

### **CHAPTER**

# America and International Trade Cooperation

by Chad P. Bown

**DECEMBER 2021** 

### **Suggested Citation:**

Bown, Chad P., "America and International Trade Cooperation" in Rebuilding the Post-Pandemic Economy, ed. Melissa S. Kearney and Amy Ganz (Washington D.C.: Aspen Institute Press, 2021). Available at https://www.economicstrategygroup.org/publication/bown/

# **America and International Trade Cooperation**

### **AUTHORS**

Chad P. Bown\*

### **ABSTRACT**

The Biden administration inherits a U.S. trade policy in transition. This chapter provides a factual and contextual assessment of that transition as well as a normative set of U.S. trade policy recommendations. It starts by allocating recent changes in U.S. trade policy into one of two categories. Some are "noncooperative" trade policy actions, driven by the perception that other countries were not following agreedupon rules, so no longer should the United States. Others are tweaks to "cooperative" policy and indicate continued U.S. adherence to existing trade rules, but with policy modifications demanded by changes in underlying domestic economic, social, and national security preferences. China was the driver behind many U.S. policy changes of both type; however, only some arose from the perception that Chinese policies were noncooperative. Other U.S. changes appear motivated by the combination of these new U.S. preferences with American dissatisfaction over how supply chains relocated globally, partly as a result of China's integration into the global economy. A final set are not focused on China at all, but rather on trade policy changes due to cooperation on corporate tax reform, climate mitigation policy, and COVID-19 vaccines. After providing a descriptive analysis of these changes, the chapter then proposes a normative set of recommendations for how the Biden administration can implement its stated approach of a "worker-centered" trade policy with a commitment to work with allies to resolve bilateral issues, to work with allies on common concerns involving China, and to work with allies and China on global challenges.

Acknowledgements: For helpful comments and conversations, thanks to Kathleen Claussen, Amy Ganz, Melissa Kearney, Soumaya Keynes, Kadee Russ, Matthew Slaughter, Robert Staiger, Robert Zoellick, and participants at the Aspen Economic Strategy Group 2021 Annual Meeting. All views and any remaining errors are my own.

<sup>\*</sup> Peterson Institute for International Economics & Center for Economic Policy Research; 1750 Massachusetts Avenue, NW, Washington, DC 20036. Tel: +1.202.454.1306. Email: cbown@piie.com, web: www.chadpbown.com.

### 1. Introduction

As of late 2021, the path of U.S. trade policy remained uncertain. Early signs from the Biden administration suggest the United States is in a transition period. The trade war that the Trump administration initiated with China in 2018 remained mostly unresolved, with bilateral ties having further soured, rendering future trade cooperation even less appealing politically. But there are other issues at play. First, the pandemic has presented pressing issues for international cooperation, including how to accelerate manufacturing and trade in COVID-19 vaccines to prioritize global public health. Second, after four years of U.S. neglect, tackling climate change is likely to be reasserted as a priority during Biden's presidency, also with potential trade implications. And third, domestic politics after a tight election remain paramount, with the new administration signaling a commitment to a "worker-centered" trade policy.

Despite the flux, and even after candidate Joe Biden campaigned against the Trump administration's trade strategy, one result was clear—there was unlikely to be a simple reversal of the Trump administration's trade policies. Many are likely to linger, as the new administration focuses its international engagement deliberately and modestly.

The Biden administration's non-reversal is consequential because the Trump administration made significant changes both to U.S. trade policy and to the multilateral, rules-based trading system. First, the Trump administration began to impose tariffs on China in July 2018, leading to retaliation and a trade war, resulting in a temporary and uneasy truce—even the terms of the Phase One agreement in effect since February 2020 mean that United States and China imposed permanently higher discriminatory tariffs on one another. In that sense, both were flouting the most basic rule of most-favored nation (MFN) treatment, a pillar of the multilateral trading system's World Trade Organization (WTO). Second, beginning in March 2018 and under the guise of protecting America's national security, the administration imposed other duties on tens of billions of dollars of steel and aluminum imports from countries aside from China, including mostly military and economic allies, that also remain in effect. Third, the U.S. administration ended the WTO's 25-yearold system of dispute resolution, meaning there is no longer a universally agreed upon way to resolve the inevitable trade frictions that arise between any of the WTO's 164 members, let alone something involving the United States. Finally, the Trump administration unilaterally implemented a series of export controls on the semiconductor supply chain—seeking to cut off Chinese access for national security reasons—but also with considerable commercial implications for firms operating in key economic and military allies.

To make sense of contemporary U.S. trade policy—and what the Biden administration is inheriting and likely continuing to some degree—this chapter establishes a simple

analytical framework in order to characterize these and other recent actions. While U.S. policy is in flux, one question is whether each of these and other potentially forthcoming policy changes are "cooperative" and can take place with minor tweaks—and thus within the existing international trade rules—or whether the U.S. changes are so dramatic that they are "noncooperative" and require abandoning the system that has been in place since 1947 and negotiating (and adhering to) completely new rules.

The answers to that question are not uniform with regard to various elements of current U.S. trade policy. Some U.S. policy changes are tweaks and covered by WTO exceptions, others are inconsistent with the existing rulebook. However, while the need for "new rules" is a persistent slogan for trade negotiators, this time is different in one way: U.S. administrations appear no longer willing to constrain themselves by old rules until the new ones are in place. That being said, new rules cannot be determined by the United States alone. They are ultimately negotiated, with the outcome of those negotiations depending on China, as well as other countries. By deciding to no longer follow certain rules, the United States is finding that others will follow suit.

The second part of this chapter provides a more normative set of proposals for U.S. policy. These are themselves informed by the first part—e.g., conditional on U.S. policymakers having decided to impose a noncooperative policy in a given context or to tweak its cooperative policy, what should that policy look like to achieve its (potentially noneconomic) objective at the least economic cost? Importantly, these proposals reflect a realism in the shifting policy environment that has emerged, albeit rather suddenly in the United States. Relative to their most recent predecessors, today's trade policymakers may be prioritizing political, social, environmental, and even national security objectives over economic efficiency. While economics remains critical in helping policymakers understand the trade-offs associated with different policy choices, the discourse is no longer between free trade and protectionism.

# 2. Framing America's trade policy re-evaluation

Consider the workhorse economic model of international trade agreements. Trade agreements are valuable because they solve what is known, in game theoretic terms, as the prisoner's dilemma.<sup>1</sup> (See Figure 1.)

In such a game, each player has two choices—"cooperate" or "do not cooperate." (The values in each box are the payoffs to each player if that is where they jointly end up.) To start, suppose there is no coordination between the players, so that each

<sup>1</sup> These theoretical models were developed in a series of research beginning with Bagwell and Staiger (1999, 2002); see the survey of Bagwell, Bown, and Staiger (2016) which also reviews empirical evidence.

chooses its best response. The equilibrium outcome will be that each chooses "do not cooperate," and the payoff to each is 1. But the problem with this outcome is obvious. Even though neither of them has a unilateral incentive to change its behavior, if they both agreed to, each can be made better off and receive a payoff of 3.

COOPERATE

COOPERATE

COOPERATE

3,3

0,5

DO NOT COOPERATE

5,0

1,1

Figure 1: The prisoner's dilemma of trade policy

Moving closer to the real world, imagine the two players are now countries, and the game they are playing is whether or not to cooperate over trade policy. Each country is a 'large' consumer of imports from the other, with market power. In the absence of cooperation, each would impose beggar-thy-neighbor policies like tariffs. For a large country, a small tariff can make itself slightly better off but only by making the other country much worse off. In a nutshell, trade agreements involve two countries jointly agreeing to cooperate by tying their hands and refraining from imposing tariff policies that are unilaterally optimal, but jointly suboptimal. Trade agreements are mutually beneficial because they stop the international cost-shifting externalities that arise when countries do not consider the negative impacts that their policies impose on those outside their borders.

Broadly speaking, these prisoner's dilemma models can be used to characterize the WTO and its core rules. Furthermore, more complex versions of these sorts of political-economic models of trade agreements do not necessarily result in "free" trade (zero tariffs) as being needed to sustain an equilibrium of cooperation. Equilibrium tariffs may arise when governments have political preferences, for example, that put higher weight on the wellbeing of one set of societal groups relative to others.<sup>2</sup> Alternatively, domestic constraints may leave a government without access to more efficient policy instruments—such as subsidies, to deal with market failures or local externalities—implying that tariffs may be a second best policy.

<sup>2</sup> A straightforward representation is to take a two-sector model and a government objective function—which includes consumer surplus, producer surplus, and government revenue—and allow the government to have political preferences that weight the producer surplus of the import-competing sector with \$\mathbb{Q}>1\$, while all other elements of the objective function receive a weight of 1.

A second basic feature of WTO rules is that they do not prevent countries from adjusting their cooperative policies—including tariffs—when certain shocks occur or if a government's preferences change. Suppose, for example, there is a sudden need to offer higher protection to some sector for redistributive reasons or to implement a policy to address a newly identified externality or market failure. WTO rules allow governments this flexibility, subject to two main caveats. The first is that such a policy change should be applied on a relatively nondiscriminatory basis. If it is a trade policy, it should follow the MFN principle and apply to all WTO members equally. If it is a domestic regulatory policy, it should follow another WTO principle—referred to as national treatment—and apply equally to local and foreign firms. The second caveat is that, if the policy change reduces previously agreed levels of market access, the government has to be prepared to "pay" for it. That is, adversely affected trading partners have a right to seek compensation so as to rebalance the benefits of the overall agreement—often that may mean an authorized, but limited, form of tariff retaliation.

Through the lens of this standard political-economic model of trade agreements, U.S. trade policy, as well as that of its key trading partners, was viewed for decades under the WTO as being "cooperative." The starting point question for today is whether a variety of U.S. trade policy actions—some already taken, others under consideration—mark the United States as making a more dramatic shift toward reimplementing noncooperative policy. There are not many clear cut examples of the latter; one is the 1930 Smoot-Hawley Tariff Act, before the advent of the WTO's predecessor, the General Agreement on Tariffs and Trade (GATT). Another might be in the 1980s when U.S. "aggressive unilateralism" on trade policy toward a variety of trading partners resulted from its dissatisfaction with the GATT (Bhagwati and Hudec 1990). (Some credit the 1980s U.S. outbursts as helping convince trading partners to commit to deeper forms of international cooperation, resulting in the formation of the WTO in 1995.)

Today, and at one extreme, there is the possibility that policymakers beginning with the Trump administration perceive China as having implemented noncooperative policy. In this case, they may be shifting U.S. policy toward China away from the standard cooperative policy applied since granting Chinese exporters its low, MFN tariffs on a provisional basis starting in 1980 and that was locked in with China's WTO accession in 2001.<sup>4</sup> A noncooperative shift could imply that getting back to

<sup>3</sup> For empirical evidence, see Broda, Limão, and Weinstein (2008), Ludema and Mayda (2013), and Bown and Crowley (2013).

<sup>4</sup> For a review of U.S. trade policy toward China over 1980–2018, see Bown (2019a). For China and the WTO, see Wu (2016, 2020).

cooperation requires a major change in behavior by trading partners (China in our example), possibly accompanied by negotiating new trade agreement rules.

At the other extreme sits the possibility that the United States still seeks to implement cooperative policies—but it needs to update them in light of changes in the underlying (domestic) social, political, and national security environment. Such a situation would not necessarily involve a major rewrite of WTO rules, and there is no allegation that trading partners—including China—have implemented a noncooperative economic policy. Yet, even tweaks that the United States would like to make to its cooperative trade policy may come at a price, requiring some negotiations and potentially compensation to trading partners adversely affected by the changes.

Which U.S. policy changes are noncooperative versus tweaks to cooperative policy? The next subsections describe some of the major U.S. trade policy developments and attempts to allocate each into the appropriate category.<sup>5</sup>

China is the motivation for multiple changes in U.S. policy that have been enacted since 2018. The desire to treat China differently—relative to other trading partners and relative to how the U.S. treated China in the past—currently enjoys bipartisan support in the United States. Yet, how the United States will apply its trade policy toward China is still to be fully determined.

Before proceeding, it is also worth clarifying that much of the current policy reaction to China does not appear to be an attempt to reverse the so-called "China shock" to the U.S. labor market. The lack of American labor market and community-level adjustment resulting from the integration of the massive Chinese economy into the global trading system in the first decade of the 2000s has been the source of much debate over the last 10 years. The evidence suggests that was a real economic shock, and its labor market and local community implications were arguably mismanaged by U.S. policymakers who failed to deploy the complementary package of domestic policy initiatives to ensure mobility of workers and adjustment of communities that bore the brunt of the shock at the time. However, reapplication of tariffs against China is highly unlikely to do much to remedy the suffering that continues to impact those workers and communities. (Some of the Biden administration's domestic policy agenda may address ongoing challenges introduced by that shock.) Thus, this

<sup>5</sup> There is third category, described and analyzed by Mattoo and Staiger (2020) and referred to as "bargaining tariffs," that motivates the United States as imposing potentially noncooperative policy even though China may not have imposed its own noncooperative policy. *I.e.*, the Trump administration motivated some of its tariff increases as a temporary strategy to induce countries (with higher tariffs) to reduce their tariffs toward the United States (Ross 2017).

<sup>6</sup> See Autor, Dorn and Hanson (2013) and the subsequent research literature, including surveys and updates in Autor, Dorn and Hanson (2016, 2021).

chapter evaluates the contemporary U.S. policy response to China as driven by other current and forward-looking reasons.

### 2.a. China and noncooperative U.S. policy

This section explores two questions. Prior to the trade war, was China playing its policy noncooperatively? Has the United States decided it must also shift its policy to do the same?

Historically, the United States has pushed for relatively low tariffs, applied on a nondiscriminatory basis to all members of the WTO.7 One interpretation of the Trump administration's tariff war is the following. Even nearly two decades after its 2001 WTO accession, China had refused to engage in additional tariff liberalization. It was deploying other policies in ways symptomatic of noncooperative play, imposing costly externalities on trading partners. Thus, the United States imposed trade war tariffs as its best response; as a result, each country is now imposing its noncooperative policy on the other. (Both are economically worse off than if they agreed to cooperate—see again Figure 1—but the United States may now be better than off than it was when it was cooperating but China was not.)

Specifically, in 2018–2019, the United States increased tariffs considerably toward imports from China. U.S. average tariffs toward China increased from roughly 3% in early 2018, to over 19% by the end of the trade war. China responded by raising tariffs on U.S. exporters (from 8% to 20%), as well as lowering its applied MFN tariffs on imports from the rest of the world (from 8% to just above 6%). Most of the higher tariffs remain in place, despite the U.S.-China Phase One agreement implemented in February 2020. Another implication is that the United States imposes much higher tariffs on imports from China, on average, than it applies to imports from countries in the rest of the world (Figure 2). Through this lens, China and the United States are not cooperating with one another, but each is still implementing cooperative policy toward the rest of the world.

<sup>7</sup> It has also negotiated some free trade agreements offering preferentially lower tariffs to a handful of countries—the most important being Canada and Mexico (NAFTA and now USMCA), and South Korea—but most U.S. partners and U.S. trade remains conducted under non-FTA (and thus WTO) rules.

A. U.S.-CHINA TARIFF RATES TOWARD EACH OTHER AND REST OF WORLD (ROW) U.S. TARIFFS ON CHINESE EXPORTS CHINESE TARIFFS ON US EXPORTS **U.S. TARIFFS ON ROW EXPORTS** CHINESE TARIFFS ON ROW EXPORTS TRADE WAR PHASE ONE AGREEMENT 25% 20% 15% 10% 5% Jul Apr B. PERCENT OF U.S.-CHINA TRADE SUBJECT TO TARIFFS U.S. EXPORTS SUBJECT TO CHINESE TARIFFS CHINESE EXPORTS SUBJECT TO U.S. TARIFFS TRADE WAR PHASE ONE AGREEMENT 80% 70% 66 4% 65.5 58.3% 60% 50% 40% 30% 20% 10% Jan 2018 Jan 2019 ECONOMIC STRATEGY GROUP

Figure 2: U.S.-China trade war tariffs

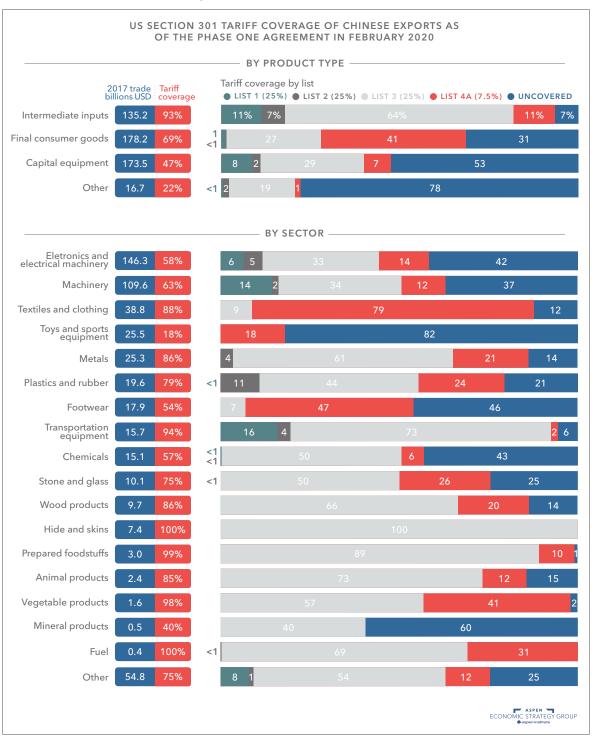
Source: Bown (2021a), trade-weighted by trading partner exports to the world at the six-digit HS level.

Consider first whether the United States is now imposing noncooperative tariffs toward China. While the average level of duties has certainly increased, there is little empirical evidence to date that the particular tariff profile—i.e., products selected, rates chosen—that the United States implemented were in any sense "optimal," let alone better than the tariffs applied prior to the trade war. For example, despite President Trump's repeated assertion that China was paying for the tariffs, there is not yet evidence that the United States effectively exploited its market power by driving down the price received by Chinese exports (Amiti, Redding, and Weinstein 2019, Fajgelbaum et al. 2019, Cavallo et al. 2021).8 Furthermore, while research generally concludes the tariffs increased U.S. product prices, there is not yet evidence that the tariffs led to employment increases even in import-protected sectors (Flaaen and Pierce, 2019).

It is worth noting at least two other economic implications of the particular U.S. tariffs chosen. First, the U.S. tariffs applied mostly to imports of intermediate inputs, as opposed to final consumer goods (Figure 3). The resulting higher input costs imply American downstream firms are at a disadvantage relative to their competitors in foreign markets—both for selling to Americans (Flaaen and Pierce, 2019) and globally as exporters (Handley, Kamal, and Monarch 2020). Second, the tariffs create an incentive for American businesses to source those inputs from countries other than China. This is consistent with desires to diversify certain economic activity out of China for either economic or noneconomic reasons. (More on this below.)

However, in their general equilibrium, quantitative model, Fajgelbaum et al. (2019) do find that there are terms-of-trade trade changes impacting the U.S. economy operating through the channel of relative wage or other factor-price changes.

Figure 3: U.S. tariffs on China disproportionately targeted imported inputs used by American businesses and workers



Source: Bown (2021a)

Consider next the question of whether China was imposing its policies noncooperatively in the first place. Here it is worth considering four different policy instruments.

Start with import tariffs. The fact that China applied higher tariffs than the United States prior to the trade war and that it had not significantly reduced its import tariffs further since its 2001 WTO accession is not sufficient evidence of noncooperative policy behavior. For example, evidence from the new tariffs resulting from China's WTO accession (Bagwell and Staiger 2011; Bown 2019b) was consistent with the negotiations having expunged China's ability at the time to shift the costs of its tariffs onto foreign exporters by forcing them to lower their prices. Admittedly, such analyses cannot speak to whether the situation had changed fifteen years later; perhaps China had increased its market power through industrialization and economic growth since 2001. However, even if China's tariffs had come to exert market power by 2016—implying the WTO could play an efficiency-enhancing role by facilitating China's engagement in reciprocal tariff liberalization negotiations with someone the failure of such negotiations to materialize is also not necessarily evidence of China engaging in noncooperative behavior. The United States, for example, may have been unlikely to take on its historical role in leading such negotiations due to what is referred to as the "latecomers problem." By 2016, U.S. tariffs were already so low—resulting from multiple rounds of successful negotiations with other countries taking place since the 1940s, subsequently extended to China through its WTO membership and application of the MFN principle—that there was not much the United States could offer to engage China in further tariff liberalization.9 Overall, whether China's currently applied MFN tariffs continue to exert market power especially given the significant tariff reductions applied in 2018 and 2019 during the trade war—remains an open research question.

However, China had a number of other policies in place prior to the trade war that may have imposed other international externalities, and thus been closer to noncooperative behavior, aside from tariffs. One allegation involves shifting of rents from intellectual property rights—e.g., the "forced technology transfer" arguments in the Section 301 reports (USTR 2018a, 2018b) that were the legal justification for the Trump administration's trade war tariffs. 10 The U.S. claim was that the Chinese government created an economic system that resulted in foreign companies having to share their technology with local firms involuntarily and at less-than-market rates, that this constituted "unfair trade," and thus the United States could respond

<sup>9</sup> For discussions, see Bagwell and Staiger (2014) and Staiger (Forthcoming).

<sup>10</sup> For a discussion, see Mavroidis and Sapir (2021).

unilaterally with tariffs.<sup>11</sup> Beijing's high tariffs for certain products meant that, in order to sell to Chinese consumers, foreign firms would have to produce locally. However, in order to produce locally, the Chinese government demanded foreign firms form joint ventures with local and often state-owned firms. Such relationships would require the sharing of technology at less than commercial terms. Finally, the Chinese government had not only failed to protect the intellectual property of foreign firms, but Beijing often set up institutional, regulatory and state-sponsored arrangements seemingly to facilitate its theft or expropriation.

A third example of potential noncooperative Chinese policy could be its complex system of subsidies. This includes not only the increased role played by China's state-owned enterprises (SOEs), but the economic subsidies that result through its deployment of other policies. For example, Chinese export restrictions on upstream (primary aluminum) products subsidize downstream (manufactured aluminum) products at the expense of downstream competitors in the rest of the world (OECD 2019a). Another was China's use of below market debt and equity to subsidize its domestic semiconductor industry (OECD 2019b). Even though China may have never promised to become a market-oriented economy (Wu, 2016), its more dramatic shift toward state-orientation under President Xi triggered alarms internationally.<sup>12</sup> While, under certain conditions, both the United States and China could be made better off by cooperating on government policy and agreeing to restrain subsidies, the lack of coordination—e.q., China's refusal to stop subsidizing since its WTO accession, its increased support to state-owned enterprises after 2013, its 'Made in China 2025' industrial policy, etc.—may result in the United States also eventually abandoning its initial position of implementing a cooperative (non-subsidy) policy so that it also starts subsidizing domestic production. 13

China's refusal to halt its subsidies could partially explain the sudden shift in U.S. policy in the semiconductor sector, where the United States has pivoted from concerns over other countries' subsidies to embracing legislation that may result in tens of billions of dollars of subsidies for the semiconductor supply chain. <sup>14</sup> Commercial aircraft may be another example of the United States changing its policy position on subsidies. The negotiated settlement to the recent E.U.-U.S. disputes at

<sup>11</sup> The Trump administration argued that because such actions were not covered by WTO rules, filing a WTO dispute against China over the issue would be fruitless. Others have disagreed, arguing that the United States could have filed what is known as a "nonviolation complaint" at the WTO, claiming that China's policies still harmed American firms even without breaking any specific WTO rules. For discussions, see Hillman (2018) and Staiger (Forthcoming). For nonviolation complaints more generally, see Staiger and Sykes (2013).

<sup>12</sup> For an assessment of the role of the changing role of the state in the Chinese economy, see Lardy (2014, 2019).

<sup>13</sup> See, for example, Brander and Spencer (1985) for an early illustration of international subsidies in imperfectly competitive markets. In cooperative markets with political economy forces, see Bagwell and Staiger (2001).

<sup>14</sup> See Bown (2020a), Varas et al. (2021), OECD (2019b), and Ip (2021).

the WTO regarding subsidies to Airbus and Boeing may have sought to resolve their differences so that they can both subsidize to compete with China's state-backed emerging industry.

A final example of Chinese noncooperative policy includes its use of export restrictions to take advantage of market power it possesses on the supply side. Historical examples include a series of export restrictions on rare earth minerals and raw materials that resulted in formal WTO disputes showing the inconsistency of Beijing's policies with its multilateral legal commitments. Indeed, foreign concerns over Chinese subsidies are often motivated by fears that China could become such a large player in a given sector that it would then be able to use export restrictions to exploit its market power at the expense of foreign consumers or consuming industries.

### 2.b. China and cooperative U.S. policy

In addition to the noncooperative scenarios described above, it is possible the United States could seek to adjust other parts of its trade policy toward China while maintaining a cooperative approach. This could be caused by changes to U.S. domestic preferences, emergence of some externality or market failure, or some other shock, not as a response to China's (perceived or real) noncooperative decisions. In such instances, the United States would like to tweak its policy, but cooperatively and in a manner that is broadly consistent with WTO rules. Put differently, some U.S. policy changes are not necessarily because of any perception that China is implementing a noncooperative economic policy.

One motivation for trade policy tweaks in a cooperative scenario could be American dissatisfaction with how economic activity has been reallocated globally over the 30 years since China's entry into the trading system. The sources of this change may be innocuous—i.e., purely economic and technological, and not the result of any noncooperative Chinese policy. For example, the removal of trade barriers allowed comparative advantage to flourish. Inventions such as containerization, automation, and the information and communications technology revolution resulted in the fragmentation of production, emergence of cross-border supply chains, and certain economic activity concentrating geographically in Asia. The problem is that sourcing certain specific products primarily from China has resulted in an outcome that may no longer be economically, socially, or geopolitically desirable.

Take, for example, public health. China emerged as the concentrated source of residual foreign supply of certain medical gear during the pandemic. Global shortages of personal protective equipment (PPE) created a political firestorm in early 2020, including in the United States. The Trump and then Biden administrations ultimately responded by first imposing export restrictions and then providing over \$1 billion of subsidies and industrial policy targeting the domestic supply chain for PPE—both outputs (e.g., N95 respirators, hospital gowns, rubber gloves) and inputs (e.g., melt blown fiber, filters, rubber)—to expand U.S. production capacity.<sup>15</sup> Some sort of quasi-permanent policy intervention may be required if the United States seeks to maintain preparedness and surge capacity once market conditions normalize—i.e., the pandemic is resolved—or if it seeks to diversify foreign sourcing away from China.

National security is another important noneconomic example, especially given heightened awareness that China under President Xi Jinping seems to pose a more serious geopolitical threat. In this case, there are certain technologies that generate negative externalities to the United States merely by being exported to China, and thus export controls are arguably first-best policies. Without commenting on the national security threat posed by any particular technology, examples of such recent U.S. export controls include semiconductors and equipment meant to address the national security threat posed by companies such as Semiconductor Manufacturing International Corporation (SMIC) and Huawei (Bown 2020a,b) that are alleged to have ties to the Chinese military.

Other noneconomic examples include human rights and democracy. It may be that China is acting against American and western "values"—e.g., any consumption of certain goods produced in China generates negative externalities to Americans. China's mistreatment of Uyghurs in Xinjiang, including allegations of forced labor, has resulted in the United States imposing "withhold release orders" (WROs, import bans) on certain products (Hendrix and Noland 2021). Beijing's suppression of democracy in Hong Kong has led the United States to reclassify the city as being equivalent to China for customs purposes. Although Hong Kong used to be a separate customs territory under U.S. trade law, imports from Hong Kong now face the trade war tariffs and other special U.S. duties imposed on imports from China.

Each of these are plausibly interpreted as the United States exercising "cooperative" trade policy, acting within the exceptions permitted by WTO rules.

A final motivation could be the United States adapting and learning from the Chinese model to potentially improve U.S. policy. For example, closer ties between China and its businesses during the recent pandemic may have been a contributing reason why China was able to more quickly scale up its "surge capacity" for PPE, relative to the United States, whose response to the shortage was less nimble despite having more advanced warning (Bown, Forthcoming).

<sup>15</sup> For a discussion of the U.S. policy response to PPE shortages in 2020, see Bown (Forthcoming).

While the United States is unlikely to shift its market capitalism model to one that is more accommodative of state-owned enterprises, it may seek ways of developing closer ties with firms in industries that are critical for national security or public health—e.g., through subsidies to maintain surge capacity or some basic market participation. 16 Especially during the pandemic, the United States has also shown an increased willingness to deploy the Defense Production Act to have firms reallocate resources toward government orders and priorities relative to the private sector that may reflect socially beneficial outcomes (positive externalities) and not simply market incentives (Bown and Bollyky, Forthcoming).<sup>17</sup> It is unclear whether this is a purely emergency phenomenon or a harbinger of a longer-term trend, but the evidence of increased use of U.S. export controls in 2019 in other sectors suggests it was not unique to the pandemic.

### 2.c. Foreign, non-China sources of changing U.S. preferences with regard to trade policy

There are other changes afoot in American domestic preferences for trade policy, many of which have less to do with China, but nevertheless have implications for international cooperation on trade.

### 2.c.1. Climate

The Biden administration has rejoined the Paris Accord and indicated combatting climate change is a policy priority (Tai 2021). This could have implications for U.S. trade policy in several ways.

Although proposals for a domestic carbon tax remain politically unpopular, the Biden administration could attempt to mimic one through a combination of other regulatory and subsidy policies. This combination of policies would then raise concerns about "carbon leakage," that is, subjecting only domestic industries to the tax, which would create an incentive for carbon-intensive activity to relocate to countries without one. The resulting imports would be unsustainable for political and economic reasons, and would undermine the policy goal of mitigating climate change.

A carbon border tax, also known as a border carbon adjustment mechanism (CBAM), could address this concern by applying the tax based on the carbon content of the import and whether it had been taxed abroad. In this sense, a CBAM has the appearance of an import tariff. While feasible in theory, estimating the carbon

<sup>16</sup> The United States imposed tariffs on imported steel and aluminum beginning in 2018 out of the threat that imports imperiled national security. While the overall argument has been discredited, for specialized niche products—e.g., aluminum needed for military needs—subsidies would be more efficient than tariffs.

<sup>17</sup> On the other hand, the Emergent BioSolutions story shows the difficulty of maintain idle surge capacity (Stolberg, LaFraniere, and Hamby 2021).

content of imports is a practical challenge. Given the complexity, there is the additional concern that the policy could be abused (subject to regulatory capture) by special interests. Finally, if it were applied unilaterally, it could become subject to foreign retaliation, which could also reduce its sustainability as a viable policy.

A CBAM is on the agenda of the Green Deal of the von der Leyen Commission in the European Union.<sup>18</sup> In July, the European Commission issued a CBAM proposal that would include an import tax on carbon-intensive industries like steel, aluminum, cement and fertilizers. It is thus important for the United States to familiarize itself with this policy instrument as it may emerge elsewhere first, with the potential for other countries' CBAM to hit U.S. exporters if America's policymakers fail to price carbon emissions and get U.S. industries to internalize its societal costs.

The United States is also contemplating legislation that could include major investments in domestic infrastructure, including hundreds of billions of dollars in spending on transit (roads and bridges), rail, and electrification of vehicles (White House 2021). Some of this public spending may tilt away from subsidizing old industries (fossil fuels) and toward new industries (electric batteries, clean energy) to shift incentives both to new priorities and tackle market failures and externalities.

At this stage it is also unclear if adopting such subsidies would fall within the confines of existing trade rules, or if the United States would need to negotiate new rules to accommodate such subsidies and encourage other governments to do the same. The failure to agree internationally means that the current rules may permit foreign retaliation as compensation if U.S. subsidies impose adverse effects on trading partner industries.

### 2.c.2. Tariffs on steel and aluminum

The United States has been imposing higher tariffs on imported steel and aluminum products since March 2018. Other, previously imposed U.S. tariffs had mostly halted imports of such products from China before the 2018 actions, leading the United States to import from other sources (trade diversion), due to the relative homogeneity of each metal. Most of the new trade restrictions in 2018 thus hit imports from economic and military allies such as the European Union and Japan, even though they did not do anything "wrong"—the underlying policy concern was China's alleged subsidization of its industry.<sup>19</sup>

<sup>18</sup> See European Commission (2021), Keynes (2021) and Bown and Keynes (2021).

<sup>19</sup> Canada and Mexico were important early targets hit as well, but they negotiated voluntary export restraints in May 2019 in exchange for removal of their tariff retaliation as part of the deal to get the USMCA—the renegotiated NAFTA—to pass Congress.

This caused problems for U.S. relations with military allies, with many imposing retaliatory tariffs that hurt U.S. exporters in other sectors. The U.S. tariffs also make it harder for other American businesses to compete with firms in Japan, Europe, or elsewhere that do not need to pay higher input costs. Because the tariffs were imposed under the guise of protecting U.S. national security, and they have been disputed at the WTO, they also place the multilateral institution in the untenable position of having to rule upon whether a country's policy is in response to a legitimate national security threat.

Finally, the steel and aluminum tariffs have done little to address the underlying economic concern. There has been no international engagement by the United States or other countries with China on the underlying issue of its subsidies to the steel and aluminum industries.

### 2.c.3. Taxation of multinational corporations, especially digital companies

Taxation of multinational companies is a major area of political concern in the United States and elsewhere, and it has turned into one of international concern as it threatens to imperil trade cooperation (Treasury 2021). The failure of multilateral progress at the OECD had led a number of major economies, beginning with France, to impose Digital Services Taxes (DSTs) designed to have an equivalent economic effect to imposing a tariff on American high-tech companies, including Google, Apple, Facebook and Amazon (Hufbauer and Lu 2018). The DSTs led the United States to conduct investigations under Section 301 of the Trade Act of 1974 that could result in U.S. tariff retaliation against European countries.

In June, the G7 economies announced a framework agreement that when agreed by the larger group of G20 economies in July. Given this progress, the United States has suspended its retaliatory tariffs against the United Kingdom, Italy, Spain, Turkey, India, and Austria, after doing similarly with retaliatory tariffs against France in January.

### 2.c.4. COVID-19 and global public health

The COVID-19 pandemic and global public health is another area which requires global cooperation and highlights the importance of trade. The proliferation of the disease globally and the eruption of additional variants implies no one is safe until everyone is safe. But given the complexity of inventing, developing, and manufacturing vaccines, most countries will not be able to produce them locally, leaving international trade as critical to addressing the public health crisis. The failure to develop and deploy an explicit framework for international trade and equitable sharing in vaccines led to accusations of hoarding of vaccine-making equipment and raw materials, and to demands to waive patent protection for vaccines.

In June, the G7 announced a plan to "vaccinate the world." However, while the early commitments involved donating hundreds of millions of doses of vaccines, it did not yet articulate a long-run strategy to manufacture and ship enough vaccine to fully—let alone quickly—inoculate the global population.

### 2.d. Domestic sources of changing U.S. preferences toward U.S. trade policy

The Biden administration has indicated it seeks to develop a "worker centered" trade policy. Thus far, the practical implications of that emphasis have been threefold.

First, given the divisive nature of trade in the public debate, the administration has decided against immediate pursuit of any new trade-liberalizing agreements. The Biden administration has even put on hold a handful of limited negotiations it inherited from the prior administration, such as potential free trade agreements with the United Kingdom and Kenya.

Second, it has prioritized enforcing worker-centered provisions in existing trade agreements. That has involved the administration initiating investigations into potential labor violations taking place at plants in Mexico under the new USMCA, the renegotiated NAFTA.

Third, in the ongoing multilateral negotiations over new rules for fisheries subsidies, the administration has tabled a new proposal seeking rules protecting against the use of forced labor on fishing vessels (USTR 2021). In a related action, its first WRO involved all tuna, swordfish, and other seafood sourced from fishing vessels owned or operated by Dalian Ocean Fishing, a Chinese company, for allegedly relying on forced labor (CBP 2021).

## 3. Policy recommendations

The Biden administration did not define trade as an early policy priority. It had to address the public health needs created by the pandemic, develop emergency fiscal policy, and shore up the U.S. economic recovery battered by recession. It also prioritized policy concerns such as racial injustice, climate change mitigation, immigration reform, tax reform, and infrastructure investments. As the Biden administration emphasizes restoring the American domestic economy through its "building back better" agenda, the trade community should view support of this domestic policy agenda as the first step necessary for rebuilding American political support for a future U.S. policy of openness to the global economy.

Nevertheless, the Biden administration also needs a new strategy for international engagement. The Trump administration approach was to engage countries

bilaterally, if at all. It viewed trade as zero sum rather than mutually benefitting (on net) both countries. Any country, especially one with a bilateral trade surplus with the United States, was viewed as an adversary. Without yet providing detail, the Biden administration has indicated a different approach. There has been no mention of continuing the Trump administration's focus on remediating bilateral trade deficits. Instead, it plans to "work with allies."

Implementation of a new international trade engagement should then have at least three components: (1) resolving old grievances and establishing a framework to work out new grievances that will inevitably emerge with allies; (2) establishing a framework to work with allies in areas of common concern involving China; and (3) establishing a framework to work with allies and China in areas of global concern.

### 3.a. A worker-centered trade policy begins at home

Improving the American workforce's competitiveness and adaptation to a changing and dynamic global economy should be the administration's top priority and would be foundational to any trade agenda.

While trade has contributed to worker displacement, strongly impacting certain sectors and communities (Autor, Dorn, and Hanson 2013), there are multiple forces of disruption at work, including technological change and shifting consumer demands. U.S. policy needs to support any part of the American workforce facing disruption, regardless of the underlying cause of that disruption. Policies that focus on individual workers—rather than a particular set of jobs—such as promoting education, retraining, health care, childcare, and portability of benefits, will form the core of a worker-centered trade policy.

Enforcing the labor standards commitments that other trading partners have taken on is important, as is pushing for countries to take on stronger commitments to provide for their workers. But the economic impact on American workers of such actions is likely small relative to how much those workers would benefit from more supportive domestic labor market policies.

### 3.b. Review and adjust the U.S. tariffs unilaterally imposed on China

The Biden administration is conducting a review of the U.S.-China Phase One agreement that was signed in January 2020. However, U.S. tariffs remain on more than two-thirds of imports from China, and China has not lived up to its commitment to purchase an additional \$200 billion of U.S. imports in 2020 (falling over 40% short) and 2021 (still well short), as indicated by Figure 4.

A. U.S. EXPORTS AND CHINA'S IMPORTS OF ALL GOODS COVERED BY THE PHASE ONE DEAL AS OF AUGUST 2021, BILLIONS USD 🗘 2021 PURCHASE COMMITMENT 🌎 2021 PURCHASE COMMITMENT (total, Chinese imports) (total, U.S. exports) ● ACTUAL PURCHASES, (Chinese imports) ● ACTUAL PURCHASES, (U.S. exports) 220 \$193.3 billion 200 180 160 August target, Chinese imports **\$129.9 billion**August target, U.S. exports **\$113.0 billion** 140 120 100 \$89.4 billion 80 60 40 20 Jan Feb May Jul Oct Nov Dec Mar Jun Aug Sep Apr B. U.S. EXPORTS AND CHINA'S IMPORTS IN 2020 OF ALL GOODS COVERED BY THE PHASE ONE DEAL, BILLIONS USD 2020 PURCHASE COMMITMENT 2020 PURCHASE COMMITMENT (total, Chinese imports) (total, U.S. exports) ACTUAL PURCHASES, (Chinese imports) ■ ACTUAL PURCHASES, (U.S. exports) \$173.1 billion 180 160 140 120 100 80 60 40 20 Feb Nov May Aug

Figure 4: China's purchases of U.S. goods under the Phase One agreement

Source: Bown (2021b)

There is no reason the current and additional U.S. tariffs must remain as they are. Even if the United States is committed to maintaining a "noncooperative" policy toward imports from China, the optimal version of that policy is unlikely to be a blanket 25% tariff on nearly all imports of intermediate inputs from China that American businesses and workers rely on to remain competitive in the global economy. Most of those additional tariffs—or the ones imposed at lower (7.5%) rates—were chosen to avoid consumer products such as electronics, toys, clothing, and footwear (see again Figure 3). If U.S. tariffs on China are to remain a permanent part of U.S. trade policy, the products subject to the tariffs as well as the tariff rates should be reviewed and ultimately changed to reflect a policy that is in the best interest of the U.S. economy and its workers, and not just to avoid a negative reaction by American consumers facing higher prices.

### 3.c. Working with allies on non-China

The list of U.S. trade policy issues that do not involve China is always long. And it has been made more complex by the Trump administration having taken one important U.S. trade policy tool used to resolve frictions—WTO dispute settlement off the table.20 Nevertheless, there is evidence the Biden administration is seeking to resolve trade disputes with key allies, some of which involve complex negotiations and compromise.

For decades, the United States and European Union have each complained about the other's subsidies to commercial aircraft makers Airbus and Boeing. Under the Trump administration, the dispute had proceeded to the point of retaliatory tariffs. By removing those tariffs on imports from the European Union and United Kingdom, the Biden administration signaled a willingness to prioritize a quick and sustainable solution for subsidy disciplines that both sides would apply in this commercial space. This is also relevant because China has also been subsidizing commercial aircraft production, and so the two sides may need to jointly tackle subsidy disciplines with China.

A second important effort involves taxation of multinational corporations. A key element of the Biden plan agreed at the G7 in June suggests a willingness to accommodate the ability of other countries to also increase tax revenue collections from major multinationals. In effect, the United States would "share" some of its corporate tax base so that all governments might jointly collect more revenue. If it

<sup>20</sup> WTO disputes take years to litigate. Even if the Biden administration were to work quickly reform the dispute settlement system and begin initiating new cases, it is unlikely the administration would see the political payoff of those disputes before the end of its first term. Thus, while in the long-term interests of the United States, fixing WTO dispute settlement is unlikely to deliver any political victories for the U.S. administration.

is agreed multilaterally at the OECD, and if it passes Congress and becomes U.S. law, the result would be cooperation with allies on trade, since it would head off the DSTs that allies deployed to unilaterally target U.S. tech companies.

Two other Trump-era grievances must be addressed with allies: U.S. tariffs on steel and aluminum, and a framework for future dispute resolution. These will be harder to tackle, because they are not purely bilateral issues and are caught up in the related question of how to address areas of common concern with China.

With steel and aluminum, the policy challenge is to find a solution that is rules-based and thus acceptable to allies, and ultimately addresses the underlying problem that is generating the demand for U.S. import protection in the first place: global overcapacity triggered by China and its system of subsidies. Before the Trump administration, that problem could have been addressed through a combination of additional transparency into the Chinese system and peer pressure arising through the OECD Steel Forum negotiations, potentially coupled with a multi-country trade dispute brought against China. (The Obama administration initiated a WTO dispute against China's *aluminum* subsidies that the Trump administration decided against pursuing.) For the moment, WTO dispute settlement is off the table because the entire system is dysfunctional. A solution will need to be found elsewhere, perhaps with a rejuvenated set of negotiations at the OECD. If packaged properly, China may be more willing to engage since its metal exports are facing increased protection outside of the United States, including and especially in the European Union.

The United States has offered protections to the steel industry in one form or another—voluntary export restraints, trigger price mechanism, antidumping and countervailing duties, safeguard tariffs, and most recently the national security tariffs—off and on since the 1960s. One potential resolution for the United States to renegotiate its tariff bindings to offer the U.S. steel industry permanently higher levels of import protection. There are WTO-consistent options available for doing so; the United States would simply need to negotiate compensation with trading partners. But trading partners are already extracting compensation, through retaliation against politically sensitive U.S. export sectors like Harley-Davidson motorcycles and Kentucky bourbon, thus the main change would be to convert this into a WTO-consistent form of protection. While costly to the U.S. economy, including to downstream using industries, this is a way to achieve such an end without threatening the integrity of the rules-based agreement. Thus, it could have benefits for cooperation elsewhere.

The second issue of ongoing concern to many economic allies is the absence of a functioning dispute resolution mechanism that resulted when the Trump

administration ended the WTO's Appellate Body. This creates uncertainty for countries to take on new trade agreement commitments and risks escalating inevitable trade frictions into a trade war. There is bipartisan concern in the United States for how the WTO's original system performed, especially how its legal decisions constrained the United States' use of policies such as antidumping, countervailing duties, and safeguards (Bown and Keynes 2020). While most of those legal cases were brought by partners like the European Union, Japan, Canada, and South Korea, the major concern today is how the result of those rulings—and future rulings—would curtail the United States' ability to use those trade remedies to address imports from China.<sup>21</sup>

The dispute settlement problem requires fixing even if the United States is unwilling to do so with its bilateral relationship with China. The United States needs a mutually acceptable way of efficiently resolving trade frictions, especially with allies. Perhaps equally important, a viable system is needed so that the rest of the world can resolve its trade disputes, so that the entire rules-based trading system does not break down.

### 3.d. Working with allies on issues involving China

One key limitation of the Trump administration's approach toward China was that it was almost entirely bilateral. The trade war imposed considerable costs on the U.S. economy and the administration's signature Phase One agreement yielded minimal improvements in the areas of core concern. The European Union also negotiated with China bilaterally, albeit without suffering through a trade war. Nevertheless, the E.U.-China Comprehensive Agreement on Investment (CAI) made minimal progress with China on systemic issues. Each of these results were unsurprising, given the changes that the United States (and the European Union) would like China to make are systemic, generating benefits to lots of other countries as well. Because no single country would appropriate all of the gains from negotiating with China, no single country would be willing to offer up enough in negotiations to obtain them.

The U.S. bilateral strategy toward China may now be changing, as the Biden administration has indicated it will seek to work with allies. The European Commission in December 2020 issued a blueprint for how it might work with the new U.S. administration in this area (European Commission 2020). President Biden's June summit with the European Union provided some initial detail, including agreement to establish a new Transatlantic Trade and Technology Council.

<sup>21</sup> This admittedly creates a bizarre parallel universe, because the main issue is that the United States and China are more importantly violating the basic rules of MFN by imposing their trade war tariffs on each other. Disagreeing over dispute settlement, as well as prior WTO legal decisions over "zeroing" or "public body," are less than second order, they are a nonbinding constraint in the U.S.-China relationship. Nevertheless, some of the issues are relevant for U.S. trade relations with other countries and could become relevant if the United States and China restored "cooperation" and once again treated one another like other WTO members.

An approach that collectively negotiates solutions with China will have pluses and minuses. On the positive side, convincing other partners to credibly threaten their own noncooperative policies toward China is more likely to convince Beijing of the benefits of adopting a cooperative policy. On the negative side, the United States often does not have the same offensive or defensive interests in negotiations as its allies. The first challenge will involve internal agreement and maintaining a common approach toward China. Working collectively will limit each country's ability to engage China unilaterally. It will prove difficult to remain united if and when China retaliates selectively and strategically, or offers something bilaterally, in an attempt to play allies one off another. This is the analog to China's strategic retaliation against U.S. farm interests—but not other sectors—when it attempted to pit one U.S. industry against another during the trade war.

Two important areas of concern to the United States and its allies are China's industrial subsidies and its system of forcibly transferring foreign technology. Admittedly, these are the areas on which the Trump administration had been working with the European Union and Japan. A "Trilateral" initiative began at the WTO Ministerial Conference in December 2017 to develop new international disciplines to address China's system of state capitalism and state-owned enterprises. Indeed, the three parties had made it sufficiently far to issue a joint statement on industrial subsidies in January 2020, proposing new types of unconditionally prohibited subsidies, which reversed the burden of proof in disputes. Instead of the United States, for example, showing that China's subsidy has caused harm, China would now need to demonstrate that its subsidy has not harmed others.

The Trilateral's progress on subsidies was halted with the COVID-19 pandemic, and there was little publicly acknowledged progress on the issue of the forceable transfer of technology. Though such a process could and should be re-engaged, an emerging question is whether any of the Trilateral partners would now stake out substantially revised positions on subsidies given the pandemic experience or other factors described earlier. However, if the three can agree between themselves, the next step would involve bringing their proposals to other like-minded countries before eventually approaching China to negotiate an agreement and return (for the United States and China) to implementing policies that are more cooperative.

A second and very new area involves potential allied coordination of export controls. With the implementation of U.S. export controls on semiconductors

<sup>22</sup> For some of the challenges in addressing China's system of subsidies within a WTO framework, see Bown and Hillman (2019).

<sup>23</sup> Joint Statement of the Trilateral Meeting of the Trade Ministers of Japan, the United States and the European Union Washington, DC, January 14, 2020.

and manufacturing equipment—which are also applied to semiconductor manufacturers in other allied trading partners, especially Taiwan, South Korea, Japan, and the European Union—these economies will increasingly seek to influence which technologies are being "controlled," since the policies affect their exports, too. A common solution will need to emerge, as the failure to control such technologies from all sources means the national security threat will not be addressed, despite the cost that the U.S. export controls impose on commercial interests of U.S. industry. However, the coordination of export controls falls outside of WTO rules.<sup>24</sup>

As a first step, the U.S.-E.U. decision in June to pursue a Trade and Technology Council looks to provide improved transatlantic coordination of export controls, as well as related national security concerns arising over inbound foreign direct investment. To be effective, establishing such an institutional framework would likely require expansion to a core group of other key economies—including the United Kingdom, Japan, South Korea, Canada, and Australia (plus or minus others, depending on the technology and involvement of the industrial supply chain). Policymakers need to better tailor export controls to limit their application to only where they are essential to protect national security threats. Overreliance on them will undermine cooperation and reduce their effectiveness.

A final and related area involves coordinating policies against forced labor and in favor of human rights and democracy. Like other examples, the failure to coordinate policy weakens their impact. It is already difficult for trade policy to impose costs on China without unintended consequences due to the global nature of supply chains.

All of this, of course, is designed to establish a clearer framework that will hopefully lead to a jointly preferable outcome, whereby the United States, its allies, China, and all WTO members return to a set of cooperative policies and participate in a mutually agreeable, rules-based trading system. That result would someday have the United States eliminating its Section 301 tariffs, China eliminating its retaliatory tariffs, and China and other countries taking on other commitments to stop implementing policies that impose externality costs on trading partners.

In the immediate term, it is unclear where these countries will end up. Will more of China's partners develop credible threats and ultimately deploy noncooperative policies of their own? Will China respond to them in kind? Or will the process of engagement more explicitly lead to cooperation? While the United States can

<sup>24</sup> Export controls on dual use technologies are currently managed through the Wassenaar Arrangement, an agreement illsuited to modern issues. The Wassenaar Arrangement replaced COCOM, which navigated the export control issue during the Cold War. It was designed in the early 1990s to control the flow of weapons of mass destruction from getting to rogue states. Its membership includes Russia, a country to which the United States and its allies might like to control the flow of certain technologies. For more see Bown (2020b).

establish, clarify, and incentivize the framework, the sovereign decisions of its allies and China will jointly determine the collective policy choices and overall outcomes.

### 3.e. Working with allies and China

Finally, as described earlier, there are at least two areas in which the United States and China, as well as other countries, must work collectively: climate and global public health.

As major emitters of carbon, both the United States and China must take on more stringent commitments to reduce emissions in a timely manner and on a larger scale. They are not alone, and the best approach would be not only to adhere to the commitments in the Paris Climate Accord, but also to cooperate and commit to the adoption of domestic policies that would allow them to go further. The Biden administration has been keen on prioritizing climate mitigation and cooperation, and the first visit by a Biden administration official to China was its climate envoy, John Kerry (Myers and Crowley 2021). While a carbon border tax is potentially in the offing if countries refuse to cooperate, if there is cooperation on reducing emissions (raising the explicit and implicit price of carbon) then CBAM would be a threat only and not required to be used in practice.

As discussed above, the pandemic has created a new global public health demand for cooperation on vaccine manufacturing, distribution, and thus trade. The emergence of viral variants has highlighted the risk that the COVID-19 pandemic will not really be over anywhere until it is under control everywhere, and that is likely to require vaccinating most of the world. Given the complexity of vaccine production, manufacturing in the near term is limited to only a handful of countries—including the United States and China—and thus trade will be essential to get vaccines distributed worldwide. Yet, the possibility of even manufacturing vaccines in sufficient quantity is complicated by the nature of global supply chains.

Effectively and quickly scaling up production globally requires additional collaboration and cooperation between the major economies. A handful of countries have proposed a Trade and Health Initiative at the WTO, but more is needed, including financing mechanisms, coordination of subsidies for inputs and outputs across countries, and agreements to not limit exports and keep trade lanes open. Bollyky and Bown (2020, 2021) have outlined one proposal for an explicit COVID-19 Vaccine Investment and Trade Agreement to help facilitate the transfer of technology as well as sufficient scaling up of production of inputs and raw materials in high demand by vaccine manufacturers.

The Biden administration has also committed to good faith negotiations over a waiver to the WTO rules for vaccine patents. Such a waiver may, over the long term, contribute to the transfer of technology for vaccine production globally, decreasing the current concentration in relatively rich countries, India, and China. But the rather long period of time before such benefits materialize means countries cannot waste existing opportunities to scale up current manufacturing capacity more quickly to produce more vaccines to inoculate the world. More trade in vaccines will be the quickest way to save lives.

### 4. Conclusion

Even with the entry of the Biden administration, U.S. trade policy was in for a long period of transition. Policy changes set in motion by the prior administration were only a start. While they might be modified, they are highly unlikely to be reversed. On almost all fronts, the future of U.S. trade policy looks to be very different from the past.

### References

- Amiti, Mary, Stephen Redding, and David Weinstein. 2019. "The Impact of the 2018 Trade War on US Prices and Welfare." *Journal of Economic Perspectives* 33 (4): 187–210.
- Autor, David H., David Dorn, and Gordon H. Hanson. 2013. "The China Syndrome: Local Labor Market Effects of Import Competition in the United States." American Economic Review 103 (6): 2121–68.
- ——. 2016. "The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade." Annual Review of Economics 8: 205–240.
- ———. 2021. "On the Persistence of the China Shock." Brookings Papers on Economic Activity, BPEA Conference Drafts, September 9.
- Bagwell, Kyle and Robert W. Staiger. 1999. "An Economic Theory of GATT." American Economic Review 89 (1): 215–48.
- ———. 2001. "Strategic Trade, Competitive Industries and Agricultural Trade Disputes." Economics and Politics 13 (2): 113–28.
- ——. 2002. The Economics of the World Trading System. Cambridge, MA: The MIT Press.
- ——. 2011. "What do trade negotiators negotiate about? Empirical evidence from the World Trade Organization." *American Economic Review* 101 (4): 1238–73.
- ———. 2014. "Can the Doha Round be a development round? Setting a place at the table', in Robert C. Feenstra and Alan M. Taylor (eds.) Globalization in an Age of Crisis: Multilateral Economic Cooperation in the Twenty-First Century, Chicago, IL: University of Chicago Press, 91-124.
- Bagwell, Kyle, Chad P. Bown and Robert W. Staiger. 2016. "Is the WTO Passé?" *Journal of Economic Literature* 54 (4): 1125–1231.
- Bhagwati, Jagdish and Hugh T. Patrick (Eds.). 1990. Aggressive Unilateralism: America's 301 Trade Policy and the World Trading System. Ann Arbor, MI: University of Michigan Press.
- Bollyky, Thomas J. and Chad P. Bown. 2020. "The Tragedy of Vaccine Nationalism: Only Cooperation Can End the Pandemic." Foreign Affairs 99 (5): 96–109.
- Bown, Chad P. 2019a. "The 2018 US-China Trade Conflict After 40 Years of Special Protection." China Economic Journal 12 (2): 109–136.
- ———. 2019b. "What's Left for the WTO?" in Ben Zissimos (ed.) The WTO and Economic Development, Cambridge, MA: The MIT Press, 93-144.
- ——. 2020a. "How the United States Marched the Semiconductor Industry Into Its Trade War with China." East Asian Economic Review 24 (4): 349-388.
- ———. 2020b. "Export Controls: America's Other National Security Threat." Duke Journal of Comparative and International Law 30 (2): 283–308.
- ——. 2021a. "The US-China Trade War and Phase One Agreement." *Journal of Policy Modeling,* forthcoming.

- —. 2021b. US-China Phase One Tracker: China's Purchases of US goods as of August 2021. PIIE Chart, Peterson Institute for International Economics, August 30. https://www.piie. com/research/piie-charts/us-china-phase-one-tracker-chinas-purchases-us-goods
- —. Forthcoming. "How COVID-19 Medical Supply Shortages Led to Extraordinary Trade and Industrial Policy." Asian Economic Policy Review.
- Bown, Chad P. and Thomas J. Bollyky. 2021. "Here's how to get billions of COVID-19 vaccine doses to the world." PIIE Trade and Investment Policy Watch, March 18.
- -. Forthcoming. "How COVID-19 Vaccine Supply Chains Emerged in the Midst of a Pandemic." The World Economy.
- Bown, Chad P., and Meredith A. Crowley. 2013. "Self-Enforcing Trade Agreements: Evidence from Time-Varying Trade Policy." American Economic Review 103 (2): 1071–90.
- Bown, Chad P., and Jennifer A. Hillman. 2019 "WTO'ing a Resolution to the China Subsidy Problem," Journal of International Economic Law 22 (4): 557-578.
- Bown, Chad P. and Soumaya Keynes. 2020. "Why Trump Shot the Sheriffs: The End of WTO Dispute Settlement 1.0." Journal of Policy Modeling 42 (4): 799–819.
- Bown, Chad P. and Soumaya Keynes. 2021. "Tackling climate change with a carbon border adjustment mechanism." Trade Talks, Podcast episode 156, July 25.
- Brander, James A., and Barbara J. Spencer. 1985. "Export Subsidies and International Market Share Rivalry." Journal of International Economics 18 (1–2): 83–100.
- Broda, Christian, Nuno Limão, and David E. Weinstein. 2008. "Optimal Tariffs and Market Power: The Evidence." American Economic Review 98 (5): 2032-65.
- Cavallo, Alberto Gita Gopinath, Brent Nieman and Jenny Tang. 2021. "Tariff Passthrough at the Border and at the Store: Evidence from US Trade Policy." American Economic Review: Insights 3(1): 19-34.
- CBP (U.S. Customs and Border Protection). 2021. "CBP issues Withhold Release Order on Chinese fishing fleet." CBP Public Affairs press release.
- European Commission. 2020. Joint Communication to the European Parliament, the European Council and The Council: A new EU-US agenda for global change. High Representative of the Union for Foreign Affairs and Security Policy, December 2.
- European Commission. 2021. Proposal for a Regulation of the European Parliament and of the Council Establishing a Carbon Border Adjustment Mechanism. Brussels, July 14.
- Fajgelbaum, Pablo D., Pinelopi K. Goldberg, Patrick J. Kennedy, and Amit K. Khandelwal. 2019. "The Return to Protectionism." Quarterly Journal of Economics 135 (1): 1–55.
- Flaaen, Aaron and Justin Pierce. 2019. "Disentangling the Effects of the 2018-2019 Tariffs on a Globally Connected U.S. Manufacturing Sector." Finance and Economics Discussion Series 2019-086. Washington: Board of Governors of the Federal Reserve System, https://doi. org/10.17016/FEDS.2019.086.
- Handley, Kyle, Fariha Kamal, and Ryan Monarch. 2020. "Rising Import Tariffs, Falling Export Growth: When Modern Supply Chains Meet Old-Style Protectionism." National Bureau of Economic Research Working Paper #26611. Cambridge, MA.

- Hendrix, Cullen S. and Marcus Noland. 2021. "Assessing potential economic policy responses to genocide in Xinjiang." Peterson Institute for International Economics Policy Brief 21-14, June.
- Hillman, Jennifer. 2018. "The Best Way to Address China's Unfair Policies and Practices Is Through a Big, Bold Multilateral Case at the WTO." Testimony Before the U.S.-China Economic and Security Review Commission Hearing on U.S. Tools to Address Chinese Market Distortions, June 8. https://www.uscc.gov/sites/default/files/Hillman%20 Testimony%20US%20China%20Comm%20w%20Appendix%20A.pdf
- Hufbauer, Gary Clyde and Zhiyao (Lucy) Lu. 2018. "The European Union's Proposed Digital Services Tax: A De Facto Tariff." Peterson Institute for International Economics Policy Brief 18-15, June.
- Ip, Greg. 2021. "'Industrial Policy' Is Back: The West Dusts Off Old Idea to Counter China." The Wall Street Journal, July 29. https://www.wsj.com/articles/subsidies-chips-china-state-aid-biden-11627565906
- Keynes, Soumaya. 2021. The EU proposes a carbon tariff on some imports. *The Economist*, July 17. https://www.economist.com/finance-and-economics/2021/07/15/the-eu-proposes-a-carbon-tariff-on-some-imports
- Lardy, Nicholas R. 2014. *Markets over Mao*: The Rise of Private Business in China. Washington: Peterson Institute for International Economics.
- ——. 2019. The State Strikes Back: The End of Economic Reform in China? Washington: Peterson Institute for International Economics
- Ludema, Rodney D., and Anna Maria Mayda. 2013. "Do Terms-of-Trade Effects Matter for Trade Agreements? Theory and Evidence from WTO Countries." *Quarterly Journal of Economics* 128 (4): 1837–93.
- Mattoo, Aaditya and Robert W. Staiger. 2020. "Trade wars: What do they mean? Why are they happening now? What are the costs?" *Economy Policy* 35 (103): 561–584.
- Mavroidis, Petros C. and Andre Sapir. 2021. China and the WTO: Why Multilateralism Still Matters. Princeton, NJ: Princeton University Press.
- Myers, Steven Lee, and Michael Crowley. 2021. "John Kerry Heads To China for First High-Level Talks Under Biden." *The New York Times*, April 13, 2021. https://www.nytimes. com/2021/04/13/us/politics/john-kerry-china-climate-biden.html
- OECD (Organization for Economic Cooperation and Development). 2019a. Measuring distortions in international markets: The aluminium value chain. OECD Trade Policy Papers, no. 218. Paris: OECD Publishing.
- OECD (Organization for Economic Cooperation and Development). 2019b. Measuring distortions in international markets: The semiconductor value chain. OECD Trade Policy Papers, no. 234. Paris: OECD Publishing.
- Ross, Wilbur. 2017. "Most favored nation rule hurts importers, limits U.S. trade," *The Wall Street Journal*, Opinion, May 25. https://www.wsj.com/articles/most-favored-nation-rule-hurts-importers-limits-u-s-trade-1495733394

- Staiger, Robert W. Forthcoming. A World Trading System for the Twenty-First Century. Cambridge, MA: MIT Press.
- Staiger, Robert W. and Alan O. Sykes. 2013. "Non-Violations." Journal of International Economic Law 16 (4): 741-775.
- Stolberg, Sheryl Gay, Sharon LaFraniere, and Chris Hamby. 2021. "Top Official Warned That Covid Vaccine Plant Had to Be 'Monitored Closely.'" The New York Times, April 7. https:// www.nytimes.com/2021/04/07/us/emergent-biosolutions-coronavirus-vaccine.html
- Tai, Katherine. 2021. "Remarks from Ambassador Katherine Tai on Trade Policy, the Environment and Climate Change." Office of the United States Trade Representative. https://ustr.gov/about-us/policy-offices/press-office/press-releases/2021/april/remarksambassador-katherine-tai-trade-policy-environment-and-climate-change
- USTR (US Trade Representative). 2018a. Findings of the Investigation into China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation under Section 301 of the Trade Act pf 1974. March 22. Washington.
- —. 2018b. Update Concerning China's Acts, Policies and Practices Related to Technology Transfer, Intellectual Property, and Innovation. November 20. Washington.
- —. 2021. United States Urges WTO Members to Address Forced Labor on Fishing Vessels in Ongoing Fisheries Subsidies Negotiations. May 26. Washington.
- US Department of Treasury. 2021. The Made in America Tax Plan. April.
- Varas, Antonio, Raj Varadarajan, Jimmy Goodrich and Falan Yinug. 2021. "Strengthening The Global Semiconductor Supply Chain In An Uncertain Era." Semiconductor Industry Association and Boston Consulting Group, March.
- —. 2020. "How Restrictions to Trade with China Could End US Leadership in Semiconductors." Boston Consulting Group and Semiconductor Industry Association.
- White House. 2021. Fact Sheet: The Bipartisan Infrastructure Investment and Jobs Act Advances President Biden's Climate Agenda. August 5.
- Wu, Mark. 2016. "The 'China, Inc.' Challenge to Global Trade Governance." Harvard International Law Journal 57 (2): 261-224.
- —. 2020. Managing the China Trade Challenge: Confronting the Limits of the WTO. Penn Project on the Future of U.S.-China Relations, Working Paper, October.