Fossil Fuel Subsidies and the Global Trade Regime

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[T]he on-going political debate on reforming fossil fuel subsidies has largely bypassed the WTO... Given that WTO members have decided to tackle the issue of environmentally harmful subsidies in the fisheries sector as part of the Doha Round, the absence of this topic from the WTO radar screen can be considered as a missed opportunity.

- Pascal Lamy, former Director-General of the WTO, 29 April 2013

7.1 Introduction

The World Trade Organization's (WTO) Agreement on Subsidies and Countervailing Measures (ASCM) has for years disciplined the use of trade-distorting subsidies by countries. Surprisingly, these rules have been largely absent in debates about fossil fuel subsidy reform. WTO rules provide, nevertheless, a clear set of indications on what might constitute a subsidy, as well as allowing some of these subsidies to be challenged by trading partners through a dispute-settlement mechanism. In this regard, the dearth of disputes involving fossil fuel subsidies is puzzling.

This chapter discusses the current and potential contribution of the trade regime to the identification and reform of fossil fuel subsidies. It analyses in particular how different types of fossil fuel subsidies do and do not intersect with existing trade rules. The chapter then offers thoughts on why fossil fuel subsidies have not been challenged yet through dispute settlement mechanisms nor even through unilateral trade remedies. Last, it discusses ways in which existing trade rules could be augmented to facilitate the reform of fossil fuel subsidies.

7.2 Why Have Countries Sought to Discipline Subsidies in General?

Subsidies have long been used by governments for a wide variety of reasons, including as a means to support particular activities that are deemed socially beneficial (e.g. public goods) or to reward individuals or institutions that are politically well connected. While citizens and firms are generally the direct recipients of government assistance, subsidies vary greatly in their design and whether

they target incomes, production levels, the use of production inputs or the consumption of particular goods or services. This implies that different subsidies can have very different effects. A firm thus may attract subsidies for investing in capital equipment, which increases both the demand for the machines the firm is using and the firm's output. Or a household may receive transfers from the government that reduce the price it pays for a good or service—be it diesel fuel or healthcare—thereby increasing the household's consumption of that product.

As economies become ever more interdependent, it is reasonable to expect a subsidy applied by one country will affect its trading partners and also possibly all other economies. This means that subsidies usually need to be considered also from an international perspective, since subsidies applied by one country impose an externality on other countries, whether positive or negative. Here the logic of economics would posit that governments seek to encourage positive externalities while attempting to internalise or mitigate negative ones. By that token, subsidies to exporting firms ought to be welcomed by importing countries because all efficiency costs are, in that case, borne by the exporter, whereas the benefits are reaped by importers in the form of improved terms of trade (i.e. cheaper imports, a positive externality). Only where countries possess a collective preference for domestically produced goods and services would export subsidies 'hurt' importing countries (Johnson 1965).

Yet subsidies are an area in which trade law often appears – at least on the surface – to follow a different logic than that of economic theory. Far from welcoming their trading partners' export subsidies, countries have instead sought to discipline the use of trade-distorting subsidies through bilateral and multilateral arrangements in the context of the WTO (Sykes 2010). What these arrangements make clear is that, in practice, countries are wary of the damage that foreign subsidies can cause domestic producers of like products more than they are content to allow domestic consumers to benefit from the downward pressure that production subsidies put on prices.

Part of the drive for subsidy disciplines has also been the need to secure the benefits of tariff concessions negotiated through the General Agreement on Tariffs and Trade (GATT), as subsidies to import-competing firms may undermine what foreign exporters have gained through the removal of import tariffs. The discipline of subsidies proceeds in this case from a concern to ensure a level playing field in international economic relations. It can be seen as a necessary addendum to the traditional theory of tariff bargaining, in which trade agreements are meant to

¹ This would be the case if the subsidising country were large enough to affect global demand or supply of the subsidised goods or services.

address the negative externality that import tariffs impose on other countries through lower terms of trade (Bagwell and Staiger 1999).

Another reason why countries have sought to discipline subsidies using trade rules may be that governments lack the political clout to reform them domestically, even though they perceive those subsidies as economically inefficient or wasteful. Subsidies create their own constituencies, which makes it very difficult for elected officials to remove them. Just as Odysseus tied himself to the mast of his ship to resist the chant of the Sirens, governments may seek to 'tie their own hands' at the supra-national level in order to resist domestic pressures for maintaining or increasing subsidies. This argument was described by Putnam (1988) in the general form of a 'two-level game', whereby governments use pressures at the domestic level for securing larger concessions at the international level, and vice versa. Under this logic, a government thus may attempt to empower itself domestically – that is, to increase its ability to resist domestic demands for more subsidies – by signing onto international agreements that limit its own ability to provide subsidies.

7.3 The Particular Case of Fossil Fuel Subsidies

On the face of it, the preceding arguments could apply equally to fossil fuel subsidies, since they essentially are a subset of all subsidies benefiting industries or consumers. As with most subsidies, the economic effects of fossil fuel subsidies can extend beyond a country's own borders. This would be the case if a large oil-importing economy were to massively subsidise its domestic consumption of gasoline, thereby increasing global oil demand and imposing a negative terms-of-trade externality on other importing countries through higher oil prices and the accelerated depletion of oil resources. A positive terms-of-trade externality, by contrast, would ensue if an oil-exporting nation were to subsidise its production and increase global oil supply. In the former case, importing nations would have an incentive to cooperate and discipline fossil fuel subsidies, whereas the reverse would hold in the second case.

Fossil fuel subsidies also have implications for the competitiveness of industries that rely heavily on the use of energy products as inputs, such as steel-making (Rentschler et al. 2017). For such industries, fossil fuel subsidies may confer an advantage to local producers in the form of lower marginal costs (Burniaux et al. 2011). The World Steel Association (2014) estimates, for example, that energy currently accounts for about 20 to 40 per cent of the total costs of steel production. To the extent that fossil fuel subsidies confer advantages to certain import-competing industries, they may well distort international trade and impose negative terms-of-trade externalities on exporting countries.

Fossil fuel subsidies differ nevertheless from most other subsidies in at least one important respect: they impose environmental externalities – generally negative – on other countries in addition to the terms-of-trade and other externalities described earlier. This changes the picture by adding one potential argument for countries to negotiate disciplines on fossil fuel subsidies. A need for international cooperation would thus arise where these subsidies generate trans-boundary environmental externalities, whether the externalities are global (e.g. climate change) or more localised (e.g. transboundary air pollutants such as sulphur oxides). The Intergovernmental Panel on Climate Change's Fifth Assessment Report (IPCC 2014: 17) notes in this regard that '[e]ffective mitigation will not be achieved if individual agents advance their own interests independently. Cooperative responses, including international cooperation, are therefore required to effectively mitigate GHG [greenhouse gas] emissions and address other climate change issues.' Since the reform of fossil fuel subsidies is an essential component of the mitigation toolkit (OECD 2017), the same basic argument holds and points to the need for countries to act in a concerted manner.

As with every collective action problem à la Olson (1971), international cooperation for disciplining fossil fuel subsidies may prove difficult where countries lack incentives to cooperate. This is particularly the case where (1) the benefits from cooperation (e.g. limiting increases in average global temperatures) are diffuse and have attributes of a public good, meaning that they are available to and shared by everyone, and (2) the number of countries involved is large.² In this situation, some nations may be tempted to free ride on the efforts of others, leaving them to bear a disproportionate share of the burden of climate change mitigation (Nordhaus 2015).

Given the economic, fiscal and environmental co-benefits of reforming fossil fuel subsidies (see also Chapter 3), it may often be in countries' own interests to reform such subsidies, irrespective of what other countries do and independent of climate change—related benefits. This would particularly be the case where net-oil-importing countries devote significant fiscal resources to subsidising the consumption of fossil fuels and where the impacts of higher fuel prices on industrial competitiveness are minor. To mention just one example, in 2015, the government of Indonesia unilaterally phased out its gasoline subsidies in a move to rein in public deficits and make better use of public funds. In this case, low international crude oil prices provided the opportunity and fiscal pressures provided the motive, not climate change mitigation (see Chapter 11).

Olson (1971: 35) famously observed that 'the larger the group, the farther it will fall short of providing an optimal amount of a collective good'.

7.4 How Effective Has the Multilateral Trade Regime Been in Disciplining Fossil Fuel Subsidies?

Even where climate change mitigation is not the main factor behind the reform of fossil fuel subsidies, reforming countries may still wish to secure additional benefits through international cooperation, be they environmental or economic. Section 7.3 has already shown that fossil fuel subsidies can impose terms-of-trade externalities on other countries, as do many other subsidies. Countries may also seek to 'tie their own hands' at the international level so as to resist future domestic pressures to reinstate the reformed subsidies (see also Chapter 8). The trade regime offers in this regard an appealing option, since it already possesses a set of rules and institutions for disciplining subsidies. Most countries are already members of the WTO (164 as of April 2018) and parties to one or several plurilateral, regional or bilateral trade agreements. In particular, the WTO's Agreement on Subsidies and Countervailing Measures is currently the only body of trade law – and the only multilateral institution – regulating government use of fossil fuel subsidies that is backed by a dispute settlement mechanism (DSM).

A core requirement for concerted international action is to ensure that the scope of what is considered a subsidy is clear among participating nations. To that end, Article 1 of the ASCM specifies the conditions under which policies can be considered subsidies. Guidance to WTO members concerning the trade harm that different subsidies generate uses a 'traffic light approach'. The ASCM thus distinguishes between subsidies that are deemed prohibited (red) – including export subsidies and local content requirements (LCRs) – and those that are only 'actionable' (amber). Should a country wish to challenge the 'actionable' subsidy of a trading partner, it must first demonstrate that the subsidy causes 'adverse effects'. Such effects would include (1) injury to the industry by another member or (2) nullification or impairment of benefits accruing directly or indirectly to other members under the GATT.³

Upon successful demonstration, the country alleging that another member is maintaining a prohibited or actionable subsidy can follow one of two procedural tracks to take action: either initiate a formal dispute through the DSM or impose a countervailing duty on subsidised imports from the offending country. The assessment of potentially adverse trade effects, however, critically hinges upon the availability of adequate data. To that end, Article 25 of the ASCM has established extensive reporting requirements, obliging all members to 'notify any subsidy as defined in paragraph 1 of Article 1' on an annual basis and requiring that

³ Article 6.1 of the ASCM, which defines a situation in which serious prejudice is deemed to exist, expired on 20 December 1999.

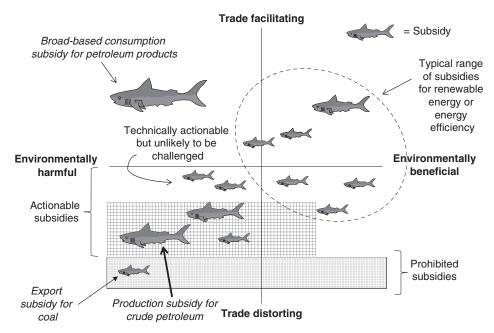


Figure 7.1 Subsidies according to their environmental and trade effects (*Source*: Adapted from Steenblik 2010.)

each notification contain information on the essential features of the reported subsidies. As explained below, however, compliance with Article 25 has been spotty.

WTO trade rules thus offer a useful framework for restraining the use of specific fossil fuel subsidies that are trade distorting – a definition, a notification process and, most importantly, the ability to enforce an obligation by means of trade remedies and countervailing measures.

Steenblik (2010) illustrates the relationship between trade impediments and environmental effects with a graph depicting subsidies as 'fish' caught (or not) by nets representing the international trade regime (Figure 7.1). For subsidies that are both environmentally harmful and trade distorting, the likelihood of trade rules discouraging them is greatest, particularly if the subsidies are prohibited. In Figure 7.1, this is illustrated by the tighter mesh preventing fish from slipping through the net. Actionable subsidies, meanwhile, may be caught by the looser mesh, provided that the DSM is activated or countervailing measures are put in place.

Despite the stricter rules governing export subsidies and LCRs, none tied to fossil fuels have been the subject of any disputes brought to the WTO since the introduction of the ASCM. Nor have fossil fuel production subsidies been challenged at the WTO (Meyer 2017). Fossil fuel subsidies are a prominent feature in

economies that started exploiting their fossil fuel endowments many years ago. The amount spent by governments to support the production of fossil fuels can be significant. Germany, for example, imposed a levy on final electricity consumers from 1975 to 1995 to enable coal-fired thermal plants to buy domestically produced hard coal, which plants were required to use and which was much more expensive than imported coal. Here, as in numerous other cases, trade effects may have been present, though apparently those effects were not significant enough to incite coal exporters to challenge the subsidies.

Indeed, we are aware of only one case involving fossil fuel production subsidies that came even close to a formal trade dispute. In the early 1990s, the government of Australia began pressing the European Community on its Member States' coal producer subsidies, which Australia alleged was hurting its own coal producers' export revenues (GATT 1991). In this case, however, the two economies settled out of court, and on 15 December 1993, they signed the bilateral European Community–Australia Coal Agreement. The European Community agreed to a standstill in subsidised coal production, and Australia committed to not challenge the Community's coal subsidy scheme.

Even unilateral trade remedies have not been used against fossil fuel production subsidies. A search through the World Bank's Global Antidumping Database (Bown 2016a) and its Global Countervailing Duties Database (Bown 2016b) – which cover antidumping and countervailing duty actions taken between 1980 and 2015 – reveals only one formal attempt to seek protection via one of these instruments. Save Domestic Oil, Inc., filed antidumping and countervailing duty petitions on certain crude petroleum oil products imported from Iraq, Mexico, Saudi Arabia and Venezuela; the US Department of Commerce ultimately dismissed them in an administrative determination issued in September 2000 (US Department of Commerce 2000). One of the reasons given for not initiating investigations pursuant to these petitions was that there was inadequate domestic industry support for taking action. Basically, the larger multinational companies depended on imports from these and other countries and so opposed the petitions. Overall, roughly 40 per cent of the industry was in favour of pursuing the petitions and 60 per cent against.

These various examples lend credence to Meyer's finding that fossil fuel subsidies have largely avoided trade-related subsidy disciplines because WTO members have chosen not to challenge them (Meyer 2017). Crucially, though, most fossil fuel subsidies are not actually trade distorting in the mercantilist sense but rather trade facilitating in that they increase imports of fossil fuels. As of 2014,

⁴ Consumption-related fossil fuel subsidies may, of course, reduce imports of cleaner forms of energy or related technologies, but because those products are not 'like' the competing fossil fuel products, potential exporters of cleaner energy would find it difficult to challenge those subsidies.

85 per cent of all the budgetary support and tax expenditures for fossil fuels provided by the (then) 34 countries of the Organisation for Economic Cooperation and Development (OECD) – plus Brazil, Russia, India, Indonesia, China and South Africa – were devoted to the consumption of fossil fuels, and most of them were 'non-specific' (OECD 2015). Many consumer support measures shield end users from price volatility and reduce incentives for adjusting consumption in response to changes in international prices. As a result, a significant share of global demand has proven resilient to hikes in fossil fuel prices in the past. Considering the market-creating effects of these types of consumer subsidies, there is no a priori reason for WTO members that produce fossil fuels to initiate a dispute. Net importing countries, by contrast, could argue that a country that extensively subsidises the consumption of fossil fuels artificially increases global demand, thereby contributing to higher international fossil fuel prices (see Section 7.3). To our knowledge, no country has ever invoked this argument at the WTO.

Subsidies that are both trade facilitating and environmentally beneficial are the most benign subsidies among those depicted in Figure 7.1 and are typically not restricted by trade rules. By contrast, subsidies that are trade distorting but environmentally beneficial have been a persistent source of disputes in the WTO in recent years. Six cases were filed against renewable energy subsidy programmes between 2010 and 2014; a seventh was lodged in 2016.⁶ The most contended complaint – from Japan and the European Union (EU) relating to the implementation of LCRs under the feed-in tariff programme adopted by the Canadian province of Ontario – pertained to prohibited subsidies (Article 3 of the ASCM) and was ultimately settled in favour of the plaintiffs.

7.5 What Makes Environmentally Harmful Energy Subsidies Resilient to WTO Disputes

The ASCM rules equally apply to environmentally harmful and environmentally beneficial energy subsidies, but distinct features of both subsidy programmes can explain why renewable-energy subsidies have repeatedly been the subject of WTO disputes, whereas fossil fuel subsidies have largely been overlooked. Contrary to the production of fossil fuels, the production of environmental technologies for the generation of renewable energy can theoretically be carried out by any country. Traditional market leaders hence face higher competition and fear the loss of

^{5 &#}x27;Specificity', in this context, refers to a legal requirement by which subsidies can only be disciplined under the ASCM if they are specific to 'a certain enterprise' (i.e. 'an enterprise or industry or group of enterprises or industries') or particular region.

⁶ www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm.

market segments as other industrialised countries – as well as developing countries – enter the market. The investigations against foreign renewable-energy subsidy programmes thus can be seen as a means to protect domestic 'green-collar' jobs (Cameron 2009) and strengthen a nation's environmental industry's competitiveness rather than a sign of environmental concern.

Moreover, while a variety of renewable energy subsidy programmes exist, almost all cases filed against renewables to date have been based on Article 3 ('prohibited subsidies') due to the inclusion of LCRs. LCRs in the oil and gas industry are mostly tied to investment conditions and fall under the disciplines of the Agreement on Trade-Related Investment Measures, not the ASCM, and subsidies usually are not involved. Moreover, the barriers to litigate a dispute are high insofar as the burden of proof lies entirely with the complainant (De Bièvre et al. 2017). Typically, proving that a subsidy (1) is specific and (2) has caused trade harm is not a straightforward matter in practice (Asmelash 2015).

One concern related to the burden of proof is the availability of adequate data. Hopes that the reporting requirements established through Article 25 of the ASCM would facilitate this requirement have not been fulfilled. Instead, the WTO noted in 2006 that 'information is only available for less than half of the WTO membership' (WTO 2006: 111). According to Steenblik and Simón (2011), this weak performance emanates from the lack of an effective system to enforce the ASCM's disclosure obligations, as well as a low capacity in many countries to monitor their own budgetary and tax expenditures. A lack of clarity as to which subsidies ought to be reported and controversies on estimation methods add to the complexity of the task (Casier et al. 2014).

Calculating the equivalent of the value conferred to the recipients of a subsidy is a potentially intricate task, as no universally recognised standard exists to do so (Jones and Steenblik 2010). In accordance with the ASCM rules, the value of direct transfers or tax breaks is simply their face value. The calculation of the value conferred through government loans or government provision of equity, by contrast, requires a more complex analysis. In the mid-1990s, the newly established WTO Committee on Subsidies and Countervailing Measures set up an expert group to explore such measurement issues. Agreement was initially reached on how to estimate some of the subsidy forms, such as those related to the government provision (Recommendation 15) or the government purchase of goods (Recommendation 16) (WTO 1998). But expectations soon turned to

Ountries that 'significantly strengthened their local content legislation since 2000'; in the oil and gas sector include Brazil, Indonesia and Kazakhstan (IFRI 2015: 10). Ghana, Mozambique, Tanzania and Uganda introduced LCRs tied to concessions even before the start of any production.

disappointment; absent a consensus on most of the remaining subsidies discussed, these early efforts were abandoned in 1999 (WTO 1998, 1999, 2005).

Lastly, WTO members seem, in practice, less worried about how foreign fossil fuel subsidies undermine the competitiveness of their fossil fuel producers than they are about the effects of such subsidies on other industries (e.g. steel-making). Some industries that might be hurt by fossil fuel subsidies may not be in the position to challenge them either because the subsidies are not sufficiently specific or because the harmed industry (e.g. a manufacturer of wind turbines) does not sell a directly comparable, or 'like', product. The latter concern gained in importance during the accession of Russia and Saudi Arabia, both of which are large hydrocarbon producer economies, but was eventually dropped (Asmelash 2015). Together these factors contribute to explaining why countries have not made use of the ASCM to challenge fossil fuel subsidies despite the fact that the Agreement could restrain a large share of such subsidies, given the number of countries the WTO covers. This also helps explain why the WTO has not had any measurable effect on fossil fuel subsidy reform at the national level.

7.6 What Could Be Done in the Future?

While WTO rules exist that can certainly be used to discipline subsidies to production, as well as consumption subsidies that are specific enough, these rules have been used little to date. Rules also exist regarding the notification of subsidies to the WTO's Committee on Subsidies and Countervailing Measures, but adherence continues to be patchy at best.

Some have suggested that the existing WTO rules and procedures could be used more robustly. An important question is, who would mount a challenge, and on what basis? On the production side, only producer countries would have any basis for challenging another country's production subsidies, and they could only challenge subsidies for a like product. That is to say, an exporter of heavy fuel oil could not challenge another country's subsidies for local coal production, even though it could be argued that one effect of the coal subsidy would be to reduce the market in that country for heavy fuel oil. It remains to be seen whether increased production from unconventional plays (e.g. shale and tight oil) may eventually increase the frequency of disputes related to fossil fuel subsidies in the WTO.

Most other proposed options would necessitate changing the rules. For example, at the beginning of the Doha Round, the European Union proposed that countries be sanctioned for not notifying the WTO of their subsidies. The European Union's own state aid rules require members to notify the European Commission of any

subsidies they intend on providing. If they fail to do so, the subsidies can be declared illegal, and the recipient may be compelled to refund them to the Member State.

Various commentators (Jones 2016; Horlick 2017) have also suggested that the WTO develop a new sectoral agreement on fossil fuel subsidies (or energy subsidies more generally) that complements the Agreement on Agriculture and the plurilateral Agreement on Trade in Civil Aircraft (WTO 2007). Proponents of such a sectoral agreement have looked less to these trade-motivated agreements than to the proposals that have emerged following the negotiating mandate contained in the 2001 Doha Ministerial Declaration 'to clarify and improve WTO disciplines on fisheries subsidies' (WTO 2001: para. 28). The various attempts to craft new disciplines on fisheries subsidies have generally related more to the effect of subsidies on the underlying resource than on their effects on trade per se. In a similar vein, many advocates of a possible Agreement on Fossil Fuel Subsidies would like to see many or most fossil fuel subsidies prohibited because of their adverse effects on the environment.

New Zealand's government has indicated that it wants the WTO to turn its attention to environmentally harmful subsidies, starting with fisheries, and even expanding eventually to other environmentally harmful subsidies (New Zealand Mission 2015).

In support of this initiative, several international non-governmental organisations have offered a wide range of ideas on actions that the WTO can take to address fossil fuel subsidies (Wooders and Verkuijl 2017). These include engaging in capacity building on how to identify, measure and evaluate fossil fuel subsidies and various ideas for increasing transparency. Other ideas are to urge WTO members to make unilateral pledges to eliminate or reduce their fossil fuel subsidies and, beyond that, to negotiate an interpretive understanding on how the ASCM rules apply to such subsidies. At the most ambitious end are calls for adopting an 'Energy Sector Agreement', classifying fossil fuel subsidies as prohibited or allowing an environmental-effects test for subsidies.

Already, the Friends of Fossil Fuel Subsidy Reform (FFFSR) have made use of the standing WTO Committee on Trade and Environment (CTE) to update WTO members on their efforts, thereby keeping the issue 'alive' in the WTO (WTO 2017a). And for the first time, fossil fuel subsidy reform was formally raised by a discussant (New Zealand), rather than simply by members from the floor, during Russia's first Trade Policy Review since its accession (2016).

New Zealand's Minister of Trade, Todd McClay, has gone even further, suggesting that *only* the WTO could deliver on the various political commitments that have been made to date to reform fossil fuel subsidies (McClay 2016).

Can we convert the political commitment, made by the G20 [Group of 20], APEC [Asia-Pacific Economic Cooperation] and through SDG [UN Sustainable Development Goal] 12, to reform fossil-fuel subsidies into legally enforceable disciplines? Again, the only way to do that effectively is on a multilateral basis, and the only place to do it is in the WTO. In practical terms, is it worth us starting to think seriously about how the WTO might successfully discipline fossil fuel subsidies?

A major new development occurred at the WTO's 11th Ministerial Conference in Buenos Aires, where 12 WTO members signed a Ministerial Declaration encouraging the reform and phasing out of fossil fuel subsidies. This statement, for the first time, asserts a link with trade and calls for an enhanced role for the WTO, 'aimed at achieving ambitious and effective disciplines on inefficient fossil fuel subsidies that encourage wasteful consumption' (WTO 2017b). Whether other WTO members rise to this challenge remains to be seen⁸ (see Chapter 9), but given the recent history of the WTO in developing new rules, it is fair to assume a WTO Agreement on Fossil Fuel Subsidies is a medium-term prospect at best.

Understandably, countries that are the most concerned about fossil fuel subsidies have looked for possibilities for obtaining quicker results through regional or plurilateral agreements (Greens-EFA 2014). Regional trade agreements (RTAs) are agreements signed among two or more trading partners, generally located in the same region of the world, and which cover substantially most trade between or among the parties to the agreement. As of April 2018, the WTO listed over 285 RTAs covering trade in goods or goods and services currently in force (WTO n.d.). Plurilateral trade agreements often include economies from different regions of the globe and focus on one sector, such as trade in civil aircraft or in services, or type of government policy, such as government procurement. The logic of RTAs and plurilateral agreements is simple: because they involve fewer parties, they can be negotiated much more quickly than can accords that have to be worked out among the WTO's more than 160 members.

Sectoral trade agreements have been much less common than RTAs, and there is only one that is in force¹⁰ that addresses subsidies: the Agreement on Trade in Civil Aircraft (WTO 2007). Negotiations did take place at the OECD to develop agreements to limit subsidies to shipbuilding and to iron and steel, but those never came into force (Pagani 2008). At the end of 2016, there were two other sectoral agreements being negotiated at the plurilateral level: the Environmental Goods

⁸ The other members, as of July 2017, were Costa Rica, Denmark, Ethiopia, Finland, Norway, Sweden, Switzerland and Uruguay. Importantly, three of these are EU Member States, for whom trade-negotiation competence resides with the European Union.

The exact number depends on whether one counts overlapping agreements and economic integration agreements. The 1951 Treaty Constituting the European Coal and Steel Community (ECSC) contained quite stringent prohibitions on subsidies to coal and steel production, but derogations from this language later became commonplace, and in 2002, the Treaty expired and all the activities and resources of the former ECSC were absorbed by the European Union.

Agreement and the Trade in Services Agreement. The Environmental Goods Agreement involved 17 WTO members, until negotiations were suspended after the failure of parties to finalise the agreement in December 2016; if it is revived, it may eventually address subsidies, but the initial focus of the negotiations was on tariff concessions. Similarly, though there was clearly an interest in disciplining subsidies in the Trade in Services Agreement, according to leaked drafts seen by Messenger (2016: 187), 'in its current form it does not appear to include subsidy regulation at all'. In any case, the Environmental Goods Agreement and Trade in Services Agreement would unlikely have a significant depressing effect on the use of subsidies for fossil fuels.

Plurilateral agreements, if they cover enough countries so as to affect most of global trade in the targeted goods or services, minimise the problem of free riding. In the case of RTAs, however, any language in the agreement to restrict the use of subsidies that is more limiting than that found in the ASCM benefits (in a mercantilistic sense) not only the other party or parties to the RTA but also all countries that trade with those parties; a country cannot selectively reduce subsidies only on goods exported to other RTA parties. This logic has, for most of the era of RTAs, kept out language on subsidies, except for prohibitions against export subsidies (Geloso-Grosso 2003). However, new possibilities begin to present themselves when the main concern about subsidies is their effect on shared natural resources, such as the marine environment or the atmosphere.

Arguably, the first RTA in modern times to include language addressing fossil fuel subsidies is the EU-Singapore Free Trade Agreement (EC 2015), which was concluded in October 2014 but as of April 2018 had yet to come into force. Its Article 13.11 states:

The Parties recognise the need to ensure that, when developing public support systems for fossils [sic] fuels, proper account is taken of the need to reduce greenhouse gas emissions and to limit distortions of trade as much as possible. While subparagraph (2)(b) of Article 12.7 (Prohibited Subsidies) does not apply to subsidies to the coal industry, the Parties share the goal of progressively reducing subsidies for fossil fuels. Such a reduction may be accompanied by measures to alleviate the social consequences associated with the transition to low carbon fuels.

Since Singapore produces no coal and consumes only about 0.6 million tonnes annually (compared with the European Union's annual consumption of around 600 million tonnes), this part of the paragraph clearly is aimed mainly at the European Union itself. Moreover, though trade effects are mentioned, the rationale for this soft constraint on 'public support systems for fossil fuels' is clearly environmental.

The environmental motive for disciplining certain subsidies is even more evident in the Comprehensive and Progressive Agreement for Trans-Pacific

Partnership Agreement (TPP-11), the legally verified text of which was released publicly on 26 January 2018. This Agreement, which has been billed as 'megaregional' because of the combined economic power of the countries involved, has been signed but not ratified by all parties. Article 20.16 of the Agreement set out a number of rules applicable to all parties on the use of subsidies to marine capture fishing (including subsidies to fuel used by fishing vessels) and establishes subsidy notification requirements. Among subsidies that would be prohibited are those which have a negative effect on overfished fisheries (paragraph 5a), benefit vessels carrying out illegal, unreported and unregulated fishing (paragraph 5b) and any new specific subsidies to fisheries that contribute to overfishing or excess capacity to fish (paragraph 7).

Interestingly, fossil fuel subsidies also were addressed in an earlier version of the TPP's Environment Chapter, at a time when the United States was still a party to the negotiations. The chapter's Consolidated Text of 24 November 2013, as posted on the website WikiLeaks (WikiLeaks 2014a), contained the following language in Article SS.15, paragraph 6:

The Parties recognize their respective commitments in APEC to rationalize and phase out over the medium term inefficient *fossil fuel subsidies* that encourage wasteful consumption, while recognizing the importance of providing those in need with essential energy services. Accordingly, the Parties agree to undertake, as appropriate, cooperative and capacity building activities designed to facilitate effective implementation of these commitments, including in applying the APEC Voluntary Reporting Mechanism.

(emphasis added)

According to the Report from the Chairs for the Environment Chapter, also dated 24 November 2013 and also posted by WikiLeaks (2014b), several of the poorer Southeast Asian economies in the negotiations objected to the reference to fossil fuels, and it was dropped.

What is significant about the text pertaining to fossil fuel subsidies, as opposed to the final language on subsidies to fisheries, is that it was essentially referential: reminding parties of their pre-existing APEC obligations, as stated in the Leaders' Communiqué of November 2009, and merely building on that commitment with a non-binding appeal to the parties to 'undertake as appropriate, cooperative and capacity-building activities'.

This brings us to the third approach: informal law (Pauwelyn et al. 2012; Shaffer et al. 2015). The APEC Leaders' Declaration of 14 November 2009 (APEC 2009) echoed a similar declaration issued by G20 leaders at the end of their meeting in Pittsburgh the previous September. Although they fall outside the international trade regime itself, both declarations commit their membership 'to rationalise and phase out over the medium term fossil fuel subsidies that encourage wasteful consumption', recognising the importance of providing those in need with essential

energy services. Compared with the hard law of the ASCM, such hortatory language may appear toothless. But it sets out a broad common goal within which the more enthusiastic members have been able to craft processes that allow them to move forward in small steps. And, as seen by the reference to the APEC commitment in the failed attempt to include language on fossil fuel subsidies in the Trans-Pacific Partnership, the declarations can also buttress efforts in other forums, including the United Nations Framework Convention on Climate Change (see van Asselt and Kulovesi 2017; see also Chapter 8).

Since 2009, both the G20 and APEC have created processes for annual reporting of their fossil fuel subsidies and for conducting voluntary peer reviews. The annual self-reports of subsidies, particularly those by G20 countries, have been criticised for their omissions by several nongovernmental organisations (e.g. Koplow 2012; Bast et al. 2015); however, the peer reviews have since increased at least the level of transparency, if not ambition (Mathiesen 2016; Ogden and Marano 2016). Moreover, thanks to the importance of the G20 and APEC in the world economic order, many other organisations, both intergovernmental and non-governmental, have used the G20 and APEC commitments as a springboard to collect data and to undertake their own reports and reviews.

7.7 Conclusion

So was Pascal Lamy right? Has the global trade regime missed the opportunity to do something about fossil fuel subsidies? In one sense it has: though some countries and organisations have called for new or tougher WTO disciplines on fossil fuel subsidies, no new negotiations towards that end have been started. Rather, a number of countries have endorsed non-binding bilateral or plurilateral commitments to phasing out some of their fossil fuel subsidies eventually, outside of the multilateral trade regime. These various informal law initiatives, which lack formal disciplines and dispute mechanisms, could be seen as bypassing the traditional route to subsidy disciplines: multilateral trade rules. But they could also be viewed as creating alternative routes for reaching the same eventual objective.

Indeed, it is difficult to see any path forward to hard international subsidy disciplines on fossil fuel subsidies that does not involve efforts on multiple fronts, involving negotiations in the WTO, regional and plurilateral trade instruments and work in non-trade arenas such as the UNFCCC and the G20. These discussions and negotiations, in turn, need to be informed by sound data and analysis undertaken by intergovernmental and non-governmental organisations.

However, to facilitate the process of eventual multilateralism, these disparate efforts need to rest on common foundations and norms. The first such foundation is a common concept of what constitutes a 'fossil fuel subsidy'. The advantages of

aligning the definition and coverage of the term with that defined in Article 1 of the ASCM are that it enjoys international recognition, and there is a wide body of analytical work that has been done on the different subsidy elements (by both economists and lawyers). The second is that whatever disciplines are imposed on fossil fuel subsidies, they need to avoid being 'WTO negative' – that is, the disciplines created should not be weaker than those set out in the ASCM. This still leaves the possibility that certain types of subsidies will not be addressed through omission, but this approach is less problematic than appearing to contradict the multilateral rules on subsidies to which most of the world's economies have already agreed to adhere.

Disclaimer

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