

**IS THE WTO A WORLD TAX ORGANIZATION?
A PRIMER ON WTO RULES FOR TAX POLICYMAKERS**

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TECHNICAL NOTES AND MANUALS

IS THE WTO A WORLD TAX ORGANIZATION? A PRIMER ON WTO RULES FOR TAX POLICYMAKERS

Abstract:

This paper examines the extent to which World Trade Organization (WTO) rules impinge on policymakers' freedom to formulate tax policies. It provides an overview of both the economic rationale for WTO rules concerning taxation and the provisions of the main WTO agreements concerning border taxes and internal taxes (direct as well as indirect). It also points out some tax anomalies and inconsistencies in these rules, and how the rules have evolved as a consequence of the interpretation of the WTO agreements by its Dispute Settlement Body and the latter's rulings in connection with several disputes over taxes affecting trade. As WTO Members will undoubtedly want to avoid having their tax policies successfully challenged in the WTO, the paper provides some guidance concerning the design of tax policy.

I. Introduction

Despite more than six decades of multilateral trade liberalization unleashed by the General Agreement on Tariffs and Trade (GATT) in 1947, protectionist policies persist in many international goods markets. Perhaps the greatest challenge regarding the design of multilateral trade rules is the concern that trade liberalization commitments with respect to one policy instrument, such as tariffs, may be vitiated by other protectionist instruments unconstrained by such rules.² Consequently, multilateral trade and other agreements must address a wide range of potentially protective measures, including tax measures other than tariffs.

Tariffs and other indirect taxes, whether levied at the border or internally, have long been subject to the binding multilateral rules embodied in the GATT. However, in recognition of the fact that tax measures can be used as substitutes for other types of protection and government assistance or regulation,³ direct as well as indirect taxes have come under increased scrutiny at

² For example, an import tariff is equivalent to a tax on domestic consumption combined with a subsidy for domestic production.

³ In ruling on the dispute between Canada and the EC, for example, although that dispute did not concern a tax measure, but rather the EC's ban on imports of asbestos, the WTO's Dispute Settlement Body (DSB) expressed the view that there is no sharp distinction between tax and non-tax regulation as both forms of regulation can be used to achieve the same ends. Accordingly, the DSB went on to add that "It would be incongruous if ... Members were prevented from using one form of regulation ... to protect domestic producers of certain products, but were able to use another form of regulation ... to achieve those ends. This would frustrate a consistent application of the 'general principle' in GATT Article III" concerning National Treatment. (See WTO, 2000a, pp. 37-38.)

the World Trade Organization (WTO). This recognition is reflected in several of the agreements negotiated under the Uruguay Round, notably those concerning subsidies and trade-related investment measures (TRIMs). These agreements reflect the realization by national governments that multilateral rules need to play an increasingly important role in regulating the use of tax as well as non-tax measures, especially where these measures affect the international movement of goods, services, capital, technology and persons.

As a consequence of these agreements, the range of tax measures challenged by WTO Members has widened considerably beyond the more traditional trade taxes. Since 1995, taxation has been the cause of over 40 of the 500 disputes that have been initiated with Members' requests for consultations submitted to the WTO's Dispute Settlement Body (DSB),⁴ which is now arguably the world's most prolific international dispute resolution system. Roughly half of these disputes have resulted in the establishment of panels and consequent rulings by the DSB. The DSB's rulings against Indonesia's National Car Programme and especially against the United States concerning the latter's Foreign Sales Corporation (FSC) scheme, which, at the time, led to the largest retaliation award ever authorized in a dispute at the WTO, are particularly noteworthy. These rulings confirmed, if there were ever any doubt, that, generally speaking, direct as well as indirect taxes (including, of course, not only tariffs), are subject to WTO rules, notwithstanding efforts by tax authorities to secure specific exemptions for certain direct tax measures in these agreements. The FSC ruling also reconfirmed the traditional distinction under multilateral trade rules between direct and indirect taxes, especially with respect to how such taxes should be treated under the border tax adjustment and subsidy rules of the WTO. It would not be surprising if other WTO-inconsistent tax measures were identified in the future, leading to further disputes among WTO Members. WTO rules can therefore be expected to continue to be an important factor in shaping tax policies, as Members will undoubtedly want to avoid having their tax policies successfully challenged in the WTO.

This paper provides an overview of the extent to which taxation is subject to WTO rules, which embody the fundamental principles of non-discrimination, predictability and transparency. Section II provides a synopsis of the possible economic rationale for these principles (and thus the main provisions of the GATT/WTO agreements), which can be ignored by readers already familiar with the basic theory of trade policy instruments. Section III focuses attention on the basic rules of the GATT/WTO agreements as well as several other provisions that are especially relevant for tax policymakers. Section IV examines how these rules have been interpreted by the DSB in a few selected cases concerning tax measures. Section V contains some concluding remarks. The Annex provides some guidelines concerning WTO rules for tax policymakers.

⁴ A brief summary of the WTO's dispute settlement process is found in footnote 74.

II. Economic Rationale for WTO Rules

Before providing an overview of the extent to which GATT/WTO rules encompass taxation, this section considers the possible economic rationale for the main rules and their underlying principles, namely non-discrimination, predictability and transparency. The broad aim of these rules is to regulate, if not remove, distortions to trade. These distortions contribute to economic inefficiency, by, for example, reducing consumer choice, raising prices to consumers, including downstream processors, and disrupting global supply chains, thus impeding economic development. Attention here is focused mainly on the GATT because the fundamental principles and consequent obligations embodied in this agreement form the basis for the other WTO agreements, such as the General Agreement on Trade in Services (GATS). In some respects, however, WTO tax rules appear to be anomalous or, indeed, inconsistent with economic theory concerning trade taxation.

Notwithstanding the considerable progress made in dismantling barriers to trade as a result of multilateral negotiations under the auspices of the GATT/WTO, protectionist policy measures are still widely used by WTO Members for various reasons, compelling or not. These may include: shifting the terms-of-trade in a country's favour; protection of specific domestic "infant" industries; correction of "market failure"; conservation of natural resources; assistance to downstream processing of such resources; food security; or as a counterbalance to domestic or other countries' trade distortions (in accordance with the theory of Second Best).⁵ In some mainly developing countries, they are also still an important source of tax revenues. Among the various protectionist measures available concerning trade in goods are tariffs (non-discriminatory or discriminatory), quantitative restrictions (quotas), voluntary export restraints, export taxes, discriminatory tax policies, and subsidies, including tax incentives. Some of these (and other measures⁶) may have similar or equivalent economic effects, particularly concerning their deadweight efficiency losses, while others can have very different effects. There may also be inherent similarities or differences concerning their transparency, predictability, susceptibility to rent-seeking, ease of administration, etc.

⁵ Developing and especially least-developed countries, where capital markets are also inevitably under-developed, are arguably more susceptible to "market failure", which raises domestic firms' costs of doing business. While there is some doubt as to whether the government can allocate resources better than even imperfect markets, some form of temporary assistance may nonetheless be considered necessary to enable domestic "infant" industries to expand sufficiently to achieve cost reductions associated with economies of scale as well to learning-by-doing and technological progress, which are among the major determinants of growth in total factor productivity (TFP). Tariffs and other forms of protection may also be used in instances where it is felt that some firms in the process of restructuring need temporary protection to enable them to adjust in order to increase their productivity and thus become viable in the longer term. Under these circumstances, the optimum tariff structure would not necessarily be uniform. Protection would be accorded only to specific "infant" or restructuring industries affected by scale economies, market failure (or externalities), but not other industries. But identifying such specific industries is usually very difficult. Besides, import tariffs are not necessarily the best instrument to address market failure. Indeed, protection runs the risk of hampering the re-allocation of domestic resources in accordance with the economy's comparative advantage. Since 1990, one of the main sources of productivity growth, and thus development, in Asia has been structural change involving the movement of labour from low- to high-productivity sectors. The poorer productivity performance of Africa and Latin America is apparently due largely to the movement of labour in the opposite direction, from high- to low-productivity sectors (McMillan and Rodrik, 2011).

⁶ Other major protectionist measures include local content requirements, state trading monopolies, and discriminatory government procurement practices.

The rest of this section provides an analysis of these non-tariff measures in comparison with a tariff, irrespective of whether government intervention to restrain trade makes economic sense or not. It also highlights some well-known instances of economic equivalence as regards different measures. At the same time, it identifies protectionist tax policy measures that do the least damage. After all, damage limitation is often a major challenge for tax, if not other, policymakers. In doing so, it is shown that, by and large, WTO rules do encourage “efficient protection,” particularly as far as goods markets are concerned (Sykes, 2001). A comparison of tax measures suggests that non-discriminatory tariffs and domestic subsidies, including those in the form of tax relief, tend to involve relatively “efficient protection” and that these measures are less constrained by WTO rules. More damaging forms of protection are, to a large degree, discouraged, if not prohibited.

A. Import Tariffs

Among the wide range of protectionist measures, import tariffs are arguably the most traditional. They are also the most transparent, especially if they involve *ad valorem* rather than specific rates. Therefore, tariffs provide a useful benchmark against which the effectiveness, discriminatory nature, predictability, transparency, and simplicity of other measures can be evaluated. In the case of a tariff that is uniform for all imports of a particular “like” product, regardless of their origin, that is, a most-favoured-nation (MFN) tariff, its impact on trade and economic efficiency is fairly predictable from a theoretical standpoint.⁷

When a small country levies a tariff, the consequent reduction in its imports is likely to have little impact on the world price of the product concerned. A tariff drives a wedge between the world price and the price paid by domestic consumers, thereby, raising the domestic price by the full amount of the tariff.⁸ The size of this wedge faced by all exporters is the same. As regards the consequent static deadweight losses, the first component involves the loss in consumer surplus incurred by domestic consumers (and producer surplus in the case of downstream processors, if the import concerned is a primary product or intermediate input), who are priced out of the market for the product owing to the higher price caused by the tariff. The second component is the waste of resources resulting from the substitution of higher-cost domestic production for lower-cost

⁷ This section largely reflects the standard partial equilibrium theory of tariffs, quotas, export subsidies and voluntary export restraints found, for example, in Krugman *et al.* (2012), Chapter 9, pp. 192-218. As the latter does not contain the theory of export taxes, this is summarized in Box 1.

⁸ Tariff escalation, which is evident in major industrialized and developing countries, especially as far as semi- and fully-processed goods are concerned, means that “effective” tariff rates can considerably exceed nominal tariff rates. The “effective rate of protection” (ERP) measures the protection provided by the entire structure of tariffs, taking into account those levied on inputs as well as those on final products (Corden, 1971). It is defined as $ERP = (V_D - V_W)/V_W$, where V_D is the value-added in the given sector at domestic prices, which includes tariffs, and V_W is value added at world prices. If the nominal tariff on the final product is t , the share of each imported input i in the total value of the final product is a_i , and the nominal tariff on each imported input is t_i , then the effective rate of protection can be written as: $ERP = (t - \sum a_i t_i) / (1 - \sum a_i)$. Thus, if $t = 10$ percent, $t_i = 5$ percent for all inputs and $\sum a_i = 0.6$, the ERP is nearly 20 percent. According to the OECD (2014), taking into account tariffs at all stages of the supply chain magnifies the effective tariff rate, especially in sectors such as communications and electronics, motor vehicles, basic metals and textiles, which are characterized by long value chains and several production stages.

foreign production insofar as domestic producers expand their output in response to the higher domestic price. These two conventional deadweight losses are depicted by the familiar “Harberger triangles” in the standard partial equilibrium theory of protection. Additional losses are associated with, among other things, the customs bureaucracy necessary to administer and collect the tariff, tariff-payers’ compliance costs, and the inducement to rent-seeking. Despite these deadweight losses, a non-discriminatory MFN tariff is regarded as a relatively efficient instrument, especially compared to a discriminatory tariff or, as shown in the next section, a quantitative restriction.⁹

Tariffs are not only a barrier to imports, however. In the presence of global supply chains, to the extent that they are levied on imported parts or components and reflected in the prices of final goods (and services) manufactured in the importing country (as in the absence of full tariff drawbacks, for example), they constitute export taxes to the extent that those final goods (and services) are tradable. The negative effects of tariffs are compounded, therefore, insofar as parts and components cross borders many times.¹⁰

The direct deadweight losses caused by a discriminatory tariff, consisting of the loss in consumer surplus and the inefficiency associated with the substitution of domestic production for lower cost foreign production, are exactly the same as those for an MFN tariff (holding the volume of imports constant). However, to the extent that lower tariff rates are applied to the same goods imported from relatively high-cost foreign suppliers, the problem of trade diversion arises. Unlike in the case of an MFN tariff, imports into the country applying the tariff are no longer produced by the lowest-cost (most efficient) foreign producers. An additional deadweight loss results, therefore, from the diversion of trade that occurs if less efficient sources of supply are given market access on more favourable terms involving lower tariffs. Further costs arise because the origin of imports must be established and necessary rules of origin must be administered.¹¹ These additional losses and other disadvantages show that a discriminatory tariff is inferior to a non-discriminatory (MFN) tariff.¹²

In the case of a small country, therefore, even a non-discriminatory (MFN) import tariff (or, as shown later, export tax) results in an unambiguous loss in economic welfare in the country levying the tariff (export tax). By contrast, insofar as the country is big enough to influence world prices and thus its terms of trade, the benefits of any terms-of-trade improvement can outweigh

⁹ A more exhaustive discussion of the rationale for MFN treatment can be found in Horn and Mavroidis (2001).

¹⁰ According to the Lerner (1936) symmetry result in international trade, an import tariff is equivalent to an export tax under a fixed trade balance. Therefore, taxes on imports also tax exports.

¹¹ A discriminatory tariff also complicates bilateral trade agreements. Countries seeking market access commitments for their exporters will undoubtedly be concerned about the possibility that differential and more favourable treatment may be given subsequently to other countries’ exporters, thereby undermining the value of the concessions they receive, and will want to guard against this problem. This type of problem is being increasingly addressed in bilateral trade treaties by means of an MFN clause.

¹² An important caveat in this regard is the “free rider” problem that arises in connection with trade negotiations based on the MFN principle. In the case of negotiations at the WTO regarding tariff cuts, this problem has been overcome, in practice, by the use of agreed tariff cutting formulae that apply to all Members. Nonetheless, the free rider problem may partly explain the proliferation of bilateral and regional trade agreements.

the deadweight efficiency losses as a consequence of these border taxes. (A country's "optimum" MFN tariff is the reciprocal of the elasticity of the rest of the world's export supply curve.) The use of "optimum" tariffs by larger countries and potential retaliation from others provides a traditional reason for the GATT and WTO, the purpose being to prevent such "beggar-thy-neighbour" trade policies (Bagwell and Staiger, 2002). It may also help to explain why relatively large trading countries are reluctant to cut tariff rates unilaterally, preferring instead that their trading partners do so as well, thus providing a rationale for the WTO's multilateral approach to trade negotiations on the basis of the MFN principle.

Even though tariffs are less distorting than quotas, they are nonetheless doubly distorting, affecting consumers' as well as producers' decisions. That is why the aim of GATT negotiations and consequent rules has been to cut and "bind" MFN tariffs, albeit leaving some scope for countries to use tariffs as instruments of policy nevertheless. At the same time, it is clearly important that internal taxes (or other regulations) not be used as *de facto* tariffs¹³ to discriminate against imports or vitiate tariff reductions negotiated at the WTO. Accordingly, national treatment (NT) requires that imported products not be treated less favourably than "like" or "directly competitive or substitutable" domestic products. These core GATT principles of MFN and NT extend beyond trade and internal taxes to non-tax measures too.

To the extent that the objective of tariffs (and export taxes) is to generate tax revenues (rather than provide protection), such trade taxes tend to be more distorting than alternative internal indirect taxes, such as excises and broadly based consumption taxes.¹⁴ (Insofar as such taxes can be shifted forward onto export prices or backward onto import prices, these too can have terms-of-trade effects.)

B. Quantitative Restrictions (Quotas)

Non-discriminatory import tariffs (and exports taxes) are usually preferable to quantitative restrictions (QRs) or quotas, if not outright bans, on imports (or exports). While quotas and trade taxes can be equivalent in perfectly competitive markets, quotas are more distorting instruments of

¹³ *De facto* tariffs include not just internal taxes, such as excises or VAT that discriminate against imports, but also, for example, other border charges or transit fees levied at specific rather than *ad valorem* rates, advance VAT or income taxes on imported goods (under certain circumstances, as discussed in section IV.D), anti-dumping duties, and countervailing duties.

¹⁴ Consider, for instance, a strategy of matching each one percentage point cut in the tariff rate on some final consumption good with a one point increase in the corresponding domestic tax on consumption of that same good (see Keen and Ligthart, 2002.) For a small open economy (which can have no impact on prices in world markets), this will leave the price faced by consumers unchanged. It will also preserve the efficiency gain from the tariff cut, as the change in the consumption tax does not offset the effect of bringing the prices faced by domestic producers closer to those in world markets. However, total tax revenue will rise because these taxes are now levied on all consumption, domestically-produced as well as imported goods. That increase in tax revenues could, in turn, be used to alleviate—by subsidies or targeted tax incentives—the transition of those sectors that stand to lose from trade liberalization, and/or to reduce consumption taxes to ensure that consumers also end up strictly better-off as a consequence of the reform. As mentioned later, however, it is important to ensure that such a strategy does not "nullify or impair" reductions in tariffs negotiated at the WTO or involve "actionable subsidies". A similar strategy for removing an export tax so as to improve efficiency and increase revenue involves replacing it by the combination of a tax on domestic production and a consumption subsidy, both at the same rate.

trade policy than import (or export) taxes under conditions of imperfect competition, which characterizes many markets for internationally traded goods. Under such circumstances, an import quota results in a higher domestic price and lower output than a tariff that results in the same level of imports. (Likewise, an export quota results in a higher price and lower quantity consumed in the importing country.) The reason for this outcome is that import quotas create more monopoly power than tariffs.¹⁵ Moreover, whereas tariffs (and export taxes) yield revenues, import (and export) quotas do not. Instead, the quota rents accrue to the beneficiaries of the quotas licences unless these are auctioned off. If quota rights are auctioned in a competitive bidding process, the most efficient, and thus lowest-cost, foreign suppliers will tend to make the highest bids for the rights to have their products imported, thereby reducing the possibility of trade diversion. If they are not auctioned, the quotas have to be allocated in some other less efficient way. Other methods of allocating quota rights, and thus rents, likely provide an additional incentive for socially wasteful rent-seeking and the allocation of the quotas can be susceptible to administrative discretion and therefore corruption. The outcome may be additional deadweight losses.

“Voluntary” export constraints (on products such as cars, steel and semiconductors, for example) involve essentially the same deadweight losses as import quotas. Its licences (and thus the quota rents) are assigned to foreign governments, however. From the standpoint of the importing country, therefore, a VER is clearly inferior to an import quota (Krugman *et al.*, 2012).

Consequently, such quantitative restrictions are certainly no better, and more likely worse, than non-discriminatory tariffs. This aversion to bans and quantitative restrictions partly explains the general elimination of such measures and the conversion of agricultural import quotas and other non-tariff measures into bound tariffs (a process known as “tariffication”¹⁶), as a result of the Uruguay Round negotiations that established the WTO.¹⁷

C. Export Taxes

As regards the nature of export barriers, taxes are, by and large, the least distorting form of restraint.¹⁸ In contrast to a tariff, an export tax (whether explicit or *de facto*¹⁹) reduces the domestic price of the product subject to the export tax (Box 1). Domestic consumers then pay the lower

¹⁵ When monopolistic industries are protected by tariffs, domestic firms know that if they raise their prices too much, they will still be undercut by imports. An import quota provides absolute protection, however, because imports cannot exceed the quota level no matter how high the domestic price (Krugman *et al.* 2012, page 217).

¹⁶ By channelling all forms of protection into a single transparent (and predictable) instrument, the added complexity and associated transaction costs of negotiations in the face of multiple protectionist instruments can be avoided.

¹⁷ Some bans are necessary to fulfil certain international obligations, such as the Convention on International Trade in Endangered Species (CITES), the Montreal Protocol on Substances that Deplete the Ozone Layer, and United Nations sanctions, aimed at prohibiting or regulating trade in certain items. As discussed later, bans may also be necessary for other reasons, such as public health.

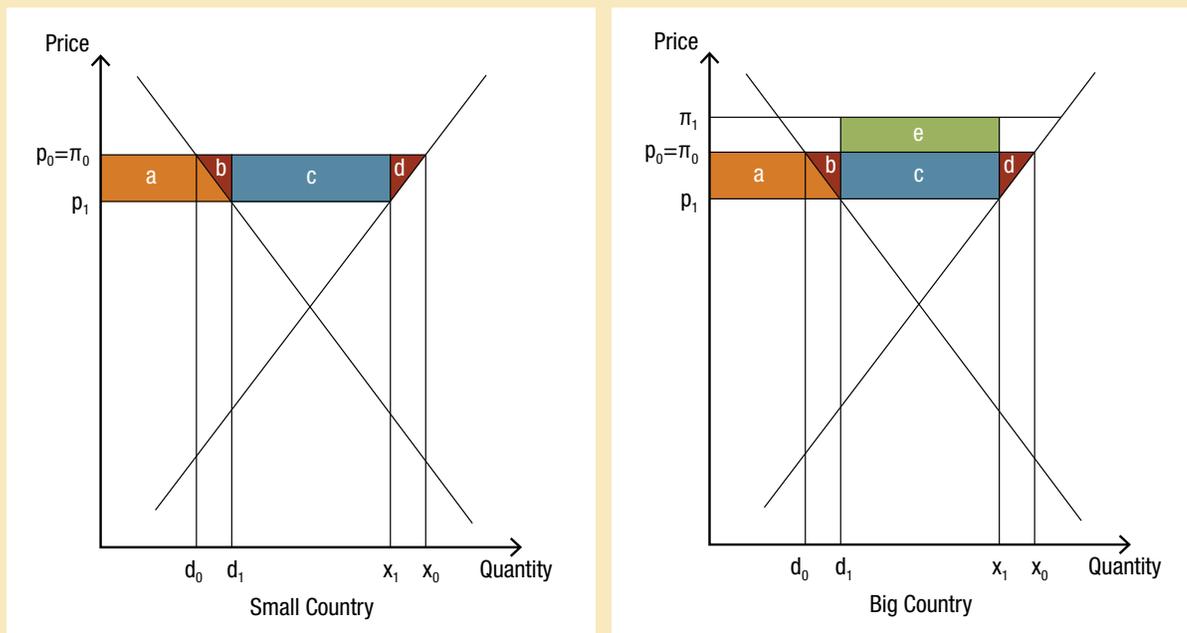
¹⁸ See Devarajan *et al.* (1996), Piermartini (2004), and Fung and Korinek (2013).

¹⁹ *De facto* export taxes include less-than-full rebates of VAT in respect of exports, as in China, where rebates have sometimes been curtailed for fiscal as well as trade policy reasons. Another example is advance income tax levied (by Argentina, Bangladesh, Myanmar and Pakistan, for example) on exports in order to reduce income tax evasion, insofar as such tax is not fully and immediately creditable or refundable against exporters' income taxes.

price for the product and likely consume more of it. By contrast, as producers receive a lower price for their product, they tend to reduce supply.²⁰ To the extent that the export tax is levied on primary or intermediate products that are used in domestic manufacturing, it constitutes an implicit subsidy for the domestic downstream processing of the manufactured product concerned. As a consequence of their doubly-distorting features, export taxes, like tariffs, are generally considered to be less effective instruments of protection than direct subsidies or tax incentives (as long as the latter do not constitute export subsidies or contain local content requirements). Unlike in the case of tariffs, however, there are no WTO disciplines aimed at cutting and “binding” export taxes (unless they are covered by countries’ protocols of accession to the WTO, as in the case of China,²¹ Kazakhstan, and Vietnam, for example).

Box 1. Economic Effects of an Export Tax

The figure below depicts the partial equilibrium effects of an export tax (or other equivalent restraint) imposed by a small country that cannot affect world prices, and a large one whose net supply (level of net exports) is sufficiently large to influence significantly world prices, and thus its terms of trade. Without such a tax, the domestic price (p_0) is the same as the world price, (π_0). At these initial prices, domestic demand (d_0) is less than domestic supply (x_0), and so the difference is exported to the rest of the world.



²⁰ Hence, whereas an import tariff is equivalent to a tax on domestic consumption combined with a subsidy for domestic production, an export tax is equivalent to a subsidy on domestic consumption combined with a tax on domestic production.

²¹ As discussed in section IV.E, in paragraph 11.3 of its Protocol of Accession, China agreed to maximum export duty rates for 84 products, mainly raw materials.

In a small country, imposition of an export tax (t) reduces exports and increases domestic supply, thereby reducing the domestic price until $p_1(1+t) = \pi_0$, which, by definition, remains unchanged. At this equilibrium price, domestic producers are indifferent between selling their products on the domestic market and exporting them. As they can consume more ($d_1 > d_0$) at a lower domestic price ($p_1 < p_0$), domestic consumers benefit from the export tax; their surplus is increased by the orange area denoted as (a). But domestic producers are adversely affected by the tax as they produce and sell less ($x_1 < x_0$) at a lower price ($p_1 < p_0$), so their surplus is reduced by $a+b+c+d$. However, the tax increases revenues by the blue area denoted (c), which is the post-tax level of exports ($x_1 - d_1$), multiplied by the per unit export tax ($\pi_0 - p_1$). It follows that the loss of producers' surplus ($a+b+c+d$) is larger than the gain in consumers' surplus (a) and export tax revenues (c). The net effect is a loss of domestic welfare measured by red areas (b+d), which are known as deadweight losses (Harberger triangles) in the theory of protection.

By contrast, in the case of a country whose share of world exports is sufficiently large, the drop in its exports owing to the tax can significantly increase the world price. Consumers' and producers' surpluses are identically affected. However, tax revenues increase (by e) in line with the rise in the world price to π_1 . The post-tax level of exports is still ($x_1 - d_1$), but the per unit export tax is now ($\pi_1 - p_1$) instead of ($\pi_0 - p_1$). An export tax thus raises domestic welfare if the green area denoted by (e) is larger than the deadweight losses reflected in the sum of the red areas (b+d). The area (e) represents the rise in domestic welfare as a result of the improved terms of trade; that is, final exports ($x_1 - d_1$) are sold at π_1 not π_0 , with $(\pi_1 - \pi_0)$ representing the gain in the terms-of-trade for each unit exported. (The optimum export tax is the inverse of the absolute value of the export demand elasticity.)

Irrespective of the stated objective of the export tax, insofar as it is levied on primary or intermediate products used in manufacturing, for example, the tax gives domestic downstream processors of the products concerned an advantage over processors abroad, who have to pay the world price for such products. A "de-escalating" export tax structure (a higher tax rate on exports of primary and intermediate products than on final goods) has been among the instruments of industrial policy used in East Asian countries to encourage the expansion of manufacturing to the detriment of primary and intermediate product sectors. This advantage is evidently higher in a large country ($\pi_1 - p_1$) than in a small one ($\pi_0 - p_1$). The advantage (plus the export tax revenues) is entirely at the expense of domestic producers of the product and efficiency if world prices are unaffected by the tax, but also partly at the expense of foreign consumers of the product, to the extent that world prices rise as a consequence of the tax. While this advantage does not involve a "financial contribution" (or taxes forgone) by the government levying the tax, and thus does not appear to be subject to WTO rules, it nonetheless constitutes assistance to manufacturing, which can distort trade; such an implicit subsidy could be illegal if it can be shown to have "adverse effects" on the market place.

If the export tax is levied on grounds of resource conservation or environmental protection (because the product is polluting or energy-intensive, for example), while the tax can alleviate such problems by inducing a fall in domestic output of the product concerned ($x_1 < x_0$), it is seldom the most effective way to achieve these conservation and environmental objectives; measures to curtail production would be more effective. (The magnitude of the fall in domestic production depends on the elasticity of supply.) Moreover, to the extent that the taxed product is processed downstream, and exports of the processed product are not similarly restrained, the effects of the export tax on the unprocessed product in meeting these objectives can be undone. Indeed, an export tax (or other constraint) may be used as an incentive to foreign enterprises to establish downstream processing plant to obtain access to key material inputs, bringing with them valuable know-how and technology.

Source: This box is adapted from Bouet, Antoine and David Laborde, "The economics of export taxation: a theoretical and CGE-approach contribution." Viewed at: <http://www.oecd.org/dataoecd/56/3/43965958.pdf>.

D. Subsidies and Tax Incentives

The doubly distorting nature of even non-discriminatory import tariffs means that the economic and revenue effects of a tariff can be replicated by the combination of a destination-based consumption tax and a subsidy for domestic production (at equal rates). Subsidies may take the form of direct government expenditures or their equivalent “tax expenditures” in the form of incentives, such as investment tax credits, especially those that are refundable.²² This equivalence means that negotiated reductions in tariffs could be “nullified or impaired” (contrary to WTO rules) by the combination of increased taxation of domestic consumption and a subsidy or tax relief for domestic production.²³ If only tax relief or a subsidy for domestic production is used, the domestic price would still be the tariff-free import price. Consequently, consumers would not be taxed, and the tax relief or subsidy accorded to the domestic industry would allow it to compete with imports at world market prices. (However, while such a subsidy avoids the increase in price to consumers and associated distortion, to the extent that the taxation required to finance the subsidy creates some other distortion, the subsidy may not necessarily be better than the tariff.) Such subsidies or tax incentives, especially those that favour specific industries,²⁴ run the risk of subsidizing good investments, which might have been undertaken in the absence of incentives, or turning intrinsically bad investments into profitable ones. Insofar as they stimulate the latter kind of investment, subsidies distort not just the allocation of domestic resources but also trade and consequently the global allocation of resources.

By contrast, under purely competitive conditions, the allocative effects of export subsidies or tax incentives are very similar to those of import tariffs when countries are too small to affect world prices.²⁵ In the exporting country, an export subsidy raises domestic prices and thereby distorts both domestic production and consumption decisions, just like a tariff. Hence, an export subsidy results in efficiency losses similar to a tariff, and these losses are compounded insofar as the export subsidy also adversely affects the exporting country’s terms of trade (Krugman *et al.*, 2012). (Local content or import substitution requirements to some extent resemble import quotas.²⁶)

Not surprisingly, the WTO imposes disciplines on tax incentives and other subsidies that favour specific industries, and thus may distort trade, and especially those aimed at exports (and also tax and non-tax measures involving local content requirements). Accordingly, whereas subsidies (in-

²² Such “tax expenditures” are generally more opaque than direct subsidies, although an increasing number of countries do publish such estimates. However, tax credits tend to be more transparent than other tax incentives. In comparison with tax holidays, for example, they also tend to be more cost-effective as far as encouraging investment is concerned (see, for example, Zee *et al.*, 2002, and Klemm, 2009).

²³ For example, an excise tax levied on a particular product in combination with a subsidy (such as a tax credit) to domestic manufacturers of the same product would be equivalent to a tariff.

²⁴ As the impact on international competitiveness of a subsidy provided to all industries would tend to be neutralized by movements in the exchange rate, provided the latter is fully flexible, only subsidies to specific industries are relevant.

²⁵ According to the Lerner (1936) symmetry result in international trade, an import tariff is equivalent to an export tax.

²⁶ A local content requirement is similar to a quota or tariff on imported components. Both a quota and a tariff on components tend to raise their domestic prices. This renders domestic producers of components more price-competitive, thereby inducing import substitution, so that local content increases (Krugman *et al.*, 2012).

cluding tax measures) that are “specific” are “actionable” insofar as they have “adverse effects” on other Members (see Section III.B), those that are contingent upon exportation (or subject to local content rules) are classified as prohibited under WTO rules, even though tariffs are not.

Economic theory does little to explain why export subsidies are accorded such unique status in the WTO. It suggests that greater leniency, rather than stringency, is the appropriate response to export subsidies. As shown in Section III.B, WTO disciplines on export subsidies include countervailing duties aimed at imports of products subsidized by the exporting country. These duties are doubly distorting, just like tariffs. The economic rationale for these duties is arguably suspect for several reasons. In particular, countries that import lower-priced subsidized products are net economic beneficiaries for the same reasons that any reduction in the price of the products they purchase from abroad is a benefit. Therefore, when countries respond to subsidies with countervailing duties, they tend to reduce their economic welfare, other things being equal.²⁷ Such a “mercantilist” trade remedy seems anomalous when one considers that the WTO’s main function is to ensure that trade flows as smoothly, predictably and freely as possible. The same applies to anti-dumping duties; dumping and any other anti-competitive business practices should arguably be addressed by countries’ competition laws.

E. Tax Measures affecting Trade in Services

The choice of protectionist instruments to limit the damage to trade in services is analytically more complicated than in the case of goods. Some of the preferred options for protection in goods markets, such as a non-discriminatory (MFN) tariff, are less relevant in markets for services, which are less tangible, although a discriminatory tax on services purchased from foreign providers might be roughly equivalent, as regards its welfare effects, to a non-discriminatory tariff in goods markets.²⁸ Subsidies are, of course, an option, but unlike a tariff, these have to be financed by taxation, which involves further distortions. Hence, protection of services markets is typically achieved by means of domestic regulations, including restrictions on foreign investment, which tend to be more distorting than tariffs. Denial of national treatment, as in taxation, is commonly the most easily administered instrument of protection (Sykes, 2003).

III. Taxation in GATT/WTO Agreements

GATT/WTO rules recognize that internal taxation, including direct tax measures, can, like other regulations, have economic effects that are similar to tariff and non-tariff border measures as well as production and export subsidies. With tariffs declining as a consequence of successive rounds of multilateral trade negotiations during the past 60 years or so under the GATT,²⁹ attention has

²⁷ See Sykes (2003, pp 23-25).

²⁸ In the case of financial services, for example, countries have been known to allow personal tax deductions in respect of contributions to life insurance or retirement savings only if such insurance is purchased from domestically-owned companies. This may be ostensibly on prudential grounds.

²⁹ The overall import-weighted tariff average for industrial goods is now below 4 percent, one-tenth of the level in 1947 when the GATT was created, although much higher tariffs are often levied on certain goods, such as automotive

focused increasingly on non-tariff measures, including internal taxes. This has raised concerns that internal tax measures may undermine tariff reductions on international trade in goods, as it has long been known that such measures can have effects equivalent to tariffs. Moreover, with services accounting for more than two thirds of the world's Gross Domestic Product (GDP), non-tariff restrictions, particularly internal regulations, can be important obstacles to the cross-border provision of services, which is more likely to require providers of such services to be located close to consumers, although services may also be embodied in goods. Consequently, obstacles to foreign direct investment (FDI) impede the establishment of foreign firms that provide these services. Thus, liberalization of trade in services and FDI go hand in hand.

Recognition of taxation's potentially important effects on international trade and investment flows, therefore, is reflected in several of the multilateral agreements, including not just the GATT, and its associated subsidiary agreements concerning Subsidies and Countervailing Measures (ASCM), Trade-Related Investment Measures (TRIMs) and Agriculture (AA), all of which concern goods, but also the General Agreement on Services (GATS). As a result of these agreements, which encompass direct as well as indirect taxation, multilateral rules are playing a more important role in regulating the use of tax measures. This expansion of WTO rules concerning trade and investment has increased the potential for conflict between these rules and tax laws and hence the scope for the WTO to encroach on Members' freedom to decide their own internal tax policies. Not surprisingly, disputes at the WTO have involved a wider range of tax measures than previously under the GATT alone, implying inconsistency between Members' tax laws and WTO Agreements.

A. The General Agreement on Tariffs and Trade (GATT) 1994³⁰

The GATT is one of the WTO's three over-arching agreements; the other two are the more recent GATS and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). WTO rules reflect three fundamental principles, namely predictability, non-discrimination and transparency, which are found in the key Articles of the GATT and its associated subsidiary agreements and also extend to the GATS and TRIPS Agreement. In the case of the GATT, which concerns goods only, these three fundamental principles and resulting rules are reflected mainly in Articles II (*Schedules of Concessions*), I (*General Most-Favoured-Nation Treatment*), III (*National Treatment on Internal Taxation and Regulation*) and X (*Publication and Administration of Trade Regulations*). These Articles are arguably the most relevant for tax policymakers. Consequently, attention is focused largely on the rules contained in these particular Articles, especially those provisions that have been frequently invoked in tax disputes.

Basic GATT/WTO principles and provisions

As regards predictability, in accordance with Article II (*Schedules of Concessions*), a WTO Member is obligated not to raise border taxes in the form of tariffs above the specified rates agreed in

goods, textiles and clothing as well as agricultural products, which may be considered sensitive.

³⁰ GATT 1994 encompasses modifications to GATT 1947 due to various subsequent decisions and waivers.

GATT negotiations and incorporated into its schedule of concessions. The tariff rates so agreed are known as *bound* rates. Their purpose is to provide greater commercial certainty through the establishment of a ceiling on tariffs that cannot be breached (without an offer of compensation to affected trading partners).³¹ *Applied* rates are often lower than bound tariff rates, however. By contrast, there is no such obligation in the GATT to bind export taxes, although a few recent Members, such as China, Kazakhstan, and Viet Nam, have agreed to curtail their use of such taxes in their Accession Protocols.

The cornerstone of the GATT, as well as other WTO Agreements, is non-discrimination, which has two aspects, namely most-favoured-nation (MFN) treatment and national treatment (NT). The MFN principle, which is embodied in Article I (*General Most-Favoured-Nation Treatment*) of the GATT, stipulates that Members should not discriminate between trading partners' goods; that is,

“... any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties.” (emphasis added)

In other words, concessions accorded to one country's goods should be granted to those of all countries, including those that are not WTO Members. Article XXIV (*Territorial Application — Frontier Traffic — Customs Unions and Free-trade Areas*) does permit departures from the MFN principle in respect of regional and bilateral free trade agreements, provided these preferential (and therefore discriminatory against non-preferential trade partners) agreements cover “substantially all” trade between the parties. More than 400 such agreements are currently in force, even though no determination has yet been made by the WTO as to whether any of them is actually consistent with Article XXIV. In accordance with a 1979 decision, which is now part of GATT 1994, departures from the MFN principle are also allowed by the “Enabling Clause,” which allows developed country Members to accord tariff preferences to developing-country Members and provides the legal basis for the Generalized System of Preferences (GSP).³²

The MFN principle, which encompasses *de facto* as well as *de jure* discrimination, thus ensures import and export neutrality as far as goods are concerned, thereby reducing the potential for trade diversion. Consequently, it is one of the pillars of the multilateral trading system. Export taxes like import tariffs must comply with the MFN principle (as well as the general transparency requirement embodied in GATT Article X).

The general principle of NT is embodied in Article III (*National Treatment on Internal Taxation and Regulation*) of the GATT. In particular, paragraph 1 of Article III states that

³¹ Nevertheless, paragraph 2(b) of Article II allows anti-dumping and countervailing duties in excess of bound tariffs. Moreover, in the event of surges in imports that are likely to cause or threaten serious injury to domestic producers, Article XIX (*Emergency on Imports of Particular Products*) allows the suspension, withdrawal or modification of tariff concessions.

³² A similar enabling clause is found in the GATS (but not the TRIPS Agreement).

“The contracting parties recognize that internal taxes and other internal charges, and laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products, ... should not be applied to imported or domestic products so as to afford protection to domestic production.”³³

Furthermore, paragraph 2 of Article III requires that

“The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges *of any kind* in excess of those applied, directly or indirectly, to *like* domestic products. Moreover, no contracting party shall otherwise apply internal taxes or other internal charges to imported or domestic products in a manner contrary to the principles set forth in paragraph 1.” (emphasis added)

Paragraph 2 of Ad Article III in Annex I adds that

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

In addition, paragraph 4 of Article III states that

“... products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favorable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use.”

In other words, NT requires that imported goods be treated the same as or no less favorably than “like” or “directly competitive or substitutable” goods produced domestically so as to ensure that discriminatory internal taxes (as well as other regulations) are not used as substitutes for tariffs.³⁴ NT encompasses *de facto* as well as *de jure* discrimination.

Article X (*Publication and Administration of Trade Regulations*) is intended to ensure the transparency of laws, regulations, judicial decisions and administrative rulings concerning border and internal taxes as well as other charges, among other things, by ensuring their prompt publication to enable governments and traders to become familiar with them.

³³ Moreover, Ad Article III in Annex I notes that, “Any internal tax or other internal charge ... which applies to an imported product and to the like domestic product and is collected or enforced in the case of the imported product at the time or point of importation, is nevertheless to be regarded as an internal tax or other internal charge, ... and is accordingly subject to the provisions of Article III.”

³⁴ The DSB’s interpretation of the relationship between “like” and “competitive or directly substitutable” products in its ruling on a dispute concerning Japan’s tax on alcoholic beverages is highlighted in the next section.

Other GATT provisions and rulings of particular relevance to taxation

Among the other provisions of the GATT pertaining to taxation are Article VII (*Valuation for Customs Purposes*), Article VIII (*Fees and Formalities connected with Importation and Exportation*), Article XI (*General Elimination of Quantitative Restrictions*), which complements Article II, Article XVIII (*Governmental Assistance to Economic Development*), XX (*General Exceptions*) and XXIII (*Nullification or Impairment*).

Article VII (*Valuation for Customs Purposes*) and the associated WTO Customs Valuation Agreement essentially require the use of transaction value of imported merchandise as the primary basis for customs valuation purposes. According to paragraph 3 of Article VII, this value should not include any internal tax, applicable in the country of origin or export, from which the imported product is exempted or relieved (by means of refund).

As regards Article VIII (*Fees and Formalities connected with Importation and Exportation*), one of the main GATT provisions concerning trade facilitation, paragraph 1(a) requires that

“All fees and charges of whatever character (other than import and export duties and other than taxes within the purview of Article III) imposed by contracting parties on or in connection with importation or exportation shall be limited in amount to the approximate cost of services rendered and shall not represent an indirect protection to domestic products or a taxation of imports or exports for fiscal purposes.”

It follows that insofar as any such fee or charge exceeds the approximate cost of services rendered, it constitutes both a tax and a protectionist measures.³⁵ In this respect, specific rates for fees are more likely to conform to this requirement than *ad valorem* rates, which do not usually bear any relationship with the cost of the service at issue.

Concerning the nature of import and export barriers, taxes are, by and large, preferred to quantitative restrictions.³⁶ This is consistent with the economic view that taxes are less distorting, and therefore less detrimental to economic welfare, than quantitative restrictions. Paragraph 1 of Article XI (*General Elimination of Quantitative Restrictions*) stipulates that

“No prohibitions or restrictions other than duties, taxes or other charges . . . shall be instituted or maintained by any contracting party on the importation of any product of the territory of any other contracting party or on the exportation or sale for export of any product destined for the territory of any other contracting party.”

³⁵ For example, the DSB ruled that Argentina’s statistical tax levied on imports to finance “statistical services to importers, exporters and the general public” violated Article VIII:1(a) “to the extent that it results in charges being levied in excess of the approximate costs of the services rendered as well as being a measure designated for fiscal purposes” (see WTO, 1998b).

³⁶ In the *EC – Asbestos* dispute (WTO, 2000a), however, the DSB ruled that France (as a Member State of the EC) was entitled to use an import ban, given that France (and the EC) had chosen zero risk as the appropriate level of protection against cancer caused by asbestos. This fundamental right is also explicitly recognized in two other WTO agreements, namely the *SPS Agreement* and the *Agreement on Technical Barriers to Trade*, both of which grant Members the right to provide levels of protection to animal or plant health and the environment as they see fit.

However, there are a number of exceptions to this rule, such as quantitative restrictions applied temporarily to prevent or alleviate critical shortages of food and other essential products as well as those concerning agriculture and fisheries. Quotas are also still allowed in connection with balance of payments crises (GATT Article XII) and as part of emergency action (GATT Article XIX).³⁷

In order to support domestic “infant” industries, Article XVIII (*Governmental Assistance to Economic Development*) allows developing country Members whose economies “can only support low standards of living” and are “in the early stages of development”³⁸ to maintain a flexible tariff structure (e.g., increase tariff rates by modifying the Schedule of Concessions), provided such measures are notified to the WTO in advance. However, the modifying developing country Member concerned must enter into negotiations with those Members mainly affected by the modification or withdrawal of the tariff concession in order to reach agreement on compensation. In the event that an agreement is not reached within 60 days of the WTO being notified of the modification, the Member may still unilaterally modify the concession in question on the condition that the WTO General Council finds that the compensatory adjustment offered by the modifying Member is adequate and that every effort was made to reach an agreement.³⁹ The modifying Member must also give effect to the compensatory adjustment at the same time as the modification. However, if the WTO finds that the compensatory adjustment offered is not adequate, other Members with a substantial interest are free to adopt retaliatory measures against the modifying Member by modifying or withdrawing substantially equivalent concessions.

Article XX sets out the general exceptions to GATT obligations and is, therefore, obviously relevant for tax as well as non-tax measures. This means that if a Member’s policy objective falls within the scope and satisfies the conditions of GATT Article XX, the associated trade-restrictive measure will be permitted to deviate from GATT obligations. Essentially, WTO Members have the *right* to pursue policies other than trade, provided they meet the conditions of Article XX, including its general *chapeau* (or introductory clause), which requires that this right not be abused. Article XX lists circumstances under which measures may be used, notwithstanding other GATT obligations, as long as the measures are not applied in a manner that would constitute a means of “arbitrary or unjustifiable discrimination ... or a disguised restriction on international trade.”

In particular, exceptions may be allowed for measures on the grounds that, *inter alia*, they: are “(a) necessary to protect public morals;” are “(b) necessary to protect human, animal or plant life or health; are “(d) necessary to secure compliance with laws or regulations” that are not inconsistent with the GATT; (g) relate to the “conservation of exhaustible natural resources if such

³⁷ Article XII (*Restrictions to Safeguard the Balance of Payments*) permits contracting parties to restrict the quantity or value of merchandise imported. In the event of surges in imports that are likely to cause or threaten serious injury to domestic producers, Article XIX (*Emergency Action on Imports of Particular Products*) allows the suspension, withdrawal or modification of obligations.

³⁸ The phrase “in the early stages of development” applies not only to Members that have just started their economic development, but also to those whose economies are undergoing a process of industrialization to correct an excessive dependence on primary production.

³⁹ GATT Article XVIII:7(b).

measures are made effective in conjunction with restrictions on domestic production or consumption;” or (i) involve “restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry” (subject to specific conditions). As indicated in Section IV, such exceptions, notably (b), (d) and (g), have been invoked in several tax disputes at the WTO.

Although these exceptions have existed since the entry into force of the GATT in 1948, they were originally interpreted by panels examining disputes in such a way as to limit the scope for citing such exemptions prior to the establishment of the WTO. The WTO’s DSB gave them a new lease of life, however. In connection with the *chapeau*, it is now understood that such exceptions can be invoked only if the respondent can show that the contribution of the measure in question to the achievement of the objective is “material” (not merely marginal or insignificant). The question then is whether there is a viable alternative measure that would achieve the same objective and be less restrictive as regards trade. In this case, the onus is on the complainant, not the respondent, to demonstrate that there is, indeed, an alternative measure that is both less restrictive, as far as trade is concerned, and possible to implement. Moreover, the scope of reasonable available alternatives was reduced to take into account the actual capacity and the level of development of the challenged Member. This carefully calibrated test means that a panel cannot reject an environmental protection or, indeed, public health measure by pointing to a WTO-consistent or less trade restrictive alternative unless that alternative is technically and financially feasible for that specific Member and provides at least the same level of protection as that desired by the Member adopting the measure.⁴⁰

Article XXIII (*Nullification or Impairment*) is intended to ensure, among other things, that any benefit accruing under the GATT is not vitiated by “any measure, whether or not it conflicts with the provisions of this Agreement,” such as when improved market access from a reduction in bound tariffs is counteracted by other tax measures.

As those GATT rules concerning import barriers pertain to goods only, it would appear that they relate more to indirect taxes (border and internal) than to direct taxes.⁴¹ The initial lack of disputes concerning the latter was viewed by some as providing support for the view that there was little, if any, scope for coverage by the GATT 1947 of direct taxes because such taxes did not relate sufficiently to goods. However, as pointed out in the next section, the DSB’s Panel Reports on Indonesia’s National Car Programme and the US FSC scheme make abundantly clear that such taxes do indeed fall within the scope of GATT Article III.

⁴⁰ Accordingly, there is no authentic “proportionality” test in the WTO, as a Member cannot be asked to make even a modest reduction in its desired level of protection, even though that would greatly diminish the trade restrictiveness of its measure.

⁴¹ Indeed, the Panel established in connection with a complaint brought by the EC against Argentina (see the next section) apparently agreed with Argentina “that income taxes, because they are taxes not normally directly levied on products, are generally considered not to be subject to Article III:2.” (See WTO, 2000b, paragraph 159). However, indirect and direct taxes can have equivalent effects given the apparent equivalence between flows of products—on which indirect taxes are levied—and factors, which are subject to direct taxes.

As regards exported goods, in a 1960 draft declaration giving effect to the provisions of Article XVI:4 (*Subsidies*) of the GATT, the “remission, calculated in relation to exports, of direct taxes or social welfare charges on industrial or commercial enterprises” is considered to be an export subsidy, whereas tariff or consumption tax refunds on exports are not. Similar language is found in Annex I (e) of the ASCM (see below). Furthermore, Ad Article XVI of the GATT and footnote 1 of the ASCM specifies that

“The exemption of an exported product from duties or taxes borne by the like product when destined for domestic consumption, or remission of such duties or taxes in amounts not in excess of those which have accrued, shall not be deemed a subsidy.”

Also noteworthy with regard to direct taxation is an “Understanding” reached by the GATT Council in 1981 as a result of four panel reports issued in connection with disputes between the US and the EC over direct taxation.⁴² These disputes involved a complaint lodged in February 1972 by the EC against the US Domestic International Sales Corporation (DISC) scheme (the FSC’s predecessor), which exempted so-called DISC income from corporate income tax and allowed partial deferment of tax on that income received by shareholders, and the related US complaints against the “territorial” income tax systems of Belgium. France and the Netherlands (Brumbaugh, 2004). The GATT panel, whose report was issued in November 1976, found elements of subsidy in both the US DISC and “territorial” tax systems. The Understanding, which later assumed an important role in the US defence of the FSC at the WTO, involved agreement on three points. First, countries need not tax economic processes occurring outside their territory. The panel found, therefore, that “territorial” tax systems did not generally contravene the GATT. Second, arm’s-length pricing should be followed in allocating income among related firms.⁴³ Third, the GATT does not prohibit measures designed to alleviate double-taxation of foreign-source income.

B. Agreement on Subsidies and Countervailing Measures (ASCM)⁴⁴

The ASCM, which evolved from Article XVI (*Subsidies*) of GATT 1947, regulates the provision of subsidies with respect to goods and the actions that can be taken against such subsidies by WTO Members. (The application of the ASCM to agricultural products is limited in some respects by the Agreement on Agriculture). The concepts of “subsidy” and “specificity,” which are found in Articles 1 and 2, respectively, together with Article 3 are the key to the entire agreement.

⁴² This “Understanding” refers to the statements of the Belgian, French, Dutch and Swiss representatives of 14 January 1981 (C/M/145).

⁴³ This suggests that the use of a formula based solely on sales to apportion income of multinational corporations may infringe WTO rules because it produces a destination-based income tax, which constitutes a prohibited export subsidy (McLure and Hellerstein, 2002).

⁴⁴ An excellent overview of the economic rationale for the ASCM rules can be found in Sykes (2003). For a critical legal analysis, see Coppens (2010).

Article 1 (*Definition of a Subsidy*) of the Agreement provides that a subsidy is deemed to exist, in particular, where there is a “financial contribution by a government or any public body within the territory of a Member” and “a benefit is thereby conferred.” Such contributions include foregone tax revenue that is “otherwise due” (e.g., fiscal incentives such as tax credits).⁴⁵

However, in accordance with GATT Article XVI, the ASCM provides that the exemption from or remission of import tariffs or indirect taxes in respect of an exported product, typically a main feature of Free Trade Zones (FTZs) and Special Economic Zones (SEZs), does not constitute a subsidy. More specifically, tariff exemptions (as well as drawbacks or other similar schemes) for imported raw materials and intermediate inputs used in production of goods for export are exempted from the foregoing definition of subsidies owing to footnote 1 of Article 1 of the ASCM, which, like Ad Article XVI of the GATT, states that

“the exemption of an exported product from duties or taxes borne by the like product when destined for domestic consumption, or the remission of such duties or taxes in amounts not in excess of those which have accrued, shall not be deemed to be a subsidy.”

The same applies to exemptions from or remissions of internal *indirect* taxes (especially VAT) on “inputs that are consumed in the production of the exported product” under certain conditions, including the requirement that these exemptions or remissions of indirect taxes not be “in excess of those levied in respect of the production and distribution of like products when sold for domestic consumption.”⁴⁶

By contrast, as indicated below, any relief of direct taxes in respect of exports constitutes an export subsidy and is therefore prohibited. The economic rationale for this distinction between indirect and direct taxes apparently arises from the assumption that whereas the burden of the indirect taxes is generally shifted forward, and thus reflected in the price of the exported product, the burden of direct taxes is shifted backwards and borne instead by the owners of the enterprise manufacturing the exported product. The implication is that whereas indirect taxes have trade effects, direct taxes (or relief therefrom) do not. Clearly, this assumption does not sit well with ASCM rules concerning export subsidies, whereby tax relief for income from exports is prohibited presumably because such relief is believed to have trade effects. The presumption of forward shifting in the case of indirect taxes and backward shifting in the case of direct taxes may be questioned on empirical grounds. In any event, the distinction between indirect and direct taxes is rather blurred.⁴⁷

⁴⁵ The notion of “revenue forgone” is closely related to whether a tax measure constitutes a departure from the “normal,” and thus the “benchmark,” tax system, and therefore involves what is commonly known as a “tax expenditure.” Determination of whether a tax measure is such a departure (or not) can be rather controversial and has thus been an important bone of contention in tax disputes at the WTO (Daly, 1995).

⁴⁶ See Annex I (g) of the ASCM.

⁴⁷ See Daly (2005).

The ASCM divides subsidies (as defined in Article 1) into prohibited and permissible subsidies. Subsidies “contingent . . . upon export performance” or “use of domestic over imported goods” are prohibited by Article 3 on the grounds that they are presumed to distort trade. The ASCM originally distinguished between two categories of permissible subsidies: those that are “actionable” (permitted, but potentially subject to action) and those that are non-actionable (permitted and shielded from action). However, the latter category no longer exists, so that all subsidies are now actionable. Although other subsidies – in particular, certain subsidies for environmental, research and development and regional development – were for a time non-actionable under Article 8 of the ASCM, that provision expired at the end of 1999. The economic rationale for their previous non-actionable status is unclear. In order to address environmental pollution, for example, which involves a negative externality, the usual policy prescription is to “internalize” it, in accordance with the well-known “polluter pays” principle. The optimum policy measure to achieve this is not a subsidy but a tax (although not a trade tax, for the reasons given in Section II of this paper).

According to Article 2 (*Specificity*), a subsidy is “specific” if it is accorded to “certain enterprises”; that is, an enterprise, or industry or group of enterprises or industries.⁴⁸ A subsidy is also specific if it is “limited to certain enterprises located within a designated geographical region within the jurisdiction of the granting authority.” Specific subsidies are actionable insofar as they have “adverse effects” (Article 5) on the interests of another Member. Most subsidies, such as production subsidies, fall in the “actionable” category. Although actionable subsidies are not prohibited, they are subject to challenge, either through the WTO’s dispute settlement mechanism or by imposing countervailing duties, in the event that such subsidies have “adverse effects” on the interests of another Member.

There are three types of adverse effects. The first is “injury” to a domestic industry caused by the importation of subsidized products into the territory of the complaining Member. This is the sole basis for countervailing action. The second involves “serious prejudice” (Article 6). Serious prejudice includes not just a loss of exports by the complaining Member to the home market of the subsidizing Member, but also a loss of exports by the complaining Member to exporters from the subsidizing Member in a third country market. Therefore, this notion makes subsidies potentially actionable any time they cause injury to the export industries of other Members. In general, the burden of proof regarding “serious prejudice” is on the complainant, except when subsidies are of a particular magnitude or type (such as they exceed 5 percent of the value or cover operating losses). In those instances, the onus is on the subsidizing Member to prove that no “serious prejudice” exists (Sykes, 2003). The third type of adverse effect concerns “nullification or impairment” of tariff concessions or other benefits accruing under the GATT 1994. Nullification or impairment arises most typically where the improved market access presumed to flow from a bound tariff reduction is vitiated by subsidization.⁴⁹

⁴⁸ “Specificity” reduces the scope for targeted and, therefore, cost-effective tax measures.

⁴⁹ After all, an import tariff is equivalent to a tax on domestic consumption combined with a subsidy for domestic production.

Part V of the ASCM sets forth certain substantive requirements that must be fulfilled in order to impose a countervailing measure, as well as in-depth procedural requirements regarding the conduct of a countervailing investigation and the imposition and maintenance of countervailing measures. As regards substantive rules, a Member may not impose a countervailing measure unless it determines that there are subsidized imports, injury to a domestic industry manufacturing like products, and a causal link between the subsidized imports and the injury. A Member must also abide by procedural rules regarding the initiation and conduct of countervailing investigations, the imposition of preliminary and final measures, the use of undertakings, and the duration of measures. Failure to respect either the substantive or procedural rules can be taken to dispute settlement and may be the basis for invalidation of the countervailing measure.

In most cases, the onus is on the complaining Member to provide evidence that an “actionable” subsidy has “adverse effects.” This is arguably more onerous than determining whether a subsidy is prohibited, and therefore perhaps explains why tax measures have rarely been challenged on these grounds. (The disputes concerning tax provisions of Indonesia’s National Car Program and the US Washington State Business and Occupation tax rate reduction accorded to large civil aircraft manufacturers, both highlighted in the next section, are two of the rare cases of this kind.)

Footnote 1 (see paragraph 46) together with Annexes I to III of the ASCM specify the circumstances under which taxes may or may not be rebated on exports. Annex I contains an illustrative list of export subsidies, five of which involve tax measures; that is, either import charges (item (i)), indirect taxes (items (g) and (h)), and direct taxes (items (e) and (f)).⁵⁰ This illustrative list also pertains to tax measures typically applied in FTZs, SEZs and similar zones. Items (g), (h) and (i) implement the destination principle with regard to specific types of indirect taxes and import tariffs. Whereas (g) involves sales taxes levied at the point of final sale and VAT, (h) pertains to “cascading” taxes.⁵¹ Item (g) of Annex I concerns the “exemption or remission, in respect of the production and distribution of exported products, of indirect taxes in excess of those levied in respect of the production and distribution of like products when sold for domestic consumption.” Likewise, item (h) involves “exemption, remission or deferral of prior-stage cumulative indirect taxes on goods or services used in the production of exported goods in excess of the exemption, remission or deferral of like prior-stage cumulative indirect taxes on goods or services used in the production of like products when sold for domestic consumption.” However, such relief is permissible provided the prior-stage cumulative indirect taxes are levied on inputs *consumed in the*

⁵⁰ For the purpose of the ASCM (see footnote 58 of the ASCM), the term “import charges” means tariffs, duties, and other fiscal charges not elsewhere enumerated in this note that are levied on imports. The term “indirect taxes” refers to sales, excise, turnover, value added, franchise, stamp, transfer, inventory and equipment taxes, border taxes and all taxes other than direct taxes and import charges. The term “direct taxes” means taxes on wages, profits, interests, rents, royalties, and all other forms of income, and taxes on the ownership of real property. Interestingly, the latter is not the same as the non-exhaustive definition of “direct taxes” found in the GATS. In Article XXVIII (o), “direct taxes” comprise all taxes on total income, on total capital or on elements of income or of capital, including taxes on gains from the alienation of property, taxes on estates, inheritances and gifts, and taxes on the total amounts of wages or salaries paid by enterprises, as well as taxes on capital appreciation.

⁵¹ Footnote 60 of the ASCM states explicitly that VAT is covered exclusively by (g) not (h).

production process (making normal allowance for waste). Similarly, item (i) involves the “remission or drawback of import charges in excess of those levied on imported inputs that are consumed in the production of the exported product (making normal allowance for waste).” As regards items (h) and (i), guidelines on consumption of inputs in the production process are contained in Annex II of the ASCM. Relief is confined to “inputs physically incorporated, energy, fuels and oil used in the production process and catalysts which are consumed in the course of their use to obtain the exported product.”⁵² Consequently, no such relief can be given for capital inputs as these are not physically incorporated in the processed products, despite the fact that capital goods may be consumed to some extent in the production process (which is the reason they normally qualify for depreciation allowances for tax purposes).⁵³

In contrast to indirect taxes, items (e) and (f) embody the origin principle for direct taxes and social welfare charges. Item (e) precludes “full or partial exemption, remission, or deferral specifically related to exports, of direct taxes,” although footnote 59 of the ASCM makes clear that item (e) is not intended to prevent Members from taking measures to avoid double taxation of foreign-source income. Footnote 59 also makes clear that deferral need not amount to an export subsidy where, for example, appropriate interest charges are collected. It also requires Members to adhere to the arm’s length principle as regards transfer pricing. Moreover, item (f) treats as an export subsidy “... special deductions directly related to exports or export performance, over and above those granted in respect to production for domestic consumption, in the calculation of the base on which direct taxes are charged.”

In accordance with Article 27 (*Special and Differential Treatment of Developing Country Members*) of the ASCM, however, the prohibition on export subsidies does not apply to any least-developed countries designated as such by the United Nations in accordance with Annex VII (a) of the ASCM. Nor does the prohibition apply to developing country Members listed in Annex VII (b) of the ASCM until such a time as their Gross National Product (GNP) per capita reached US\$1,000 per year in constant 1990 dollars for three consecutive years.⁵⁴ Moreover, as a consequence of Article 27.4 of the ASCM, other developing country Members not listed in Annex VII still benefit from programme-specific and time-limited exemptions from the prohibition on export subsidies, subject to a “standstill” obligation and an annual review by the SCM Committee, that may last no longer than 31 December 2015.⁵⁵ This particular exemption related to 19 Members’ export subsidy programs, many of which involved tax incentives, including those offered FTZs and

⁵² See footnote 61 of the ASCM.

⁵³ Interestingly, footnote 61 does not mention computer software, for example, which may also be consumed in the production process.

⁵⁴ As of 6 July 2015, the Members were the following: Bolivia, Cameroon, Congo, Ivory Coast, Ghana, Guyana, Honduras, India, Kenya, Nicaragua, Nigeria, Pakistan, Senegal, and Zimbabwe (WTO, G/SCM/110/Add.12, 6 July 2015). The Dominican Republic, Egypt, Guatemala, Indonesia, Morocco, the Philippines, and Sri Lanka recently passed this threshold. Note that this provision does not apply automatically to developing countries acceding to the WTO; it has to be negotiated.

⁵⁵ See WTO General Council Decision WT/L/691, 31 July 2007.

SEZs (Box 2).⁵⁶ A developing country Member otherwise exempt from the prohibition on export subsidies may no longer be exempt if it reaches export competitiveness in any product.⁵⁷ However, even the export subsidies of those Members that are exempt from, or have been granted an extended transition period in respect of, otherwise applicable prohibitions concerning export subsidies, these subsidies can be challenged at the WTO if they have “adverse effects” and may be subject to countervailing measures.⁵⁸ The ASCM no longer provides any exemption from the general prohibition on local content (or import substitution) subsidies.

Box 2: Tax Measures in Free Trade Zones (FTZs)

Free trade or special economic zones have long been an important feature of countries’ economic development strategies, especially in an attempt to facilitate export-led growth. Free trade zones (FTZs) around the world have a number of different names depending on the country where they are located and their particular type. Those in Ireland are called *industrial free zones* or *export free zones*, while in the United States they are called *foreign-trade zones*. In developing countries producing specifically for export, they are typically called *export processing zones* (EPZs). Those in China, which tend to be less export-oriented than EPZs, are often called *special economic zones* (SEZs), although the most recent one established in Shanghai is called a *free trade zone*. (In the case of the United States’ FTZs, all goods could theoretically be sold on the domestic market.)

The first “modern zone” was established in 1959 as an “experiment” at Shannon Airport (Ireland). Since then, these zones have proliferated, particularly in Asia, so that there are now some 4,300 zones in more than 130 countries. Of the 66 million workers employed in the zones worldwide, China accounted for over 60 percent and the rest of Asia 22 percent. By and large, these zones have been aimed at facilitating manufacturing rather than services, although that is changing. For example, the Shanghai Pilot Free Trade Zone, which was launched in September 2013 in order to test and refine economic reforms before their potential roll-out nationwide, will loosen restrictions on foreign investment in 23 service sectors, including banking, financial services, healthcare and technology. FTZs are viewed as a useful tool to enhance productivity, and therefore competitiveness, by attracting foreign direct investment (FDI) as well as associated technology and managerial know-how, develop and diversify exports while maintaining trade barriers elsewhere in the economy, create employment and improve on-the-job training, and to pilot new policies.

⁵⁶ These Members are Antigua and Barbuda, Barbados, Belize, Costa Rica, Dominica, Dominican Republic, El Salvador, Fiji, Grenada, Guatemala, Jamaica, Jordan, Mauritius, Panama, Papua New Guinea, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, and Uruguay, all of which are small exporting countries. Whether this exemption is extended or not remains to be seen. Jordan, for example, has formally requested such an extension until 31 December 2019 (see WTO document G/C/W/705/Rev.1, 23 June 2015).

⁵⁷ Export competitiveness is reached when exports of a given product by a developing country Member attain 3.25 percent of world trade in that product for two consecutive years.

⁵⁸ Export subsidies granted by developing country Members that are in conformity with the provisions of the ASCM (notably Article 27), although not prohibited, are still actionable by other Members. If another Member has recourse to the dispute settlement machinery against the measure, adverse effect will have to be demonstrated by positive evidence, as in the case of actionable subsidies for all Members. In case of a positive finding the developing country Member concerned is not obliged to eliminate the measure, but may instead only take appropriate steps to remove the adverse effect (Hoda and Ahuja, 2003, page 18). Moreover, in countervailing duty investigations against subsidised exports from developing country Members, the proceedings must be terminated if the overall level of subsidies does not exceed two percent (as against one percent for others), or if the volume of subsidised imports is less than four percent of the total imports of the like product (unless subsidised imports from two or more developing country Members with individual market shares of less than 4 percent collectively exceed 9 percent of total imports).

Box 2: Tax Measures in Free Trade Zones (FTZs) (Continued)

Taxation is usually one of the main instruments of policy in such zones, involving relief from various border and internal taxes. Such relief typically includes:

- exemption from tariffs (or other charges) on imported raw materials and intermediate inputs, machinery and equipment, or goods destined for sale abroad;
- exemption from indirect taxes (excises, VAT and other sales taxes) and full or partial relief from other fees and charges in connection with exports;
- full or partial exemption from direct taxes (e.g. income tax) and social welfare (such as social security) charges.

Although there are no WTO rules that deal with FTZs per se, and FTZs have not been challenged at the WTO until very recently, various aspects of their taxation may infringe those rules, including the conditions attached to the authorization to establish and operate in the FTZ and thereby qualify for tax relief (and other benefits). Such conditions might include, for example, an obligation to export a certain proportion of production, a restriction on the proportion of production that can be sold on the domestic market, or a requirement to use a minimum percentage of local inputs. The GATT and related agreements, such as the ASCM and TRIMs Agreement, and, to a lesser degree, the GATS, do apply to tax measures, including those listed above.

In particular, each of the three above categories of tariff and tax exemptions is consistent with the definition of a “subsidy” in the ASCM. Consequently, these three categories of tax measures would be prohibited insofar as they are contingent upon export performance or local content, or “actionable” if they are “specific” and have “adverse effects” on the interests of another Member. Prohibited and actionable subsidies may be challenged, either through the WTO’s dispute settlement mechanism, or by imposing countervailing duties (see Section III.B above).

Article 3.1(a) of the ASCM prohibits “subsidies contingent, in law or in fact, whether solely or as one of several other conditions, upon export performance, including those illustrated in Annex I.” Five of the 12 examples of export subsidies illustrated in Annex I of the ASCM involve tax measures; that is, either tariffs (item (i)), indirect taxes (items (g) and (h)), or direct taxes (items (e) and (f)). In addition, Article 3.1(b) of the ASCM prohibits import substitution subsidies; that is “subsidies contingent, whether solely or as one of several other conditions, upon the use of domestic over imported products.” A tax measure would probably be considered such a prohibited subsidy if, for example, it were contingent upon a quota on the amount of goods produced in the FTZ that can be sold in the domestic market, in which case the tax measure would be tantamount to an export subsidy, or it required those firms located in the FTZ to use a certain percentage of local rather than imported inputs.

Tax measures in the FTZ that are neither contingent upon export performance nor the use of domestic instead of imported inputs may nevertheless be considered actionable subsidies if they are “specific” and the complaining Member can demonstrate that they have “adverse effects.” Specificity may be the outcome of the authorization process if, for example, the government chooses the industries or enterprises allowed to operate in the zone. Adverse effects may take the form of: (a) injury to its domestic industry; (b) nullification or impairment of WTO benefits of tariff concessions; (c) or “serious prejudice.”

Whereas Article 27.2 of the ASCM continues to provide a general exemption for some developing countries and a phase-out period for others in respect of export subsidies, many of which involved tax incentives for enterprises in FTZs, a similar phase-out period for import substitution subsidies provided in Article 27.3 expired in 2002. However, even the export subsidies of those Members who are exempt from these export subsidy disciplines, or have been granted an extended transition period in respect of otherwise applicable prohibitions concerning export subsidies, can be challenged if they have adverse effects (see Section III.B above). They may, therefore, be subject to countervailing measures.

Box 2: Tax Measures in Free Trade Zones (FTZs) (Continued)

As in the case of the ASCM, there are no explicit references to FTZs in the TRIMs Agreement, even though FTZs are both trade related and can involve investment measures intended to attract FDI and promote exports. Like the ASCM, the TRIMs Agreement provides an illustrative list of measures that are inconsistent with GATT Articles III (National Treatment) and XI (General Elimination of Quantitative Restrictions). The list includes local content and trade balancing requirements as well as foreign exchange restrictions. Therefore, any FTZ measure that imposes such requirements or restrictions would infringe the TRIMs Agreement (unless it had been notified in accordance with Article 5.1). Interestingly, no such notifications related to FTZs have been made to the WTO.

Subsidies to services, whether in FTZs or elsewhere within a Member's territory, are covered by neither the ASCM nor the TRIMs Agreement. They are instead subject to the GATS, particularly MFN treatment and, to the extent that Members have made commitments in specific service sectors, also National Treatment (NT). Consequently, unlike in the ASCM, tax and non-tax measures contingent upon export performance (or import substitution) are permitted as long as they are non-discriminatory within FTZs. However, FTZs cannot accord preferential treatment to a subset of services and service suppliers from foreign countries. Nor can they treat foreign services and service suppliers less favourably than domestic services and service suppliers insofar as they have made NT commitments in specific service sectors. (FTZs can, of course, treat foreign services and service suppliers more favourably than domestic services and service suppliers.)

As regards tax treatment of trade in goods and services between FTZs and the domestic market, in order to place firms supplying the domestic market from inside and outside the zone on a more equal footing, sales of goods and services to the domestic market by firms located in the FTZ should face full taxation as far as tariffs and all other indirect taxes are concerned and be subject to the same direct taxes. In the case of an inverted tariff, producers in the FTZ should be allowed to choose either the tariff rate that would have applied to the imported inputs or the rate that applies to the finished goods. Furthermore, to facilitate exports by domestic firms located outside the zones and develop value chains linking firms located inside and outside the zones, sales of goods and services by domestic firms to zone-based enterprises should be eligible for full tariff drawbacks and rebates of indirect internal taxes.

C. Agreement on Trade Related Investment Measures (TRIMs)

Not only do governments use tax as well as non-tax incentives to attract foreign investment, they may also impose conditions to ensure that the investments accord with certain national priorities. Such conditions include, *inter alia*: local content provisions, which require the investor to utilize a certain amount of local (instead of imported) inputs in production; and export performance requirements that compel the investor to export a certain proportion of its output. Such conditions, which can distort trade, just like import tariffs (or quantitative restrictions) and export subsidies, are known as trade-related investment measures (TRIMs).

The TRIMs Agreement applies to investment measures related to trade in goods only. Article 2 prohibits WTO Members from applying any TRIM that is inconsistent with Articles III (*National Treatment*) and XI (*General Elimination of Quantitative Restrictions*) of the GATT. The illustrative list of prohibited TRIMs contains four categories of measures: (a) benefits that are conditional upon local content requirements; (b) the conditioning of a firm's ability to import

on its export performance; (c) foreign exchange balancing requirements or restrictions; and (d) domestic sales requirements involving restrictions on exports.⁵⁹ Prohibited TRIMs thus include not only mandatory measures but also those with which compliance “is necessary to obtain an advantage.”⁶⁰ Although the term “advantage” is not defined explicitly in the Agreement, it is understood to encompass all types of advantages, including tax relief. The Agreement is limited in scope, however. It is noteworthy, for example, that it does not prevent countries from attaching export performance requirements to tax or non-tax incentives for investment; however, such requirements are covered by the ASCM. Nor does it prevent them from requiring that a minimum percentage of equity be held by local investors or that the foreign investor must bring in the most up-to-date technology or must conduct a certain amount or type of R&D locally.

D. Agreement on Agriculture (AA)

Under Article 1 (*Definition of Terms*) of the Agreement on Agriculture (AA), “budgetary outlays” or “outlays” include revenue forgone, so that tax measures are covered by the Agreement insofar as they constitute export subsidies.⁶¹ The disciplines on subsidies agreed for the agriculture sector are quite different from those found in the ASCM in at least one important respect. While the AA has established rules concerning the acceptability of various subsidization practices – “green box” measures are acceptable, “amber box” measures are not⁶² – it also involves binding commitments to *reduce* aggregate levels of support (which is not unlike the negotiated reduction in tariffs under the GATT). Hence, agricultural subsidy disciplines are designed in accordance with commitments to a progressive reduction in levels of subsidization (and, as a consequence of agreement at the sixth WTO ministerial Meeting in 2005, with a view to their elimination by 2013, although that deadline has been missed because of the impasse in the Doha Development Agenda negotiations).

E. General Agreement on Trade in Services (GATS)

In contrast to the GATT, ASCM, TRIMs and Agriculture agreements, which deal solely with trade in goods, the GATS applies to trade in services.⁶³ The GATS constitutes a first multilateral agreement to subject the supply of services to international trading rules, including the principles of MFN (Article II) and NT (Article XVII).⁶⁴ MFN treatment is a general obligation that applies to all

⁵⁹ Such measures involve restrictions on the exportation or sale for export by an enterprise of products, whether specified in terms of particular products, volume or value of products, or in terms of a proportion of volume or value of its local production (in violation of paragraph 1 of GATT 1994).

⁶⁰ See the TRIMs Agreement’s Annex, which contains an illustrative list.

⁶¹ The AA requires the conversion of variable import levies as well as certain other non-tariff measures, including quantitative restrictions, into ordinary tariffs, a process known as “tariffication.”

⁶² “Green” subsidies are those that have “no, or minimal, trade-distorting effects or effects on production” and do not have the “effect of providing price support to producers” and are thus exempt from reduction commitments. Such commitments do apply to “amber” subsidies, which include certain direct payments under production-limiting programmes (sometimes dubbed “blue” box measures).

⁶³ The GATS does not contain a legal definition of services. (Nor does the GATT contain a legal definition of goods.)

⁶⁴ Unlike in the GATT, National Treatment under the GATS is not a general commitment; it applies only to scheduled sectors and subject to limitations listed therein.

measures affecting trade in services.⁶⁵ The concepts of MFN and National Treatment in the GATS are of particular relevance because they involve non-discrimination on the basis of the *origin*, not only of the *services* but of the *service suppliers*. The GATS covers FDI insofar as it involves a commercial presence for the supply of services (that is mode 3⁶⁶). Under Article XIV (*General Exceptions*), to the extent that WTO Members have made NT commitments in their schedules, these commitments apply to tax measures, including tax incentives, except where such measures are aimed at ensuring “the equitable or effective imposition or collection of direct taxes in respect of services or service suppliers of other Members.”⁶⁷ This implies that direct tax measures would generally be covered by Article XVII; otherwise Uruguay Round negotiators would not have deemed it necessary to create such an explicit exception when drafting the relevant provisions of the GATS (WTO, 2002). However, according to Article XXII (*Consultation*), a Member may not invoke the NT obligation if a measure of another Member falls within the scope of a treaty relating to the avoidance of double taxation. Also, in accordance with Article XIV(e), tax measures that depart from the MFN treatment obligation are permitted if they are the result of an agreement on the avoidance of double taxation (i.e., a bilateral tax treaty) or similar binding provisions in any other international agreement or arrangement. As a result of Articles II, XIV, XVII and XXII, it is generally conceded that direct taxation has, to a considerable extent, been excluded from the GATS disciplines, particularly if there is a double taxation agreement between the Members.⁶⁸

The most important forms of export support in the case of services appear to be direct tax incentives, particularly profit tax exemptions or reductions (Geloso Grosso, 2008). However, GATS Article XV (*Subsidies*) is essentially a negotiating mandate, and thus not a set of rules. It follows that even though, in contrast to the ASCM, GATS rules aimed at curtailing the use of subsidies, including those for exports, have yet to be negotiated,⁶⁹ all foreign service providers must nonetheless be treated equally (in accordance with the MFN principle). Moreover, insofar as Members

⁶⁵ However, measures inconsistent with the MFN obligation at the time of accepting the Agreement may be maintained (in principle, for not more than ten years and subject to review after not more than five years), provided they are listed in, and meet the conditions of, the Annex on Article II Exemptions. Members are required to provide the following five types of information for each exemption: a description of the measure, indicating how it is inconsistent with Article II; the rationale for the exemption; a description of the sector or sectors to which the exemption applies; the Members to which the measure applies; and the intended duration of the exemption.

⁶⁶ The establishment of a “commercial presence” in the importing country (by, for example, setting up a branch or subsidiary company) to supply the service involves FDI and is known as mode 3. The other modes of supply are the cross-border movement of services (mode 1), movement of consumers to the country of importation (mode 2), and the temporary cross-border movement of natural persons (mode 4). It is estimated that commercial presence (mode 3) accounts for around 56 percent of total world trade in services.

⁶⁷ The meaning of “equitable or effective” is spelled out in footnote 6 to Article XIV(d).

⁶⁸ In some countries, including EU Member States, contributions to private pension plans and life insurance policies are deductible from personal income tax as long as the plan or policy is purchased from domestic companies (who may be foreign-owned). Similarly, in other countries, income from annuities purchased from foreign-owned life insurance companies may not qualify for the personal tax exemption otherwise applicable to such income even if those companies were established in those countries. Depending on the extent to which WTO Members have made NT commitments concerning such financial services in their GATS schedules, such personal tax provisions might contravene GATS rules.

⁶⁹ As mentioned earlier, it is noteworthy that item (h) of the ASCM’s Illustrative List of Export Subsidies involves exemption, remission or deferral of prior-stage cumulative indirect taxes on services as well as goods. This seems to be the only instance of an export subsidy to services being prohibited by WTO rules.

have made NT commitments in their GATS schedules, they must also grant tax incentives to foreign as well as domestic services providers. (If Members grant tax incentives to domestic service providers, including for exports of services, they must extend them to foreign services providers, but not vice versa.) The lack of GATS disciplines leaves some scope for subsidization of goods as well as services because the distinction between goods and services can in some instances (such as “contract manufacturing”⁷⁰) be rather blurred.

F. Trade Policy Review Mechanism (TPRM)

The above provisions of WTO Agreements are not the only ones to exert disciplines on the use of tax measures. While the notification and other obligations contained in these Agreements (notably GATT Article X, ASCM Article 25, TRIMs Articles 5 and 6, GATS Article II and TRIPS Article 63) do ensure a certain degree of transparency, the latter is further enhanced by the TPRM. The TPRM goes beyond mere notification, for example, by obliging Members to undergo periodic “peer” review,⁷¹ in which the WTO Secretariat plays an unusually prominent role. The purpose of the TPRM is to contribute to improved adherence by all Members to rules, disciplines and commitments made under the WTO Agreements, and hence to the smoother functioning of the multilateral trading system, by achieving greater transparency in, and understanding of, Members trade policies and practices, including tax measures. In the case of taxation, transparency entails four key elements: (i) a description of the nature of tax measures; (ii) their rationale or objectives; (iii) their cost (or benefits) in terms of tax revenue forgone (or taxes collected); and (iv) an economic evaluation of the effectiveness of individual tax measures (relative to alternative measures) in achieving their given objectives.⁷² Accordingly, the mechanism enables the regular collective appreciation and evaluation of a full range of individual Members’ trade policies and practices, including taxation, and their impact on the functioning of the multilateral trading system.

As stressed in section A (i) of the TPRM, the review mechanism “is not, however, intended to serve as a basis for the enforcement of specific obligations under the Agreements, or for dispute settlement procedures.”⁷³ Nor is it intended to impose new policy commitments on Members. Nevertheless, it does permit the evaluation of trade and trade-related policies and measures, even though they may not necessarily contravene, or indeed be subject to, WTO obligations. Indeed, TPRs have identified many trade-distorting tax measures that may or may not infringe WTO rules. The mechanism involves reviews by the Trade Policy Review Body (the General Council in another guise) of each Member’s trade and trade-related policies, practices and measures based mainly on a report drawn up by the WTO Secretariat on its own responsibility and a report supplied by the Member under review.

⁷⁰ “Contract manufacturing” involves manufacturing undertaken on a fee or contract basis (Adlung and Zhang, 2013).

⁷¹ “Peer” review can facilitate a more gentle form of dispute resolution than the WTO’s dispute settlement system.

⁷² As mentioned earlier, the “specificity” provision of the ASCM reduces the scope for targeted and, therefore, cost-effective tax measures.

⁷³ While the WTO Secretariat and Members can, and often do, discuss potential infringements of WTO rules in conducting TPRs (and possibly provide technical assistance in this regard), that is not the purpose of the mechanism.

It is important to note that in connection with Brazil's dispute with Canada over measures affecting the export of civilian aircraft, the Dispute Settlement Body (also, in effect, the General Council in another guise) ruled that TPRs are *not* relevant for disputes, citing specifically the section A(i) of the TPRM, which is quoted above (WTO, 1999a).

IV. Tax Disputes at the WTO

Not surprisingly, the expansion of WTO rules concerning international trade and investment has increased the potential for conflict between these rules and Members' tax laws and thus for disputes between Members. Such rules are inevitably open to different interpretation by Members (especially when they are specified in the WTO's three official languages, namely English, French and Spanish). Disputes at the WTO imply ambiguity or inconsistency between WTO rules and domestic as well as international tax laws.

The WTO's dispute settlement system is widely regarded as its "crown jewel."⁷⁴ Whereas adoption of rulings previously under the GATT required consensus (so that a single objection could block a ruling), now a ruling is adopted automatically unless there is a consensus to reject it ("reverse consensus"). Consequently, a Member losing a case may no longer block adoption of a ruling on a dispute. Since its inception in 1995, as of 10 November 2015, Members had brought 500 disputes before the Dispute Settlement Body (DSB), initiated with a request for consultation, 282 of which have proceeded to the litigation stage. Thus, the WTO is arguably the most prolific international dispute resolution system in the world today. While most of the disputes have involved the four largest traders (US, EU, China and Japan) and other large traders, as respondents or complainants, several complaints have been filed by very small traders. The DSB ruled in favour of Antigua and Barbuda, for example, which challenged US laws prohibiting the cross-border supply of gambling and betting services in violation of its specific GATS commitments (WTO, 2005).

⁷⁴ The dispute settlement process involves WTO Members' governments only. Typically, the process (including appeal) takes 15 months from the initial complaint to the final ruling by the Dispute Settlement Body (DSB), which consists of all WTO Members, and involves essentially three or four stages. A dispute is initiated by a request for consultations by the complainant to the respondent. Stage 1 involves bilateral consultations between the complainant and respondent with a view to resolving the dispute; this stage can last up to two months. As a result of such consultations, 110 disputes have been resolved or withdrawn. If the matter is not resolved following consultations, Stage 2 entails the establishment of a panel consisting of three (or possibly five) experts, serving in their individual capacities, to adjudicate on the dispute during a period of 6-9 months. While these panellists are usually chosen in consultation with the Members in dispute, if the two sides cannot agree, they are appointed by the WTO's Director General. If the panel decides that the disputed measure does violate a WTO Agreement or obligation, it recommends that the measure be brought promptly into compliance with WTO rules. In the event that either the complainant or the respondent objects to certain aspects of the panel's report, Stage 3 involves referral of the matter to the permanent seven-member Appellate Body (AB) established by the DSB and broadly representing the range of WTO membership. Appeals must be based on points of law such as legal interpretation; they cannot re-examine existing evidence or examine new issues. Each appeal is heard by three members of the AB, which typically deliberates for 2-3 months before issuing its report. Reports of the panel and AB (in the event that there has been an objection to a panel's findings) are passed to the DSB, where they become rulings or recommendations, unless rejected by consensus. The final stage of the process involves implementation of the DSB's ruling, subject to negotiation between the parties to the dispute. If a Member does not comply with the DSB's ruling, it is required to offer mutually-acceptable compensation or suffer a suitable penalty authorized by the DSB. As a last resort, retaliation by a Member against another Member found to be in violation of its WTO obligations has been authorized in 18 disputes. The DSB monitors implementation of adopted rulings, with outstanding cases remaining on its agenda until they are resolved.

Hitherto, more than 40 of the disputes initiated at the WTO have been over taxation, entailing mostly indirect taxes. Disputes concerning the latter, such as excises and VAT, have mainly involved alleged differential treatment of imported products (including alcoholic beverages, cigarettes, periodicals, cars and integrated circuits) in relation to “like” domestic products, in violation of NT. However, there have also been important disputes involving direct taxes, the most notable of which involved the US FSC and subsequent Extraterritorial Income (ETI) and American Jobs Creation Act (AJCA) schemes. Some selected disputes that are particularly relevant for tax policy are outlined below, with special attention to the disputes over FSC/ETI/AJCA schemes because of these disputes’ potentially far-reaching implications for direct taxation. Judging from TPRs, the tax measures found by the DSB to contravene WTO rules are only the tip of an increasingly large iceberg.

A. Internal Taxes on Alcoholic Beverages

Among the first disputes at the WTO was a complaint lodged in June 1995 by Canada, the EC, and US against Japan’s Liquor Tax Law (WTO, 1996a). This dispute is noteworthy for its clarification of the scope of NT obligations in the GATT as far as internal taxes are concerned. The Law in question established a mixed system⁷⁵ of specific and *ad valorem* liquor taxes that involved *different rates depending on the type of liquor* with domestic *shochu* being taxed at a lower rate than vodka and other white spirits as well as cognac, rum and whisky. The complainants alleged that the liquor tax system therefore discriminated against their spirits exported to Japan, and thus violated Japan’s NT obligations under GATT Article III.

In the case of vodka, the Appellate Body (AB) of the DSB ruled that imported vodka and domestic *shochu* were indeed “like” products and that vodka was taxed more than *shochu*, thereby violating the first sentence (regarding “like” products) of Article III:2 (NT – taxes and charges). In its examination of the second sentence (regarding “directly competitive or substitutable products”) of Article III:2, the AB noted that this sentence specifically invokes Article III:1 (NT – the general principle that internal taxes should not afford protection to domestic production), which plays a more important role than the first sentence of Article III:2 (regarding “like” products). Accordingly, the AB also clarified whether: (i) imported and domestic products are “directly competitive or substitutable” products;⁷⁶ (ii) the directly competitive or substitutable imported and domestic products are not similarly taxed; and (iii) the dissimilar taxation of the directly competitive or substitutable imported and domestic products is applied so as to “afford protection to domestic production.” The AB concluded that *shochu*, whisky, cognac, rum, gin, and liqueurs were indeed “directly competitive or substitutable” and that these products were not similarly taxed so

⁷⁵ The specific tax classified alcoholic beverages into different categories, sub-categories and grades, based on alcoholic content and other qualities, and applied different tax rates to each category. In addition, the value-added tax was not levied on categories, such as traditional Japanese products, which included *shochu*.

⁷⁶ This category is broader than the category of “like” products, looking not only at such matters as physical characteristics, common end-uses, and tariff classifications, but also at the “market place,” including the elasticity of substitution between products.

as to “afford protection to domestic production,” in violation of the second sentence of Art. III:2. Whereas in the case of “like” products, even the smallest amount of tax on imported products “in excess of” that on domestic products is too much, in the case of “directly competitive or substitutable products,” the excess amount of tax must be more than *de minimis* in order to be deemed “not similarly taxed” in a way that affords protection.

The relationship between “like” and “directly competitive or substitutable” products also arose in a similar subsequent dispute concerning Korea’s taxation of alcoholic beverages, where the DSB further clarified that all like products are, by definition, directly competitive or substitutable products, whereas not all directly competitive or substitutable products are like (WTO, 1999b). While perfectly substitutable products fall within Article III:2, first sentence, imperfectly substitutable products can be assessed under Article III:2, second sentence.

Unlike the internal tax systems of Japan and Korea, in Chile’s case (WTO, 1999c), *all* alcoholic beverages, irrespective of origin, with an alcohol content of 35° or below were taxed at a fixed *ad valorem* rate of 27 percent. Thereafter, the tax rate increased “steeply” by 4 percentage points for every additional degree of alcohol, until a maximum *ad valorem* rate of 47 percent was reached, so that the latter rate applied to *all* beverages with an alcoholic content in excess of 39°. Hence, the tax system did not involve *type* distinctions such as those that existed in both Japan and Korea. Interestingly, even though Chile argued that one of the reasons for linking the tax rate directly to the alcoholic content was to discourage alcohol consumption, the AB nonetheless ruled that Chile had violated its NT obligations under Article III:2, second sentence, of the GATT 1994. The AB noted that whereas 75 percent of all domestic production of alcoholic beverages at issue fell in the category taxed at the lowest rate, 95 percent of the “directly competitive or substitutable” imported products were in the category taxed at the highest rate. These disputes raise the question of the extent to which WTO rules should preclude the choice of an origin-neutral basis (alcohol content in Chile’s case) for “sin” or other taxation aimed at protecting public health.

B. Indonesia’s Tariff and Sales Tax Exemptions affecting the Automotive Industry

Another early dispute concerning taxation arose in connection with Indonesia’s National Car Programme (WTO, 1998), whose purpose was to assist the domestic car industry. In October 1996, the EC, Japan and US initiated a complaint by requesting consultations regarding the Programme’s tariff and tax treatment of imported automotive parts and luxury cars. The tariff measures in dispute were exemptions and reductions based, among other things, on the percentage of local content of the finished motor vehicles for which the imported parts were used. The offending tax measure involved luxury car tax exemptions or reductions granted solely to domestic car companies and cars satisfying local content requirements. The complainants alleged that these tax measures were in violation of Indonesia’s obligations under, among others, Articles I, III and X of GATT 1994, Articles 3, 6 and 28 of the SCM Agreement, and Article 2 of the TRIMS Agreement. (The US also contended that the measures infringed Articles 3, 20 and 65 of the TRIPS Agreement.)

The DSB's key findings were as follows. First, it found that, as a result of the local content requirement, the National Car Programme constituted a trade-related investment measure and therefore violated Indonesia's national treatment obligation, specifically GATT Article III:2 (regarding "like" products), as the measures involved subsidies to producers resulting from exemptions or reductions of indirect taxes on products. Although this particular dispute did not involve direct tax measures, it is noteworthy that the DSB observed that while "subsidies granted in respect of direct taxes are generally not covered by Article III:2," they "may infringe Article III:4 to the extent that they are linked to other conditions which favour the use, purchase, etc. of domestic products."⁷⁷ Second, the DSB found that the sales tax exemptions were inconsistent with Indonesia's national treatment obligation because an imported vehicle was taxed at a higher rate than a "like" domestic vehicle, and that any imported vehicle was not taxed similarly to a directly competitive or substitutable domestic car. Third, the tariff and sales tax exemptions were judged to be in violation of Indonesia's MFN obligation (GATT Article I) because the consequent "advantages" accorded to Korean imports were not granted "unconditionally" to imports of "like" products from other Members. Finally, the DSB ruled that these tariff and sales tax exemptions constituted "specific subsidies" that had caused "serious prejudice" (through significant price undercutting) to like imports, thereby infringing the ASCM. (However, the DSB found that the complainants had not demonstrated that Indonesia was in violation of Articles 3 and 65 of the TRIPS Agreement.)

C. Thailand's VAT on Cigarettes

In February 2008, the Philippines lodged a complaint concerning several Thai tax and customs measures affecting cigarettes imported from the Philippines (WTO, 2011). The measures included Thailand's VAT regime and especially its administration, which the Philippines alleged was contrary to NT obligations embodied in GATT Article III:2. The specific tax measure in question subjected resellers of imported cigarettes to VAT when they did not satisfy conditions for obtaining input tax credits necessary to achieve zero VAT liability. By contrast, resellers of like domestic cigarettes were exempt from VAT liability. Notwithstanding the fact that resellers of imported cigarettes could take action to achieve zero VAT liability, the DSB ruled that, by imposing additional administrative requirements only on resellers of imported cigarettes, Thailand's VAT treated imported cigarettes less favourably than "like" domestic cigarettes and was therefore inconsistent with Art. III:2 first sentence. The DSB rejected Thailand's characterization of the measure as "administrative requirements" justified under GATT Article XX(d).⁷⁸ In June 2014, Thailand reported that it did not have to take any further action to implement the DSB's recommendations and rulings. The Philippines disagreed, however, and was of the view that Thailand had failed to comply. Consequently, it would appear that this dispute remains to be resolved.

⁷⁷ See (WTO, 1998), paragraph 14.38.

⁷⁸ Another dispute concerning discrimination in the collection of VAT or its refund mechanism arose in the case of China (WTO, 2004). Although China levied VAT at the same rate on imported and domestically-produced or designed integrated circuits, the VAT refund was applicable only to domestic production. The US complained that this treatment was contrary to GATT non-discrimination rules as well as the NT obligation in the GATS. The outcome of this dispute was a mutually agreed solution after consultations.

D. Argentina's Advance Tax Payments

This case is noteworthy for the DSB's ruling that NT encompasses tax administration and collection measures concerning direct as well as indirect taxes. It involved a complaint by the EC that Argentina's advance tax payments constituted a higher tax burden on imports than domestically-produced goods (WTO, 2000b). Two tax measures were subject to dispute. The first measure related to the "Ley del Impuesto al Valor Agregado" ("IVA"), which provides for a general VAT system applicable to the sale of goods within Argentina and their importation. It involved prepayment of the IVA at *ad valorem* rates of 10 percent or 12.7 percent, respectively, in respect of imports by registered and non-registered taxable persons. The second measure related to the "Ley del Impuesto de Ganancias" (the "IG"), which is levied on all sources of income, and involved special rules for the advance collection of the IG. It entailed prepayment of the IG at *ad valorem* rates of 3 percent or 11 percent.

The DSB ruled that even if the prepayments of the IVA and IG may be credited against the definitive tax liability under the IVA Law and IG Law, taxable persons are still required to "advance" money to the Argentinean tax authorities. As the amount of the advance tax collected was determined by applying the tax rate to the normal price of the goods, it was a tax measure that "clearly applied to products" and therefore fell within the purview of Article II:2 (first sentence regarding "like" products).⁷⁹ Such advance tax payment requirements constituted financial burdens in the form of an opportunity cost (interest lost) and a debt financing (interest paid). As higher nominal prepayment *rates* applied to imported products than to like domestic products, this necessarily implied that a heavier actual tax *burden* was imposed on imported products, thereby violating the Article. III:2. Although the DSB found that the measures were "necessary to secure compliance" with Argentina's tax law and, thus, fell within the terms of the general exception found in Article XX(d), it concluded that they resulted in "unjustifiable discrimination" under the *chapeau* of Article XX when they were not "unavoidable" for the operation of Argentina's tax law and when several alternative measures were available. Despite bringing tax administration and collection measures attached to direct taxes with the scope of national treatment, however, the DSB acknowledged that as income taxes are not normally levied directly on products, they "are generally considered not to be subject to Article III:2."⁸⁰

E. China's Export Taxes on Certain Raw Materials and Rare Earths

The first dispute concerned four types of restraints, including taxes, imposed by China on exports of certain raw materials (WTO, 2012a). Although export taxes are not contrary to any WTO

⁷⁹ See (WTO, 2000b), paragraph 11.160. The Appellate Body (AB) faced a similar issue in a dispute concerning an excise tax imposed by Canada on advertisements in split-run periodicals (WTO, 1996b). The tax was applied to the value of advertising carried by each issue of a split-run magazine. Canada maintained that the tax was a measure pertaining to advertising services and therefore not within the purview of the GATT 1994. The AB acknowledged that both the editorial and the advertising content of periodicals could be viewed as having services attributes, but observed that they nevertheless combined to form a physical product. It then went on to conclude that the GATT 1994 was applicable to the contested tax, reasoning that that tax "clearly applies to goods -- it is an excise tax on split-run editions of periodicals."

⁸⁰ See (WTO, 2000b), paragraph 11.159.

Agreement, as long as they are levied in accordance with the MFN principle, the EU, Mexico, and US (the “complainants”) instead challenged these taxes (and other restraints) on the grounds that they were inconsistent with China’s commitments in (Paragraph 11.3 of) its Protocol of Accession because the raw materials concerned were not listed in Annex 6 of the Protocol.⁸¹ While China argued that the general exceptions in GATT Article XX (b) and (g), respectively, concerning measures “necessary to protect human, animal or plant life or health” and “relating to the conservation of exhaustible natural resources,” provided justification for its violation of the export tax commitments contained in its Protocol, the DSB concluded that there was no basis in this Protocol to allow the application of these exceptions. Consequently, the DSB ruled that China’s export duties on these raw materials were inconsistent with the obligations contained in its Protocol. In January 2013, China notified the DSB that it had fully implemented the DSB’s recommendations and rulings in these disputes.

The second similar dispute initiated by the EU, Japan and US involved three types of restraints, including export duties imposed by China on exports of rare earths, tungsten and molybdenum (WTO, 2014a).⁸² Once again, the complainants challenged these taxes (and other export restraints) on the grounds that they were inconsistent with China’s commitments in its Protocol of Accession. In this case, China argued that the export taxes were “necessary to protect human, animal and plant life and health” from the pollution caused by mining the products at issue and was therefore in accordance with Article XX (b) of the GATT 1994. China also argued that the export quotas were justified under the exception in Article XX (g), as they relate to the conservation of an exhaustible natural resource. However, the Panel again ruled that “General Exceptions” could not be invoked to justify breaches of China’s obligation to eliminate export taxes contained in its Accession Protocol and that, in any event, those export taxes were not necessary for the protection of human, animal or plant life or health. Under the circumstances, China’s imposition of the export taxes in question was found to be inconsistent with China’s WTO obligations. In April 2014, both China and the US notified the DSB of their decisions to appeal to the Appellate Body certain issues of law covered in the panel report and certain legal interpretations developed by the panel.

In anticipation of such an appeal, the Panel had nonetheless examined the merits of China’s Article XX (g) as well as (b) defence for its export duties for the sake of argument so that, in the event of an appeal and reversal on the applicability of the provision, the Appellate Body would have on the record the Panel’s relevant factual findings in this regard. While the restraints at

⁸¹ Pursuant to Paragraph 11.3 of the Protocol “China shall eliminate all taxes and charges applied to exports unless specifically provided for in Annex 6 of this Protocol or applied in conformity with the provisions of Article VIII of the GATT 1994.” Whereas the latter concerns fees and charges imposed as payment for services rendered, Annex 6 lists 84 products, mainly raw materials, indicating for each of those products the maximum rate of export tax.

⁸² China accounts for roughly 95 percent of the current global supply of rare earths, which are critical constituents of many high technology goods. Export restraints are thus likely to have a significant effect on its terms of trade. However, there appears to be little evidence that the sectoral distribution of China’s post-WTO increase in export taxation is consistent with the terms-of-trade rationale for such taxes. Instead, both empirical evidence and statements by policymakers suggest that these taxes are motivated by industrial policy favouring downstream processing. China’s export tax increases (including those associated with VAT rebate policy) were concentrated in industries where WTO-induced import tariff cuts were smallest (Garred, 2015).

issue did not include *de facto* export taxes in the form of less-than-full rebates of VAT in respect of exports, these measures did feature in connection with China's defence of its export quotas on grounds of Article XX (g). However, the Panel did not examine rebates in connection with *upstream* rare earth products. Instead, it remarked on the fact that VAT refunds were provided on all exported *downstream* rare earth products, which would seem to stimulate the production and consumption of rare earths. (This inconsistency is relevant not just for export quotas, but also to *de jure* and *de facto* export taxes.) The Panel thus failed to see how such measures contributed to domestic restrictions whose purpose is to enhance the conservation of rare earths. The AB upheld the Panel's findings and on 29 August 2014, the DSB adopted the Panel and AB reports, which found that China's export restrictions were in breach of China's WTO obligations and not justified under the GATT exceptions.⁸³ At the DSB meeting on 20 May 2015, China informed the DSB that these export restrictions had been removed, thereby fully implemented the DSB's recommendations and rulings. However, the US did not share China's assessment, so that compliance proceedings are ongoing.

Interestingly, in neither of these two disputes did the complainants challenge China's *de facto* export taxes in the form of less-than-full rebates of VAT in respect of exports. In the second case, the Panel did refer to instances where rebates were terminated or reduced for upstream rare earth and tungsten products.⁸⁴ However, it did not rule on whether these too constituted a breach of China's WTO obligations, presumably because a full rebate of VAT in respect of exports is not obligatory and a less-than-full rebate is not considered legally to be an "export duty." Hence, whereas excess rebates of VAT in respect of exports are clearly contrary to WTO rules, partial rebates are not, even if export duties are covered by a Member's Protocol of Accession.

F. United States' FSC, ETI and AJCA Schemes concerning Direct Taxation

The dispute between the US and the EC that resulted in the "1981 Understanding" re-surfaced in November 1997, when the EC formally challenged the US over the DISC's successor, the Foreign sales Corporation (FSC) scheme⁸⁵ which was enacted in 1984 (largely in response to aggressive US tactics in the banana and beef hormone disputes with the EC). The FSC allowed a partial tax exemption for the income of a foreign corporate subsidiary derived from handling sales of US exports. The amount of income exempted was calculated by a formula designed to approximate arm's length pricing (dividing export profits between domestic and foreign sources). As mentioned earlier, this dispute clarified, if there was any doubt, that direct as well as indirect taxes were subject to WTO rules. The FSC, like the DISC and subsequent ETI, was intended to offset the perceived tax disadvantage encountered by US producers in respect of their exports.⁸⁶ This

⁸³ See WTO (2014b).

⁸⁴ See WTO (2014a), page 155, footnote 863.

⁸⁵ See WTO (2000c). A more detailed history and description of the DISC/FSC/ETI measures and resulting disputes between the EC and US can be found in Brumbaugh (2004) and Hufbauer (2002).

⁸⁶ Apparently, the combination of specified exemptions and pricing rules embodied in the FSC amounted to a total tax exemption of between 15 and 30 percent of income from exports.

disadvantage, it was argued, involved two elements. The first element concerned the fact that whereas some European countries generally tax only income earned domestically (the so-called “territorial” system of direct taxation), the US generally taxes world-wide income of its residents (the so-called “world-wide” system of direct taxation). The focus on the taxation of foreign source income was a distraction, however, because the FSC measure actually provided relief in respect of domestic source (artificially characterized as foreign source) income earned on foreign sales. Secondly, whereas US exports to the EU are subject to the latter’s VAT, EU exports to the US are not because the EU exempts its own exports while the US does not levy such a tax on imports. Although a destination-based VAT does not distort trade, it is argued by some that the tax gives a distinct advantage to EU exports to the US not enjoyed by US exports to the EU. When consultations failed to resolve the dispute, the EC requested the establishment of a dispute settlement panel at the WTO and such a panel was formed in September 1998.

The WTO Panel, whose report was issued in October 1999, concluded that the “carve-out” of foreign-source income attributable to exports from the “world-wide” income tax system allowed by the FSC did indeed constitute a prohibited subsidy contingent on exporting, and thus violated Article 3.1(a) of the ASCM. The Panel also found that the US had acted inconsistently with its obligations under Article 3.3 of the AA (and consequently with its obligations under Article 8 of that agreement, whereby each WTO Member undertakes not to provide export subsidies other than those in conformity with that Member’s schedule of specific commitments). In reaching its conclusion, the Panel rejected the US analogy between FSC and “territorial” taxation. Although the panel accepted that countries need not tax income from foreign economic processes, whether a provision forgives taxes “otherwise due,” and therefore constitutes a subsidy, depends on how the provision in question compares to a country’s own general method of taxation.⁸⁷ In short, because the FSC carved out an exception from the way the US normally taxed income from exports, the Panel concluded that it was an export subsidy.

The US appealed the Panel’s decision almost immediately, arguing again that under WTO rules, a country need not tax income from foreign economic processes and that FSC was therefore permissible. However, on 22 February 2000, the WTO Appellate Body ruled that, having decided to tax foreign source income in general, the US provided a subsidy by carving out an exception to that treatment, thus once again rejecting the analogy between FSC and “territorial” taxation.

In response to the AB’s decision, the US enacted the ETI provisions in November 2000 in order to phase out the FSC benefits. The Extraterritorial Income Exclusion Act (the amended FSC legislation) excluded from the US definition of gross income certain foreign source income (namely a portion of export earnings and a portion of earnings from production abroad) with the condition that this territorial method of avoiding double taxation could be used only if the taxpayer did not claim foreign tax credits with respect to the same earnings. The benefits of the ETI Act

⁸⁷ The AB confirmed that there must be some defined, normative benchmark against which a comparison can be made between the tax revenue actually raised and the revenue that would have been raised “otherwise.”

were also conditional upon the sale of goods outside the US and the use of less than 50 percent imported inputs.

Although the US claimed that, with the adoption in November 2000 of the FSC Repeal and Extraterritorial Income Exclusion Act (the amended FSC legislation), it had implemented the recommendations and rulings of the DSB, this claim was disputed by the EC, which requested authorization from the DSB to take appropriate countermeasures and suspend concessions pursuant to Article 4.10 of the ASCM and Article 22.2 of the Dispute Settlement Understanding (DSU). In response, the WTO Panel ruled against the US, essentially on four grounds. Firstly, it found that the ETI provisions imposed enough special conditions on their use that they were an effective departure from the general US tax practice, and therefore constituted a subsidy (within the meaning of Article 1.1 of the ASCM). Secondly, the Panel concluded that the subsidy was “dependent or contingent upon export” performance (within the meaning of Article 3.1(a) of the ASCM). Thirdly, the Panel rejected the US argument that the ETI was intended to avoid double-taxation (within the meaning of footnote 59 of the ASCM), concluding that the scope of the benefit was considerably broader than the type of income that would ordinarily be at risk of double-taxation. Fourthly, the Panel found that the 50 percent “foreign content limitation” violated Article III:4 of GATT 1994 by according less favourable treatment to imported products than to like domestic products.⁸⁸

In connection with the latter, the FSC Panel stated that “we can see no specification or limitation in the text of Article III:4 concerning the type of advantage linked to the measure under examination under Article III:4 of the GATT 1994. Thus, nothing in the plain language of the provision specifically excludes requirements conditioning access to income tax measures from the scope of application of Article III.”⁸⁹ The Panel went on to conclude that “Article III:4 of the GATT 1994 applies to measures conditioning access to income tax advantages in respect of certain products.”⁹⁰

Although the US asked the AB to reverse the Panel’s findings, the Body issued its report in January 2002 upholding the Panel’s ruling. Following adoption of both reports by the DSB and failure by the US to take further compliance actions, an arbitration proceeding was carried out pursuant to Article 22.6 of the DSU.

In August 2002, the Arbitrator’s award was circulated. The Arbitrator determined that the suspension by the EC of concessions under the GATT 1994 in the form of the imposition of a 100 percent *ad valorem* charge on imports of certain goods from the US in a maximum amount of roughly

⁸⁸ One of the conditions of eligibility for tax relief under the ETI measure was that no more than 50 percent of the fair market value of qualifying property be attributable to the article produced or direct labour performed outside the U.S.

⁸⁹ See WTO (2002), paragraphs 8.142-8.143.

⁹⁰ The Panel further noted that “if measures conditioning access to income tax advantages in respect of certain products were excluded from the scope of Article III:4, a wide range of trade-distortive measures with enormous economic and commercial implications would, in effect, be given a safe haven, while measures not linked to income tax advantages and perhaps associated with a lesser extent of trade distortion would be subject to the disciplines of Article III:4. It seems to us that such an interpretation runs counter to the object and purpose of the GATT and the WTO Agreement (including the “elimination of discriminatory treatment” in international trade ...) and can hardly have been what the drafters intended. See WTO (2002), paragraph 8.144.

\$4 billion per year, as described in the EC's request for authorization to take countermeasures and suspend concessions, would constitute appropriate countermeasures within the meaning of Article 4.10 of the ASCM.⁹¹ In April 2003, the EC requested authorization from the DSB to suspend concessions or other obligations under Article 22.7 of the DSU and Article 4.10 of the ASCM. In May 2003, the DSB authorized the EC to take appropriate countermeasures and to suspend concessions. Accordingly, in March 2004, the EC began to impose seemingly "punitive" tariffs that were envisaged to rise by 1 percent monthly from 5 percent initially to 17 percent in March 2005.⁹² Such a "mercantilist" trade remedy appears anomalous when one considers that the WTO's main function is to ensure that trade flows as smoothly, predictably and freely as possible.

In October 2004, after more than two years of complex negotiations between the House and Senate, the US Congress passed legislation to repeal the FSC/ETI and replace it with a new corporate tax law, which provided for the phasing out of the FSC by 2007 and its replacement with several forms of tax relief, including a corporate tax deduction of almost \$77 million, for domestic manufacturing, US multinationals, and a wide range of other industries and businesses (Atkins, 2005). The new legislation called the American Jobs Creation Act (AJCA) of 2004, which some described as the most significant corporate tax bill since 1986, was signed into law by the President on 22 October 2004.

Shortly afterward, the EC moved to lift sanctions that it had imposed on US exporters. At the same time, however, the EC expressed concern over transition provisions in the newly-passed legislation repealing the FSC/ETI, one involving the phase-out of the ETI over two years,⁹³ the other concerning the "grandfathering" of existing contracts so that the full benefit of the ETI applied to exports made under contracts entered into before 17 September 2003. The EC argued that the "grandfathering" provision favoured exporters of capital goods with long delivery times; such exporters included Boeing, Microsoft, Intel, Motorola, and Caterpillar. In any event, on 5 November 2004 the EC initiated proceedings at the WTO challenging these provisions. Some US observers have suggested that the EC appeal was linked to a separate WTO complaint lodged by the US against Airbus (see below). Be that as it may, on 30 September 2005 a WTO compliance panel found that the US had indeed failed to implement an earlier ruling by allowing some of the tax breaks to continue through 2006 and beyond. The US then appealed the compliance panel's decision, which was subsequently upheld by the AB, whose report (together with that of the compliance panel) was adopted by the DSB on 14 March 2006. On 17 May 2006, the US Congress passed legislation to repeal the "grandfather" provisions of the AJCA and ETI Acts that

⁹¹ In connection with other disputes, the US had imposed 100 percent tariffs on selected European imports – a trade sanction worth \$300 million a year – in response to what it considered to be unfair import restrictions on bananas and hormone-treated beef.

⁹² A punitive action is one in which the value of trade affected by the retaliation exceeds the value of trade affected by the infraction.

⁹³ This provision permitted firms to claim 80 percent of their otherwise applicable ETI benefit in 2006 and 60 percent in 2007 before ending in 2008.

were a subject of the compliance proceedings. In response, the EC withdrew its sanctions, thereby ending a saga lasting almost a decade.

G. Washington State's reduced Business and Occupation Tax (on Manufacturers of Aircraft)

In apparent retaliation for a complaint to the DSB by the US against the EC's support for Airbus (WTO, 2011), the EC claimed that ten measures (of the US State of Washington and municipalities therein) constituted subsidies to Boeing's large civil aircraft division that were inconsistent with the ASCM (WTO, 2012). These measures included tax incentives provided by the State of Washington and tax breaks under legislation relating to the FSC, ETI and successor Acts.

As regards Washington State's B&O tax rate reduction, the DSB ruled in March 2012 that the reduction in the Washington State B&O tax rate applicable to commercial aircraft and component manufacturers constituted foregone tax revenue and therefore a financial contribution within the meaning of Article 1.1(a)(1)(ii) of the ASCM. It also found that the Washington State B&O tax rate reduction was a subsidy that is "specific" within the meaning of Article 2.1(a) of the ASCM. In addition, the DSB concluded that, through their effects on Boeing's prices, Washington State's B&O tax rate reduction together with the FSC/ETI subsidies caused "serious prejudice" in the form of significant lost sales within the meaning of Articles 5(c) and 6.3(c) of the ASCM with respect to the 100-200 seat large civil aircraft market. In September 2012, the US notified the DSB of the withdrawal of subsidies and removal of adverse effects in this dispute, thereby fully complying with its recommendations and rulings. However, the EU requested consultations pursuant to Article 21.5 of the DSU, and subsequently requested the establishment of a compliance panel, which was composed in October 2012. In March 2015, the Chairman of the panel informed the DSB that due to the scale and complexity of the dispute, the panel does not expect to complete its work before mid-2016.

Another dispute arose on 19 December 2014 when the EU requested consultations with the US regarding conditional tax incentives contained in the Revised Code of the State of Washington in relation to the development, manufacture, and sale of large civil aircraft (WTO, 2015a). These tax incentives include a preferential B&O tax rate, tax credits, and exemptions from sales, excises and property taxes. The EU alleges that the measures constitute specific subsidies (within the meaning of Articles 1 and 2 of the ASCM Agreement) and also considers that the measures are prohibited subsidies (under Articles 3.1(b) and 3.2 of the ASCM). At its meeting on 23 February 2015, the DSB established a panel, which was composed by the Director General on 22 April 2015.

H. Brazil's "Tax Advantages"

In December 2013, the EU initiated (with a request for consultations) a complaint against Brazil concerning its tax measures aimed at increasing the effective level of border protection in Brazil, while providing preferences and support to domestic producers and exporters, by, *inter alia*, levying higher indirect taxes on imported goods than on domestic goods, including

those manufactured in free trade zones (FTZs), and providing tax relief contingent upon export performance and the use of domestic goods, in contravention of the GATT, ASCM and TRIPS Agreement (WTO, 2013).

The tax measures of most concern to the EU appear to be those related to the automotive sector, particularly the so-called *Inovar-Auto* programme, whereby accredited automobile manufacturers receive tax credits of up to 30 percent with respect to the general *Imposto sobre Produtos Industrializados* (*Tax on Industrial Products*). In order to become accredited, eligible businesses must satisfy requirements concerning minimum levels of manufacturing and R&D in Brazil, a vehicle labelling programme, and Brazilian energy efficiency targets for automobiles.

The EU alleges that the *Inovar-Auto* programme is inconsistent with the MFN principle found in Article I:1 of the GATT, insofar as it confines the tax advantages to goods originating in certain countries (including Mercosur and non-Mercosur countries). It also maintains that the *Inovar-Auto* programme breaches Article III of the GATT concerning the National Treatment principle inasmuch as the programme, *inter alia*, subjects imported goods to internal taxes or other internal charges in excess of those applied to domestic products and discriminates against imported goods *vis-à-vis* their internal sale and distribution. For instance, whereas sales of goods manufactured in FTZs are exempted from the *Imposto sobre Produtos Industrializados* (IPI) when they are sold within Brazil's customs territory, imported goods, including those stored in the FTZs but marketed elsewhere in Brazil, are subject to all taxes applicable to imports, including IPI. Furthermore, the EU argues that the programme violates Article 3.1(b) of the ASCM concerning subsidies contingent upon the use of domestic over imported goods. Finally, the EU alleges that the required use of domestic content violates Article 2 of the TRIMs Agreement, in conjunction with the Illustrative List provided in the Annex to the TRIMs Agreement.

At its meeting on 17 December 2014, the DSB established a panel, which was composed by the Director General on 26 March 2015. Argentina, Australia, Canada, China, Chinese Taipei, Colombia, India, Japan, Korea, Russia, South Africa, Turkey and the US reserved their third-party rights. A related dispute was initiated by Japan on 2 July 2015 (WTO, 2015b).

As this dispute is in its very early stages, the outcome remains to be seen. In some respects, this dispute resembles the one concerning Indonesia's tax measures used to assist domestic producers of automobiles, and which the DSB ruled were inconsistent with Indonesia's GATT obligations. However, whereas in the latter dispute, the tax measures were challenged on the grounds that they constituted "specific" and thus potentially "actionable" subsidies, in this case, they are being challenged on the grounds that they are prohibited subsidies. Interestingly, this particular dispute is the first regarding FTZs.

I. Summary Observations concerning Tax Disputes

A number of broad conclusions can be drawn in the light of the outcomes of these (and other) tax disputes.

- Several of the DSB's rulings clarified the scope of NT obligations. For example, whereas in the case of "like" products, even the smallest amount of tax on imported products "in excess of" that on domestic products is excessive, in the case of "directly competitive or substitutable products", the excess amount of tax must be more than *de minimis* in order to be deemed "not similarly taxed" in a way that affords protection.
- In connection with NT, the DSB has made clear that differences in taxation concern not just tax rates, but administrative measures, and that GATT exemptions do not provide a means of escaping from NT obligations in this regard.
- The DSB also confirmed, if there were ever any doubt, that, generally speaking, direct as well as indirect taxes are subject to WTO rules.
- Although proving that an "actionable" subsidy has "adverse effects" is arguably more onerous than determining whether a subsidy is prohibited, tax measures have been challenged successfully on these grounds.
- WTO rules apply not only to national taxes, but also to sub-national taxes.
- While export taxes are currently subject to much less discipline than import tariffs, judging from the disputes concerning China and bindings agreed by other countries that have recently acceded to the WTO as well as recent proposals by WTO Members, attention is being focused increasingly on these barriers to trade, which also constitute implicit subsidies (to downstream processing). Accordingly, like tariffs, they should arguably be curtailed by WTO rules.⁹⁴
- Although China argued that its export taxes were "necessary to protect human, animal and plant life and health" from the pollution caused by mining the products and was therefore in accordance with Article XX (b) of the GATT 1994, the DSB ruled that such taxes breached China's Protocol of Accession. No other disputes have arisen in connection with border tax adjustments for environmental reasons. However, countries wishing to reduce emissions of greenhouse gases by, for example, imposing an internal tax or equivalent measure on domestic emissions may wish to levy a border tax on imports of products from countries without such taxes or equivalent measures in order to place domestic producers and foreign producers emitting greenhouse gases on an equal footing. In this case, it is conceivable that such border carbon adjustments (BCAs) that would otherwise violate the GATT might be justified on grounds of Article XX (b) or perhaps (g).⁹⁵ Clearly, the country implementing such BCA measures would need to demonstrate that the domestic environmental policies embodied therein are "important and legitimate in character,"⁹⁶ and that, in accordance with the general *chapeau* of Article XX, such measures are not be applied in such a manner that is would constitute a means of "arbitrary or unjustifiable discrimination ... or a disguised restriction on international trade."
- If the recent dispute over Brazil's FTZs is any guide, attention may also be turning towards such zones, some 4,300 of which exist in one form or other in more than 130 countries.

⁹⁴ Major regional trade agreements such as the NAFTA, MERCOSUR, ANZERTIA and CARICOM prohibit export taxes among members (Piermartini, 2004).

⁹⁵ See Condon and Ignaciuk (2013).

⁹⁶ See WTO (1998c), page 45, paragraph 121.

V. CONCLUDING REMARKS

Clearly, WTO rules encompass not just import tariffs, and to a lesser extent export taxes, but also direct as well as indirect internal taxes, especially insofar as these taxes affect international trade in goods and services. As a consequence, a wide range of tax measures have been scrutinized at the WTO, including by the DSB, which has made major rulings in tax disputes between WTO Members. WTO rules can therefore be expected to continue to be an important factor in shaping tax policies, as Members will undoubtedly want to ensure that their tax policy measures do not infringe WTO rules. Trade Policy Reviews suggest that complaints brought before the DSB are merely the tip of an increasingly large iceberg.⁹⁷ Accordingly, one can expect more tax measures to be challenged at the WTO.⁹⁸

While the scope for using tax measures as instruments of trade and industrial policies has been curtailed, WTO rules still leave Members with plenty of scope not just to affect adversely their trading partners, but also to inflict economic damage upon themselves. Indeed, even if certain tax measures are permissible under WTO rules, it may be inadvisable for Members to use them. In the case of tax incentives for investment, for example, judging from the experience of countries that evaluate such measures, they are seldom cost effective.⁹⁹ Greater transparency (including cost-benefit analysis) concerning the economic effectiveness of these and other tax measures, therefore, would help to improve Members' tax policies.

⁹⁷ Mindful of the proverb that “people who live in glass houses shouldn’t throw stones,” Members may also be wary of provoking “tit-for-tat” disputes.

⁹⁸ Given the high costs of litigation and their limited resources, WTO Members, particularly those that are developing or least-developed countries, are unlikely to take a dispute over a tax (or any other) measure to the DSB unless they believe that the probability of success before the DSB and the benefits of removing the adverse effects of the measure are sufficiently large to outweigh the costs of litigation.

⁹⁹ The essence of an evaluation of an investment incentive’s cost-effectiveness is determining the extent to which the investment induced by it is *incremental*; that is, it would not have taken place in the absence of the incentive. This can be very difficult to determine. Most econometric studies show that forgone tax revenues exceed the increase in investment induced by the incentive. Even in the case of R&D, where the market’s failure to capture positive spill-overs is particularly relevant, a study by Australia’s Productivity Commission, for example, found that the general tax concession for R&D acted mainly as a “reward” for research that firms would have undertaken anyway, rather than stimulating much additional R&D (Productivity Commission, 2007).

References

- Adlung, R. and Zhang, W. (2013), "Trade Disciplines with a Trapdoor: Contract Manufacturing," *Journal of International Economic Law*, May, pp 1-26.
- Atkins, C., 2005, "FSC/ETI Transition Relief in the New JOBS Act: Does the U.S. Have to Quit Cold Turkey?" Special Report N° 133, Tax Foundation, Washington, D.C.
- Bagwell, K. and Staiger, R. (2002), *The Economics of the World Trading System*, The MIT Press, Cambridge, Massachusetts.
- Bouet, A., and Laborde, D. (2010), *Economics of Export Taxation: A Theoretical and CGE Approach Contribution*, IFPRI Discussion Paper 00994, June.
- Brumbaugh, D. (2004), *A History of the Extraterritorial Income (ETI) and Foreign Sales Corporation (FSC) Export Tax-Benefit Controversy*, Congressional Research Service, 9 November.
- Condon, M. and Ignaciuk, A. (2013), *Border Carbon Adjustment and International Trade: A Literature Review*, OECD Trade and Environment Working Paper 2013/06, OECD Publishing.
- Coppens, D. (2010), *Balancing Policy Space and Policy Constraints? A Critical Legal Analysis of WTO Disciplines on Subsidies and Countervailing Measures*, Katholieke Universiteit Leuven.
- Corden, W.M. (1971), *The Theory of Protection*, London: Oxford University Press.
- Daly, M. (1995), "The role of tax expenditure reporting in a global economy," *The World Economy*, 12(1), pp 87-111.
- Daly, M. (2005), *The WTO and Direct Taxation*, WTO Discussion Paper No. 9, WTO, Geneva, available at http://www.wto.org/english/res_e/booksp_e/discussion_papers9_e.pdf.
- Devarajan, S. *et al.* (1996), *The Whys and Why Nots of Export Taxation*, Policy Research Working Paper 1684, The World Bank, Washington, D.C.
- Fung, K.C. and Korinek, J. (2013), *Economic of Export Restrictions as Applied to Industrial Raw Materials*, OECD Trade Policy Paper N° 155 (TAD/TC/WP(2012)23/FINAL).
- Garred, J. (2015), "Trade in Raw Materials and Economic Development," a thesis submitted to the Department of Economics of the London School of Economics for the degree of Doctor of Philosophy London.
- Geloso Grosso, M. (2008), *Analysis of Subsidies for Services: The Case of Export Subsidies*, OECD Trade Policy Papers, No. 66, OECD Publishing.
- Hoda, A. and Ahuja, R. (2003) *Agreement on Subsidies and Countervailing Measures: Need for Clarification and Improvement*, Working Paper No. 101, India Council for Research on International Relations.
- Horn, H. and Mavroidis P. (2001), "Economic and legal aspects of the Most-Favoured-Nation clause," *European Journal of Political Economy*, Vol. 17, 233-279.
- Hufbauer, G. (2002), "The FSC Case: Background and Implications," Peterson Institute for International Economics, Washington, D.C., February 27.
- Keen, M., and Lighthart, J. (2002), "Coordinating Tariff Reduction and Domestic Tax Reform," *Journal of International Economics*, vol. 56, pp 489-507.
- Klemm, A. (2009), *Causes, Benefits, and Risks of Business Tax Incentives*, IMF Working Paper WP/09/21.
- Krugman, P., Obstfeld, M., and Melitz, M. (2012), *International Economics: Theory and Policy* (Ninth Edition), Addison-Wesley, World Student Series.

- Lerner, A.P. (1936), "The symmetry between import and export taxes," *Economica* 3, pp 306-313.
- McLure, C. E., and Hellerstein, W. (2002), "Does Sales-Only Apportionment Violate International Trade Rules?" *Tax Notes*, September 9, pp. 1513-1521.
- McMillan, M. and Rodrik, D. (2011), *Globalization, Structural Change and Productivity Growth*, NBER Working Paper No. 17143.
- OECD (2014), *Global Value Chains: Challenges, Opportunities, and Implications for Policy*, Paris.
- Piermartini, R. (2004), *The Role of Export Taxes in the Field of Primary Commodities*, WTO, Geneva, available at http://www.wto.org/english/res_e/booksp_e/discussion_papers4_e.pdf.
- Productivity Commission (2007), *Public Support for Science and Innovation*, Research Report, Canberra.
- Sykes, A. (2001), "Effective Protection through WTO Rulemaking." In *Efficiency, Equity, Legitimacy: The Multilateral Trading System at the Millennium*, Porter, R. *et al.* (eds), Brookings Institution.
- Sykes, A. (2003), *The Economics of WTO Rules on Subsidies and Countervailing Measures*, Economics Working paper N° 186, The Law School, University of Chicago, pp. 23-25.
- Torres, R. (2007), "Free Zones and the World Trade Organization Agreement on Subsidies and Countervailing Measures," *Global Trade and Customs Journal*.
- WTO (1996a), Japan – Taxes on Alcoholic Beverages (WT/DS8, 10, 11/AB/R).
- WTO (1996b), Canada – Certain Measures Concerning Periodicals (WT/DS31/AB/R).
- WTO (1998a), Indonesia – Certain Measures Affecting the Automobile Industry (WT/DS54/R, WT/DS55/R, WT/DS/59/R, WT/DS64/R).
- WTO (1998b), Argentina – Measures Affecting Imports of Footwear, Textiles, Apparel and Other Items (WT/DS56/AB/R).
- WTO (1998c), United States – Import Prohibitions on Certain Shrimp and Shrimp Products (WT/DS58/AB/R).
- WTO (1999a), Canada – Measures Affecting the Export of Civilian Aircraft" (WT/DS70/R).
- WTO (1999b), Korea – Taxes on Alcoholic Beverages (WT/DS75/AB/R and WT/DS84/AB/R).
- WTO (1999c), Chile – Taxes on Alcoholic Beverages (WT/DS87/AB/R and WT/DS110/AB/R).
- WTO (2000a), European Communities – Measures Affecting Asbestos and Asbestos-Containing Products (WT/DS135/AB/R).
- WTO (2000b), Argentina – Measures Affecting the Export of Bovine Hides and the Import of Finished Leather (WT/DS155/R).
- WTO (2000c), United States – Tax Treatment for "Foreign Sales Corporations" (WT/DS108/AB/R).
- WTO (2002), United States – Tax Treatment for "Foreign Sales Corporations," Recourse to Article 21.5 of the DSU by the European Communities (WT/DS108/RW), adopted 29 January 2002, as modified by the Appellate Body Report (WT/DS108/AB/RW).
- WTO (2004), China – Value-Added Tax on Integrated Circuits (WT/DS309/1).
- WTO (2005), United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services (WT/DS285/AB/R).
- WTO (2006), *World Trade Report*, Geneva, available at http://www.wto.org/english/res_e/booksp_e/anrep_e/world_trade_report06_e.pdf.

- WTO (2011a), Thailand – Customs and Fiscal Measures on Cigarettes from the Philippines (WT/DS371/AB/R).
- WTO (2011b), European Union and Certain Member States – Measures Affecting Trade in Large Civil Aircraft (WT/DS316/AB/R).
- WTO (2012a), China – Measures Related to the Exportation of Various Raw Materials (WT/DS394, DS395, DS398/AB/R).
- WTO (2012b), United States – Measures Affecting Trade in Large Civil Aircraft (Second Complaint) (WT/DS353/AB/R).
- WTO (2013), Brazil – Certain Measures Concerning Taxation and Charges (WT/DS472/1).
- WTO (2014a), China – Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum (WT/DS431, 432, 433/R).
- WTO (2014b), China – Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum (WT/DS431, 432, 433/AB/R).
- WTO (2015a), United States – Conditional Tax Incentives for Large Civil Aircraft (WT/DS487/2).
- WTO (2015b), Brazil – Certain Measures Concerning Taxation and Charges (WT/DS497/1).
- Zee, H. H., Stotsky, J. G., and Ley, E. (2002), “Tax Incentives for Business Investment: A Primer for Policy Makers in Developing Countries,” *World Development*, Vol. 30, No. 9, pp. 1497-1516.

TABLE A1: BORDER TAX MEASURES AND ADJUSTMENTS

TAX MEASURE AT ISSUE	KEY WTO PROVISIONS ¹	RELEVANT TAX DISPUTES	GUIDELINES
Tariffs rates exceeding <i>bound</i> MFN rates.	GATT Art. II (schedules of concessions) concerning <i>bound</i> MFN rates.	–	<i>Applied</i> tariff rates should not exceed <i>bound</i> MFN rates.
Preferential tariff rates.	GATT Arts. I (MFN treatment) and XXIV (customs unions and free-trade areas), which permits lower applied tariff rates in CUs and FTAs provided these arrangements encompass “substantially all” trade between the constituent territories, and the “Enabling Clause,” which allows developed country Members to accord tariff preferences to developing countries.	–	In general, tariffs should be applied in accordance with the MFN principle (unless allowed by GATT Art. XXIV or the “Enabling Clause”).
Discriminatory tariff exemptions or reductions.	GATT Art. I:1 (general MFN treatment)*; and ASCM Arts. 1.1 (definition of a subsidy – forgone tax revenue), 2 (“specific” subsidies), 5 (“adverse effects”):	Indonesia – tax measures pertaining to the automobile industry (DS54, 55, 59, 64).	Tariff exemptions or reductions should not discriminate among importers. Nor should they have “adverse effects” on other WTO Members.
Tariff exemptions or reductions contingent upon local content requirements (LCRs).	TRIMs Art. 2.1 (local content requirement) and Annex, which provides an Illustrative List of trade-related investment measures, including LCRs, that are inconsistent with GATT Art. III:4 (NT – domestic laws and regulations).	Indonesia – tax measures pertaining to the automobile industry (DS54, 55, 59, 64).	Tariff exemptions or reductions should not be contingent upon LCRs (or other TRIMs).
Tariff drawbacks for exported products.	ASCM Arts. 3.1(a) (subsidies contingent upon export performance), 27 (developing country waiver), Annex I (illustrative list of export subsidies) item (j) concerning the remission or drawback of import charges in excess of those levied on imported inputs that are consumed in the production of the exported product.	–	Excess remission or drawback of import tariffs in respect of exported products constitutes an export subsidy and, as such, is prohibited (unless ASCM Art. 27 waiver applies). N.B. Remissions or drawbacks for tariffs paid on capital imports are not allowed as these inputs are not considered to be consumed in the production of the exported product.
Refunds of indirect taxes in respect of exported goods or services.	ASCM Arts. 3.1(a) (subsidies contingent upon export performance), 27 (developing country waiver), Annex I (illustrative list of export subsidies) items (g) and (h) concerning the exemption, remission or deferral of indirect taxes in excess of those levied on “like” products when sold for domestic consumption.	–	Excess refunds of indirect taxes in respect of exported goods or services constitute export subsidies and, as such, are prohibited (unless ASCM Art. 27 waiver applies). N.B. Rebates of indirect taxes on capital imports are not allowed as these inputs are not considered to be consumed the production of the exported product.
Other import/export fees and charges.	GATT Art. VIII (fees connected with importation and exportation)* specifies that such fees should be limited to the approximate cost of the services rendered.	Argentina – statistical services tax levied on imports (DS56).	Other import/export fees, including transit fees, should usually involve specific rather than <i>ad valorem</i> rates.
Withholding tax on imports.	GATT Arts. II (schedules of concessions), III:2 (NT – taxes and charges)* and XX(d) (exceptions – necessary to secure compliance with tax laws)*. To the extent that withholding tax on imports (used as advance payment of income tax or VAT, for example) involves an opportunity cost (interest forgone) and debt finance (interest paid), it constitutes a financial burden on imports in excess of that on domestic products.	Argentina – advance tax payments on imports (DS155).	Unless listed in schedules of concessions, withholding tax should not impose a larger burden on imported products than on domestic products (when viable alternatives are available to ensure compliance with domestic tax laws).
Export taxes.	Protocols of Accession* (providing for elimination of export taxes and charges); GATT Arts. I (MFN treatment) and XX (b) (general exception – necessary to protect life or health), (g) (general exception – relating to the conservation of exhaustible natural resources)*.	China’s export taxes and charges on raw materials (DS394, 395, 398) and rare earths (DS431, 432, 433).	Export taxes should be levied in accordance with the MFN principle and comply with Members’ Accession Protocols.

¹ In instances where the corresponding tax measures listed in column 1 have prompted the disputes mentioned in column 3, the main WTO provisions pertaining to the rulings by the DSB in those disputes are identified by an asterisk.

A N N E X

TABLE A2: INTERNAL TAX MEASURES			
TAX MEASURE AT ISSUE	KEY WTO PROVISIONS ²	RELEVANT TAX DISPUTES	GUIDELINES
Sales taxes discriminating against imported goods.	GATT Arts. III:1 (NT – general principles); III:2 (NT – taxes and charges)* first sentence (“like” products) and second sentence (“directly competitive or substitutable” products).	Discriminatory tax rates of Japan (DS8, 10, 11), Korea (DS75, 84), and Chile (DS87, 110) concerning imports of alcoholic beverages.	Sales taxes levied on imported products should not exceed those levied on “like” domestic products.
Discriminatory tax administration.	GATT Arts. III:2 (NT – taxes and charges)*; III:4 (NT – domestic laws and regulations)*, XX(d)* (exceptions – necessary to secure compliance with tax laws).	Thailand – discriminatory conditions for obtaining VAT credits for inputs (DS371).	Sales taxes should not treat imported goods less favourably than “like” domestic products by imposing additional administrative requirements only on imported products.
Sales tax exemptions or reductions conditional upon LCRs.	GATT Art. III:2 (NT – internal taxes and charges)*; TRIMs Art. 2.1 (local content requirement)* and Illustrative List of TRIMs in Annex, which sets out trade-related investment measures, including LCRs, that are inconsistent with GATT Art. III:2.	Indonesia – tax measures pertaining to the automobile industry (DS54, 55, 59, 64).	Sales tax exemptions or reductions must not be discriminatory or conditional upon LCRs or other trade-related investment measures.
Relief from direct taxes contingent upon local content.	GATT Art. III:4 (NT – domestic laws and regulations)* in the case of the ETI Act; ASCM Arts. 1.1 (definition of a subsidy – forgone tax revenue)*; 3.1(b) (prohibited subsidy contingent upon the use of domestic instead of imported goods), TRIMs Arts. 2 (NT) and Annex (illustrative list).	US – Foreign Sales Corporations and Extraterritorial Income Exclusion (ETI) Act (DS108).	Tax relief contingent upon LCRs constitutes a prohibited subsidy.
Relief from direct taxes specifically related to exports.	ASCM Arts. 1.1 (definition of a subsidy – forgone tax revenue)*; 3.1(a) (prohibited export subsidy)*; 4.7 (recommendation to withdraw a prohibited subsidy)*; 27 (developing country waiver), Annex I (illustrative list of export subsidies) items (e)*, including footnote 59 (double taxation exemption)*; and (f) concerning full or partial exemption, remission, deferral or special deductions related to exports of direct taxes; and AA Arts. 3.3 (export subsidy commitments)*; 8 (export competition commitments)*; and 10.1 (export subsidies not listed in Art. 9.1)*.	US – Foreign Sales Corporations and Extraterritorial Income Exclusion Act (DS108).	No relief from direct taxes specifically related to exports is allowed (unless ASCM Art. 27 waiver applies).
“Actionable” tax incentives.	ASCM Arts. 1.1 (definition of a subsidy – forgone tax revenue)*; 2 (specificity of the subsidy)*; 5 (adverse effects)*; 6 (serious prejudice – displacement, lost sales and price suppression)*; and 7.8 (remedies – to remove adverse effects or withdraw the subsidy)*.	Indonesia – tax measures pertaining to the automobile industry (DS54, 55, 59, 64). US – tax incentives for large civil aircraft (DS317, 353, 487).	Tax incentives are potentially “actionable” subsidies if they are “specific” and have “adverse effects” on other WTO Members.
Taxation of services and service providers.	GATS Arts. II (MFN treatment), XVII (NT), XIV (d) (equitable or effective imposition or collection of direct taxes), (e) (double taxation agreements), and XXII (consultation). N.B. Tax measures contingent upon export performance or LCRs are permitted provided they are non-discriminatory.	–	Tax measures concerning services and service providers should respect MFN treatment and, to the extent that commitments have been made in specific service sectors, NT (except when allowed by Art. XIV).

² In instances where the corresponding tax measures listed in column 1 have prompted the disputes mentioned in column 3, the main WTO provisions pertaining to the rulings by the DSB in those disputes are identified by an asterisk.

Acronyms

AA	Agriculture Agreement
AB	Appellate Body
AJCA	American Jobs Creation Act
ASCM	Agreement on Subsidies and Countervailing Measures
DISC	Domestic International Sales Corporation
DSB	Dispute Settlement Body
DSU	Dispute Settlement Understanding
EC	European Community
ERP	Effective Rate of Protection
ETI	Extraterritorial Income
EU	European Union
FSC	Foreign Sales Corporation
FTZ	Free Trade Zone
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
LCR	Local Content Requirement
MFN	Most-Favoured-Nation
NT	National Treatment
SEZ	Special Economic Zone
TPRB	Trade Policy Review Body
TPRM	Trade Policy Review Mechanism
TRIM	Trade-Related Investment Measure
TRIPS	Trade-Related Aspects of Intellectual Property Rights
VER	Voluntary Export Restraint

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