

TRADE AND INVESTMENT POLICY WATCH

Biden and Europe remove Trump's steel and aluminum tariffs, but it's not free trade

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Image credit: REUTERS/Aaron Josefczyk

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The October 2021 agreement to lift barriers on steel and aluminum trade was widely hailed as helping both sides of the Atlantic turn the page after a long and bitter confrontation. The accord—announced by President Joseph R. Biden Jr. and European Commission President Ursula von der Leyen—achieved a breakthrough and perhaps presaged further cooperation on economic and climate issues. But it also created myriad problems to be addressed down the road.

The agreement was more complex than Biden's statement that "it immediately removes tariffs on the European Union" suggested. It called for zero US tariffs on European metal exports—but only at a volume set by historical patterns, through a new system of bilateral tariff rate quotas (TRQs). These quotas could turn into voluntary export restraints, ushering in a return to the "managed trade" era of the 1980s, when governments, not market forces, controlled much of international commerce.

The deal does remove European duties that targeted iconic US-made goods, including [Harley Davidson](#) motorcycles, Kentucky bourbon, and Levi's jeans, and it staves off an additional round (covering over \$4 billion of US exports) of retaliatory tariffs that had been scheduled to take effect later in 2021.

Europe embraced the agreement because much of its steel and aluminum exports will resume tariff-free. American manufacturers stand to benefit because they have suffered from high steel and aluminum prices. But how much US prices will fall remains unclear.

There is no doubt that the October accord is an improvement over the status quo. President Trump's tariffs on European steel and aluminum damaged the US economy. They protected some US metal producers—but at the cost of raising prices for the many US domestic manufacturers that use steel and aluminum. Trump's rationale of protecting national security was undercut by the fact that his actions hurt US allies, not adversaries. And [nothing](#)—not even his signature [Phase One](#) agreement with Beijing—was done to address the overproduction of steel and aluminum by China that has flooded markets throughout the world.

The main benefit of the new accord will occur, however, only if it paves the way for Washington and Brussels to cooperate on other goals that neither has made any progress on alone. One example was included in the announcement: a new framework to negotiate a Global Agreement on Sustainable Steel and Aluminum, which aims to lower the carbon intensity of metals production worldwide. A second—addressing the trade challenge China poses to both the United States and Europe—went unstated but was implicit.

THE STORY OF TRUMP'S STEEL AND ALUMINUM TARIFFS

The Trump restrictions on steel and aluminum were a response to investigations under Section 232 of the Trade Expansion Act of 1962, led by Commerce Secretary Wilbur Ross. Concluding that metal imports threatened national security, on March 1, 2018, Trump announced tariffs of 25 percent on imports of steel and 10 percent on imports of aluminum. Some tariffs were imposed on March 23. The announcements were awash in contradictions. Although they were motivated by combatting China, they were imposed on NATO and other alliance members, because the United States had largely stopped importing steel and aluminum from China, as a result of antidumping and countervailing duties imposed by earlier US administrations (see appendix table below).

Initially, the administration sought to give the European Union and six other trading partners a chance to negotiate bilateral deals. Some escaped tariffs by almost immediately agreeing to voluntary export restraints (VERs) on steel or aluminum (see appendix table). But unwilling or unable to negotiate settlements, the European Union, Canada, and Mexico were hit with Trump's tariffs starting June 1, 2018.

The European Union had warned for months that US duties would lead to retaliation. It followed through with tariffs on more than \$3 billion of politically sensitive US exports, including those Harley Davidson motorcycles. The European Union also filed a formal trade dispute against Trump's national security tariffs with the World Trade Organization (WTO). Many countries followed this two-pronged approach (see appendix table).

US STEEL AND ALUMINUM INDUSTRIES BEFORE AND AFTER THE 2018 TARIFFS

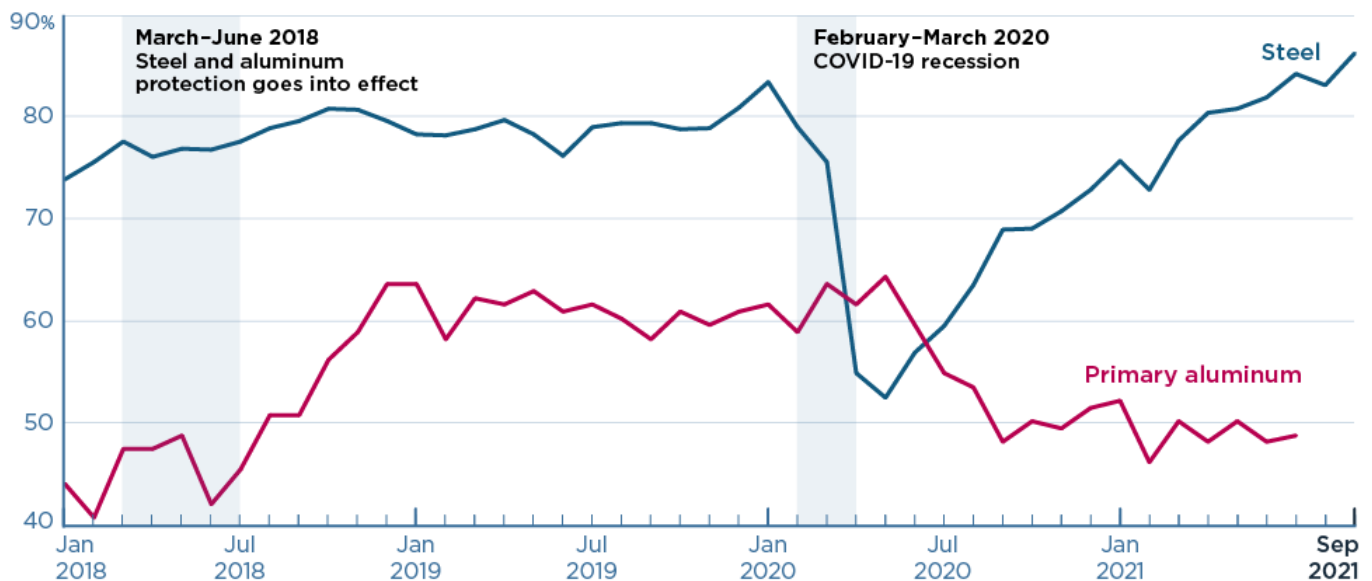
The US steel industry and the United Steelworkers Union endorsed the 2018 tariffs, as did Century Aluminum and Magnitude 7 Metals, two of only three firms operating *primary* aluminum smelters in the United States. Companies making *refined* aluminum products protested, because they would lose access to low-cost primary aluminum imported from Canada and other countries. The Aluminum Association stated that the tariff did "little to address the China challenge while potentially alienating allies and disrupting supply chains that more than 97 percent of US aluminum industry jobs rely upon."

The Trump administration argued that domestic production of the steel and aluminum industries was below capacity and needed to rise to 80 percent of capacity to remain viable. At the time, capacity utilization in the steel industry was under 75 percent (figure 1). The eight aluminum smelters (operated by three firms) had a combined capacity utilization rate of under 45 percent.

Figure 1

US steel production has risen above 80 percent of capacity since tariffs were applied, but primary aluminum peaked at 64 percent

US steel and primary aluminum capacity utilization rates since 2017, percent



Note: Monthly data. Data on primary aluminum available only through July 2021. Steel defined as NAICS 3311.2. Primary aluminum defined as primary production relative to one-twelfth of year-end capacity.

Source: Constructed by the authors with data from Federal Reserve Economic Data and US Geological Survey.

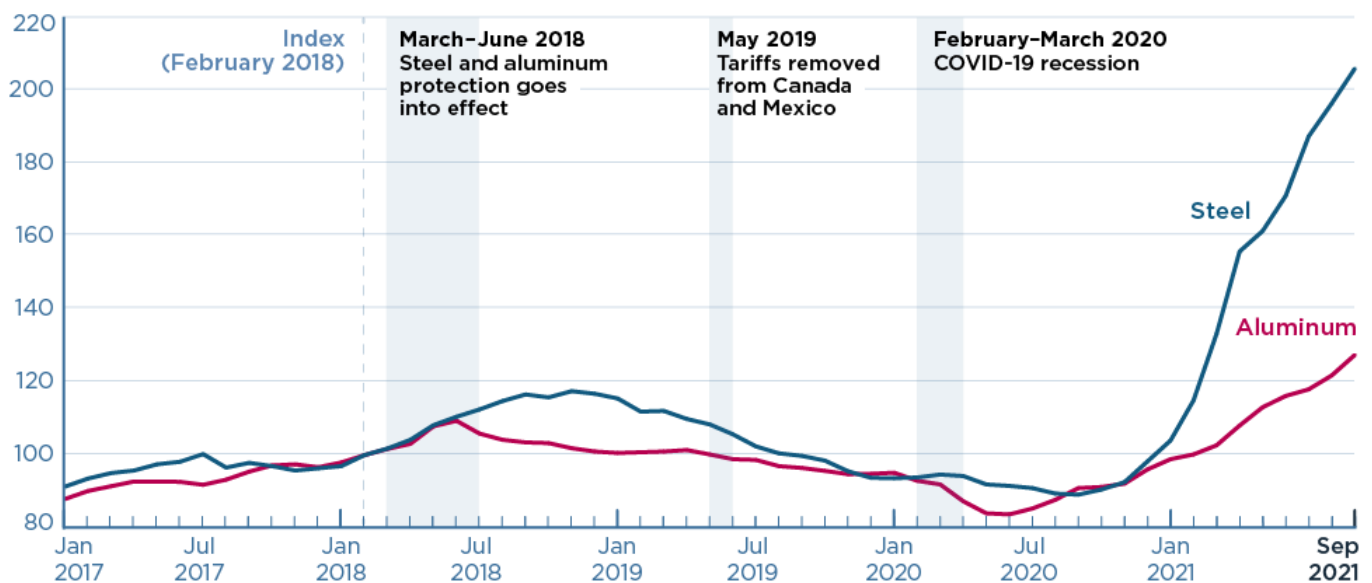
Protected by Trump's tariffs, capacity utilization for steel and primary aluminum did increase—until the COVID-19 recession. The steel industry's capacity utilization now exceeds the 80 percent target, but primary aluminum peaked at only 64 percent, before falling last year and levelling off at around 50 percent today.

Overall, US companies increased their steel and aluminum production comparatively little after the tariffs (figure 2). And just as metal-using companies had warned, US prices of steel and aluminum initially rose substantially. As global demand for metals softened and uncertainty over the US–China trade war took hold, prices eventually began to decline. Weakened US demand for automobiles did not help; expanded imports of metals from Canada and Mexico also contributed to lower prices after the Trump administration removed tariffs on those countries in May 2019, in order to win Congressional passage of the new US-Mexico-Canada Agreement.

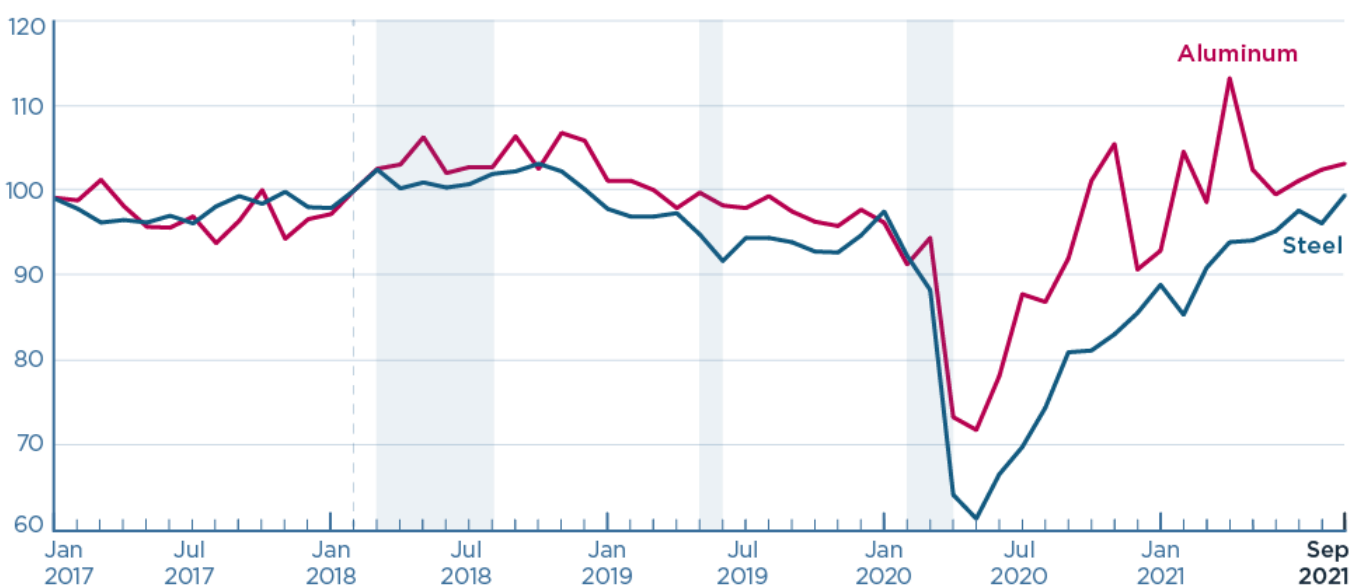
Figure 2

US steel and aluminum prices have increased more than production since tariffs were introduced

a. Steel and aluminum prices, January 2017–September 2021 (index, February 2018=100)



b. Steel and aluminum production, January 2017–September 2021 (index, February 2018=100)



Note: Monthly data. Steel defined as NAICS 3311.2. Aluminum defined as NAICS 3313.

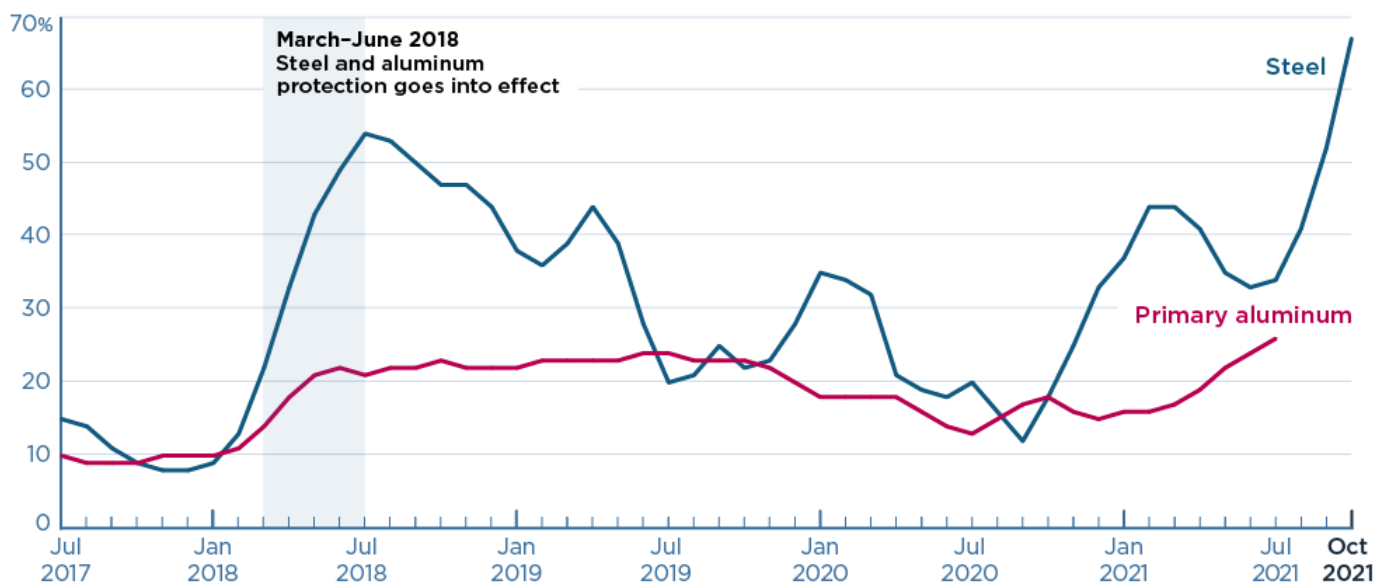
Source: Constructed by the authors with data from Federal Reserve Economic Data.

US metal tariffs also contributed to higher production costs for US manufacturers, weakening their sales. Compare the price facing American versus European purchasers of metals (figure 3). Although a price premium for both steel and aluminum existed before the tariffs were imposed, in mid-2018 the US premium increased and remained elevated, and it has recently been rising again. These effects are important. For every job in a US iron or steel mill, for example, roughly 20 people work in industries for which steel inputs account for at least 5 percent of production costs.

Figure 3

US steel and aluminum prices have been considerably higher than European prices since protection was applied

US steel and primary aluminum price premia relative to European prices, July 2017–October 2021, percent



Note: Monthly data, 3-month averages. Steel prices are defined as end of month spot prices for hot rolled coil in North America relative to North Europe. Aluminum prices are defined as Midwest US market price relative to London Market Exchange (LME) cash price Grade A and are available only through July 2021.

Source: Constructed by the authors with data from Bloomberg and US Geological Survey.

Trump's protection of aluminum and steel and the trade war tariffs he imposed on China hit the US manufacturing sector hard. Several scholars have found that these tariffs were almost entirely absorbed by importers (and not passed on to foreign exporters), squeezing their profit margins and reducing US manufacturing employment. The metals tariffs themselves caused the disappearance of an estimated 75,000 manufacturing jobs in the United States. US exporters have also struggled to compete for customers abroad because of the higher costs paid for metals at home.

Trump's tariffs also cascaded upon themselves. Faced with rising US costs for domestic steel users, the administration doubled down on its protection, expanding the coverage of its steel and aluminum duties to "derivative" products in January 2020. Higher metals costs had made it difficult for American-made nails, bumpers, body stampings for tractors, wire, and cables to compete with imports, requiring yet another round of tariffs. Elsewhere, other metal-using American businesses clamored for import protection under the antidumping law, some after the Department of Commerce denied their petitions for exemptions from Trump's metal tariffs.

The COVID-19 recession of early 2020 also hurt both steel and aluminum (see figure 2). Production bottomed out in May 2020, hit by lockdowns and reduced demand from sectors like automobiles. During the subsequent economic recovery, demand for steel and aluminum has surged. But because this expansion outpaced supply, metals prices began rising again in 2021. Recent consolidation of the US

steel industry has contributed to the sluggish supply response. Continued steel and aluminum tariffs that discourage imports have thus posed a challenge for US-based manufacturers especially reliant on access to metals.

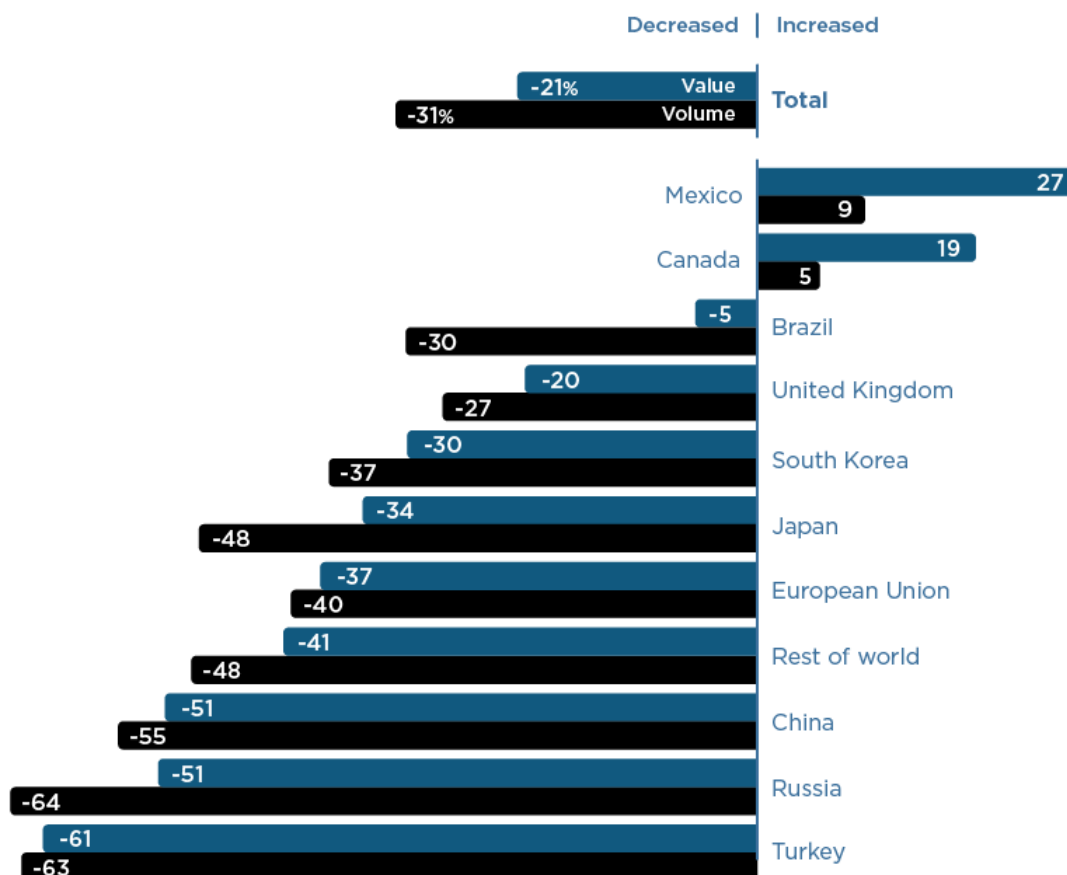
EU EXPORTS OF STEEL AND ALUMINUM UNDER THE TARIFFS

US imports of metals fell immediately after protection was imposed in 2018. More recently, US imports from other countries have increased, but steel imports from the European Union remain 40 percent lower than they were before March 2018 (figure 4). Before the tariffs, the European Union was the largest source of imported steel. Its exporters have suffered more than exporters from Canada and Mexico, which were hit with US tariffs at the same time but then subsequently agreed to voluntarily restrain exports in May 2019 in exchange for the removal of the tariffs. (In September 2020, Trump temporarily reimposed tariffs on Canadian aluminum to enforce the VER.) EU steel exporters have also fared worse than exporters from Brazil and South Korea, which agreed to binding quotas in 2018. It was thus not surprising that Eurofer, the European steel industry association, welcomed the October 2021 announcement of a US–EU agreement.

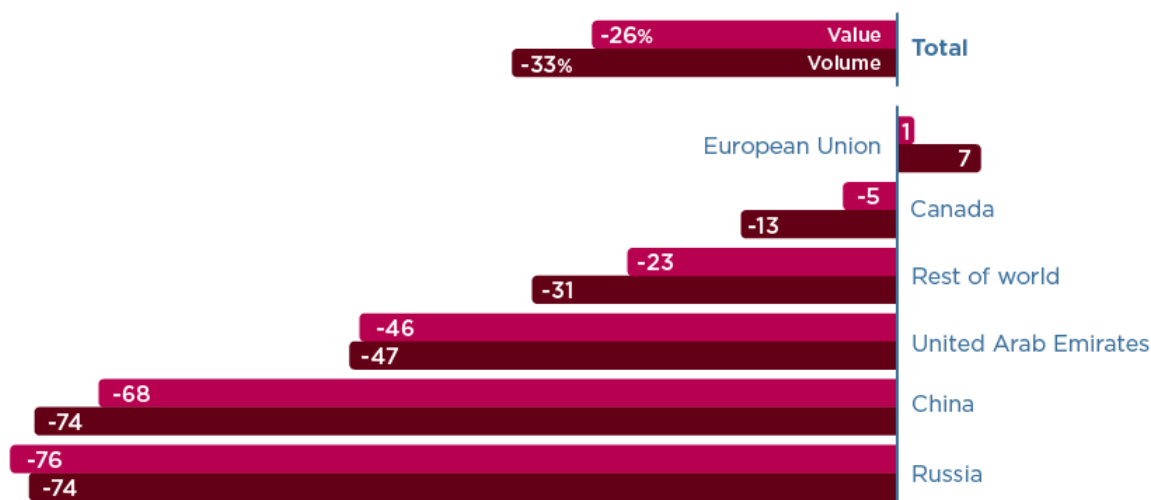
Figure 4

US tariffs reduced imports of steel from the EU more than steel from many other allies and EU aluminum

a. Percent change in US steel imports,
Mar 2017–Feb 2018 (before Trump’s protection) vs. Sept 2020–Aug 2021 (latest available data)



b. Percent change in US aluminum imports,
Mar 2017–Feb 2018 (before Trump’s protection) vs. Sept 2020–Aug 2021 (latest available data)



Unlike steel, the EU aluminum industry came out against the October deal, continuing to argue for the full removal of US protection. One reason for its opposition might be a lack of urgency as the sector has recently exported more to the United States than before protection was imposed in 2018 (see figure 4). The fact that steel is a larger force in the EU economy than aluminum (\$5.8 billion versus \$1 billion in 2017 US export sales) may also help explain why the European Union went ahead with the deal despite protests from its aluminum sector. (The US Aluminum Association also opposed the agreement, just as it had opposed the original tariffs in 2018.)

FROM TARIFFS TO MANAGED TRADE

The new US TRQs for steel are the most economically consequential part of the immediate arrangement. EU exporters will be able to sell 3.3 million metric tons (MMT) of steel annually into the US duty free. European steel exports that received exclusions from the Department of Commerce from Trump's tariffs in 2021 will have those exclusions extended for two years. (European Trade Commissioner Valdis Dombrovskis reportedly indicated that 2021 product exclusions cover an additional 1.1 MMT of EU steel exports.) The European Union can thus export up to 4.4 MMT of steel a year duty-free. This volume is comparable to the average 2015–17 ("historical") volume of US imports from Europe of steel products covered by the original scope of the Section 232 policies—i.e., 4.7 MMT in 2015, 4.0 MMT in 2016, and 4.7 MMT in 2017.

For aluminum, the size of the TRQs is based on volumes in 2018–19, with the exception of foil, which is based on annualized 2021 volumes. Primary aluminum would get a TRQ of 18 thousand metric tons (TMT), and semi-finished aluminum would receive a volume limit of 366 TMT. US imports from the European Union of aluminum products covered by the original scope of the Section 232 policies were 325 TMT in 2018 and 410 TMT in 2019. (Unlike for steel, there was no mention of extending aluminum product exclusions.)

Whether European exporters "fill" the duty-free quotas depends in part on other details of the announced policy. One involves how the licenses to fill the quotas are allocated. Here, the announcement was the quotas would be filled under a "first-come, first-served" approach; an alternative might have been for the US government to auction off licenses to fill the quota. Other details involve additional constraints on how much the European Union can export each quarter (steel) or in the first half of the year (aluminum). On the positive side, there is an allowance for a small amount of unused steel volume to be rolled over to future quarters, a process to adjust the size of the TRQ in the future based on evolving estimates of US steel demand, and a mechanism for the European Union to request a reevaluation of the entire policy if its exporters encounter practical difficulties in filling the quota. On the restrictive side, the 3.3 MMT and 366 TMT quotas are the headline aggregates; separate TRQs are applied to 54 steel products, 2 types of aluminum, and by EU member state. The announcement did not mention the possibility of reallocating unused volume in any given quarter or year—from one product category to another, for example, or from one EU member state to another.

The announcement included at least three other important elements. First, the TRQ policy facing the European Union provides more flexibility for European exporters than the absolute quotas the United States negotiated with South Korea, Brazil, and Argentina in 2018. For example, if a demand surge or other constraint means an EU company wants to sell more steel product than the quarterly TRQ limit would allow duty free, it can do so by simply accepting the 25 percent US steel tariff. (The absolute quotas agreed by Argentina, Brazil, and South Korea in 2018 do not allow firms to export above the limits even if they are willing to face the additional duty.) Second, EU exports of steel and aluminum *derivative products*—i.e., the products suddenly subject to new tariffs Trump announced in January 2020—do not count toward the TRQs and no longer face US tariffs. Third, EU steel exports face more restrictive rules of origin, as zero-tariff eligibility also requires that the steel be “melted and poured” in the European Union. This requirement is designed to prevent a European steel company from importing cheaper raw steel from, say, China or Russia for processing into finished products to export to the United States.

EXPECTED IMPACTS OF THE US-EU AGREEMENT

One clear benefit of the deal to US exporters and EU consumers is the removal of existing EU tariff retaliation against US exports of motorcycles, bourbon, and other products, as well as the additional retaliation scheduled for December 1, 2021. But the effects of converting Trump’s metals tariffs into a TRQ are harder to predict. The conversion does not go into effect until January 2022, and it will take time to ease supply chain stresses exacerbated by the current tariffs. The impact may also depend largely on difficult-to-forecast changes in US import volumes from both the European Union—determined, in part, by how well it can fill those quotas—and other partners.

Suppose, for example, that Europe starts coordinating its steel shipments into a VER, perhaps by issuing licenses. (Some form of coordination is likely, given the strong economic incentive for Europe to do so, as described next.) If the conversion from a tariff to a VER simply results in the same amount of steel trade, US prices will remain unchanged. The main effect of changing the policy will be to shift the benefits of that unchanged US price (what economists call “quota rents”) from the US Treasury (which had been collecting tariff revenue) to European steel exporters, without benefit to any US steel-consuming or producing companies.

Alternatively, suppose EU steel exports increase when the tariff policy converts to the new VER. The impact depends on whether that increase is offset by other countries reducing shipments to the United State and whether those other countries’ export shipments would have faced US tariffs. If, for example, additional imports from the European Union only offset US imports from Japan (which currently faces a US tariff), then the United States would lose revenues, as total tariff collections fall. At the other extreme, if EU imports offset only imports from Canada (which also does not currently face a US tariff), then there is no additional loss of tariff revenue and no additional change in US well-being.

Overall, the main benefit to American steel-using industries will emerge if the October deal reduces US prices by increasing the total volume of US steel imports. In that case (e.g., the United States imports more from the European Union, and US imports from other countries do not decline), the downward

pressure on US steel prices provides benefits to steel-consuming industries which are larger than the slightly worse-off US steel producers.

The benefits for Europe make it easy to see why the European Union agreed to this settlement with the United States. The Europeans realized that complete removal of US protection was apparently not on the table. Thus, even if a TRQ does little to increase EU export volumes, simply shifting the quota rents from the US Treasury to EU companies makes Europe better off.

The deal also importantly resolves one more bilateral irritant with the United States. This announcement is the third major agreement between the European Commission and the Biden administration in 2021, following resolution of the decades-long disputes over subsidies to Boeing and Airbus and cooperation on global corporate tax reform to remove potential US retaliatory tariffs over European digital services taxes on American Internet companies. It allows Washington and Brussels to push ahead on areas of joint concern—the biggest of which being China—including through their new Trade and Technology Council.

The impact of one other significant component of the October accord is also difficult to predict. The US and the European Union announced a framework to negotiate a Global Agreement on Sustainable Steel and Aluminum, seemingly aimed at lowering the carbon intensity of metals production worldwide. Details were scant. At a minimum, the two may be creating a way to manage frictions expected to emerge as Europe presses ahead on its July proposal for a carbon border adjustment mechanism (CBAM) that would tax imports of carbon-intensive steel and aluminum. The negotiations could create a path for US metals exporters to avoid an EU CBAM, even if they are unlikely to face a domestic tax on their carbon intensity for the foreseeable future.

NEW PROBLEMS AND THOSE LEFT UNRESOLVED

Shifting the US policy from a tariff to a potential VER creates a number of new challenges. One is the concern over tacit collusion emerging between European companies. Maximizing the value of the 3.3 MMT steel quota, for example, requires that European firms organize to make sure that volume limits are met. That coordination could prove worrisome for European policymakers if it reduces product competition between companies in the European steel market.

Other US allies continue to face tariffs and may seek a similar deal. For example, the Biden administration has announced talks with Japan and the United Kingdom. The restrictiveness of the 2018 quotas (see figure 4) suggests that South Korea, Brazil, and Argentina may also want to revisit their earlier agreements.

The shift toward states—rather than markets—determining who buys and sells what, where, and when is worrisome. It began when South Korea, Brazil, and Argentina signed up to Trump's steel and aluminum quotas in 2018 and continued with Canada and Mexico agreeing to VERs in May 2019. Next was the voluntary import expansion—which covered \$200 billion of purchase commitments—in the US-China Phase One agreement. The worry is that Washington and Brussels increasingly seek to manage the

challenges posed by China's nonmarket economy by settling for imperfect, nonmarket outcomes of their own, leading to less vibrant competition in the United States and Europe.

The US–EU agreement also does not prevent the WTO from being forced to issue a dispute settlement ruling over the politically explosive question of whether the national security rationale of Trump's steel and aluminum tariffs is justified. The European Union has agreed to suspend its formal legal challenge, but other WTO members may press ahead over the issue (see the appendix table).

The October deal leaves unaddressed such questions as, what would happen if the European Union finds the value of its TRQ eroded by a separate policy action? For example, in response to a sudden increase in imports from Europe, the US steel industry could file antidumping petitions against EU steel companies that result in new duties.

None of this is to suggest that the agreement was not a step forward. Many problems lie ahead, but at least the October steel and aluminum accord shows the enduring importance of reciprocity in negotiations, an important departure from the Trumpian view of trade as a zero-sum game. Europe ended its retaliation, which benefits American exporters, and the United States removed its tariffs, which helps European steel and aluminum firms. This small step is a useful reminder that durable trade deals can be win-win.

Some US trading partners voluntarily limited exports to escape tariffs, others retaliated and filed disputes at the WTO

US steel and aluminum imports, effective tariff dates, and trading partner responses

	imports				Tariff dates and trading partner responses			
	US imports in 2017 (millions USD)	Share of total US imports			US tariffs went into effect	Quota/voluntary export restraint went into effect	Retaliatory tariffs against US exports went into effect	WTO dispute filed
		2017	2021					
Countries not hit by initial round of US tariffs and given chance to negotiate								
EU27	Steel	5,807	19.8%	14.9%	6-1-2018	1-1-2022	6-20-2018	6-1-2018*
	Aluminum	1,054	6.2%	8.3%	6-1-2018	1-1-2022		
Canada		5,187	17.7	26	6-1-2018	5-20-2019	7-1-2018	6-1-2018*
		6,918	40.7	51.8	6-1-2018	5-20-2019		
South Korea		2,796	9.5	8.3	NA	3-28-2018	NA	NA
		108	0.6	1.9	6-1-2018	NA		
Mexico		2,509	8.6	14	6-1-2018	5-20-2019	6-5-2018	6-5-2018*
		255	1.5	2.0	6-1-2018	5-20-2019		
Brazil		2,450	8.3	11.6	NA	4-30-2018	NA	NA
		138	0.8	0.2	6-1-2018	NA		
UK		464	1.6	1.4	6-1-2018	NA	6-22-2018	NA
		38	0.2	0.3	6-1-2018	NA		
Argentina		223	0.8	0.6	NA	4-30-2018	NA	NA
		547	3.2	1.6	NA	4-30-2018		
Australia		211	0.7	1.0	NA	NA	NA	NA
		213	1.3	1.8	NA	NA		
Countries hit by initial round of US tariffs								
Japan		1,659	5.7	4.2	3-23-2018	NA	NA	NA
		172	1.0	1.2	3-23-2018	NA		
Russia		1,431	4.9	3.7	3-23-2018	NA	8-6-2018	6-29-2018
		1,627	9.6	3.3	3-23-2018	NA		
Turkey		1,192	4.1	1.8	3-23-2018	NA	6-21-2018	8-15-2018
		50	0.3	1.7	3-23-2018	NA		
China		1,003	3.4	1.9	3-23-2018	NA	3-23-2018	4-5-2018
		1,816	10.7	4.6	3-23-2018	NA		
India		761	2.6	1.2	3-23-2018	NA	6-15-2019	5-18-2018
		382	2.2	2.0	3-23-2018	NA		
Switzerland		51	0.2	0.1	3-23-2018	NA	NA	7-9-2018
		24	0.1	0.4	3-23-2018	NA		
Norway		35	0.1	0	3-23-2018	NA	NA	6-12-2018
		7	0	0.2	3-23-2018	NA		



EU27 = European Union (27 members); NA = not applicable; WTO = World Trade Organization

* WTO dispute has since been settled.

Note: 2021 Trade data available through August. The United Kingdom was part of the European Union at the time the tariffs were imposed and formally left the European Union on January 31, 2020. On December 8, 2020 the United Kingdom announced it was rolling over its retaliatory tariffs. Steel and aluminum in this table are defined as products covered by the Section 232 investigations. Policy actions are as of November 10, 2021.

Source: Compiled by the authors.

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