

Subsidies and Future PTAs

From Market Distortions to Legitimate Policy Goals?

*Leopoldo Biffi, Yuliia Kucheriava, and Shailja Singh**

9.1 INTRODUCTION

Subsidies regulation is one of the most contentious and complicated issues in international trade. There are various reasons for that. Subsidies are extraordinarily complex in the sense that they are extremely difficult to evaluate and quantify. Another important factor is their political sensitivity. Above all, the debate over subsidies puts in stark contrast the national spending required to attain public policy goals and international rules founded on a free trade ideology. Striking a balance between these two objectives is as crucial as it is challenging in a world in which, on the one hand, market integration has unbundled production across multiple regions and, on the other hand, the climate crisis and a global pandemic call for an increasingly active role of the state at home.

A growing number of frictions around subsidies have been playing out both at the domestic level in the form of countervailing duty (CVD) investigations and at the international level, as evidenced by the number of subsidy-related disputes taken to the World Trade Organization (WTO). Between 1 January 1995 and 30 June 2022, governments initiated 669 CVD investigations (WTO 2023a), with at least one CVD investigation per week being launched in 2018–2020 (Evenett and Fritz 2021: 12). At the multilateral level, WTO Members invoked the WTO Agreement on Subsidies and Countervailing Measures (ASCM) as many as 130 times in disputes from 1995 to 2021.¹

* Views expressed are personal.

¹ This is only slightly behind the Anti-Dumping Agreement (AD Agreement) with 142 and the General Agreement on Tariffs and Trade (GATT 1994) that appears in 511 of the 607 disputes initiated over the same period (WTO 2023b). Interestingly, however, as of 25 October 2022, only thirty-eight Members had notified that they maintain subsidies in accordance with Article 25.1 of the Agreement and Article XVI of GATT 1994, and ten Members had notified that they did not maintain any notifiable subsidies. See the ‘Report (2022) of The Committee on Subsidies

Against this background, the chapter argues that a future-proof subsidies regulation in trade can only result from a paradigm shift in how these policy measures are evaluated, and therefore sanctioned or permitted. Such a shift would be concretised by moving away from singular assessments of a subsidy's trade-distortive potential to a balancing test that weighs any possible trade distortions against the benefits that subsidies pursuing legitimate policy objectives create. The latter crucially includes economic recovery, public health, and environmental protection – all objectives whose urgency and legitimacy cannot simply be undermined by a trade distortion benchmark. This approach would entail introducing a balancing test to 'legitimate' subsidies assessment, strengthening the transparency rules as well as expanding the list of prohibited subsidies, along with the requisite exceptions, to attain a more nuanced, practical, and balanced outcome. In elaborating on this argument, we look at preferential trade agreements (PTAs) as the most feasible institutional framework in which such a focal point shift can occur. Preliminary evidence already points in this direction. For instance, the European Union (EU) has incorporated into its recent PTAs a notion of 'state aid' with a wide scope and public policy focus that grants parties greater leeway in subsidy implementation than the current framework provided in the ASCM (Rubini and Hoekman 2022).

This chapter is structured as follows. First, we provide an overview of the state of the art of countries' resort to subsidies, discussing figures from advanced capitalist economies in the G7 (Section 9.2). Second, we conceptualise and discuss the hybrid and ambivalent policy nature of subsidies, which are caught between the pursuit of legitimate public policy objectives and the market distortions they might generate (Section 9.3). Third, we explain why and how PTAs are the right platform for introducing changes to subsidies regulation for the twenty-first century (Section 9.4). Fourth, we briefly conclude (Section 9.5).

9.2 THE STATE OF THE ART OF SUBSIDIES IN INTERNATIONAL TRADE

The ASCM is the primary legal framework governing subsidies regulation at the multilateral level. The ASCM deems a subsidy to exist if there is a 'financial contribution' by a government or any public body or if there is any form of 'income or price support' and a benefit is thereby conferred.² It broadly tackles the issue of subsidisation from two perspectives. First, it regulates the provision of subsidies by WTO Members, and second, it governs the use of countervailing measures to offset the adverse trade effects caused by subsidised imports. The ASCM disciplines two kinds of subsidies – prohibited and actionable subsidies (Part II and III of the

and Countervailing Measures', adopted on 28 October 2022 (Committee on Subsidies and Countervailing Measures 2022).

² See Article 1.1 of the ASCM.

ASCM, respectively). While the prohibition applies to local content and export-contingent subsidies that are deemed to be specific,³ actionable subsidies are those specific subsidies that can be subject to challenge in the WTO or by resorting to countervailing measures at the national level.

As mentioned, the most significant controversy that revolves around the question of subsidisation is its *ambivalence*. Subsidies have been frequently seen as undermining the effects of market access prerogatives that result from tariffs and other trade concessions (Horlick and Clarke 2016: 8–9). However, there is increasing recognition that subsidies can and, in fact, do produce positive effects and pursue legitimate goals (Heyl et al. 2022: 9).

In this latter case, subsidies can, indeed, correct the market process at least as much as they may distort it (Schwartz and Harper 1972: 833). This section relaxes the assumption that subsidies are necessarily an expression of anti-competitive behaviour by anti-liberal countries challenging the tenets of the free market. Far from wanting to make a normative statement as to what is trade-distortive or not, we argue here that resorting to subsidies is a policy practice that can coexist with both an open economy and a political commitment to trade liberalisation. The multilateral legal framework has so far failed to properly take into account the positive externalities that subsidies may produce. Rather, it focuses on a trade distortion benchmark in assessing the effects of a particular subsidy scheme. Subsidy codification at the multilateral level also does not meet the level of detail and flexibility that such widespread and varied use of these policy tools would require.

The relationship between subsidies and trade law speaks directly to political economy debates assessing the role of the state within increasingly globalised and interconnected market economies. In this context, the ‘retreat of the state’ paradigm, which has populated political economy literature since the 1990s, has implied a mutual exclusivity between globalisation and market integration on one side, and an active role of the state in public and welfare policies on the other. Scholars like Strange (1996) argue that, as globalisation advances, the ability of the state to manage and regulate the market shrinks (see also Streeck and Crouch 1997). Similar arguments are in line with the idea that the need to counter trade distortions is hierarchically prior to and largely incompatible with the need for states to deliver public and welfare policies.

We suggest here, however, that thinking of future-proof subsidy rules in twenty-first century trade is best served by arguments that see globalisation and widespread market liberalisation as going hand in hand with a resilient, if not, growing role of the state at home. This phenomenon was famously captured by Ruggie (1982), who juxtaposed a notion of ‘embedded liberalism’ to neoliberal paradigms calling for an unconstrained role of markets, like the Washington Consensus (see also Cameron 1978; Rodrik 1998). The essence of embedded liberalism lies in seeking to strike a balance between

³ In particular, see Article 3 of the ASCM.

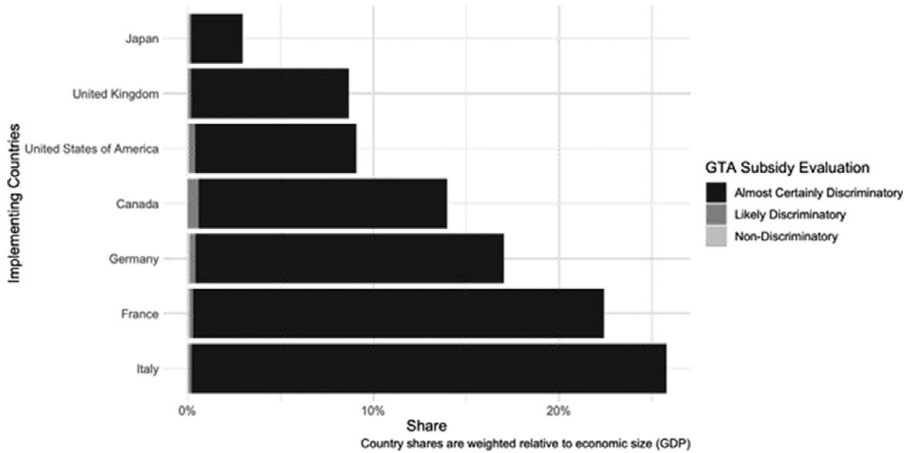


FIGURE 9.1 G7 country shares of subsidy measures implemented since 2008 (GTA data).

domestic demands for an active role of the state in the economy and the fact of remaining a globally integrated market. In this sense, the relationship between domestic subsidies and free trade poses a paradox for liberal democracies, understood in terms of states' 'political mandate ... to pursue the political economic interests of their citizenry under conditions of complex economic, legal and regulatory interdependence where large parts of economic governance are no longer exclusively within their control' (Crouch 2008, as quoted in Clift and Woll 2012: 308; Clift 2013).

Figure 9.1 suggests that subsidies are a common feature of highly developed and economically integrated liberal democracies. The plot is based on the Global Trade Alert (GTA) database (Evenett and Fritz 2020) and displays the share of subsidies and state aid measures implemented by G7 countries since the 2008 financial crisis, relative to the economic size of each (measured in average GDP). It categorises them based on their estimated trade-distortive potential.

Figure 9.1 indicates that the main divide amid G7 economies is one of quantity, rather than quality. While Italy accounts for the largest share of implemented subsidy measures proportional to its economic size, all G7 Members predominantly resort to subsidies which, albeit with varying magnitude, go in the direction of creating distortions in foreign markets – according to GTA evaluations. That is, subsidy and state aid policies implemented by globally integrated liberal economies like G7 ones are unlikely to have effects that are limited to their home markets. Considering the political economy drivers of subsidisation, the fact of resorting to these policies also seems to go beyond the 'Varieties of Capitalism' (VoC) divide between liberal market economies (LMEs) and coordinated market economies (CMEs) (Hall and Soskice 2001). The VoC framework suggests subsidies would be utilised differently in deregulated political economies (LMEs) than they would in

more regulated and welfare-oriented ones (CMEs). Yet, at least at a macro-level, the above figures indicate that the VoC intuition is not really reflected by the data. Proportionally to their economic size, both LMEs and CMEs rely on subsidisation extensively. Specifically, two LMEs like the United States (US) and the United Kingdom (UK) score higher in their share of implemented measures than a CME like Japan, and an LME like Canada scores closer to a CME like Germany than to the US and the UK. Overall, subsidies qualify as a ubiquitous policy tool, which becomes particularly prominent in the aftermath of shocks and crises.

9.3 SUBSIDIES AS HYBRID POLICY INSTRUMENTS

Having discussed how subsidies constitute a widespread policy tool in even highly integrated capitalist economies, this section moves to consider how the hybrid policy nature of subsidies and their specific politico-economic effects are at odds with existing subsidy rules at the WTO level.

Specifically, we contend that the ASCM has yet to cover existing gaps in multi-lateral subsidies regulation. The reason for that is that subsidies are ambiguous and ambivalent in nature, in that the same policy measure can pursue certain legitimate goals and be classified as actionable or prohibited under the ASCM at the same time.

A first challenge in regulating the issue of subsidies multilaterally lies precisely in the difficulty in accounting for overlaps between ‘good’ and ‘bad’ subsidies within the same policy measure (Hoekman and Kostecki 2009). We contend here that the reason for that lies in the ASCM’s one-sided focus on the adverse trade effects of the subsidy in question as opposed to a balanced analysis of both its negative and positive effects.

Subsidies are often the most immediate, readily available, and politically invoked public policy measures for governments to pursue given public objectives. Yet, subsidies can also be pushed for by vested interests of import-competing groups. In this latter case, subsidies may qualify as trade-distortive measures invoked by given industrial sectors in view of enhancing their market competitiveness at the expense of foreign exporters. The recent US Inflation Reduction Act (IRA), which introduces subsidies supporting the electric vehicle sector, alongside a local content requirement limiting the provision of government transfers to American manufacturers (United States Congress 2022), is an example of how a measure targeting desirable public policy objectives (i.e. climate change mitigation) can likewise have a trade-distortive potential.

Another example is the EU Green Deal Industrial Plan, as announced in January 2023 by Commission President Von der Leyen. While it entails ‘simplified’ state aid rules aimed at pursuing legitimate public policy objectives, including targeted aid for R&D in green technologies (WEF 2023), its trade-distortive potential may not be excluded.

The ASCM category of *non-actionable subsidy* contained in its Part IV lapsed in 2000, which means WTO law currently fails to define a category of subsidies *de jure* considered to be legitimate on the ground of attaining goals such as climate change mitigation, environmental protection, public health, or economic recovery, both nationally and globally.⁴ The main implication of this legal void is that the specific subsidy evaluation at the level of international trade law is currently possible only through the *prohibited* and *actionable* categories.

Therefore, the key limitation of the ASCM framework lies in the absence of a coherent ‘test’ to assess the dual nature of any given subsidy: its alleged trade-distortive potential (as either a prohibited or an actionable subsidy) on the one hand, and its sustainable non-actionable component on the other. More deeply, the ASCM also lacks the case specificity to measure the specific nature of spillovers generated by a given subsidy for foreign markets, at least without initiating a dispute settlement process under WTO rules.

9.4 PTAS: PAVING THE WAY FOR TRADE AND SUBSIDY REFORM

Having discussed the ubiquity of subsidies and how challenging it is to devise recommendations for allowing or proscribing them, we now move on to arguing why and how PTAs are a good place to start for future-proof subsidies regulation. We argue here that PTAs can serve as helpful institutional ‘laboratories’ for subsidies regulation. PTAs have the potential to enact subsidy provisions built around a ‘balancing test’ focal point, while strengthening related transparency obligations between two or more parties.

While objectives pursued by subsidies do matter, so does the design of the system. Subsection 9.4.1 below discusses how PTAs can ensure greater governance specificity to address subsidy spillovers along global value chains (GVCs). We understand GVCs as consisting of industries spread globally and each contributing to different segments of the production of a single good. In subsection 9.4.2 below, we propose that subsidies pursuing legitimate objectives should be guided by a set of principles, which are by their very nature more conceptual than prescriptive. It goes without saying that in order to make the notion of ‘subsidies to attain a legitimate objective’ operational, a lot of questions about their precise boundaries and treatment are yet to be answered. Nevertheless, we believe that incorporating principles as opposed to directly applicable rules to regulate them is the best approach currently available. It is flexible enough to apply to a wide set of all possible scenarios but, at the same time, stringent in the sense that it provides clear indications on how to practically

⁴ As per Article 1.2 of the ASCM, the agreement only applies to subsidies that are ‘specific’ within the meaning of Article 2; non-specific subsidies continue to be non-actionable as per the WTO framework.

determine what is covered and what is not covered, when a subsidy creates a positive spillover and when it does not.

Another necessary means to further reinforce the PTAs' potential to address current deficiencies in subsidies regulation is to improve the way they regulate transparency, which we discuss in subsection 9.4.3. Information is the key towards a constant improvement, and ensuring there is timely and sufficient information on subsidies is absolutely critical to creating a better and more effective subsidies regulation in the future.

Lastly, in subsection 9.4.4, we explain why and how PTAs are an appropriate avenue to expand the notion of 'prohibited subsidies' pending WTO deadlock. It is noteworthy that, unlike some other aspects of subsidies regulation, this is least likely to create a conflict with the WTO rules and could indeed be in the nature of a typical 'WTO-plus' obligation found in PTAs.⁵ Future PTAs can develop a robust mechanism for governing newer types of extremely trade-distortive subsidies by including them within the definition of 'prohibited subsidies' and weighing their distortive potential against the stated domestic policy goal.

9.4.1 PTAs and Value-chain Specificity

The added value of PTAs in subsidies regulation is not only due to the limitations of the ASCM. It is also ascribable to the specificity of both the political economy drivers and effects of subsidisation across integrated markets, and more specifically GVCs. The effects – both positive and negative, and both market and non-market ones – of a given subsidy along a GVC are a function of a specific array of variables. These include the degree of subsidised goods' access to a given foreign market, the weight of a subsidised sector in a country's own export or import, as well as the specific politico-economic drivers leading to a subsidy in the first place.

Overall, the specificity of subsidy spillovers along GVCs qualifies PTAs as targeted institutional tools capable of prescribing and proscribing given policies in line with broader WTO rules. Paradoxically, the legitimacy of a subsidy cannot be measured separately from the market effects it yields on country B or C if implemented in country A, or vice versa (Hoekman and Nelson 2020). For instance, a subsidy implemented in final-good production by country B can expand the industrial base by multiplying intermediary inputs in country A (Baldwin and Venables 2015; Hoekman 2016). But intra-GVC subsidisation can also yield opposite effects. Biesebroek and Sturgeon (2010) argue that subsidisation of large downstream car manufacturers can damage upstream producers when downstream car producers are the largest purchaser of these intermediary products, hence controlling their market (see also Blonigen 2016). Against this background, another type of externality that

⁵ A potential conflict may, however, arise to the extent that there are additional exceptions to the WTO-recognised prohibited subsidies incorporated in the PTA text.

could be envisioned has to do with ‘free riding’, and specifically with the problem of who is bearing the costs of subsidies generating *positive* spillovers along a GVC. Take, for instance, the implementation of a subsidy within a country (country A) sustaining the production of more innovative and energy-efficient microchips and bringing innovation also to the downstream semiconductors industry in country B, without requiring substantial technology adjustment in the latter. The subsidising government in country A would paradoxically be the one bearing the highest financial and political costs *vis-à-vis* taxpayers in terms of investment in new technologies, while country B would simply benefit from the positive spillover of a subsidy implemented elsewhere.

We argue here that PTAs qualify as viable institutions to govern the specificity of similar issues. For example, assuming that the intra-GVC externalities from subsidies were controlled for, a PTA would allow institutionalising processes of even burden-sharing for subsidies deemed to benefit the entire GVC. Let us go back to the semiconductors example, where intermediary-level innovation would positively impact also on downstream producers. A PTA would allow GVC Members to design forms of collective contributions, such as institutionalised shared funds, under the auspices of the agreement, from which subsidies with envisioned positive GVC spillovers would be disbursed. Contributions would be made on the basis of respective market size, or based on the extent to which a state’s national industry is expected to benefit from the subsidy in question, and would be limited to sectors where subsidisation is expected to benefit *all* PTA Members. Similar arrangements could be reviewed periodically by an *ad hoc* PTA committee, as is the case for various policy domains in twenty-first century agreements (like sustainable development or data protection). That would guarantee sufficient flexibility to channel shared investments to a defined set of sectors having ‘value-chain relevance’, adjusting the magnitude and direction of investments based on the evolving priorities of the preferential partners.

Overall, we acknowledge that countries that are part of a GVC may not be members of the same PTA. Furthermore, subsidy spillovers may extend well beyond members of a PTA. Yet, it is reasonable to assume that countries in a GVC would be comparatively more incentivised to enter a PTA (if not having one already in place), as preferential agreements have witnessed faster tariff cuts on intermediate goods, whose flow is essential for the existence of GVCs (Baccini et al. 2018). Lower market barriers, in turn, would, all else being equal, make subsidy GVC spillovers (both positive and negative) more pronounced, and their impact assessment and regulation even more pressing.

9.4.2 ‘Legitimate’ Subsidies: A Balancing Test

Subsidies granted to provide public services, provide regional aid, or ensure environmental protection have been frequently incorporated into PTAs as a part of

sustainability chapters or provisions. These are frequently referred to as ‘legitimate’ subsidies (Rubini 2020) and would have belonged to the *non-actionable* category referred to above in Section 9.3, unless lapsed.

The EU has so far been a champion in promoting such provisions in PTAs with its trading partners, particularly in its ‘new generation’ PTAs (e.g. the EU–Korea FTA; EU–UK Trade and Cooperation Agreement (TCA)). However, these PTAs differ significantly in what they consider a legitimate objective, be it greening the economy or providing support to underdeveloped regions.

While there cannot be a one-size-fits-all approach, we argue that in the multilateral or regional context, it is insufficient that a subsidy merely pursues a legitimate objective. It is critical that such a legitimate subsidy generates benefits that are at least regional or, preferably, global in nature.

As we have explained above, subsidies, even those that have the most commendable objectives, such as environmental stewardship, could either incidentally or intentionally improve the competitive outlook or performance of the respective domestic industry in the subsidising country. One example would be local content requirements introduced by the US in the IRA. The introduction of a balancing test between negative trade-distortive and positive (e.g. public good creation) effects of a subsidy is, therefore, necessary for a comprehensive and fair assessment of the real impact of the subsidy in question. Despite their prominence and variability, as of today, no PTA would contain such guidance and, thus, give an understanding of how to draft, incorporate, and enforce an effective mechanism to regulate legitimate subsidies, serving not only a subsidising country’s interest but also of the peer countries’. The introduction of a balancing test that may allow assessing the effect of a particular legitimate subsidy taking into account its potential to bring about positive changes on a broader-than-national scale might, thus, act as a game changer in effective subsidies regulation.

We suggest that the focal point shift should take place in this context and along these lines.

Based on the best practices of the selected set of PTAs, as well as general economic and legal concepts, we draw up guiding principles and interpretation notes thereto (where relevant) that may serve as a basis for an efficient balancing mechanism for future PTAs.

This subsection, therefore, proceeds as follows. It suggests a respective principle to be incorporated, elaborates on its potential content and form, and discusses various settings where its application may be relevant.

The first principle is the *adequacy* of a subsidy in question to attain or otherwise promote the achievement of a legitimate objective. The critical question to be answered in this respect is how and why a subsidy may or may not be an adequate means to achieve a stated objective.

To answer this question, the respective competent authority in the granting country shall consider whether the potential beneficiary is capable of providing a business plan and/or investment strategy linked to a project with a detailed explanation of why that subsidy type is needed and its amount is necessary to achieve the stated objective.

The second principle is the *effectiveness* of a subsidy in attaining a legitimate objective. Effectiveness differs from adequacy in that while adequacy assesses whether a subsidy is the best instrument to pursue the stated objectives, effectiveness assesses the extent to which stated objectives are attained. Thus, the focus of effectiveness is on targeting the correct actions and completing them in a timely manner.

Here the test should be more stringent than a mere declaration that a subsidy is ‘not incapable of achieving the stated objective.’⁶ Instead, due regard must be given to the particular circumstances surrounding the granting of a subsidy.

These circumstances may include the effect of the policies already in place in the particular country and their contribution to the attainment of the stated legitimate objective (e.g. policies to promote renewables, tax cuts for ‘green’ production processes, etc.) akin to the ‘non-attribution’ test under the ASCM.⁷

In other words, the subsidy in question should be the main and genuine contributor to the attainment of the stated legitimate objective. The need for such a causal-link analysis stems from the necessity to eliminate double support in cases where the stated objective would be achieved nonetheless. For instance, consider the French government’s EUR 7 billion bailout of Air France, which came with conditions for the airline to become ‘the most environmentally friendly airline on the planet’. This ambitious goal was pegged to three conditions: (i) halving overall emissions from domestic flights by 2024; (ii) sourcing 2 per cent of its fuel from ‘sustainable’ sources by 2025; and (iii) reducing carbon intensity by 50 per cent by 2030 over 2005 levels (Alderman 2020). However, every other airline that neither received support from the government nor did commit to ‘extra’ obligations to protect the environment is bound to reduce emissions and switch to renewable energy sources⁸ under the EU’s Green Deal and the EU’s commitments under the Paris Agreement. Also, the third condition attached to the Air France bailout is no more than a simple reaffirmation of a commitment that the airline made as part of its Horizon 2030 Initiative (AF 2019: 3).

The effectiveness of a subsidy to attain a legitimate objective may also be assessed as a part of the ‘benefit’ analysis. This could be done by introducing an additional pillar to the ‘better off’ test, namely, whether there are positive spillovers and whether these are the effect of the subsidy in question.⁹

⁶ Appellate Body Report, *Colombia – Textiles*, WT/DS461/AB/R, paras 5.67–5.70. See also Panel Report, *US – Tariff Measures*, WT/DS543/R, para 7.125.

⁷ See Article 15.5 ASCM.

⁸ Conditions i and ii under the Air France bailout.

⁹ The standard ‘benefit’ test under Article 1.1(b) of the SCM Agreement seeks to identify whether the financial contribution has made ‘the recipient “better off” than it would otherwise have

On top of that, PTAs may introduce a supervision mechanism that would allow control over a subsidy's amount and allocation. This may include granting a subsidy incrementally, such as, for instance, every month/year based on the milestones achieved and/or actions undertaken at a particular stage of the project. A sunset clause may reinforce this obligation even further by making a payment of a subsidy feasible only insofar as it produces the incentive effect (Rubini 2015).

Introducing a yearly obligation of the beneficiary to provide a detailed status report on the progress achieved and on the particular items of expenditure is another instrument against opportunistic behaviour. Thus, in cases where resources were spent on purposes other than the stated objective (e.g. the delivery of a particular public good) and if the beneficiary failed to prove the opposite, a subsidy due for the next milestone should be reduced by this 'off-label' amount.

The third principle is the *enforceability* of the particular obligations attached to a subsidy to ensure the attainment of a legitimate objective.

There are several aspects that must be examined in this respect.

First is the enforceability of the transparency obligations, which will be discussed in more detail in the next subsection.

Second is the existence of an enforcement body, responsible for overseeing whether subsidies are being used for the intended purpose. This enforcement body may be either a separate and independent body or a division of the Subsidies Committee (or any similar body created by the parties to the PTA).

Third is the enforceability of the 'strings' attached to subsidies. One example is 'green strings' attached to subsidies granted to ailing undertakings in times of emergency.

The green stimulus has recently become a typical feature of state aid, even though it still comprises only a small chunk of the total stimulus packages. According to some estimations, as of February 2021, the world's leading economies have announced economic stimulus packages worth approximately USD 4.6 trillion directly into sectors that have a large and lasting impact on carbon emissions and nature, namely agriculture, industry, waste, energy, and transport, but less than USD 1.8 trillion has been allocated for green initiatives (GSI 2021). There are various reasons for such a disparity, including the lack of regulatory oversight on environmentally intensive sectors, and conflicting priorities, such as boosting economic performance during the crisis (as was the case during the COVID-19 crisis) versus environmental stewardship.

Therefore, attaching enforceable green conditions to the recovery packages is absolutely critical. This should be done, however, in a way that does not preclude the achievement of the primary growth-enhancing goals of such emergency-assistance packages, thus making them redundant. Instead, the main requirement

been, absent that contribution'. See Appellate Body Report, *US – Large Civil Aircraft (2nd complaint)*, WT/DS353/AB/R, paras 635–636, 662, and 690.

for such green commitments should be a precautionary ‘do no harm’ requirement obliging the respective undertakings to ensure that no harm is done to the environment as a result of the increased economic performance. Additional green commitments (beyond the status quo) may come into play as the recovery gains momentum.

9.4.3 *Transparency*

Transparency has become all the more important when it comes to subsidies schemes. In order to facilitate a discussion on government support and to develop effective disciplines to cover existing and potential new support, information on the nature and scale of government support would be very useful, if not indispensable. Yet, such information remains limited (WTO 2021). There are several explanations for that: first, the difficult technical nature of subsidies; second, the political sensitivity of state aid measures; third, the fact that subsidies are diffuse, namely granted by various departments and levels of government. Attempts to address the lack of transparency on the multilateral level by ‘naming and shaming’ serial defaulters at the WTO in 2019 were harshly criticised¹⁰ and the proposal did not see the light of day. Addressing this concern at the level of PTAs may, therefore, be a feasible solution. Currently, many PTAs already include WTO+ obligations on transparency on subsidies (Mattoo et al. 2020). The Association of Southeast Asian Nations (ASEAN) Free Trade Area (AFTA), for example, contains requirements to create repositories on laws and measures. Preferential trade agreements of the EU with countries like Montenegro, Bosnia and Herzegovina, Serbia, and Ukraine provide for an inventory of all aid schemes. Another example is the PTA between Guatemala and Taiwan and China which contains the requirement to carry out studies.

However, more should be done.

Better information, objective analysis, and regular dialogue are key parameters that must be taken into account while elaborating a transparency chapter on subsidies in the model twenty-first century PTAs (IMF, OECD, World Bank and WTO 2022).

Keeping in mind these key pillars and based on the current best practices at the WTO (such as Technical Barriers to Trade (TBT)/Sanitary and Phytosanitary (SPS) Committees) as well as minimum standards elaborated by the Organisation for Economic Co-operation and Development (OECD) in the context of disclosed requirements, this subsection provides few recommendations that may underpin the transparency provisions in future PTAs.

¹⁰ The African Group, Cuba, and India stressed the capacity constraints of developing members, thus strongly opposing any transparency obligations that go beyond existing ones. See Communication from African Group, Cuba and India (Revision) ‘An Inclusive Approach to Transparency and Notification Requirements in the WTO’ (WTO 2019).

These recommendations seek a balance between the need for early and complete information on subsidy schemes with a requirement that notifications and disclosures are timely, complete, and enforceable and avoid placing an undue compliance burden on the respective party.

The first recommendation is *differentiated reporting obligations*. Reporting may contemplate different degrees of detail and/or different formats and/or content. For instance, reporting requirements may be a mere notification of a particular subsidy being granted when the subsidy is below the respective threshold value¹¹ Such an approach would be consistent with the EU's State Aid regime and potentially increase the mechanism's efficiency by attributing more resources (e.g. person-hours) to cases contemplating significant public spending.¹² These notifications, however, should be subject to review on a yearly basis to ensure that this flexibility is not being abused.

At the same time, when the subsidy scheme involves significant state aid, its notification should follow the pre-assessment procedure of the dedicated unit of the Subsidies Committee (or any similar body created by the parties to the PTA). Such a committee could incorporate best practices that currently exist at the WTO TBT/SPS Committees, namely discussion of 'specific trade concerns' (STC), annual reviews on implementation of transparency provisions (notifications), as well as the introduction of information management systems.

The second recommendation is obtaining the *high-quality data on subsidisation* that would allow measuring the fiscal, economic, and positive global spillover effects of subsidy schemes and carrying out respective assessments and/or audits. The data should be complete, comprehensive, verifiable, and accessible. For instance, the UK Department for Business Energy and Industrial Strategy (BEIS)¹³ developed a subsidy transparency database where comprehensive information on subsidies can be uploaded and viewed. This database may be used as an example of good practice and used as a starting point in elaborating on the subsidies' data set template in future PTAs (BEIS 2022).

The third and last recommendation is the *enforceability* of transparency requirements. In particular, we suggest the application of non-monetary penalties such as

¹¹ For the purposes of this contribution, referred to as 'insignificant' while aid that exceeds this threshold is referred to as 'significant'.

¹² In particular, under the EU State aid control there are a few exceptions to mandatory notification, including de minimis aid that, among others, does not exceed €200,000 per undertaking over any period of three fiscal years. See Commission Regulation (EU) No 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid (OJ L 352, 24.12.2013).

¹³ Since 2023, the database has been maintained by the Department for Business and Trade (DBT) – one of the three departments, together with the Department for Energy Security and Net Zero (DESNZ) and the Department for Science, Innovation and Technology (DSIT) that BEIS was split into.

temporary revocation of benefits or concessions granted by the PTA in cases of non-compliance with transparency obligations.

9.4.4 *Prohibited Subsidies: A Future of Expansion?*

Over the years, the predominant approach in international subsidies regulation has centred around disciplining different kinds of trade-distortive subsidies depending upon the level of distortion caused.¹⁴ This stems from the fact that the outcome of the ASCM negotiations prioritised the ‘impact on competing producer interests’ over the possible welfare effects from certain subsidies (Zhou and Fang 2021: 484). Arguably, prohibited subsidies, as envisaged under the ASCM, are the most trade-distortive of the lot. In fact, they are to be withdrawn immediately in case of a positive finding in a WTO dispute.¹⁵

While this chapter argues for a focal point shift from a trade distortion to a balancing approach for regulating subsidies in the PTAs (as elaborated in subsection 9.4.2 above), it does not propose to completely abandon the existing tenets of international subsidies regulations in these agreements, such as those surrounding prohibited subsidies. Indeed, the balancing test would assist in categorising a given assistance as prohibited, by assessing its trade-distortive effects over any potential positive effects. However, the outcome of the test may change in an exceptional situation, such as a financial emergency. This subsection hence proposes an update of the existing list of prohibited subsidies, counterbalanced by an expanded exceptions framework in future PTAs. In essence, this chapter argues for a yin–yang approach where modern twenty-first century PTA rules on subsidies adopt a well-balanced mechanism for both promoting and disciplining subsidies, depending upon their typology and effect. To this end, this subsection evaluates the current state and future prospects for disciplining the most trade-distortive subsidies in the PTAs with specific recommendations.

At present, the WTO rules explicitly prohibit two kinds of subsidies, namely the export subsidies and the import-substitution subsidies, under ASCM Article 3.1. While the former refers to subsidies contingent upon export performance,¹⁶ the latter deals with subsidies contingent upon the use of imported over local products.¹⁷ These kinds of subsidies are also presumed to be specific without any requirement to demonstrate adverse effects under the WTO rules (IMF, OECD, World Bank and WTO 2022; Rubini 2021).¹⁸

¹⁴ Since the non-actionable subsidy category under the ASCM is now lapsed.

¹⁵ See Article 3, ASCM. In case a WTO Member is found to have granted or maintained a prohibited subsidy through a dispute, it is to ‘withdraw the subsidy without delay’ as per Article 4.7, ASCM.

¹⁶ See also Appellate Body Report, *Canada – Aircraft*, WT/DS70/AB/R, para 167.

¹⁷ Appellate Body Report, *Canada – Renewable Energy*, WT/DS412/AB/R, para 5.6.

¹⁸ See Article 2.3, ASCM regarding the deemed specificity of prohibited subsidies.

However, in recent times there has been a resurgence of discontent from certain quarters with respect to the narrow range of subsidies that are treated as prohibited under the WTO rules and, by extension, subject to the most stringent disciplines. The genesis of this can primarily be traced to the perceived inability of WTO rules to tackle trade-distorting subsidisation in the state-led economic model seen in countries such as China (McDonagh and Draper 2020).

Primarily led by the EU, two recent initiatives in this regard stand out. These are the Joint Statement of the Trilateral Meeting of the Trade Ministers of Japan, the United States and the EU (USTR 2020), and the EU's concept paper for WTO Modernisation (European Commission 2018). The primary thrust of these proposals is upon the need for expanding the current rules governing the most trade-distortive subsidies and going beyond prohibited subsidies.

The Trilateral Statement, for instance, proposes a trifold approach for updating the WTO disciplines since they are perceived to be inadequate to tackle market and trade-distorting subsidies in certain countries (USTR 2020). First, it argues for expanding the list of 'new' unconditionally prohibited subsidies based on what the proponents consider to be extremely trade-distortive. These could include unlimited guarantees, subsidies to ailing or insolvent enterprises without a credible restructuring plan, subsidies to enterprises operating in sectors or industries in overcapacity that cannot obtain long-term financing from independent commercial sources, etc. Second, the Trilateral Statement argues for a shift of the burden of proof on the subsidising country to demonstrate that its subsidy is not causing negative trade or capacity effects, for example, in the case of excessively large subsidies. Arguably, this approach could also be relevant in the context of GVCs. Finally, it argues for the direct linking of the concept of 'serious prejudice' under Article 6.3 to capacity.¹⁹ The EU Concept Paper also provides the additional option of creating a rebuttable presumption of serious prejudice for these kinds of subsidies (as opposed to categorising them as prohibited subsidies).

Given the sweeping nature of changes to WTO rules proposed, both these initiatives are, however, surprisingly short on details or justifications. Concerns have also been raised regarding the lack of clarity on how the expanded notion of prohibited subsidies will interact with the developmental objectives of developing and least developed countries (Bhatnagar and Arora 2020).

With the WTO system already under considerable stress at the moment, an emerging consensus could very well be elusive on these issues, at least in the short

¹⁹ For more details on the link between subsidies and overcapacity, see the submission from the European Union, Japan, Mexico and the United States, 'The Contribution of the WTO to the G20 Call for Action to Address Certain Measures Contributing to Overcapacity' (Committee on Subsidies and Countervailing Measures 2016); and the Communication from Canada, European Union and the United States, 'Role of Subsidies in Creating Overcapacity and Options for Addressing this Issue in the Agreement on Subsidies and Countervailing Measures' (Committee on Subsidies and Countervailing Measures 2017).

to medium term. Predictably, these proposals have failed to yet attract enough traction at the WTO. The PTAs are, hence, poised to emerge as a more viable platform for any future rulemaking in this field. They have the potential to serve as laboratories for the future, feeding into any future developments at the multilateral level.

Subsidies regulations in PTAs have largely remained underdeveloped beyond the transparency, dispute settlement, and countervailing duties frameworks for a large number of countries. While many PTAs do include disciplines on prohibited subsidies, very often these are a reiteration of the WTO position (Rubini 2020). However, this does not apply to the EU-, UK-, and US-led PTAs, particularly the recent ones (Sekine 2020). A limited expansion of the prohibited subsidies list is observed in these PTAs, primarily through the inclusion of unlimited guarantees and subsidies to insolvent or ailing enterprises without a credible restructuring plan within the ambit (e.g. EU–Japan Economic Partnership Agreement (EPA), EU–Singapore Free Trade Agreement (FTA), United States–Mexico–Canada Agreement (USMCA), UK–New Zealand FTA). This is considerably smaller in scope, compared to the proposed prohibited subsidies list in the Trilateral Statement at the WTO. Other major PTAs, such as the Regional Comprehensive Economic Partnership Agreement (RCEP) and the African Continental Free Trade Agreement (AfCFTA), do not include an expanded list of prohibited subsidies.

There is also a variance observed in the approaches of the EU and the US. While the EU-led PTAs tackle the issues of prohibited subsidies as part of the larger subsidies' disciplines, not much different to the WTO template, the US addresses this in the context of state-owned enterprises (SOEs). For instance, the USMCA prohibits non-commercial assistance provided by a party or its state enterprise or SOE to another SOE in case of insolvency without a credible restructuring plan.²⁰ At its core, the concept of non-commercial assistance is not very different to that of a subsidy, allowing for the above comparison.²¹ As Siqi and Rubini (2021) note, the issue of state enterprises is largely a subsidy issue. This provides an avenue for streamlining the rules on the two issues. In sum, while limited strides have been made in the prohibited subsidies disciplines under PTAs by some countries, there is scope for developing these further in the coming times.

Any proposal for a future design of a PTA cannot be oblivious to its accompanying context, geopolitics, and global developments. When the world is only now bracing up to experience the full impact of COVID-19 on international trade and the global economy, the use of subsidies as a regulatory tool by governments to overcome the situation cannot be ruled out, and, indeed, can already be observed (IMF 2021). Against this background and building upon the existing rules and proposals, this

²⁰ See Article 22.6(b) of the USMCA.

²¹ For the definition of a non-commercial assistance, see Article 22.1 of the USMCA.

subsection lays down an array of recommendations based on certain broad principles for tackling the issue of prohibited subsidies through future PTAs.

First, an overarching principle behind any future disciplining of prohibited subsidies must be viewed through the prism of maintaining a balance of the rights and obligations (Low et al. 2018) of the parties to the PTA. Rules that are skewed in favour of only expanding the list of prohibited subsidies, without accounting for the accompanying exemptions or flexibilities that may be needed – particularly to deal with exceptional situations – may not be a tenable proposition in the long run. For instance, the EU–Japan EPA exemption from the prohibited subsidies rules for subsidies granted temporarily to respond to a national or global economic emergency may serve as an effective precedent.²² Despite their not very successful track record at the WTO, horizontal exceptions along the lines of Article XX of GATT 1994 and Article XIV of GATS can also be made available to the subsidies discipline under PTAs.²³ Further, going forward, PTAs should also be designed to provide the necessary flexibility from the prohibited subsidies disciplines in case of a pandemic or post-pandemic recovery or other kinds of health emergencies.

Second, there is a need for undertaking a robust assessment through the balancing test before any expansion of the prohibited subsidies list. As mentioned earlier, the Trilateral Statement and the EU Concept Paper list potential subsidies that could be included in the prohibited subsidies list in the context of the WTO. However, PTA parties should examine the economic/trade distortion effects of the subsidies in question before including these in their agreements (Bown and Hillman 2019). Further, the proposed treatment of the subsidies in question should be proportionate to their effects. It is prudent not to repeat the mistakes made in the past, particularly at the WTO. Sykes, for instance, argues the WTO rules on subsidies are indefensible from an economic perspective, and they fail to identify the types of subsidisation in any meaningful way (Sykes 2010).

Third, any negotiated outcome on prohibited subsidies would require pre-empting legal loopholes by accurately capturing the understanding of the parties on specific new terms used in the new PTA rules. For instance, there is yet to be any global consensus on what would constitute an industrial ‘overcapacity’ in relation to subsidies (Bown and Hillman 2019). This will, thus, need to be resolved in a future PTA, in the event the parties agree to include the related subsidies in the expanded ambit of prohibited subsidies.

Finally, future PTA rules on prohibited subsidies could be designed to make subsidies and the state-owned enterprise (SOE) approaches for tackling prohibited subsidies converge, given the conceptual overlap between the two subjects. At their core, both broadly target the issue of distortive subsidisation by public bodies/SOEs that escape the WTO disciplines through the PTA route. As mentioned earlier, the

²² See Article 12.3.6 of the EU–Japan EPA.

²³ See, for instance, Article 12.9 of the EU–Japan EPA.

US deals with some of the subsidies-related issues in the chapter on SOEs in PTAs such as the erstwhile Trans-Pacific Partnership Agreement (TPPA) and the USMCA. This allows it the flexibility to define SOEs in broader terms, compared to the ‘public body’ definition under WTO. This chapter builds upon the ASCM Article 1.1 definition of a ‘subsidy’ as a basis for its analysis and recommendations. As per the ASCM, a subsidy is deemed to exist if there is a financial contribution by a government or any public body within the territory of a Member and a benefit is thereby conferred.

While the notion of ‘public body’ has not been defined under the ASCM, Appellate Body rulings have elaborated the meaning and scope of the term. For instance, in the *US – Antidumping Countervailing Duties (China)*, the Appellate Body concluded that a ‘public body’ ‘must be an entity that possesses, exercises or is vested with governmental authority’.²⁴ According to the Appellate Body, the precise contours of a public body will vary from entity to entity, state to state, and case to case.²⁵ Thus, the Appellate Body interpretation appears to give precedence to governmental authority and control over governmental ownership of an entity. This would imply that the determination of whether an SOE is a public body would also vary on a case-by-case basis, despite both the terms being similar to some extent.

This interpretation has attracted much criticism, especially from the US, which argues that it is too narrow.²⁶ Thus, it is not surprising to see the US PTAs defining an SOE in clear terms, with ownership being an independent criterion front and centre of the definition.²⁷ The Trilateral Statement also states that the interpretation of the ‘public body’ by the WTO Appellate Body in several reports undermines the effectiveness of WTO subsidy rules, without proposing any specific modifications.

Future PTAs could be designed to include additional clarifications on what constitutes governmental authority or control in the context of a public body. While using ownership as an independent determinant may be easy to establish from publicly available resources, it may be unsuited to accurately capture the different shades of public bodies seen across the globe (OECD 2018) – for the specific purpose of prohibited subsidies. This approach can also be said to have contributed to a large number of exclusions sought and agreed upon with respect to SOEs in recent PTAs (Willemyns 2016). Hence, it is recommended that future PTAs further evolve the case-by-case analysis approach of the Appellate Body by laying down additional grounds for clarity and consistency. The enjoyment of monopolistic or dominant market positions by the SOE on account of

²⁴ Appellate Body Report, *US – Antidumping Countervailing Duties (China)*, para 317.

²⁵ Ibid.

²⁶ Statement by the US at the 25 March 2011 meeting of the Dispute Settlement Body (United States Mission in Geneva 2011).

²⁷ See the USMCA definition of SOE in Article 22.1. It defines an SOE, inter alia, to mean an enterprise that is principally engaged in commercial activities, and in which a party: (a) directly or indirectly owns more than 50 per cent of the share capital.

government-conferred advantages could be one such additional criterion to examine (Wu 2019).

In conclusion, the WTO and PTA experiences with prohibited subsidies, along with some of the reform proposals, provide the groundwork needed to tailor a modern twenty-first century PTA design for prohibited subsidies. The recommendations above attempt to weave together different stands of the prohibited subsidies discourse to form a coherent strategy for the future.

9.5 CONCLUSION

Subsidies are one of the most widely used instruments to pursue public policy objectives, be it support of ailing undertakings, export promotion, or green transition.

World Trade Organization subsidy disciplines do not prohibit subsidies per se. They do prohibit, however, subsidies that are distortive to international trade. Distortion is measured by economic indicators such as increased market share or revenue of the subsidised industry to the detriment of exporters that might have competed equally.

Therefore, the current regime's notion is that all prohibited or actionable subsidies are intrinsically harmful irrespective of oftentimes legitimate objectives they strive to pursue and their positive effects on the economy. We argue that this is one of the most critical omissions of the system, and where we see the need for a 'focal point' shift: from the system that fights against trade distortions to a system that would protect and shelter subsidies granted to attain legitimate objectives. We do not suggest that this system should bluntly exclude such subsidies from the ASCM regime. Neither do we suggest that one should turn a blind eye to subsidies with high distortive potential, such as unlimited guarantees, or subsidies to undertakings without a solid restructuring plan. We are also cognisant that the proposed approach may suit the interests of some countries more than others depending upon their level of development and capacity to subsidise.

Instead, we suggest introducing a set of guiding principles against which to assess not only the detrimental but also the positive effects of a particular subsidy. The Agreement on Subsidies and Countervailing Measures, in its current iteration, is incapable of fulfilling this task. That is where PTAs may serve as a game changer, first on the bilateral or regional and, later, on the multilateral level by gradually paving the way towards new and improved subsidies regulation for the twenty-first century.

REFERENCES

- Aggarwal, V. K. and Evenett, S. J. 2010. 'Financial Crisis, "New" Industrial Policy, and the Bite of Multilateral Trade Rules', *Asian Economic Policy Review* 5: 221–224.

- Downloaded from <https://www.cambridge.org/core>. IP address: 18.224.56.11, on 17 Apr 2025 at 19:27:38, subject to the Cambridge Core terms of use, available at <https://www.cambridge.org/core/terms>. <https://doi.org/10.1017/9781009484640.010>

2022. 'EU-New Zealand: Text of the Agreement – Chapter 16: Subsidies', 7 July, <https://circabc.europa.eu/ui/group/09242a36-a438-40fd-a7af-fe32e36cbdoe/library/4dcde64a-9f5b-415a-9087-b7befiboc2e4/details>, accessed on 29 September 2022.
- Evenett, S. and Fritz, J. 2020. *The Global Trade Alert Database Handbook*. Manuscript, 21 October 2022.
2021. 'Subsidies and Market Access: Towards an Inventory of Corporate Subsidies by China, the European Union and the United States', *The 28th Global Trade Alert Report*. London: CEPR Press, pp. 1–151.
- Greenness of Stimulus Index (GSI) 2021. 'Finance for Biodiversity Initiative', www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=0CAMQw7AJahcKEwiot_vKsLf6AhUAAAAAHQAAAAAQAg&url=https%3A%2F%2Fwww.vivideconomics.com%2Fwp-content%2Fuploads%2F2021%2F01%2F201214-GSI-report_December-release.pdf&psig=AOvVaw2S8Hh98LYIKRSaTiGq9e59&ust=1664450806551982, accessed on 28 September 2022.
- Hall, P. and Soskice, D. 2001. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press.
- Heyl, K., Ekardt, F., Sund, L. and Roos, P. 2022. 'Potentials and Limitations of Subsidies in Sustainability Governance: The Example of Agriculture', *Sustainability* 14(23): 15859. doi:10.3390/su142315859.
- Hoekman, B. M. 2016. 'Subsidies, Spillovers and WTO Rules in a Value-chain World', *Global Policy* 7(3): 351–359.
- Hoekman, B. M. and Kostecki, M. M. 2009. *The Political Economy of the World Trading System: The WTO and beyond*. Oxford: Oxford University Press.
- Hoekman, B. M. and Nelson D. 2020. 'Rethinking International Subsidy Rules', *The World Economy* 43(12): 3104–3132.
- Horlick, G. and Clarke, P. 2016. 'Rethinking Subsidy Disciplines for the Future. E15 Task Force on Rethinking International Disciplines – Policy Options Paper', *E15 Initiative*. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum.
- International Monetary Fund (IMF) 2021. 'Policy Responses to Covid 19', 1 July, www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19, accessed on 30 January 2023.
- International Monetary Fund (IMF), Organisation for Economic Co-operation and Development (OECD), World Bank, and World Trade Organisation (WTO) 2022. 'Subsidies, Trade, and International Cooperation', 22 April, www.wto.org/english/news_e/news22_e/igo_22apr22_e.pdf, accessed on 28 September 2022.
- Low, P., Mamdouh, M. and Rogerson, E. 2018. 'Balancing Rights and Obligations in the WTO – A Shared Responsibility', Government Offices of Sweden, www.swedenabroad.se, accessed on 30 September 2022.
- Maskus, K. 2015. 'Research and Development Subsidies: A Need for WTO Disciplines?' The E15 Initiative, International Centre for Trade and Sustainable Development (ICTSD), World Economic Forum, pp. 1–10, <https://e15initiative.org/publications/research-and-development-subsidies-a-need-for-wto-disciplines/>, accessed on 30 January 2023.
- Mattoo, A., Rocha, N. and Ruta, M. 2020. *Handbook of Deep Trade Agreements*. Washington, DC: World Bank.
- McDonagh, N. and Draper, P. 2020. 'Industrial Subsidies, State-Owned Enterprises and WTO Reform: Prospects for Cooperation?' July. *Institute of International Trade Policy Brief* 08, https://iit.adelaide.edu.au/ua/media/783/mcdonagh-draper-2020-industrial-subsidies-soes-and-wto-reform_o.pdf, accessed on 30 January 2023.

- Ministry of Foreign Affairs of Japan 2018. 'Japan–EU Economic Partnership Agreement (EPA)', 18 February 2021, www.mofa.go.jp/files/000382106.pdf, accessed on 29 September 2022.
- Office of the United States Trade Representative (USTR) 2020. 'Joint Statement of the Trilateral Meeting of the Trade Ministers of Japan, the United States and the European Union', 14 January, <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2020/january/joint-statement-trilateral-meeting-trade-ministers-japan-united-states-and-european-union>, accessed on 30 January 2023.
- Organisation for Economic Co-operation and Development (OECD) 2018. 'Ownership and Governance of State-Owned Enterprises: A Compendium of National Practices', www.oecd.org, accessed on 30 September 2022.
- Rodrik, D. 1998. 'Why Do More Open Economies Have Bigger Governments?' *Journal of Political Economy* 106(5): 997–1032.
- Rosendorff, P. and Milner, H. 2001. 'The Optimal Design of International Trade Institutions: Uncertainty and Escape', *International Organization* 55(4): 829–857.
- Rubini, L. 2015. 'Rethinking International Subsidies Disciplines: Rationale and Possible Avenues for Reform', E15Initiative. Geneva: International Centre for Trade and Sustainable Development (ICTSD) and World Economic Forum, 2015, <https://cadmus.eui.eu/handle/814/39404>, accessed on 28 August 2023.
2020. 'Subsidies', in A. Mattoo, N. Rocha and M. Ruta (eds.), *Handbook of Deep Trade Agreements*. Washington, DC: World Bank, pp. 427–461.
2021. 'State Aid and International Trade Law', in L. Hancher and J. López (eds.), *Research Handbook on European State Aid Law*. Cheltenham: Edward Elgar Publishing Limited, pp. 103–133.
- Rubini, L. and Hoekman, B. 2022. 'Transcending Territoriality: Expanding EU State Aid Control Through Consensus and Coercion', Robert Schuman Centre for Advanced Studies Research Paper No. RSC_33.
- Ruggie, J. G. 1982. 'International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order', *International Organization* 36(2): 379–415.
- Schwartz, W. and Harper, E. 1972. 'The Regulation of Subsidies Affecting International Trade', *Michigan Law Review* 7: 833.
- Sekine, T. 2020. 'Possibility of Developing and Expanding the Regulation of Subsidies Through Free Trade Agreements (FTAs): Analysis Focusing on a Trend in FTAs Concluded by the EU', *Public Policy Review* 16(5): 1–33.
- Siqi, L. and Rubini, L. 2021. 'About Knowledge and Rule-Making: Reforming WTO Rules on Subsidies', in B. Hoekman, T. Xinquan and W. Dong (eds.), *Rebooting Multilateral Trade Cooperation: Perspectives from China and Europe*. London: CEPR Press.
- Strange, S. 1996. *The Retreat of the State: The Diffusion of Power in the World Economy*. Cambridge: Cambridge University Press.
- Streeck, W. and Crouch, C. 1997. 'Political Economy of Modern Capitalism', *Political Economy of Modern Capitalism*.
- Sykes, A. O. 2010. 'The Questionable Case for Subsidies Regulation: A Comparative Perspective', *Journal of Legal Analysis* 2(2): 473–523.
- United States Congress 2022. 'H.R.5376 – Inflation Reduction Act of 2022, 117th Congress (2021–2022)', the US Government Publishing Office, www.congress.gov/bill/117th-congress/house-bill/5376/text, accessed on 30 January 2023.
- United States Mission in Geneva 2011. 'Statements by the United States at the March 25, 2011 DSB Meeting', 25 March 2011, <https://geneva.usmission.gov/2011/03/28/mar-25-2011-dsb-meeting/>, accessed on 29 August 2023.

- Van Biesebroeck, J. and Sturgeon, T. 2010. 'Effects of the 2008–09 Crisis on the Automotive Industry in Developing Countries: A Global Value Chain Perspective', in O. Cattaneo, G. Gereffi and C. Staritz (eds.), *Global Value Chains in a Post-Crisis World: A Development Perspective*. Washington, DC: World Bank, pp. 209–244.
- Willemyns, I. 2016. 'Disciplines on State-Owned Enterprises in International Economic Law: Are We Moving in the Right Direction?' *Journal of International Economic Law* 19(3): 657–668.
- World Economic Forum (WEF) 2023. 'Davos 23: Special Address by Ursula von der Leyen, President of the European Commission', Davos, 17 January 2023, www.weforum.org/agenda/2023/01/davos-23-special-address-by-ursula-von-der-leyen-president-of-the-european-commission/, accessed on 30 January 2023.
- World Trade Organization (WTO) 2019. 'An Inclusive Approach to Transparency and Notification Requirements in the WTO', Communication from African Group, Cuba and India (Revision), 11 July, https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?MetaCollection=WTO&SymbolList=%22JOB/GC/218%22+OR+%22JOB/GC/218/*%22&Serial=&IssuingDateFrom=&IssuingDateTo=&CATTITLE=&ConcernedCountryList=&OtherCountryList=&SubjectList=&TypeList=&FullTextHash=371857150&ProductList=&BodyList=&OrganizationList=&ArticleList=&Contents=&CollectionList=&RestrictionTypeName=&PostingDateFrom=&PostingDateTo=&DerestrictionDateFrom=&DerestrictionDateTo=&ReferenceList=&Language=ENGLISH&SearchPage=FE_S_S001&ActiveTabIndex=0&languageUIChanged=true, accessed on 29 August 2023.
2021. 'World Trade Report 2021. Economic Resilience and Trade', Geneva: WTO www.wto.org/english/res_e/booksp_e/wtr21_e/oo_wtr21_e.pdf, accessed on 28 September 2022.
- 2023a. 'Countervailing Initiations by Reporting Member 01/01/1995–31/12/2022', www.wto.org/english/tratop_e/scm_e/scm_e.htm, accessed on 29 August 2023.
- 2023b. 'Disputes by Agreement', www.wto.org/english/tratop_e/dispu_e/dispu_agreements_index_e.htm, accessed on 29 August 2023.
- Wu, Y. 2019. 'Reforming WTO Rules on State-Owned Enterprises: SOEs and Financial Advantages', *Northwestern Journal of International Law and Business* 39(3): 275–308.
- Zhou, W. and Fang, M. 2021. 'Subsidizing Technology Competition: China's Evolving Practices and International Trade Regulation', *Washington International Law Journal* 30(30): 470–544.