

# POLICY BRIEF

## 21-5 Will Industrial and Agricultural Subsidies Ever Be Reformed?

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### INTRODUCTION

Politicians in the United States have been debating the value of federal subsidies for industry at least since Alexander Hamilton, the first US treasury secretary, who argued that US manufacturing needed direct government support. The goal, as Hamilton saw it, was to protect infant industries with subsidies (paid for by tariff revenues) in order to promote domestic prosperity and progress.

The argument, opposed by Hamilton's archrival Thomas Jefferson, survives to this day. In recent decades, as the United States has clashed with major and minor trading partners over their subsidies, it defends home-grown subsidies to shore up declining industries, capture markets abroad, attract foreign firms to domestic shores, and gain a march in emerging technologies. Many economists have deplored the escalating subsidy battles as ineffective, costly to consumers, a drag on productivity, and self-defeating over the long run.

If there is a legitimate economic argument for subsidies, it is that subsidies are necessary to compensate firms for benefits they provide to society at large but cannot capture in the prices they charge for goods or services (internalizing externalities). For example, tax credits for research and development arguably produce unanticipated benefits and innovations that strengthen the common good. Subsidies to renewable energy are defended because renewable energy limits carbon emissions.

Subsidies gained in popularity under President Donald Trump and are endorsed by President Joseph R. Biden Jr. Policymakers and public opinion, in both the United States and abroad, champion government leadership, question

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free markets, and support subsidies that go well beyond those with the laudable goal of internalizing external benefits.<sup>1</sup>

When a major economy subsidizes extensively, its trading partners are drawn into the game, with losses all around. As the prisoner's dilemma suggests, a better outcome would entail mutual restraint. But the goal of mutual restraint is no less difficult in international trade than it is in international arms control.

Both the European Union and the US federal system try, in different ways, to regulate industrial subsidies.<sup>2</sup> Among other major countries, only Japan seems to favor a system akin to the EU state aid model to regulate subnational subsidies deployed by provinces and cities.<sup>3</sup> The general absence of strong constitutional measures means that national restraints depend largely on two features of the local political economy: (1) what remains of its faith in private enterprise as the engine of economic life and (2) the strength of competing claims for public resources (defense, health, education, and other social needs). In this time of depressed demand, easy money, and widespread unemployment, greater restraint at the national level would be desirable, even if politically difficult.

At the international level, restraint depends on two tools countries use to discourage their trading partners from using subsidies and to encourage mutual restraint. The first tool involves nationally imposed countervailing duties (CVDs), which limit the access of foreign subsidized goods to the domestic market. In talking about CVDs, the term *restraint* must be qualified, as the possibility of facing a foreign CVD seldom, if ever, persuades a government not to launch a subsidy program. Once the CVD is imposed, however, the government may trim or abandon the offending subsidy.

The second category of international restraints includes two World Trade Organization (WTO) agreements: the Agreement on Subsidies and Countervailing Measures (SCM) and the Agreement on Agriculture (AoA). Both can be invoked, through litigation, by any WTO member against the subsidies of another member. If the complaining country succeeds, the WTO instructs the responding country to terminate the offending subsidy.

This Policy Brief summarizes efforts to contain unjustifiable subsidies and proposes modest improvements, bearing in mind that as countries struggle to overcome the global economic downturn resulting from the COVID-19 pandemic, there is little appetite for unfettered free markets. The first section cites a few statistics that illustrate the extent of national subsidies and the political demand for more. The next sections sketch EU and US constitutional systems for exercising internal restraint. The bulk of the Policy Brief examines the success and failure of international restraint through the CVD system and WTO agreements. It concludes by reviewing proposed measures to strengthen the international rules, endorsing modest reforms to the SCM proposed by the United States, the European Union, and Japan. The proposals overlap an agenda set forth by Bown and Hillman (2019) to resolve the "China problem." Although those proposals

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<sup>1</sup> Hoekman and Nelson (2020) examine such externalities in the context of WTO subsidy rules.

<sup>2</sup> See Skyes (2009) for an overview comparison of WTO, EU, and US systems.

<sup>3</sup> Kana Inagaki, "Japan State Intervention Rules Still Lack Sufficient Teeth," Financial Times, April 5, 2016.

have value, it seems unlikely that China will accept even modest WTO reforms to the SCM—even if it did accept some subsidy disciplines in its recent bilateral investment agreement with the European Union.

New international agreements on the distinction between "good subsidies" and "bad subsidies" are unlikely. To a small and controversial extent, the AoA permits "good" subsidies that fall within what is called the "Green Box"—namely, environment-friendly subsidies. But agreement on an "Industrial Green Box" seems too far a reach. Countries harbor too many competing visions as to which industries are environment friendly. (Electric vehicles? Solar panels? Wind turbines? Nuclear power?) National governments will continue to make their own implicit judgments regarding "good subsidies," both through their decisions on foreign subsidies not to challenge through CVDs or WTO litigation and through their own domestic subsidy programs.

### **EXTENT OF NATIONAL SUBSIDIES**

Governments all over the world spend massive sums on subsidies. In its June 2020 publication *Agricultural Policy Monitoring and Evaluation 2020*, the Organization for Economic Cooperation and Development (OECD) estimates that over the period 2017-19, 54 countries—all OECD countries, the European Union, and 13 emerging-market and developing economies—provided average total support of \$708 billion a year to the agriculture sector.

According to the European Commission (2019), excluding aid to agriculture, fisheries, and railways, the EU28 spent €121 billion, or 0.76 percent of EU28 GDP, on state aid in 2018. This figure includes industrial state aid (to steel producers, for example). Spending was reported for 4,121 active measures, of which 1,760 were new measures. More than half of the spending was allocated to measures characterized as environmental protection and energy savings. Average annual subsidies to railways and agriculture reached €50 billion and €6 billion, respectively, in 2018.<sup>4</sup>

In the United States, the Trump administration authorized two assistance packages worth \$28 billion in 2018 and 2019 to compensate farmers for losses following the trade war with China.<sup>5</sup> On September 17, 2020, Senate Democrats introduced the America Labor, Economic Competitiveness, Alliances, Democracy and Security Act (S 4629), known as the America LEADS Act, to provide more than \$350 billion of "investment" funding to build US industrial capacity and challenge China.<sup>6</sup> A version of this bill has a good chance of enactment in 2021. In his campaign for the presidency, Biden promised \$300 billion over four years to promote high-tech industries and \$400 billion over 10 years to support clean energy and innovation.

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<sup>4</sup> A paper on industrial subsidies in the OECD economies was published in January 1990. More recent OECD evaluation is not available.

<sup>5</sup> US Department of Agriculture, "USDA Announces Details of Assistance for Farmers Impacted by Unjustified Retaliation," press release, August 27, 2018; and "USDA Announces Details of Support Package for Farmers," press release, July 25, 2019 (accessed on November 16, 2020).

<sup>6</sup> Catie Edmondson, "Senate Democrats Present \$350 Billion Strategy to Counter China," *New York Times*, September 17, 2020 (accessed on November 16, 2020).

### THE EUROPEAN UNION'S STATE AID RULES

The European Union has a stringent regime regulating subsidies within its internal market. Article 107(1) of the Treaty on the Functioning of the European Union (TFEU) defines state aid as "any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods." Articles 107(2) and (3) describe aids that are and are not allowed. The treaty prohibits state aids that distort competition and trade within the European Union.

According to the European Commission, to qualify as state aid, four criteria must be met:8

- 1 The state intervened (or state resources were used to do so), by, for example, providing grants, interest and tax relief, or guarantees; holding all or part of a company; or providing goods and services on preferential terms.
- 2 The intervention gives the recipient an advantage on a selective basis (favoring specific companies, sectors, or regions, for example).<sup>9</sup>
- 3 Competition has been or may be distorted.
- 4 The intervention is likely to affect trade between member states.

EU members are required to notify new aid measures to the European Commission and seek approval before implementation.<sup>10</sup> The European Commission will investigate the measure and decide whether it constitutes an aid, and if so, whether the aid is compatible with EU rules. Aid granted without Commission authorization is unlawful. Article 21 of Regulation 659/1999 mandates that members submit annual reports to the European Commission on all existing aid schemes.<sup>11</sup>

An investigation into state aid may arise at the notification stage, through a complaint, or at the European Commission's own initiative. In recent years, the Commission has been aggressive in challenging state aids and initiated investigations into tax practices of member states designed to attract foreign investment, including Ireland's tax benefits to Apple. One criticism of the EU regime is that the definition of state aid is too broad (Rubini 2011).

The EU regime differs from the WTO reporting scheme, in the sense that in principle, EU member states must first notify and seek approval from the European Commission before granting state aids. A few years ago, the EU members are required to notify new aid measures to the European Commission and seek approval before implementation.

<sup>7</sup> EUR-Lex, "Consolidated Version of the Treaty on the Functioning of the European Union" (accessed on November 19, 2020).

<sup>8</sup> European Commission, "State Aid Control" (accessed on November 19, 2020).

<sup>9</sup> Subsidies granted to individuals or general measures open to all enterprises are not covered and do not constitute state aid.

<sup>10</sup> Article 108(3) of the TFEU and Article 2 of Council Regulation (EC) No 659/1999.

<sup>11</sup> Article 108(3) of the TFEU and Article 2 of Council Regulation (EC) No 659/1999. Commission Regulation 794/2004 sets out detailed implementing rules on the form and content of notifications, time limits, and annual reports.

<sup>12</sup> European Commission, "State Aid: Commission Investigates Transfer Pricing Arrangements on Corporate Taxation of Apple (Ireland), Starbucks (Netherlands), and Fiat Finance and Trade (Luxembourg)," press release, June 11, 2014 (accessed on November 19, 2020). The European Commission lost the Apple case at the European Court of Justice.

Commission implemented Regulations 651/2014, 702/2014, and 1388/2014, which enable categories of aid that are compatible with the state aid rules and can be granted without prior notification and approval by the European Commission. Consequently, member states implement more than 94 percent of new state aid measures without seeking prior approval. The European Commission still monitors these measures and can self-initiate investigations. In contrast, under the WTO system, members can implement subsidies without approval or monitoring by the WTO, and the WTO rulebook imposes no penalties on members that do not report their subsidies.

The large commercial aircraft sector has arguably been the biggest recipient of EU state aid. Since the late 1990s, members of the European Union have supported Airbus through aircraft development programs financed by a reimbursable launch regime. Member governments advance money to Airbus, which repays the money after it sells aircraft. Another example of state aid for Airbus is the €377 million French and German program to develop an innovative Airbus X6 helicopter, approved in June 2017 (SA 45185).¹³ Steel and automobile sectors are also frequent subjects of EU state aid investigations.¹⁴ Member states and the European Union as a whole are frequent targets of WTO subsidy challenges.

Amid the COVID-19 pandemic, the European Commission set up a State Aid Temporary Framework and approved a significant number of state aids to "remedy a serious disturbance in the economy of member states." As of November 2020, for example, the European Commission had approved 25 Italian state aid applications under the Temporary Framework.

### **US COMMERCE CLAUSE**

Neither the European Union nor the United States faces constitutional restraints on subsidies at the level of the European Union or the United States as a whole. In addition, unlike the European Union, the United States does not have a standalone regime to regulate local aids and subsidies. Article 1, Section 8, Clause 3 of the US Constitution grants Congress power "to regulate commerce with foreign nations, and among the several states, and with the Indian tribes." The Commerce Clause is self-executing, in the sense that state laws can be challenged in federal courts even in the absence of supplementary federal legislation (Goodman and Frost 2000). This "dormant" Commerce Clause

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<sup>13</sup> European Commission, "State Aid: Commission Approves €377 Million of French and German Aid to Develop Innovative Airbus X6 Helicopter," press release, June 19, 2017 (accessed on November 23, 2020).

<sup>14</sup> See, for example, Case SA. 37100, in which the Commission approved state aids to JSC Liepajas Metalurgs, a Latvian steel producer, and Case SA. 27308, in which the Commission allowed state aids to Mercedes-Benz Manufacturing Hungary.

<sup>15</sup> European Commission, "Statement by Executive Vice-President Margrethe Vestager on a Draft Proposal for a State Aid Temporary Framework to Support the Economy in the Context of the COVID-19 Outbreak," March 17, 2020 (accessed on November 24, 2020).

<sup>16</sup> European Commission, "Details of Italy's Support Measures to Help Citizens and Companies during the Significant Economic Impact of the Coronavirus Pandemic" (accessed on November 24, 2020).

<sup>17 &</sup>quot;Commerce Clause," Legal Information Institute, Cornell Law School (accessed on November 12, 2020).

doctrine prohibits state regulation that discriminates against or imposes excessive burdens on interstate commerce. In *West Lynn Creamery, Inc. v. Healy* (1994), for example, the State of Massachusetts imposed a nondiscriminatory sales tax on milk. Both in-state producers and out-of-state producers paid the same tax for the milk they sold in Massachusetts. However, the proceeds of the tax were distributed solely to Massachusetts milk producers. An out-of-state producer challenged the constitutionality of the tax-plus-local-subsidy program on Commerce Clause grounds. The Supreme Court ultimately ruled the scheme unconstitutional.

However, the Supreme Court has taken a very permissive stance toward state subsidies that do not entail overt discrimination against interstate commerce.<sup>18</sup> Most state subsidies are never contested, and nothing requires states to report their subsidies. Indeed, negotiations between state officials and major firms are often cloaked in secrecy.

The federal government has granted large sums to renewable energy. According to the US Energy Information Administration, in fiscal year 2016, direct federal subsidies to renewables amounted to \$6.7 billion. The State of Michigan has given billions to the Big Three automakers (Ford, General Motors, and Chrysler) through the Michigan Economic Growth Authority tax credit program. Other states have granted large sums to attract new assembly plants built by Mercedes-Benz, Toyota, Nissan, and firms in a wide range of industries.

### **NATIONAL COUNTERVAILING DUTIES**

National CVDs, antidumping duties, and safeguard measures constitute the troika of trade remedies available to every country. Because trade remedies are often applied as protective devices, in violation of other WTO obligations, the SCM, along with other WTO agreements, enables exporting countries to challenge their imposition. As the next section shows, the SCM somewhat curtails the use of CVDs, but CVDs are still probably the most important international restraint on subsidies.

A few statistics put CVDs in perspective. The United States imposes CVD measures more aggressively than any other country. But at the end of 2019, US CVD measures covered only about 2.4 percent of the value of US imports (Bown and Keynes 2020). Globally, CVDs cover less than 2 percent of imports.

The World Bank's Temporary Trade Barriers Database includes detailed data on the use of trade remedies by more than 30 national governments since 1980. The latest update, released in the fourth quarter of 2018, covers 1,038 CVD investigations. Not all investigations covered by the database result in affirmative subsidy and affirmative injury determinations. Only in cases in which both the subsidy and the injury determination are affirmative is a CVD applied.<sup>20</sup>

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<sup>18</sup> DaimlerChrysler Corp. v. Cuno and Sykes (2009).

<sup>19</sup> The US Energy Information Administration (EIA) considers four types of subsidies: tax benefits, direct expenditures to recipients, financial support towards research and development, and financial support authorized to be provided by the Department of Energy for innovative clean energy technologies that are typically unable to obtain conventional private financing because of their high technology risks. See EIA, "Direct Federal Financial Interventions and Subsidies in Energy in Fiscal Year 2016" (accessed on November 24, 2020).

<sup>20</sup> See Section 771(7) of the Tariff Act of 1930 for the legal explanation of injury determination.

For Australia, for example, the database shows 32 investigations. Only 14 were affirmative regarding both injury and subsidy in the preliminary stage, and 1 of these investigations was terminated before the final stage.

Unless a domestic industry complains, very few cases are initiated. For this reason, thousands of subsidies are never challenged. The US Department of Commerce can self-initiate CVD investigations, although it does so only rarely. In November 2017, it self-initiated a CVD investigation on common alloy aluminum sheet from China.<sup>21</sup> In 1991, it self-initiated a CVD investigation on softwood lumber from Canada. Between these two cases, there were few if any self-initiations by the Commerce Department.

This Policy Brief analyzes nine economies (four advanced and five emerging-market) that initiated more than 10 CVD investigations between 1995 and 2018 (Australia, Brazil, Canada, China, the European Union, India, Peru, South Africa, and the United States).<sup>22</sup> Over this period, 498 investigations were covered, accounting for about half of the 971 investigations the nine economies initiated.

Figure 1 shows the top targets of CVD investigations initiated by the four advanced economies (panel a) and five emerging-market economies (panel b) covered in this Policy Brief. Among the nine economies covered, the four advanced economies—the European Union, the United States, Australia, and Canada—together initiated 432 investigations. In contrast, the five emerging-market economies brought only 66 cases. Unsurprisingly, China and India were the favored targets of advanced-economy CVDs. Together, the two countries were the targets of almost half of all investigations by advanced economies. China and India also topped the list as major targets of emerging-market CVD investigations. Developing countries frequently targeted the United States and the European Union.

Appendix table 1 identifies the sectors that were most frequently hit by CVD investigations initiated by the four advanced economies and the five leading emerging-market economies.<sup>23</sup> Less than 4 percent of the sectors targeted by advanced economies can be characterized as high-tech (nuclear products and electrical machinery). More than 75 percent of products targeted by advanced economies hit traditional metal industries (iron, steel, and aluminum). Emerging-market economies challenged a more diversified set of industries than the advanced economies did, but traditional industries were still the main targets.

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<sup>21</sup> US Department of Commerce, "US Department of Commerce Self-Initiates Historic Antidumping and Countervailing Duty Investigations on Common Alloy Aluminum Sheet from China," press release, November 28, 2017.

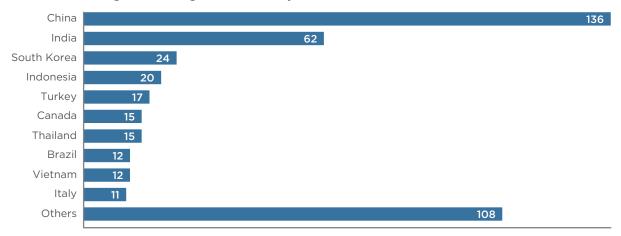
<sup>22</sup> Only post-1994 national CVDs were reviewed in order to enable comparisons with WTO challenges. The WTO replaced the General Agreement on Tariffs and Trade (GATT) in 1995. With its creation, the Dispute Settlement Body became the premier international forum for challenging national CVDs.

<sup>23</sup> Some CVDs hit multiple products, as defined by HSO2 codes; appendix table 1 reports the number of products rather than the number of CVDs.

Figure 1

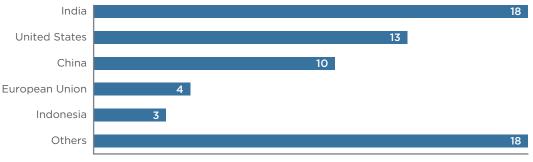
Economies most frequently targeted by countervailing duties since 1995





number of investigations

b. Targets of investigations initiated by emerging-market economies



number of investigations

Source: World Bank's Temporary Trade Barriers Database (TTBD). 2019.

### WTO AGREEMENT ON SUBSIDIES AND COUNTERVAILING MEASURES AND AGREEMENT ON AGRICULTURE

Article XVI of the General Agreement on Tariffs and Trade (GATT) tried to limit export subsidies. It had little effect, because a complaining country had to prove both adverse price effect and injury ("serious prejudice," in GATT terminology).

One attempt to deal with this obstacle was the "gentleman's agreement" major industrial countries concluded in 1975 to limit their official export credit subsidies. The agreement was later expanded through informal OECD guidelines, but China and other emerging exporting economies never accepted the OECD guidelines (Hufbauer and Shelton-Erb 1984).

In the Tokyo Round (1974-79), 24 GATT members agreed to a code that, among other features, required them not to grant subsidies that favored exports over domestic sales. Building on the Tokyo Round Subsidies Code, the Uruguay Round (1986-94) delivered the SCM, which all WTO members agreed to.<sup>24</sup>

The SCM defines covered industrial subsidies and requires that a covered subsidy be specific to a line of production (Articles 1 and 2). It then identifies three categories of subsidies: prohibited, actionable, and nonactionable. The WTO prohibits subsidies that are conditioned on export performance or the use of domestic over imported goods (Article 3). Actionable subsidies are subsidies that adversely affect the interests of other members (Article 5). In WTO proceedings, the legal burden is on the complaining party to show the adverse effects of an actionable subsidy; if it does not, the subsidy is permitted. The SCM allowed a category of nonactionable subsidies that are arguably beneficial to society (such as research activities and environmental protection), but this category expired at the end of 1999. Reinstating this category would be commendable, but the high current level of mutual distrust suggests that a fresh agreement is unlikely.

If a member state chooses to challenge the use of a subsidy by another member state within the WTO framework, the Dispute Settlement Body examines the measure. It first decides whether the subsidy is prohibited or actionable. If its decision is contested, the issue goes before the Appellate Body, which makes a final decision. Prohibited subsidies should be withdrawn immediately, and the adverse effects of actionable subsidies should be removed. If a subsidizing party that loses a case does not implement the WTO decision, the complaining party can take countermeasures authorized by the WTO (usually a tariff on imports from the losing party).

Outside the WTO framework, a country can investigate a trading partner's subsidy and impose a CVD to offset either the subsidy, or in some jurisdictions, the injury to the domestic industry. "Injurious" subsidies in national CVD terminology are roughly equivalent to "actionable" subsidies in WTO terminology. Procedurally, it is much easier for a petitioner to obtain a national CVD remedy than a WTO remedy. But national CVDs can be challenged in the WTO, either for incorrect determination of the subsidy or for erroneous attribution of injury to the subsidy.

The SCM sets out rules on subsidy notification and surveillance in Articles 25 and 26. Members are supposed to notify their subsidy programs to the WTO annually, but compliance with the requirement is low. According to the latest report by the Committee on Subsidies and Countervailing Measures, as of November 19, 2019, 95 members (out of 164) had yet to make their 2019 new and full subsidy notifications, for which the deadline was June 30, 2019; 72 members still had not made 2017 subsidy notifications; and 61 members had not submitted their 2015 notifications.<sup>25</sup> Important trading countries that did not make timely 2019 notifications include Malaysia, Peru, South Africa, and Vietnam. Submitting a notification does not ensure that the notification lists all subsidy programs in a transparent fashion.<sup>26</sup> The WTO does not assess the "quality" of country notifications.

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<sup>25</sup> World Trade Organization, "Committee on Subsidies and Countervailing Measures Report (2019) of the Committee on Subsidies and Countervailing Measures, Adopted 19 November 2019."

<sup>26</sup> World Trade Online, "US Rips China for Lax Subsidy Notifications; China Blasts US Currency Rule," October 28, 2020 (accessed on November 11, 2020).

The SCM limits industrial subsidies and some agricultural subsidies but not subsidies to services. The AoA permits "Green Box" and "Blue Box" subsidies that arguably have little or no distortive effect. Other agricultural subsidies (the "Amber Box") are, in principle, capped.<sup>27</sup> Article 3 of the AoA limits domestic support and export subsidies exceeding commitment levels in the member's GATT schedule. Articles 6 and 7 specify rules on reducing domestic support; Articles 8, 9, and 10 specify rules on commitments to reduce export subsidies and prohibit circumvention. Annex 2 identifies the criteria for support measures that have no or at most minimal trade-distorting effects and are therefore exempted from commitments. The 2013 WTO Ministerial Conference added expenditures on land reform and rural livelihood security to the nonexhaustive list of Annex 2 exemptions. The 2015 Ministerial Conference committed members to eliminate their scheduled export subsidies. An interim agreement allows developing countries to exceed their commitments because of market price support for acquisition of grain stocks for food security purposes without risk of challenge in WTO dispute settlement (Brink and Orden 2020).

The General Agreement on Trade in Services (GATS) committed WTO members to negotiate limits on subsidies to service activities. However, nothing was ever agreed to, leaving a major loophole. The WTO framework, then, limits industrial subsidies, only modestly disciplines agricultural subsidies, and does nothing to restrict service subsidies.

### CASES BEFORE THE WORLD TRADE ORGANIZATION

Between 1995 and 2020, 131 disputes before the WTO cited the SCM—far fewer than the number of national CVD cases. Two landmark WTO cases illustrate the two branches of SCM jurisprudence. The US-EU Boeing-Airbus dispute challenged prohibited and actionable subsidies granted by the respondent country; the Canada-US softwood lumber dispute challenged a national CVD imposed by the respondent country. This section first examines WTO cases that claim prohibited and/or actionable subsidies and then looks at challenges to CVD measures.

Appendix table 2 summarizes the known 77 prohibited/actionable WTO disputes. Major SCM complainants were the United States (27 cases), the European Union (15 cases), Brazil (8 cases), and Japan (8 cases). Collectively, they accounted for three-quarters of all of the cases the Dispute Settlement Body reviewed. The complaints concentrate on agriculture and traditional industries. The main industries were autos and parts (15 cases), agriculture and food (14 cases), aircraft (12 cases), and renewable energy (8 cases). Among the leading industries, only aircraft and energy can be characterized as high-tech.

Prohibited subsidies attract far more complaints than actionable subsidies. Of the 77 SCM complaints reviewed, all but 3 (DS71, DS147, and DS519) challenged prohibited subsidies—and those three cases ended at the consultation stage. In the 23 cases that cited both prohibited and actionable subsidies, the WTO issued a decision in only 8, all of which the complainant won.

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<sup>27</sup> World Trade Organization, "Domestic Support in Agriculture: The Boxes" (accessed on November 16, 2020).

Many disputes never went beyond the consultation stage. Of the 77 SCM complaints reviewed, the WTO issued a panel (or Appellate Body) decision in only 31 cases. Panel decisions alone resolved 8 of the 31 cases. Three disputes were not successfully appealed, because of a backlog of appeals pending with the Appellate Body or (in 2019) a dysfunctional Appellate Body because the Trump administration blocked the appointment of new Appellate Body members to replace retiring members. Complainants won slightly more than half of decided WTO disputes: Of the 31 SCM cases decided with a panel or Appellate Body decision, the complainant prevailed 17 times.

Appendix table 3 summarizes the known 22 WTO cases that challenged agricultural subsidies citing the AoA. All but six were brought concurrently with allegations of SCM violations. All of the WTO decisions issued (at the panel or Appellate Body stage) favored the complainant.

It took years for the Dispute Settlement Body to deal with most SCM disputes. The average time for resolving panel and Appellate Body SCM cases, excluding the Boeing-Airbus cases, was almost 45 months. The main Boeing-Airbus cases, DS316 and DS 353, took more than 15 years to resolve. The required time to settle disputes goes far beyond the norm of 12 months in the Dispute Settlement Body rules (Article 20 of the "Understanding on Rules and Procedures Governing the Settlement of Disputes"). Delay discourages complaints, especially as the WTO never awards retroactive relief to a successful complainant.

Appendix table 4 reviews 52 CVD challenges at the WTO since 1995, corresponding to the coverage of national CVDs listed in the World Bank's Temporary Trade Barriers Database. Among the 52 cases steel accounted for 10 of the challenges reviewed. Another 13 cases covered agricultural products. Canada (12 cases), the European Union (10 cases), and Korea (6 cases) brought most CVD challenges. The United States was the most frequent respondent, accounting for 34 cases.

Twenty-eight CVD disputes—about half of the total—resulted in panel or Appellate Body decisions. Complainants prevailed in 24 of the 28 cases. When CVDs were challenged in the WTO, the Dispute Settlement Body thus usually found fault with the calculations or legal reasoning. This pattern, together with the lopsided targeting of US CVD decisions, goes a long way toward explaining the Trump administration's dissatisfaction with the Appellate Body. The Trump administration contended that the Appellate Body went far beyond its authority in overriding US Department of Commerce decisions in CVD cases.

### CAN THE SUBSIDIES RULEBOOK BE UPGRADED?

The moment is not auspicious for toughening discipline on subsidies. There is little appetite for restoring a free market economy—one in which firms compete with minimum government assistance or regulation; instead, there are calls for intervention to promote select industries—especially renewable energy and high-tech—and to cushion job losses in fading sectors. The principal limitation on ambitious public subsidies is budget resources, which may be scarce given rising demands for improvements in education, health, infrastructure, and defense.

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Dissatisfaction with the long timeline for Dispute Settlement Body decisions

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and poor notification of subsidies by member countries is widespread. More pressing are loopholes that permit some partners to gain an advantage through creative subsidies. This section outlines and comments on three proposals to upgrade the SCM.

The first proposal concerns undervalued exchange rates. Under US law, "countervailable subsidies exist when a foreign government or public entity provides a 'financial contribution' to a company that confers a 'benefit' to the company's production, manufacture, or exportation of merchandise and which is 'specific."<sup>28</sup> Although US law does not contemplate an undervalued exchange rate, in April 2020, the Department of Commerce enacted a rule that treats "currency manipulation" as a countervailable subsidy. Assuming other conditions of CVD law are met, it can offset this subsidy with a penalty duty.<sup>29</sup> The Department of Commerce defers to the Treasury Department to measure the extent of undervaluation.<sup>30</sup> In the first currency investigation, launched in June 2020 against Vietnam on passenger vehicles and light trucks,<sup>31</sup> Treasury determined that Vietnam's exchange rate was undervalued vis-à-vis the US dollar by 4.2 to 5.2 percent.<sup>32</sup> The second currency case was launched in July 2020, against imports of Chinese twist ties.<sup>33</sup>

The International Monetary Fund has warned against the US currency CVD.<sup>34</sup> Other countries might follow the US lead and adopt their own definitions of currency manipulation. The resulting tide of restrictive trade measures could interfere with the prevailing regime of flexible exchange rates and central bank monetary policy. Moreover, the WTO has no precedents for treating an undervalued exchange rate as a subsidy (Hufbauer and Cimino-Isaacs 2015). The new US rule will therefore likely face challenge in Geneva.

A major component of the challenge will be the argument that an undervalued exchange rate does not "specifically" benefit a particular industry. Anticipating this argument, the Commerce Department's regulation asserted that companies that buy or sell goods in the international market constitute a "specific" group of companies for purposes of US law and WTO rules.<sup>35</sup> Its

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<sup>28</sup> International Trade Administration, "Subsidy Allegation" (accessed on November 12, 2020).

<sup>29</sup> US Department of Commerce, "Department of Commerce Issues Final Rule for Countervailing Unfair Currency Subsidies," press release, February 4, 2020 (accessed on November 12, 2020).

<sup>30</sup> In its semiannual reports to Congress, the Treasury Department considers three criteria for identifying whether a major trading partner of the United States engages in currency manipulation: it ran a significant bilateral surplus with the United States over the last 12 months, it runs a material current account surplus, and it engages in persistent one-sided intervention in the currency market. In Treasury's latest report, issued in December 2020, Vietnam met all three criteria and was named a manipulator. See US Treasury, "Macroeconomic and Foreign Exchange Policies of Major Trading Partners of the United States," December 2020 (accessed on December 21, 2020).

<sup>31</sup> International Trade Administration, "US Department of Commerce Initiates Antidumping Duty and Countervailing Duty Investigations of Imports of Passenger Vehicle and Light Truck Tires from the Republic of Korea, Taiwan, Thailand, and the Socialist Republic of Vietnam," press release (accessed on November 3, 2020).

<sup>32</sup> See the letter from the US Treasury dated August 24, 2020 (accessed on November 3, 2020).

<sup>33</sup> World Trade Online, "Commerce: Chinese 'Twist Ties' Benefit from Undervalued Renminbi in CVD Case" (accessed on November 25, 2020).

<sup>34</sup> IMF, "United States: 2020 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for United States," press release (accessed on November 3, 2020).

<sup>35</sup> Federal Register, "Modification of Regulations Regarding Benefit and Specificity in Countervailing Duty Proceedings," February 4, 2020.

assertion can be questioned, but regardless of the legal outcome, imposing CVDs in response to currency undervaluation amounts to an unwarranted intrusion into the realm of monetary policy.

The second proposal, this one from the European Union, seeks to regulate distortions caused by foreign subsidies. In June 2020, the European Commission issued a *White Paper on Levelling the Playing Field as Regards Foreign Subsidies*. The Commission's goal is to discipline "transnational" subsidies where the granting government is a non-EU economy and the recipient/beneficiary is active in the European Union. The White Paper discusses four kinds of foreign subsidies the Commission fears could undermine a level playing field in the internal market: subsidies to support the general operations of a firm in the European Union, subsidies to facilitate the acquisition of EU firms, subsidies to gain public procurement contracts, and subsidies to access EU funding programs. The Commission argues that new instruments are needed to tackle these distortions (for an earlier proposal, see Hufbauer, Moll, and Rubini 2008).

On December 30, 2020, the European Union reached two landmark agreements: an economic partnership agreement with the United Kingdom to conclude its departure from the European Union and a comprehensive investment agreement with China.<sup>37</sup> The agreement with Britain specifies commitments on subsidies regarding issues not covered by the SCM, including unlimited state guarantees, rescue and restructuring of insolvent or ailing firms, large cross-border or international cooperation projects, energy and the environment, and air carriers for the operation of routes. It also lays out an arbitration system to resolve claims of "unfair advantage" by either partner. In its deal with China, the European Union secured commitments from China to share information and consult on specific subsidies that could have a negative effect on European investment interests and novel obligations on transparency with respect to subsidies in the service sectors. It remains to be seen whether the European Union will try to generalize either the UK or China provisions to its relations with other trading partners.

The third proposal, circulated before COVID-19 swept the globe, was a US, EU, and Japan initiative to revamp WTO rules governing industrial subsidies.<sup>38</sup> The trilateral suggestions include the following:

 Article 3.1 of the SCM should cover four new types of unconditionally prohibited subsidies: unlimited guarantees, subsidies to an insolvent or ailing enterprise in the absence of a credible restructuring plan, subsidies

The Commission's goal is to discipline "transnational" subsidies where the granting government is a non-EU economy and the recipient/beneficiary is active in the European Union.

<sup>36</sup> European Commission, *White Paper on Levelling the Playing Field as Regards Foreign Subsidies*, June 17, 2020 (accessed on November 2, 2020).

<sup>37</sup> For the economic partnership agreement between the European Union and the United Kingdom, see EUR-Lex, "Trade and Cooperation Agreement between the European Union and the European Atomic Energy Community, of the One Part, and the United Kingdom of Great Britain And Northern Ireland, of the Other Part." Part Two, Heading One, Title XI discusses the level playing field for open and fair competition and sustainable development. For the investment agreement with China, see European Commission, "Key Elements of the EU-China Comprehensive Agreement on Investment," press release, December 30, 2020.

<sup>38</sup> US Trade Representative, "Joint Statement of the Trilateral Meeting of the Trade Ministers of Japan, the United States and the European Union," press release, January 14, 2020 (accessed on November 3, 2020).

to enterprises unable to obtain long-term financing or investment from independent commercial sources operating in sectors or industries in overcapacity, and certain forms of direct forgiveness of debt.

- The subsidizing member should bear the burden of proof to demonstrate that certain subsidy programs have no serious negative effect.
- Apart from serious prejudice to the *interests* of another member, Article
   6.3 of SCM should cover, as a new type of serious prejudice, measures that distort the *capacity* of another member.
- Meaningful incentives should be added to ensure subsidy notification.
  If a subsidizing member does not notify the WTO but another member
  counter-notifies the measure, the subsidizing member's subsidy should be
  treated as prohibited, unless the required information is provided within
  the set deadline.
- The conditions under which members can reject domestic prices and instead use third-country pricing data in CVD investigations should be clarified.
- The definition of "public body" that subjects state enterprises to WTO subsidy rules without the need to show that they were carrying out government policy should be sharpened.

This trilateral proposal, together with the EU proposal on distortive foreign subsidies, should provide a starting point for overhauling the SCM. Negotiations will never conclude, however, if conducted under the single-undertaking principle—the principle that nothing is agreed to until everything is agreed to, by all 164 WTO members. The pragmatic alternative is a plurilateral agreement signed by a subset of WTO members as a stand-alone agreement. Apart from the United States, the European Union, and Japan, the plurilateral pact should include the United Kingdom, all Comprehensive and Progressive Trans-Pacific Partnership (CPTPP) countries (10 countries in addition to Japan), many EU free trade agreement partners (44 economies), and most US free trade agreement partners (20 countries). Although the plurilateral pact would initially include only advanced economies, it should be open to all WTO members.

China and many other emerging-market economies are not likely to join in the near future. A chapter in the Comprehensive Agreement on Investment between the European Union and China calls for greater transparency of public subsidies. This chapter is a step in the right direction, but it falls well short of the trilateral proposal and has no enforcement provision, beyond the possibility of consultations.

A perennial issue confronting plurilateral agreements is whether nonmembers should have access to the rights they bestow on an unconditional most favored nation (MFN) basis or be required to join the pact in order to enjoy its rights. Pact members will not accept new limitations on their own subsidies to alleviate harm to nonmembers unless nonmembers accept the same limitations. For this reason, a conditional MFN approach, requiring pact membership to enjoy pact benefits, seems the only promising route.

For the new disciplines to work, pact members will benefit from a functioning Dispute Settlement Body as well as national CVD laws. The existing Dispute Settlement Body, revived and reformed, can enforce the new pact among WTO

The pragmatic alternative is a plurilateral agreement signed by a subset of WTO members as a stand-alone agreement.

pact members. Nonmembers will still have recourse to the prereform SCM with respect to both other nonmembers and pact members. Pact members will also have recourse to the prereform SCM with respect to nonmembers. The diverse configuration of obligations seems confusing, but it is a necessary cost in a world in which 164 countries cannot agree on uniform rules.

If a plurilateral pact can promote reforms, its members should then turn their attention to harmonizing national CVD laws and resolving sector-specific issues in agriculture, steel, and civil aviation. Much later, the WTO might consider agreed rules on subsidies that distort competition in service sectors (such as maritime and airline services), if sufficient interest exists among a subset of WTO members.

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**APPENDIX** 

### Appendix Table 1

### Sectors most frequently targeted by countervailing duties since 1995

HS chapter	Description	Frequency
Investigatio	ons initiated by advanced economies	
72	Iron and steel	2,690
73	Articles of iron or steel	1,155
44	Wood	193
48	Paper and paperboard	181
84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	126
76	Aluminum	92
03	Fish and crustaceans, molluscs and other aquatic invertebrates	89
40	Rubber	80
39	Plastics	72
85	Electrical machinery and equipment and parts thereof	55
	Others	507
	Total	5,240
Investigation	ons initiated by emerging-market economies	
72	Iron or steel	28
74	Copper	28
39	Plastics	27
87	Vehicles other than railway or tramway rolling stock (and parts)	26
55	Man-made staple fibers	26
	Others	98
	Total	233

Cases that came before the World Trade Organization between 1995 and 2020 that cited the Agreement on Subsidies and Counter-Appendix Table 2 vailing Measures

51 1996-07						•		
	07 1996-07	7 Japan	Brazil	>	z	Autos	Consultations requested	ΩZ
52 1996-08	08 1996-08	s n	Brazil	>	z	Autos	Consultations requested	Q
57 1996-10	01-966-10	sn	Australia	>	z	Leather products	Consultations requested	Q
65 1997-01	10-7661 10	SN	Brazil	>	z	Autos	Consultations requested	Q
71 1997-03	03 1997-03	5 Brazil	Canada	z	>	Civil aircraft	Consultations requested	Q
81 1997-05	05 1997-05	5 EU	Brazil	>	>	Autos	Consultations requested	Q
104 1997-10	01-7997-10	SN	EU	>	z	Processed cheese	Consultations requested	Q
127 1998-05	05 1998-05	SO OS	Belgium	>	Z	<b>∀</b> 2	Consultations requested	Ω N
128 1998-05	05 1998-05	s us	Netherlands	>	Z	<b>∀</b> 2	Consultations requested	Ω Z
129 1998-05	05 1998-05	s us	Greece	>	Z	۲ ۲	Consultations requested	ΩN
130 1998-05	05 1998-05	s n	Ireland	>-	z	A N	Consultations requested	Ω Z

	<b> </b>	ı	I	I	I	I	I	I	I	I	I
Winner	ΩZ	Ω Z	O N	O Z	Q	ΩZ	ΩZ	ΩZ	ΩZ	Q Q	ΩZ
Status	Consultations requested	Consultations requested	Consultations requested	Consultations requested	Consultations requested	Consultations requested	Consultations requested	Consultations requested	Consultations requested	Consultations requested	Consultations requested
Industry	ΥN	Leather industry	Flight management system in Airbus	Flight management system in Airbus	Shipping industry	Wine and spirits	ΥN	ΑΝ	<b>∀</b> Z	Wind power equipment manufacturing	Apparel and textiles
Actionable	Z	<b>&gt;</b>	>	>	>	Z	Z	z	z	z	z
Prohibited	>-	Z	>-	>	>	>	>-	>	>-	>	>-
Respondent	France	Japan	EU	France	EU	India	China	China	China	China	China
Complainant	NS	EU	US	US	Korea	EU	NS	Mexico	Guatemala	US	Mexico
Last update	1998-05	1998-10	1999-05	1999-05	2004-02	2009-11	2009-01	2009-01	2009-01	2011-01	2012-10
Launch date	1998-05	1998-10	1999-05	1999-05	2004-02	2008-09	2008-12	2008-12	2009-01	2010-12	2012-10
Case no.	131	147	172	173	307	380	387	388	390	419	451

Case no.	Launch date	Last update	Complainant	Respondent	Prohibited	Actionable	Industry	Status	Winner
452	2012-11	2012-11	China	EU	>	Z	Renewable energy generation	Consultations requested	Q
459	2013-05	2013-05	Argentina	EU	>-	Z	Biodiesel	Consultations requested	N
507	2016-04	2016-04	Brazil	Thailand	>-	>	Sugar	Consultations requested	Ω N
519	2017-01	2017-01	NS	China	Z	>-	Primary aluminum	Consultations requested	Ω Z
563	2018-08	2018-08	China	US	>-	Z	Renewable energy	Consultations requested	Ω Z
571	2018-11	2018-11	Japan	Korea	>-	>-	Commercial vessels	Consultations requested	Q
592	2019-11	2019-12	EU	Indonesia	>-	Z	Raw materials	Consultations requested	Ω N
594	2020-01	2020-02	Japan	Korea	>-	>-	Commercial vessels	Consultations requested	Ω N
354	2006-11	2008-12	EÜ	Canada	>	z	Wine and beer	Mutual agreement reached through MOU	* _ Z
358	2007-02	2007-12	Sn	China	<b>&gt;</b>	z	۹ ۲	Mutual agreement reached through MoU	* _ Z

Case no.	Launch date	Last update	Complainant	Respondent	Prohibited	Actionable	Industry	Status	Winner
359	2007-02	2008-02	Mexico	China	>-	Z	<b>∢</b> Z	Mutual agreement reached through MoU	* _ Z
489	2015-02	2016-04	NS	China	>-	Z	<b>∢</b> Z	Mutual agreement reached through MoU	* _ Z
347	2006-01	2007-10	NS	EU	>-	>-	Large civil aircraft	Mutually agreed solution notified	* _ Z
106	1997-11	1998-06	NS	Australia	<b>&gt;</b>	Z	Automotive leather	Panel established	Ω Z
195	2000-05	2000-11	US	Philippines	>-	Z	Motor vehicles	Panel established	N
357	2007-01	2007-12	Canada	US	<b>&gt;</b>	<b>&gt;</b>	Corn and other agriculture products	Panel established	QN
365	2007-07	2007-12	Brazil	US	>	Z	Agriculture	Panel established	Ω N
593	2019-12	2020-07	Indonesia	EU	>	>	Palm oil and oil palm crop- based biofuels	Panel established	<u>Q</u>
317	2004-10	2006-04	EU	US	<b>&gt;</b>	<b>&gt;</b>	Large civil aircraft	Panel composed	Ω Z
522	2017-02	2020-05	Brazil	Canada	>	>-	Commercial aircraft	Panel composed	Q

Winner	ΩZ	Q	ΩZ	C-Act	C-Act	C-Act	C-Act	U	ΩZ	U	ΩZ
Status	Panel composed	Panel	Panel composed	Panel report circulated	Panel report circulated	Panel report circulated	Panel report circulated	Panel report circulated	Panel report circulated	Panel report circulated	Panel report circulated, appeal requested
Industry	Sugarcane and sugar	Sugarcane and sugar	Pharmaceutical products	Autos	Autos	Autos	Autos	Regional aircraft industry	Shipping industry	Shipbuilding	Energy
Actionable	Z	z	Z	>	>	>	>	z	>	>	z
Prohibited	>-	>	>	>	>	>	>	>	>	>-	>
Respondent	India	India	Turkey	Indonesia	Indonesia	Indonesia	Indonesia	Canada	EU	Korea	EU
Complainant	Australia	Guatemala	EU	EU	Japan	NS	Japan	Brazil	Korea	EU	Russia
Last update	2020-04	2020-04	2020-09	1999-07	1999-07	1999-07	1999-07	2003-03	2005-07	2005-04	2018-11
Launch date	2019-02	2019-03	2019-04	1996-10	1996-10	1996-10	1996-10	2001-01	2003-09	2002-10	2014-04
Case no.	580	581	583	54	55	59	64	222	301	273	476

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Case no.	Launch date	Last update	Complainant	Respondent	Prohibited	Actionable	Industry	Status	Winner
510	2016-09	2019-10	India	NS	>	>	Renewable energy	Panel report circulated, appeal requested	Q
541	2018-04	2019-11	Sn	India	>	z	<b>∢</b> Z	Panel report circulated, appeal requested	U
126	1998-05	2000-07	NS	Australia	>	Z	Automotive leather	Panel report circulated	U
46	1996-06	2001-08	Canada	Brazil	>	Z	Aircraft	Appellate Body report circulated	U
70	1997-03	2000-08	Brazil	Canada	>	Z	Civil aircraft	Appellate Body report circulated	U
103	1997-10	2003-05	US	Canada	>	Z	Dairy products	Appellate Body report circulated	* * Z
108	1997-11	2006-05	EU	ns	>	Z	<b>∢</b> Z	Appellate Body report circulated	U
139	1998-07	2001-03	Japan	Canada	>	Z	Autos	Appellate Body report circulated	U
142	1998-07	2001-03	EU	Canada	>	z	Autos	Appellate Body report circulated	U

Winner	* ^ Z	* ^ Z	U	* ^ Z	C-Act	Ω Z	Ω Z	Ω Z	U
Status	Appellate Body report circulated								
Industry	Sugar	Sugar	Upland cotton	Sugar	Large civil aircraft	Autos	Autos	Autos	Large civil aircraft
Actionable	Z	Z	>	Z	>	Z	Z	Z	<b>&gt;</b>
Prohibited	>	>	>	>	>	>	>	>	>-
Respondent	EU	EU	US	EU	EU	China	China	China	NS
Complainant	Australia	Brazil	Brazil	Thailand	US	EU	NS	Canada	n n
Last update	2006-06	2006-06	2014-10	2006-06	2019-12	2009-08	2009-08	2009-08	2020-10
Launch date	2002-09	2002-09	2002-09	2003-03	2004-10	2006-03	2006-03	2006-03	2005-06
Case no.	265	266	267	283	316	339	340	342	353

	Launch date	Last update	Complainant	Respondent	Prohibited	Actionable	Industry	Status	Winner
201	2010-09	2014-03	Japan	Canada	<b>&gt;</b>	z	Renewable energy generation sector	Appellate Body report circulated	α
20	2011-08	2014-03	EU	Canada	<b>&gt;</b>	Z	Renewable energy generation facilities	Appellate Body report circulated	œ
20	2013-02	2018-01	Sn	India	>	>	Solar cells and solar modules	Appellate Body report circulated	ΩN
20	2014-12	2017-09	П	Sn	>	Z	Large civil aircraft	Appellate Body report circulated	<u>*</u>
20	2015-07	2020-01	Japan	Brazil	<b>&gt;</b>	z	Autos, electronics, and technology	Appellate Body report circulated	U

AoA = Agreement on Agriculture; ASCM = Agreement on Subsidies and Countervailing Measures; MoU = memorandum of understanding; WTO = World Trade Organization NA in "Industry" column = information not available

on prohibited subsidies; ND = no WTO decision; ND\* = a mutual agreement was reached and no WTO decision; ND\*\* = complainant won only with respect to AoA subsidization in "Winner" column: C = complainant; R = respondent; R\* = complainant won in panel, but respondent won in appeal; C-Act = complainant won only on actionable subsidies but not excess of the respondent's commitments, and no WTO decision on ASCM issues.

Source: Compiled by the author based on the WTO Dispute Settlement gateway, www.wto.org/english/tratop\_e/dispu\_e.htm.

Appendix Table 3 Cases that came before the World Trade Organization between 1995 and 2019 that cited the Agreement on Agriculture

Case no.	Launch date	Last update	Complainant	Respondent	ASCM	Industry	Status	Winner
104	1997-10	1997-10	NS	EU	<b>&gt;</b>	Processed cheese	Consultations requested	Ω Z
387	2008-12	2009-01	SN	China	<b>&gt;</b>	<b>∀</b> Z	Consultations requested	Ω Z
388	2008-12	2009-01	Mexico	China	>	ΑN	Consultations requested	ΩZ
390	2009-01	2009-01	Guatemala	China	<b>&gt;</b>	<b>∀</b> Z	Consultations requested	ΩΖ
451	2012-10	2012-11	Mexico	China	>	Apparel and textile	Consultations requested	ΩZ
507	2016-04	2016-04	Brazil	Thailand	>	Sugar	Consultations requested	ΩZ
35	1996-03	1997-07	Argentina, Australia, Canada, New Zealand, Thailand, United States	Hungary	Z	<b>∀</b> Z	Panel requested	QV
357	2007-01	2007-12	Canada	United States	>	Corn and other agricultural products	Panel established	Ω Z
365	2007-07	2007-12	Brazil	United States	<b>&gt;</b>	Agricultural products	Panel established	ΩΖ
579	2019-02	2020-04	Brazil	India	z	Sugarcane and sugar	Panel composed	ΩN

Case no.	Launch date	Last update	Complainant	Respondent	ASCM	Industry	Status	Winner
280	2019-02	2020-04	Australia	India	>	Sugarcane and sugar	Panel composed	Ω Z
581	2019-03	2020-04	Guatemala	India	>	Sugarcane and sugar	Panel composed	Q N
511	2016-09	2020-08	US	China	z	Wheat, India rice, Japonica rice, and corn	Panel report circulated	U
103	1997-10	2003-05	US	Canada	<b>&gt;</b>	Dairy products	Appellate Body report circulated	O
108	1997-11	2006-05	EU	SN	<b>&gt;</b>	<b>∀</b> Z	Appellate Body report circulated	O
113	1997-12	2003-05	New Zealand	Canada	z	Dairy products	Appellate Body report circulated	U
161	1999-02	2001-09	SN	Korea	z	Beef	Appellate Body report circulated	U
169	1999-04	2001-09	Australia	Korea	z	Beef	Appellate Body report circulated	U
265	2002-09	2006-06	Australia	EU	>	Sugar	Appellate Body report circulated	U
266	2002-09	2006-06	Brazil	EC	>	Sugar	Appellate Body report circulated	U

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Case no.	Launch	Last update	Complainant	Respondent	ASCM	ASCM Industry	Status	Winner
267	2002-09	2014-10	Brazil	US	>	Upland cotton	Appellate Body report circulated	U
283	2003-03	2003-03 2006-06	Thailand	EU	>	Sugar	Appellate Body report circulated	U

ASCM = Agreement on Subsidies and Countervailing Measures

NA in "Industry" column = information not available

"Winner" column: C = complainant; R = respondent; ND = no WTO decision

Source: Compiled by the author based on the WTO Dispute Settlement gateway, www.wto.org/english/tratop\_e/dispu\_e.htm.

Appendix Table 4

Cases that came before the World Trade Organization between 1995 and 2020 that involved national countervailing duties

Case no.	Complainant	Respondent	Launch date	Last update	Industry	Status	Winner
97	Chile	US	1997-08	1997-08	Salmon	Consultations requested	ND
112	Brazil	Peru	1997-12	1997-12	Bus	Consultations requested	ND
145	EU	Argentina	1998-09	1998-09	Wheat gluten	Consultations requested	ND
167	Canada	US	1999-03	1999-03	Live cattle	Consultations requested	ND
218	Brazil	US	2000-12	2000-12	Carbon steel products	Consultations requested	ND
262	EU	US	2002-07	2002-07	Corrosion- resistant carbon steel flat products & cut-to-length carbon steel plate	Consultations requested	ND
314	EU	Mexico	2004-08	2004-08	Olive oil	Consultations requested	ND
330	EU	Argentina	2005-04	2005-04	Olive oil, wheat gluten and canned peaches	Consultations requested	ND
338	US	Canada	2006-03	2006-03	Unprocessed grain corn	Consultations requested	ND
368	China	US	2007-09	2007-09	Coated free sheet paper	Consultations requested	ND
385	India	EU	2008-12	2008-12	NA	Consultations requested	ND
514	Brazil	US	2016-11	2016-11	Cold- and hot- rolled steel flat products	Consultations requested	ND
535	Canada	US	2017-12	2017-12	NA	Consultations requested	ND
572	Argentina	Peru	2018-11	2018-11	Biodiesel	Consultations requested	ND

Case no.	Complainant	Respondent	Launch date	Last update	Industry	Status	Winne
598	Australia	China	2020-12	2021-01	Barley	Consultations requested	ND
310	Canada	US	2004-04	2004-06	Hard red spring wheat	Panel requested	ND
470	Indonesia	Pakistan	2013-11	2014-05	Paper products	Panel requested	ND
280	Mexico	US	2003-01	2003-08	Carbon steel plates in sheets	Panel established	ND
474	Russia	EU	2013-12	2014-07	NA	Panel established	ND
539	Korea	US	2018-02	2019-07	NA	Panel composed	ND
577	EU	US	2019-01	2020-04	Ripe olives	Panel composed	ND
311	Canada	US	2004-04	2007-02	Softwood lumber	Mutually agreed solution reached	ND
277	Canada	US	2002-12	2007-02	Softwood lumber	Panel report circulated, mutually agreed solution reached	С
236	Canada	US	2001-08	2007-02	Softwood lumber	Panel report circulated, mutually agreed solution reached	С
523	Turkey	US	2017-03	2019-03	Pipe and tube products	Panel report circulated, appeal requested	С
194	Canada	US	2000-05	2001-08	NA	Panel report circulated	R
206	India	US	2000-10	2003-02	Cut-to-length carbon quality steel plate products	Panel report circulated	ND

Case no.	Complainant	Respondent	Launch date	Last update	Industry	Status	Winner
221	Canada	US	2001-01	2002-08	NA	Panel report circulated	R
299	Korea	EU	2003-07	2006-04	Dynamic random access memory chips	Panel report circulated	С
341	EU	Mexico	2006-03	2008-11	Olive oil	Panel report circulated	С
427	US	China	2011-09	2018-02	Broiler products	Panel report circulated	С
440	US	China	2012-07	2014-06	Autos	Panel report circulated	С
491	Indonesia	US	2015-03	2018-01	Coated paper	Panel report circulated	R
533	Canada	US	2017-11	2020-08	Softwood lumber	Panel report circulated	С
257	Canada	US	2002-05	2007-02	Softwood lumber	Appellate Body report circulated, mutually agreed solution reached	С
138	EU	US	1998-06	2000-07	Hot-rolled lead and bismuth carbon steel	Appellate Body report circulated	С
212	EU	US	2000-11	2005-09	NA	Appellate Body report circulated	С
213	EU	US	2000-11	2004-04	Corrosion- resistant carbon steel flat products	Appellate Body report circulated	R*
217	Australia, Brazil, Chile, European Communities, India, Indonesia, Japan, South Korea, Thailand	US	2000-12	2019-08	NA	Appellate Body report circulated	С

Case no.	Complainant	Respondent	Launch date	Last update	Industry	Status	Winne
234	Canada; Mexico	US	2001-05	2008-08	NA	Appellate Body report circulated	С
295	US	Mexico	2003-06	2007-01	Beef and long grain white rice	Appellate Body report circulated	С
336	Korea	Japan	2006-03	2010-03	Dynamic random access memories (DRAM)	Appellate Body report circulated	С
345	India	US	2006-06	2009-04	Frozen warmwater shrimp	Appellate Body report circulated	ND
379	China	US	2008-09	2012-09	NA	Appellate Body report circulated	C*
414	US	China	2010-09	2015-08	Grain oriented flat-rolled electrical steel	Appellate Body report circulated	С
437	China	US	2012-05	2019-10	Solar panels, ind towers, thermal paper, coated paper, tow behind lawn groomers, kitchen shelving, steel sinks, citric acid, magnesia carbon bricks, pressure pipe, line pipe, seamless pipe, steel cylinders, drill pipe, oil country tubular goods, wire strand, and aluminum extrusions	Appellate Body report circulated	C
449	China	US	2012-09	2015-08	NA	Appellate Body report circulated	С
464	Korea	US	2013-08	2019-02	Large residential washers	Appellate Body report circulated	С
486	Pakistan	EU	2014-11	2018-05	Polyethylene terephthalate	Appellate Body report circulated	С

Case no.	Complainant	Respondent	Launch date	Last update	Industry	Status	Winner
505	Canada	US	2016-03	2019-06	Supercalendered paper	Appellate Body report circulated	С
296	Korea	US	2003-06	2006-03	DRAMs and DRAM modules	Appellate Body report circulated	С
436	India	US	2012-04	2020-01	Hot rolled carbon steel flat products	Appellate Body report circulated	С

<sup>&</sup>quot;NA" in "Industry" column = information not available

 $Source: {\tt Compiled by the author based on the WTO Dispute Settlement gateway, www.wto.org/english/tratop\_e/dispu\_e/dispu\_e.htm.}$ 

<sup>&</sup>quot;Winner" column: C = complainant; R = respondent; ND = no WTO decision;  $C^* = respondent$  in panel but complainant in Appellate Body;  $R^* = complainant$  in panel but respondent in Appellate Body



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