1924), 56; L. R. Edminster, 'Control of Exports of Raw Materials: An International Problem', The Annals of the American Academy of Political and Social Science 150 (1930), 89; R. Goode and G. Lent, 'Role of Export Taxes in Developing Countries', Staff Papers (International Monetary Fund) 13 (1966), 453; S. Devarajan,

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power to make extensive use of export restrictions on selected agricultural raw materials such as wool, hides and skins in the early stages of its industrialization, and many analysts agree that in several cases these measures contributed significantly to the building of England's industrial greatness.⁵ From the nineteenth century, export restrictions were progressively dismantled in Europe although never completely eliminated by countries aiming to accelerate their industrial development.⁶ Other areas of the world including Canada and several countries of Latin America introduced restrictive measures on the exportation of various agricultural

D. Go, M. Schiff and S. Suthiwart-Narueput, 'The Whys and Why Nots of Export Taxes', The World Bank Policy Research Working Paper No. 1684, 1996, pp. 1–25; E. S. Reinert, *How Rich Countries Got Rich . . . and Why Poor Countries Stay Poor* (London: Constable & Robinson Ltd, 2008); and C. V. Prestowitz, 'Export Restraints: The Key to Getting Rich', *Foreign Policy Magazine* (7 July 2011). Although well-documented records trace export restrictions back to the eleventh century, these types of instruments were most probably utilized at the time of the Roman Empire as well, at least with respect to certain goods. Evidence of such measures, however, remains vague and poorly documented. See H. Meredith, 'Evaluating Movements of Open-Work Glassware', in M. Mundell Mango (ed.), *Byzantine Trade, 4th—12th Centuries: The Archaeology of Local, Regional and International Exchange*. Papers of the Thirty-eighth Spring Symposium of Byzantine Studies (Farnham and Burlington: Ashgate, 2004), p. 197.

- ⁵ England started to introduce export restrictions in the form of taxes on the exportation of wool and hides in 1275 in order to promote domestic textile processing, and maintained such measures for several centuries (at least until 1660) in order to achieve industrial development. Particularly during the Tudor era, Britain achieved a substantial wool fabric monopoly through export duties on raw wool applied during the realm of Henry VII and, even more, by means of the raw wool export ban subsequently introduced by Elizabeth I. For an analysis of the effects produced by the exploitation of the monopolistic position of Great Britain in the wool industry, particularly in terms of competition with the Florentines, see Reinert, How Rich Countries, pp. 80-1. During the same period, other European territories, such as Venice and Holland, used export restrictions as a tool of industrial and trade strategy in order to acquire 'the same triple rent situation: a strong industrial sector, a raw material monopoly, and overseas trade' (ibid., pp. 81-3). Another significant example of recourse to restrictive export measures as a means to achieving a dominant position in the international market, and thereby eliminating prospective competitors (in particular, the US), is the case of the export duty on tin ore introduced by Great Britain in the first decades of the twentieth century. In this case, England exploited its power of colonial dominion to apply a preferential export duty on tin ore shipped from British colonies such as the Federated Malay States and West Africa, i.e. a duty applied only on the exportation of tin ore to states other than the United Kingdom. See Gorton, 'British Preferential Export Taxes', pp. 57 ff. Preferential export duties were frequently applied by Great Britain (e.g. a ban on untanned hides and skins coming from India was introduced in 1919; an export duty on crude rubber from the British Empire was applied in 1922 to eliminate US competitors). See Edminster, Control of Exports, pp. 89 ff.
- ⁶ J. Viner, 'National Monopolies of Raw Materials', *Council on Foreign Affairs* 4 (1926), 585. Among the European powers still maintaining export restrictions during that time was Spain, which applied an export duty of 20 per cent on hides and skins similar to the 15 per cent *ad valorem* export duty maintained by England. Gorton, 'British Preferential Export Taxes', p. 58.

I.1 HISTORICAL TRENDS IN USE OF EXPORT RESTRICTIONS 3

raw materials from the twentieth century.⁷ The rationale associated with such measures was in most cases the protection of domestic industries and the promotion of higher value-added activities, together with – in the case of countries applying export taxes in particular – the generation of government revenues.⁸

After a temporary but intensive resurgence of export restrictions on primary commodities triggered by the two world conflicts,⁹ the 1950s and 1960s were characterized by two distinct trends: on the one hand, developing countries were increasingly resorting to restrictions on the exportation of agricultural commodities in an attempt to raise government revenues and reduce volatility of markets which could significantly undermine their efforts towards economic development.¹⁰ On the other hand, developed countries were starting to negotiate export-restraint arrangements¹¹ with developing countries expanding their textile

- ⁷ Viner, 'National Monopolies of Raw Materials', p. 589 and E. Reubens, 'Commodity Trade, Export Taxes and Economic Development', *The Academy of Political Science* 71 (1956), 42.
- ⁸ This rationale was particularly prevalent among Latin American countries. Ibid., pp. 45-8.
 ⁹ Viner, 'National Monopolies', p. 585. In certain cases, countries have maintained export restrictions on raw materials for a number of decades. Switzerland, for instance, has continued to control exports of metal scrap to ensure adequate domestic supplies.
- ¹⁰ These measures were used by developing countries that had undergone the process of decolonization. As countries relying on resource-led development, they counted on the exportation of agricultural commodities for a predominant share of their gross domestic product (GDP) and therefore aimed at stabilizing the price of such commodities in the world market. These types of issues continue to affect so-called monoeconomies and, more generally, least developed countries (LDCs) whose low level of economic diversification makes them heavily dependent on commodity exports. Radetzki, *A Handbook of Primary Commodities*, pp. 188–206; R. Piermartini, 'The Role of Export Taxes in the Field of Primary Commodities', World Trade Organization (WTO) Discussion Paper, Economic Research and Statistics Division, 2004, www.wto.org/english/res_e/booksp_e/discussion_papers4_e. pdf (accessed May 2014), pp. 1–2.
 ¹¹ The expression 'export-restraint arrangements' refers to a wide set of practices used to
- ¹¹ The expression 'export-restraint arrangements' refers to a wide set of practices used to limit the volume of exports of a specific product to another country. These arrangements can be formal (i.e. legally binding agreements) or informal (i.e. statements or explanations of intent). They can be taken unilaterally or be concluded between the governments of the exporting country and the government of the importing country, between a government and non-governmental entities such as industry associations or groups of firms, or between industry groups. Depending on the type of actors involved and on the form of the arrangement, these measures are known as voluntary export restraints (VERs), voluntary restraint arrangements (VRAs) or orderly market arrangements (OMAs). J. H. Jackson, *The Jurisprudence of GATT & the WTO: Insights on Treaty Law and Economic Relations* (Cambridge University Press, 2000), pp. 69–72. Although such expressions suggest that the exporting country voluntarily enters into such arrangements, in practice it is often the case that it does so under the pressure that the importing country might otherwise adopt other types of restrictions having stronger negative impacts on its

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sectors¹² as a way of protecting their own industry from increased import competition. In these cases, the restriction on exportation took the form of a quota on textile products but reflected the interests of importing trading partners rather than the national industrial strategies of exporting countries.¹³ The United States was the first country to impose restrictions on Japan's exports of cotton textiles in 1955. Rapidly, however, many developing countries started using export-restraint arrangements – and, in particular, voluntary export restraints (VERs) – in order to cope with the surge of cheap textile products coming from industrializing Asian economies.¹⁴

It was, however, during the price spike of 1972–1975 that export restrictions were used systematically by exporting countries in an attempt to protect their own markets. The first wave of export restrictions developed in response to the commodity boom induced by the supply shocks that occurred in the cereal grain and vegetable oil international markets,¹⁵ and exacerbated by the rise in oil prices that followed the embargo imposed by the Organization of the Petroleum Exporting Countries (OPEC) on the Western countries supporting Israel during the Yom

exports. Ibid., p. 72; P. Van den Bossche and W. Zdouc, *The Law and Policy of the World Trade Organization*, 3rd edn (Cambridge University Press, 2013), p. 491.

- ¹² The textile sector has historically been a catalyst for industrialization in countries at early stages of development. A. J. H. Wohn, 'Towards GATT Integration: Circumventing Quantitative Restrictions on Textile and Apparel under the Multi-Fibre Agreement', *University of Pennsylvania Journal of International Economic Law* 22 (2001), 375, pp. 388–9.
- pp. 388–9.
 ¹³ J. M. Finger and A. Harrison, 'Import Protection for U.S. Textiles and Apparel: Viewed from the Domestic Perspective', in A. O. Krueger (ed.), *The Political Economy of Trade Protection* (University of Chicago Press, 1996), pp. 43–50.
- ¹⁴ Y. Yang and C. Zhong, 'China's Textile and Clothing Exports in a Changing World Economy', *The Developing Economies* 36 (1998), 3, pp. 3–23. This network of arrangements eventually led to the conclusion of the so-called Short-Term Cotton Agreement (1961), the Long-Term Arrangement (1962–1973) and, in 1974, the Multi-Fibre Agreement (MFA). P. C. Mavroidis, *Trade in Goods: The GATT and the Other Agreements Regulating Trade in Goods*, 2nd edn (Cambridge University Press, 2012), pp. 782–3. The MFA was a four-year agreement which was renewed four times over the decades with a progressively wider membership. The fourth Multi-Fibre Agreement was eventually replaced by the WTO Agreement on Textiles and Clothing (ATC) adopted at Marrakesh during the Uruguay Round in 1994. The ATC outlawed the introduction of new VERs and required that existing voluntary export restraints be phased out after a ten-year transition period (1995–2004). Ibid., pp. 783–7.
- ¹⁵ For an account of the causes of the 1970s commodity boom see R. N. Cooper and R. Z. Lawrence, 'The 1972–1975 Commodity Boom', *Brooking Papers on Economic Activity* 3 (1975), 671.

I.1 HISTORICAL TRENDS IN USE OF EXPORT RESTRICTIONS 5

Kippur War.¹⁶ Net food-exporting countries started to apply export restraints as price insulating instruments in reaction to high prices.¹⁷ For the first time, world markets experienced the consequences of the domino effect of export restrictions,¹⁸ namely vulnerability of supply and increased price volatility, while the poorest segments of the population in imposing countries often suffered negative income distribution effects.¹⁹ The turbulence caused on the international agricultural markets did not, however, instigate any effective and timely reaction within the framework of the General Agreement on Tariffs and Trade (GATT).²⁰ The opportunity for improving multilateral disciplines on the export side within a

- ¹⁶ WTO, 'World Trade Report 2013: Factors Shaping the Future of World Trade', www.wto. org/english/res_e/booksp_e/world_trade_report13_e.pdf (accessed November 2014), p. 171. OPEC came into existence in 1960 as a cartel of petroleum producers, and its original members were Venezuela, Iran, Iraq, Kuwait and Saudi Arabia. Gradually its membership has expanded to include Algeria, Angola, Ecuador, Libya, Nigeria, Qatar and the United Arab Emirates. Gabon and Indonesia also joined the Organization but eventually suspended their membership. OPEC, 'Member Countries', www.opec.org/opec_web/en/ about_us/25.htm (accessed November 2014). OPEC has traditionally used its market share to influence international oil prices. While the 1973 embargo constitutes an extreme example of OPEC's abuse of its dominant position, its devastating effects on oil prices were caused by the increasing import dependence of the Western world on OPEC supplies during the 1970s, the low elasticity of oil demand and the lagged response of non-OPEC supply. Radetzki, *A Handbook of Primary Commodities*, p. 159.
- ¹⁷ W. Martin and K. Anderson, 'Export Restrictions and Price Insulation During Commodity Price Booms', The World Bank Policy Research Working Paper No. 5645, 2011, www.imf.org/external/np/seminars/eng/2011/trade/pdf/session1-martin-paper. pdf (accessed May 2014); S. Mitra and T. Josling, 'Agricultural Export Restrictions: Welfare Implications and Trade Disciplines', International Food and Agricultural Trade Policy Council (IPC) Position Paper, Agricultural and Rural Development Policy Series, 2009, www.agritrade.org/documents/ExportRestrictions_final.pdf (accessed May 2014), pp. 3-8.
- ¹⁸ The term 'domino effect' is used to describe the phenomenon by which the introduction of an export restriction by a country triggers the reaction of other countries sharing similar objectives so that the multiplication of export restrictions ultimately annuls their intended effects. In the case of agricultural commodities, in particular, export restrictions used as price insulating instruments have tangibly contributed to the rise of food prices. M. Ivanic, W. Martin and A. Mattoo, 'Welfare and Price Impacts of Price-Insulating Policies', Presented at the 14th Annual Conference on Global Economic Analysis (Venice, Italy, 2001), Global Trade Analysis Project (GTAP) Resource No. 3651, www.gtap.agecon.purdue.edu/resources/ download/5580.pdf (accessed November 2014); P. Giordani, N. Rocha and M. Ruta, 'Food Prices and the Multiplier Effect of Export Policy', WTO Economic Research and Statistics Division, Staff Working Paper ERSD-2012-08, www.wto.org/english/res_e/reser_e/ ersd201208_e.pdf (accessed November 2014).
- ¹⁹ Piermartini, 'The Role of Export Taxes', pp. 15-8.
- ²⁰ General Agreement on Tariffs and Trade (1994), Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 187, entered into force 1 January 1995 [hereinafter GATT]. For an overview of the mixed reactions raised by the first wave

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system traditionally centred on the goal of market access and, thus, on the removal of import barriers²¹ was discussed during the Tokyo Round.²² Concrete steps forward were hampered, however, by the continuous divergence between commodity net exporting and net importing countries.²³ Momentum was eventually lost following the normalization of international markets and the subsequent start of a two-decade span of commodities' price decline.²⁴

During the 1980s and 1990s, the issue of export restrictions on raw materials was therefore not prominent on the international trade agenda. The main point of controversy concerning the use of measures restricting exports was linked to the surge of voluntary export restraints in manufacturing sectors other than textiles.²⁵ In particular, from the late 1970s through to the middle of the 1980s, VERs dominated Japan-US trade relations.²⁶ Several formal and informal export-restraint arrangements were concluded between the two countries to control the importation of a variety of manufactured goods of Nipponese origin into the US. Among the restricted products were automobiles, semiconductors, colour televisions and machine tools.²⁷ Many European states followed the example of the United States to restrain Japan's penetration into their markets.²⁸

The wide diffusion of VERs reflected the intention of Western economies to protect those domestic manufacturing sectors most affected by the pressure of Japanese imports during a time of macroeconomic downturn. As soon as such sectors recovered, from the second half of the 1980s onwards, VERs were progressively phased out, and Western countries

of export restrictions on agricultural commodities and the consequently weak initiatives undertaken see Mitra and Josling, 'Agricultural Export Restrictions', pp. 14–15.

- ²¹ R. W. Staiger, 'Non-Tariff Measures and the WTO', WTO Economic Research and Statistics Division, Staff Working Paper ERSD-2012-01, www.wto.org/english/res_e/ reser_e/ersd201201_e.pdf (accessed November 2014), p. 2.
- ²² See below, Chapter 7, Section 7.2. ²³ GATT Doc. BISD 29/S/9, 29 November 1982.
- ²⁴ Carter et al., 'Commodity Booms and Busts', p. 93; Radetzki, A Handbook of Primary Commodities, p. 10.
- ²⁵ Jackson, The Jurisprudence of GATT & the WTO, pp. 69-74.
- ²⁶ W. Cline, *Trade Policy in the 1980s* (Washington, DC: Peterson Institute for International Economics, 1983).
- ²⁷ M. Satake, 'Trade Conflict between Japan and the United States over Market Access: The Case of Automobiles and Automotives Parts', Pacific Economic Papers No. 310, Asian Pacific School of Economics and Governance (APSEG), 2000, https://crawford.anu.edu. au/pdf/pep/pep-310.pdf (accessed November 2014).

²⁸ Cline, Trade Policy in the 1980s, pp. 529-30.

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started focusing again on improving access to foreign markets as a way of increasing their own exports.²⁹

The 'reversed' issue of access to primary supplies was therefore not a priority in the minds of the World Trade Organization (WTO) negotiators during the Uruguay Round (1986–1994). Two decades of low and declining commodity prices had led to a relatively moderate use of export restrictions. Any agreement on the topic, moreover, seemed hampered at the outset by the apparent insurmountable divide between net importing countries, interested in securing further trade liberalization, and net exporting countries, advocating the relevance of the principle of sovereignty over natural resources in this area.³⁰ Thus, while the use of VERs was explicitly outlawed in the new WTO Agreement on Safeguards,³¹ the issue of export restrictions was not specifically dealt with, as countries were lacking the incentive to find a multilateral solution on the long-standing issue of access to primary commodities.

The unresolved questions at the basis of the stalemate in any discussions on export restrictions resurfaced abruptly at the beginning of the 2000s, when renewed use of export restraints soon reached an alarming dimension. The new wave again affected the agricultural sector, contributing to exacerbating the food crisis in 2007–2008 and the food price spike of 2010– 2011.³² Moreover, it also rapidly spread to various categories of commodities, including raw materials of mineral origin for use by other sectors of the economy.³³ This multi-directional expansion in the use of export

- ³⁰ GATT Doc. MTN.GNG/NG2/W/40, 8 August 1989.
- ³¹ Agreement on Safeguards, Multilateral Agreements on Trade in Goods, Annex 1A to the Agreement Establishing the World Trade Organization, 1869 U.N.T.S. 154, entered into force 1 January 1995. See Article 11.1(b).
- ³² K. Anderson and S. Nelgen, 'Trade Barrier Volatility and Agricultural Price Stabilization', *World Development* 40 (2012), 36; Food and Agriculture Organization (FAO), International Fund for Agricultural Development (IFAD), International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), United Nations Conference on Trade and Development (UNCTAD), World Food Programme (WFP), the World Bank, the WTO, International Food Policy Research Institute (IFPRI) and the United Nations High Level Task Force on the Global Food Security Crisis (UN HLTF), 'Price Volatility in Food and Agricultural Markets: Policy Responses', 2 June 2011, www.oecd.org/tad/agricultural-trade/48152638.pdf (accessed November 2014); A. L. Coulibaly, 'The Food Price Increase of 2010–2011: Causes and Impacts', Publication No. 2013-02-E, Ottawa, Canada, Library of Parliament, 2013, www.parl.gc.ca/Content/ LOP/ResearchPublications/2013-02-e.pdf (accessed November 2014); P. Liapis, 'How Export Restrictive Measures Affect Trade in Agricultural Commodities', OECD Food, Agriculture and Fisheries Papers, No. 63 (OECD Publishing, 2013).

²⁹ Satake, 'Trade Conflict', pp. 6 ff.

³³ See below, Section I.2.

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restrictions reflected, on the one hand, the exceptional scope of the 2000s commodity boom³⁴ and the role played by hard commodities in the 2008 price spike³⁵ and, on the other hand, the sentiment of closure that countries started to develop in a phase of major macroeconomic downturn. By the end of the 2000s, export restrictions were the fastest growing component of the trade-restrictive measures introduced within the framework of the global financial and economic crisis.³⁶

I.2 The panoply of export restrictions on primary commodities in recent times

The second wave of export restrictions on primary commodities represents a *unicum* in recent history due to its scope and length. It has extended to various categories of primary products, from foodstuffs and agricultural raw materials to hard commodities.³⁷ Directly linked to the 2000s commodity boom,³⁸ it has eventually taken its own course, becoming – at least for certain sectors – more persistent than price spikes. The unfolding of the financial and economic crisis at the end of the 2000s has moreover given further stimulus to the use of export restrictions, affecting in particular industrial raw materials in the context of a 'revival' of industrial policies.³⁹ Export restrictions indeed reached their peak

- ³⁴ Two main factors explain the commonality of price rises across commodity sectors experienced in the 2000s: first, the existence of common driving forces; second, the existence of linkages across markets. As to the first factor, analysts agree that the exceptional economic performances of developing Asia (and China in particular) played a key role in the 2000s commodity boom, boosting in particular energy and metals prices for which demand skyrocketed to the highest level recorded in over twenty years. Radetzki, *A Handbook of Primary Commodities*, pp. 70–1. The second factor mainly refers to the 'contagion' effects that changes in energy (oil) prices produce in other commodity sectors and, particularly, in the agricultural sector. C. L. Gilbert, 'How to Understand High Food Prices', *Journal of Agricultural Economics* 61 (2010), 398, p. 401.
- ³⁵ There is general agreement on the fact that the demand shock affecting energy and metals from 2002-2003 onwards had a predominant role in boosting the entire range of commodities' prices. Carter *et al.*, 'Commodity Booms and Busts', p. 90.
- ³⁶ WTO Doc. WT/TPR/OV/14, p. 17.
- ³⁷ See WTO Docs. WT/TPR/OV/W/1-8 (various years).
- ³⁸ For a full account of the commodity boom see Radetzki, *A Handbook of Primary Commodities*, pp. 70-2; Gilbert, 'How to Understand'; Carter *et al.*, 'Commodity Booms and Busts'.
- ³⁹ The practice of introducing trade-restrictive measures during severe economic crises is not a new trend for either developed or developing countries. The use of export restraints has, however, raised particular concerns given their rapid diffusion and growing incidence. See WTO Doc. WT/TPR/OV/14, p. 17. For a comprehensive description of recent trends in the use of industrial policy instruments see, among others, J. Salzman and

I.2 EXPORT RESTRICTIONS ON PRIMARY COMMODITIES 9

between 2010 and 2011, registering an incidence of more than 150 per cent higher than the previous year.⁴⁰ While this increase still mainly concerned agricultural products,⁴¹ minerals and metals gained prominence as one of the product categories most affected by the introduction of barriers applied to exportation.⁴²

The number of new export restrictions applied to primary products slowly decreased in the subsequent years, going from thirty-two in the period between mid-October 2011 and mid-October 201243 to twentyseven between mid-October 2012 and mid-November 2013.44 In the 2013 between mid-November mid-May period and 2014. however, twenty-four new restrictive measures were already being introduced on the exportation, showing a reversed upward trend.⁴⁵ Although this number was still lower than the level recorded at the same point in time during the peak year 2010–2011,⁴⁶ export restrictions accounted for 27 per cent of the total number of trade-restrictive measures introduced in this timeframe by WTO Members,⁴⁷ the highest percentage registered

- ⁴⁰ WTO Doc. WT/TPR/OV/14, p. 17. The number of new export restrictions had been steadily increasing since 2008, going from twenty new reported measures in the period between October 2008 and October 2009 to twenty-five between November 2009 and mid-October 2010, and finally sixty-four from mid-October 2010 to mid-October 2011 (of which thirty were introduced from mid-October 2010 to April 2011, and thirty-four from May 2011 to mid-October 2011). WTO Doc. WT/TPR/OV/W/5, p. 5, and WTO Doc. WT/TPR/OV/W/6, 28 June 2012, p. 1.
- ⁴¹ Food-related commodities were, in particular, severely affected by export restrictions as a reflection of the price spike of 2010–2011. See below, Section I.2.1.
- ⁴² WTO Doc. WT/TPR/OV/W/5, p. 16; WTO Doc. WT/TPR/OV/W/6, p. 19; B. Fliess, H. Gou and T. Mard 'Taking Stock of Measures Restricting the Export of Raw Materials: Analysis of OECD Inventory Data', OECD Trade Policy Working Paper No. 140 (OECD Publishing, 2012), p. 4. Because of the ambiguity of mineral export restraints – on the one hand, purporting to fulfil environmental goals such as resource depletion and, on the other hand, serving industrial purposes – the diffusion of these measures has generated further alarm. See below, Section I.2.2 and Section I.3.
- ⁴³ WTO Doc. WT/TPR/OV/15, 29 November 2012, p. 2. Nineteen new export restrictions were applied in the period between mid-October 2011 and mid-May 2012. WTO Doc. WT/TPR/OV/W/6, p. 1.
- ⁴⁴ WTO Doc. WT/TPR/OV/16, 31 January 2014, p. 23. Of the twenty-seven new measures reported in that year, sixteen were reported in the period between mid-October 2012 and April 2013. WTO Doc. WT/TPR/OV/W/7, 5 July 2013, p. 7.
- ⁴⁵ WTO Doc. WT/TPR/OV/W/8, 27 June 2014, pp. 87–97.
- ⁴⁶ In the first half of the 2010-2011 reporting period, WTO Members had introduced thirty new export restrictions. WTO Doc. WT/TPR/OV/W/5, p. 5.
- ⁴⁷ WTO Doc. WT/TPR/OV/W/8, p. 23.

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since the beginning of the crisis.⁴⁸ New measures were also introduced during the second half of the monitoring period, and by mid-October 2014 the number of export restrictions had grown to thirty-six.⁴⁹ In its last Report, the Directorate-General for Trade of the European Commission stressed the detrimental effects of a 'resurgence in the application of measures restricting *exports*^{'50} for the global commodity markets, as practices that 'not only can affect or serve to regulate prices domestically but also worldwide'.⁵¹ It accordingly considered 'the intensification of such a trend ... particularly alarming as all countries are globally dependent on each other's natural resources'.52

Export restrictions have moreover been more resilient than other categories of trade-restrictive measures applied by WTO Members in the framework of the global crisis, accounting for a relatively marginal share of the overall trade-facilitating measures adopted during each reporting period. This share has furthermore slightly decreased over time, going from 18 per cent in the period between 2011 and 2012 to 6 per cent between 2012 and 2013, and to 5 per cent from mid-November 2013 to mid-October 2014.⁵³ Trade-facilitating measures applied on the export side (e.g. reduction of export duties or elimination of export bans or quotas) occur for the most part in the agricultural sector, with only a negligible proportion intervening in the mineral sector.54

These data show the pervasiveness of the export restrictions on raw materials introduced in the last decade as well as the persistence of such measures. Furthermore, they anticipate the emergence of a substantial upward trend in the use of restrictive measures applied on the exportation of minerals and metals. As explained below, this new element has

⁴⁸ Between 2010 and 2011, the number of export restrictions accounted for less than 20 per cent of the total number of trade-restrictive measures introduced by WTO Members. WTO Doc. WT/TPR/OV/14, p. 17.

⁴⁹ WTO Doc. WT/TPR/OV/17, 24 November 2014, p. 20.

⁵⁰ European Commission 'Eleventh Report on Potentially Trade-Restrictive Measures Identified in the Context of the Financial and Economic Crisis', 2014, http://horizon. hozint.com/2014/11/dg-trade-11th-report-on-potentially-trade-restrictive-measures/ (accessed December 2014), p. 13. Based on the European Commission's calculations, the use of export restrictions increased by 39 per cent between 1 June 2013 and 30 June 2014 compared with previous monitoring periods. ⁵¹ Ibid., p. 4. ⁵² Ibid.

⁵³ WTO Doc. WT/TPR/OV/16, p. 18 and WTO Doc. WTO Doc. WT/TPR/OV/17, p. 19.

⁵⁴ WTO Doc. WT/TPR/OV/W/8, pp. 57–67.