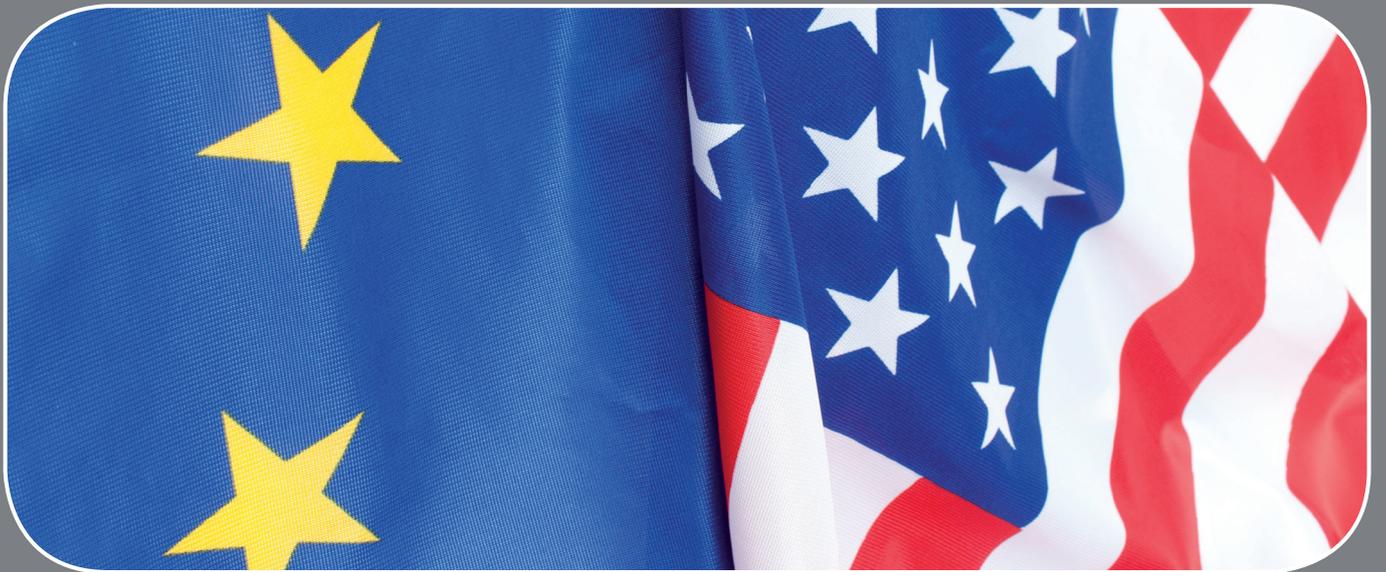




## **Transatlantic Restart**

Proposals for trade cooperation between the EU and the United States



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## Summary of main results

1. The new administration in the United States offers great opportunities to settle transatlantic trade disputes and to reduce the uncertainty that still prevails. Existing conflicts – such as the dispute over subsidies in aircraft manufacturing – must be resolved as quickly as possible, and the aim must be to prevent new rifts – for example when using trade policy to underpin climate policy – from arising in the first place.
2. Trade interventions by the United States and the EU in recent years can, above all, be attributed to disputes over steel and aluminium as well as Airbus-Boeing. The number of protectionist measures with an impact on Germany has increased sharply since 2017: on 1,054 occasions, the United States has imposed trade barriers with consequences for Germany, and Germany has enacted 478 protectionist measures against the United States. Transatlantic trade relations have suffered since then as a result. The introduction of punitive tariffs by President Trump's administration affected above all medium-sized European exporters who do not have the option of circumventing tariffs by relocating their production to the United States. The EU's counter-tariffs make imported goods more expensive for European consumers and hamper the competitiveness of domestic industries because they drive up the cost of intermediate products.
3. The United States' punitive tariffs hit European aircraft manufacturers the hardest. The special tariffs imposed owing to Airbus and Boeing are the highest compensation claims awarded by the WTO in its history. The second most affected category is alcoholic beverages (such as German spirits, French wine and Irish whisky). Apart from aircraft manufacturers, US manufacturers of gaming consoles, construction equipment and alcoholic beverages are bearing the brunt of EU tariffs.
4. The additional duties imposed by the United States because of Airbus, which have been in force since autumn 2019, have led to a reduction of at least 40 per cent in German exports outside the aircraft sector. An additional factor is the extremely negative impact of the coronavirus crisis, which accounts for a further decline of up to 25 per cent. For Germany, the decline in exports resulting from the US Airbus tariffs alone amounts to almost €900 million a year; changes to the schedules of duties are responsible for higher losses than initially expected. Negative effects are also to be expected for other EU member states.
5. The economic cooperation between the EU and the United States is strong. For the EU, the United States continues to be the most important partner by far. The media sometimes suggest that this role belongs to China. Yet in this context, it is important to focus not only on goods trading, but also on services trading and companies that operate in both regions, and if all these exchanges are included, the United States is the number one partner for Germany and the EU. The magnitude of these economic relations automatically means that a reduction of trade barriers can bring major economic benefits. It also means that

the transatlantic partners can still shape the global system of trade, if only they cooperate.

6. The EU's tariffs on American goods are approximately twice as high as those imposed by the United States on European goods, although the United States has introduced an increasing number of non-tariff barriers since 2009, and at a faster pace since 2017. In the EU, an upward trend in these types of barriers can also be found, albeit with less momentum.
7. The EU should actively approach the United States and make concrete trade proposals in order to lower bilateral trade barriers. They must first and foremost be aimed at permanently defusing the Airbus-Boeing dispute. The four-month suspension of the tariffs that has recently been agreed is good news, yet the persistent uncertainty about the future is making goods trading more difficult in the sectors affected to date. The WTO has found that the damages caused by the EU's subsidies outweigh the damages caused by the US subsidies, meaning that the EU will have to make greater concessions. If it is not possible to settle the dispute over aircraft subsidies completely, the parties should at least offset their respective compensation claims. This would reduce the burden on European exporters by more than 50 per cent and that on importers down to zero.
8. For tariffs, too, the ball is in the EU's court: European import tariffs are clearly higher than those levied by the United States, both on average and specifically in the agricultural sector. It is in the EU's interest to seek a sustainable trade reconciliation with the United States. This will require resetting European agricultural policy in a way that does not use import tariffs to prop up farmers' incomes, but focuses instead on modified direct payments and service agreements. This would put the EU in a position to reduce agricultural tariff barriers; in return, the United States would be prepared to eliminate industrial tariffs. If this happened, it would be possible at last to realise the customs agreement that was envisaged as early as the summer of 2018.
9. In addition, a number of stimulus measures will be needed in the area of non-tariff trade barriers, relating in particular to the setting of standards for new products and services. The United States and the EU together will remain the world's most important regulatory powers for many decades to come – providing, of course, that the two cooperate. When combined, both their economic output and trading volume are very likely to account for a larger share of the global total than those of China, so that together they have enough influence to enforce their ideas about data protection, environmental policy, product safety etc. around the world.
10. At the same time, the EU's and the United States' economic interests as regards China are not identical. The United States tends to have its comparative advantages in the services sector, while the EU tends to prevail in the industrial sector. Since China already grants better market access in the industrial sector, the EU's current account deficit with China is significantly smaller than the United States'. For a number of years, Germany has even

generated a current account surplus with China because German investments in that country are highly profitable.

11. These observations suggest that it will be better for the global economy and for the transatlantic partners to put their own bilateral relations in order and regularise them on the basis of a new free trade agreement rather than to seek cooperation defensively, particularly against China. A strong transatlantic relationship will strengthen the negotiating power of both the United States and Europe against China.
12. The most appropriate forum for extended cooperation between the EU and the United States is the World Trade Organisation (WTO). In this context, the partners will have to prioritise the restoration of the Appellate Body in the dispute settlement process, which can only be done by restricting WTO law-making through the courts of arbitration – a process rightly criticised by the United States. In addition, the EU and the United States should work towards facilitating plurilateral WTO agreements under which groups of WTO members take the lead in specific fields. Finally, there is a need to tackle the difficult task of improving the subsidy rules.
13. To ensure that climate policy ambitions on both sides of the Atlantic and the high CO<sub>2</sub> prices that need to be charged for their implementation do not lead to trade disputes, for example due to the unilateral introduction of a climate tariff or CO<sub>2</sub> border adjustment, the EU and the United States should agree to establish a climate club in which they jointly set a minimum CO<sub>2</sub> price and a CO<sub>2</sub> border adjustment applicable to third countries.



## A. Introduction and motivation

During the period from 2017 to 2020, the EU's economic relations with the United States were marred by a number of disputes. In the years before then, there had been signs of increased transatlantic cooperation: between 2013 and 2016, negotiations were held on an ambitious Transatlantic Trade and Investment Partnership (TTIP). However, following the election of Donald Trump as the 45<sup>th</sup> US president, the agreement was "*consigned to the deep freeze*" (Cecilia Malmström)<sup>1</sup> and the pendulum swung from cooperation to conflict.

President Trump repeatedly referred to the alleged unfair treatment of US producers in the EU. Publicly made claims such as "*The European Union treats us, I would say, worse than China, they're just smaller*"<sup>2</sup> (17 May 2019) were not a rare occurrence. As this study will show, this statement is false with regard to both of its central claims: transatlantic economic relations are significantly more extensive than Sino-US relations and much more balanced.

From the outset, the US president threatened to impose tariffs against European and German companies. And his threats were not empty: the US government's introduction of tariffs on European steel and aluminium products in the spring of 2018 on the grounds that US security interests were threatened broke a taboo: it was the first time that the exceptions of Article XXI of the General Agreement on Tariffs and Trade (GATT) were used against allies. The EU responded with retaliatory measures. For a short while, it even seemed conceivable that the United States could progress to imposing tariffs on cars, which could have had a much more serious negative impact on Germany. In the end, a kind of "truce" between the EU and the United States was announced in July 2018. However, the truce foresaw serious negotiations on a trade agreement that would remove the continuing trade barriers between the EU and the United States, and they did not materialise; instead, only a mini-deal on lobster trading was concluded in the autumn of 2020. Thus the trade barriers introduced in 2018 still apply, weighing particularly on industrial family businesses in Germany and the EU.

In transatlantic relations, two arbitration awards by the World Trade Organisation (WTO) gave rise to further problems: initially, the WTO allowed the United States to levy additional tariffs on goods from the EU as compensation for illegal European subsidies in aircraft manufacture. A year later, it also allowed the EU to impose tariffs on US goods for similar reasons. The total compensation involved made this the most far-reaching measure ever approved by the WTO. It has led to tangible economic losses in sectors that have nothing to do with aircraft manufacture, but that have nevertheless been affected by the countervailing duties (Felbermayr/

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*Major losses in sectors outside the aircraft sector*

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1 <https://www.reuters.com/article/us-usa-election-eu-trade-idUSKBN1361UN>.

2 <https://www.reuters.com/article/uk-usa-trade-eu-idUKKCN15N2FC>.

Herrmann, 2020). Although it is encouraging that the new US administration and the EU have agreed not to levy the tariffs for four months, starting in March 2021, this is not yet a solution to the dispute, which has been going on for 16 years.

Under Trump, the United States attempted to coerce China into making trade concessions by threatening high tariffs. The strategy failed: China made scarcely any real concessions. And around half of each party's trading volume (at 2018 levels) still attracts additional duties of about 20 per cent, causing a high economic burden in both the United States and China (Amiti et al., 2019). The Sino-US trade war is creating great uncertainty in the multilateral trading system and thus burdening European and German trade relations – even though it also offers opportunities (Felbermayr/Steininger, 2019). The conflict between these two powers highlights the need for an independent European strategy that meets the bloc's own interests and preconditions.

Under President Trump, the United States entered into or amended several trade deals with third countries, deals which oppose the EU's economic interests, at least indirectly. More stringent rules of origin have been agreed with Mexico and Canada, putting suppliers from the EU at a disadvantage, especially in automotive manufacture. The Phase I Agreement between the United States and China forces China to purchase US products, which will lead to a diversion of demand at the EU's expense, specifically for example in some agricultural sectors and in aircraft manufacture. Korea and Japan have been exempted from steel and aluminium tariffs in return for voluntary limits on exports. This Trump-era bilateralism is in conflict with the rules of the WTO, for example Article XXIV of the GATT, which requires trade agreements to cover the majority of bilateral trade, and Article XI, which generally prohibits any quantitative restrictions (unlike customs measures).

Ultimately, many of the moves on trade policy made by the US administration in recent years were directly or indirectly levelled at the WTO. The Obama administration had already refused to give its consent to filling vacancies on the WTO Appellate Body, and under Trump this body became incapacitated due to a lack of arbitrators, thus undermining the WTO's dispute settlement function and forcing the EU and other countries to seek alternative agreements without involving the WTO. President Trump never acted on his threat to pull out of the WTO, but the unscrupulous way in which he frustrated its rules will permanently weaken the organisation.

To ensure that the transatlantic partners can make a constructive contribution to a working global trade order, they will first have to resolve their own conflicts and take action to avoid future burdens. This includes finding a solution at last in the bilateral dispute over aircraft subsidies, a solution that can also pave the way for more realistic arrangements regarding state subsidies on a multilateral level. The United States will also have to remove the illegal

tariffs on steel and aluminium products – a step which may succeed in the context of fresh negotiations towards a transatlantic trade agreement. The EU and the United States should not define their economic relations purely on the basis of a joint approach to China policies. Strong, reliable transatlantic trade relations will strengthen both players, including their bilateral discussions with China.

Subsection B of this study initially looks at transatlantic economic relations as compared with other trading partners as well as over time. All the elements of the current account balance will be reviewed in this process, with a focus on the EU (or the eurozone) and Germany. There is evidence that, despite the massive difficulties experienced in the past four years, economic relations across the Atlantic have remained strong; that is, there is no trace of a negative “Trump effect” in the aggregated data.

This is followed by a review of some central disputes in transatlantic relations. For instance, we will see that the EU levies significantly higher tariffs on US goods than the other way round. Conversely, there was a particularly sharp increase in non-tariff trade barriers imposed by the United States in the years after the 2008/09 global financial crisis. The latest developments in the Airbus-Boeing dispute will be discussed and new calculations on economic damage presented.

Subsection D of this study deals with two major challenges facing both the EU and the United States: the rapid rise in China’s importance and climate change. Transatlantic cooperation will be required in both areas, although there are diverging interests in trade policy that will be hard to coordinate. As for climate policy, there is an opportunity to introduce a joint minimum price for CO<sub>2</sub> emissions and to secure a transatlantic climate club with a system of CO<sub>2</sub> border adjustments.



## B. United States: the EU's most important economic partner

The United States of America continues to be by far the most important economic partner of the EU27 and Germany. In the media and in political debates, the situation is sometimes presented misleadingly, citing China as Europe's and Germany's most important partner.<sup>3</sup> This is only correct if economic relations between two countries or regions are reduced to the level of goods exchange. In recent decades, however, services trading has expanded at a particularly rapid pace and now plays an important part in many bilateral relationships. Re-exports and the processing of intermediate imports do not play a significant role in the services sector, but they do in goods trading; thus the proportion of domestic value creation in services exports is significantly higher than in goods exports.<sup>4</sup> For this reason, official trade data often underestimates the relevance of services trading to economic wealth relative to the contribution of goods trading. What is more, domestic companies serve foreign markets not only through exports, but also through local production. In the case of the latter, primary income (wages, dividends and investment income) is generated that is attributable to domestic national income.

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*China is not  
Germany's most  
important  
partner*

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### I. EU27's current account balance with the United States

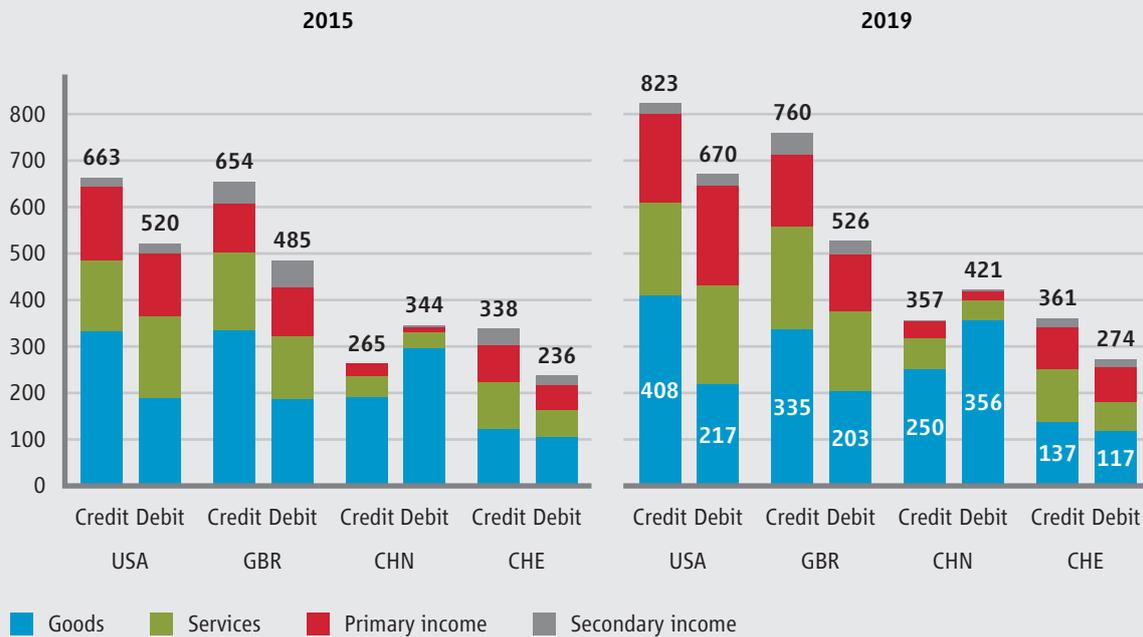
Figure 1 shows that the EU27 countries exported goods worth €408 billion to the United States, while exports to the United Kingdom amounted to €335 billion and those to China totalled €250 billion. Imports from the United States amounted to €217 billion, while goods imported from the UK stood at €203 billion and those from China at €356 billion. The figures for China include Hong Kong. This means that the volume of goods the EU27 traded with the United States in 2019 amounted to €625 billion, while the volume traded with China was €606 billion. In 2020, goods trade with China exceeded the volume traded with the United States for the first time. However, if we include the services sector in the analysis, a very different picture emerges: services exports from the EU27 to the United States amounted to €200 billion in 2019 – three times more than those to China – and services imports from the United States (€214 billion) exceeded those from China by a factor of five. And in terms of primary income, China likewise lags far behind.

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3 A press statement released by Eurostat on 15 February 2021 reads: "In the year 2020, China was the main partner for the EU." On 22 February 2021, Destatis declared that in 2020 China was "Germany's most important trading partner for the fifth year in succession" [our translation].

4 According to data released from the OECD's TiVa database (<https://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm#access>), in 2016 the proportion of domestic value creation from gross exports in the German services sector was 89.7 per cent (eurozone: 87.6 per cent); the corresponding proportion in the manufacturing sector was 75.6 per cent (eurozone: 80.9 per cent).

Figure 1: EU27's current account balance with top four partner countries in € billions



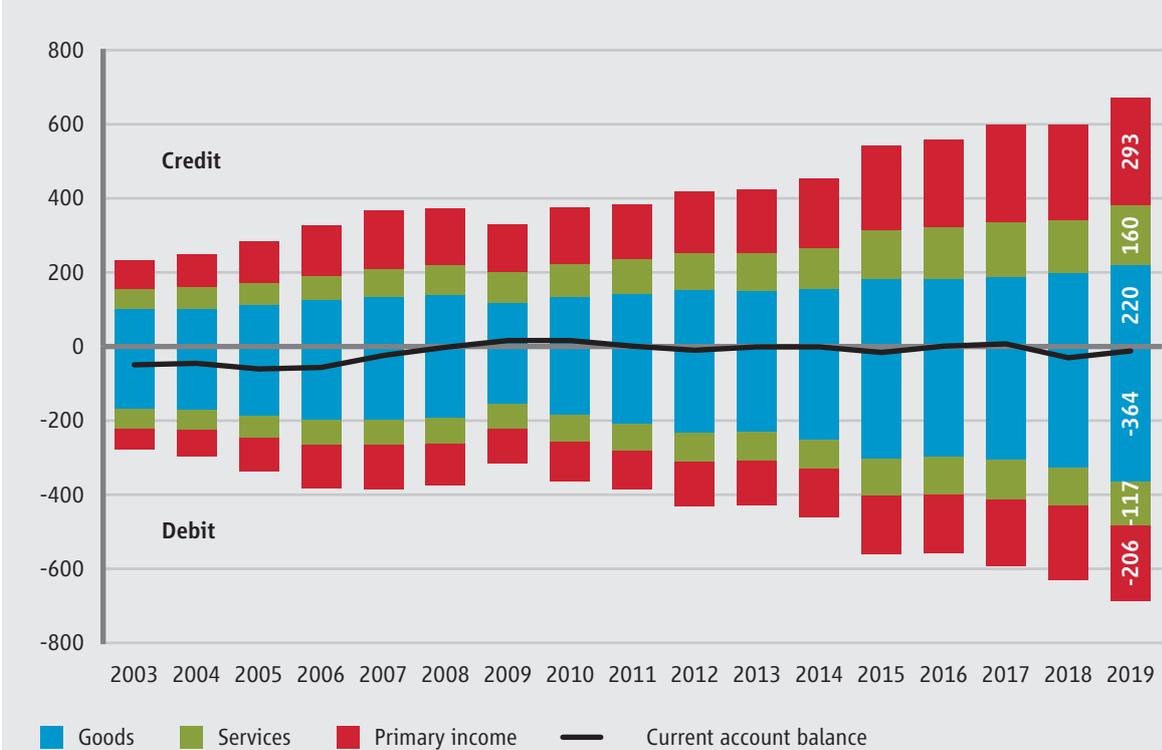
Source: Eurostat. Own calculations and presentation. CHN (China) includes Hong Kong. Primary income refers to income from work carried out abroad or from investments abroad. Secondary income refers to governmental or private transfers and other payments without a service in return. "Credit" refers to payment received, such as for exports; "Debit" to a payment made, such as for imports.

Total inflows into and outflows from the EU's aggregate current account balance as a result of exports and imports (goods and services) of the EU27, plus primary income and (immaterial) secondary income from the United States in 2019 amounted to €1,493 billion; since 2015, the annual rate of increase has been approximately 6.0 per cent. The UK recorded €1,286 billion in 2019 (annual growth of 3.1 per cent since 2015), China €777 billion (annual growth of 6.3 per cent since 2015) and Switzerland €634 billion (annual growth of 2.5 per cent since 2015). In other words: despite the deterioration in bilateral relations due to various transatlantic disputes during the Trump administration (2017-2020), the rate of increase in economic exchange with the United States in the past five years was only insignificantly slower than that with China.

Figure 1 shows the EU's account surplus with the United States in 2019 at €153 billion – a sum primarily driven by a positive balance in goods trading amounting to €191 billion. Braml and Felbermayr (2019) argue that the data published by Eurostat is not plausible, and indeed, the data presented by the US Bureau of Economic Analysis (BEA), which should in fact mirror the Eurostat data, paints a different picture. Figure 2 shows that, with the eurozone (which represents the major part of the EU27 after Brexit) the United States has only a very small current account deficit of €12 billion. Over the years, in fact, it reveals an almost even balance

of about zero. The reason is that the United States has significant surpluses in services trading and primary income which are underestimated in the Eurostat data.

Figure 2: Bilateral current account balance of the United States with the eurozone in € billions



Source: Bureau of Economic Analysis (BEA). Figures were converted from dollars to euros using the average annual exchange rates of the Bundesbank. Own calculations and presentation. For the sake of simplicity, secondary income (transfers without a service in return) is not shown separately here, but it is included in the current account balance. Please note that the illustration refers to the eurozone, not the EU27 countries, for which the BEA keeps no statistics. However, the difference between the eurozone and the EU27 is slight.

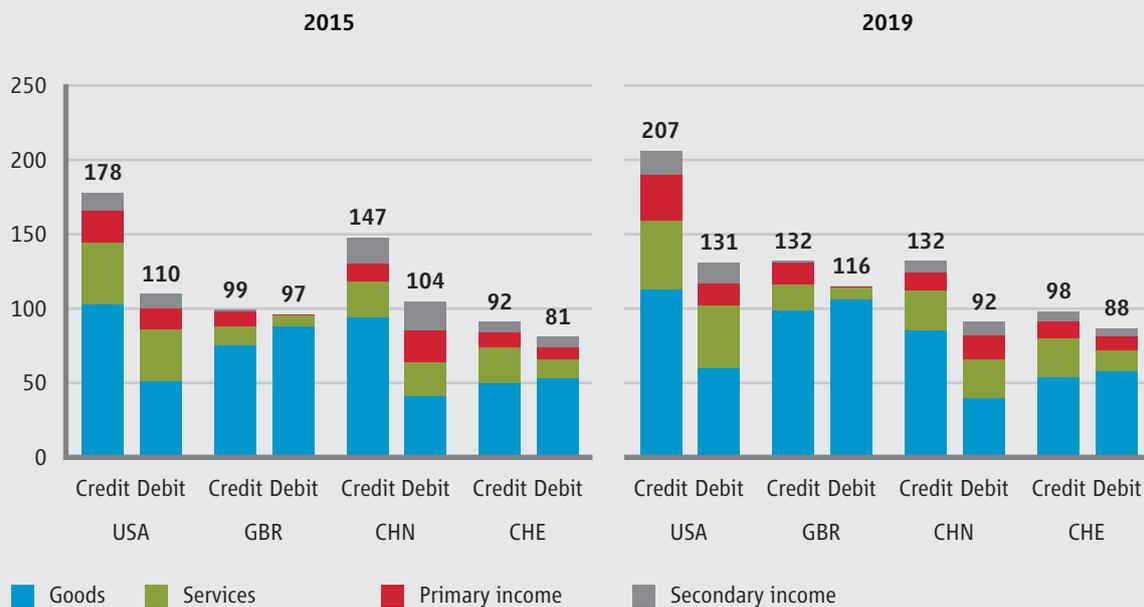
## II. Germany’s current account balance with the United States

For Germany, too, the United States continues to be the most important economic partner; see Figure 3. In 2019, Germany had a current account surplus of €207 billion with the United States and a surplus of €132 billion with China. The difference is attributable to the far larger volume of transatlantic services trade and the massive interconnected movements of capital reflecting in primary income accounts. China, however, has overtaken the UK as the second most important economic partner.

As Braml and Felbermayr (2019) show, Germany’s official bilateral statistics with the United States underestimate the true intensity of bilateral economic relations. For example, Germany buys services from subsidiaries of US companies registered in Ireland or the Netherlands, and

these subsidiaries then generate profits that reflect in the statistics as primary income of the United States from the EU27. Because of the freedoms of the EU’s single market and existing tax differences within this market, it is not helpful to interpret bilateral relations of individual members of the single market with a non-European economic partner such as the United States. In particular, Germany’s current account balance with the United States is probably a great deal more even than Figure 3 suggests.<sup>5</sup>

Figure 3: Germany’s current account balance with the top four non-EU partner countries

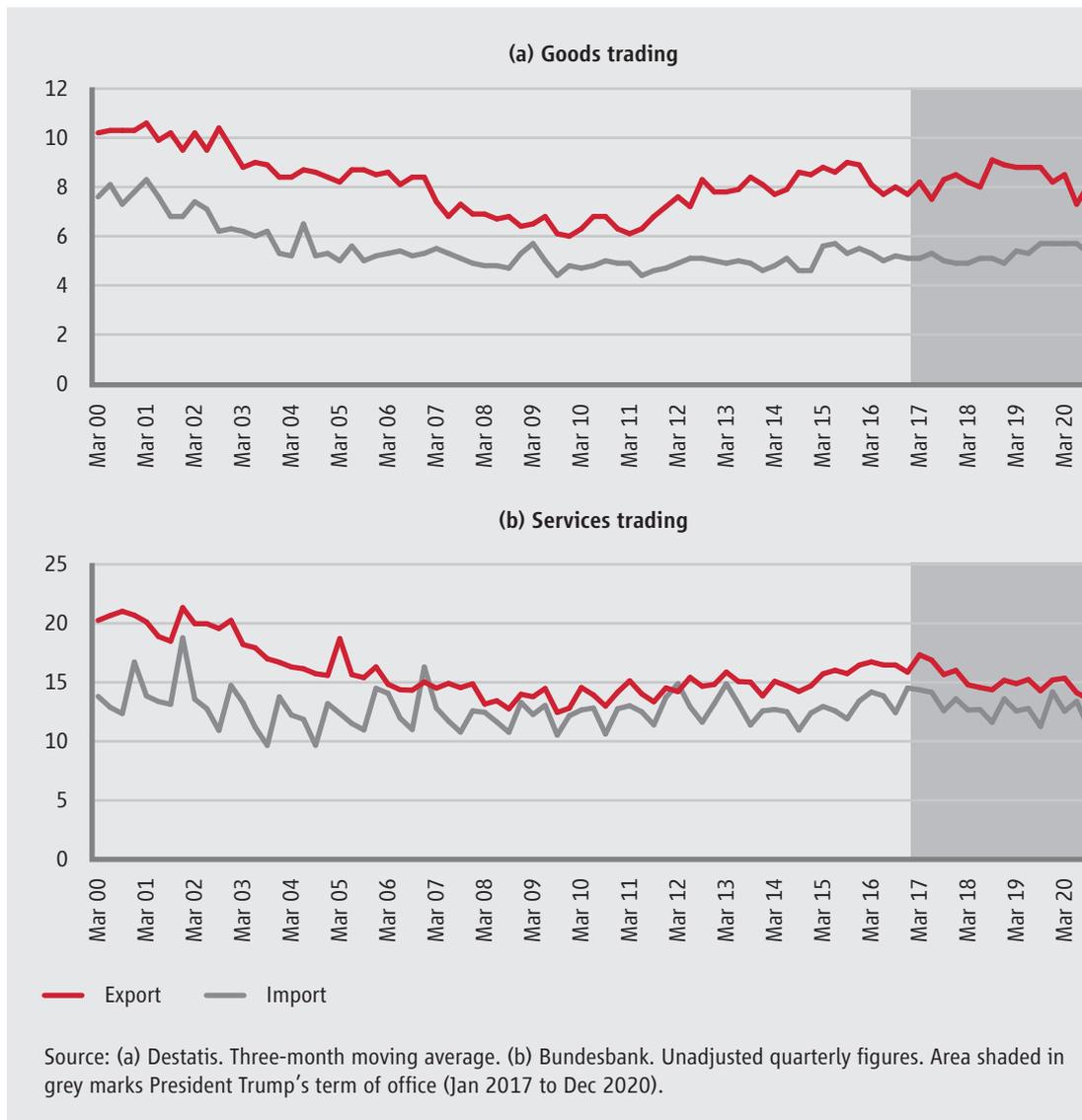


Source: Bundesbank. CHN (China) includes Hong Kong. Own calculations and presentation.

Germany’s trade with the United States flourished between 2015 and 2019. The total value of transactions increased by an average of 4.1 per cent a year, from €288 billion to €338 billion; transactions with China grew by 6.1 per cent and those with Switzerland by 1.9 per cent – only marginally higher than the average rate of inflation during this period. The current account balance with the UK declined by 2.9 per cent per year: from €252 billion in 2015 to €224 billion in 2019.

5 The data of the Bureau of Economic Analysis correlates very well with that of the Bundesbank; see Braml and Felbermayr (2019).

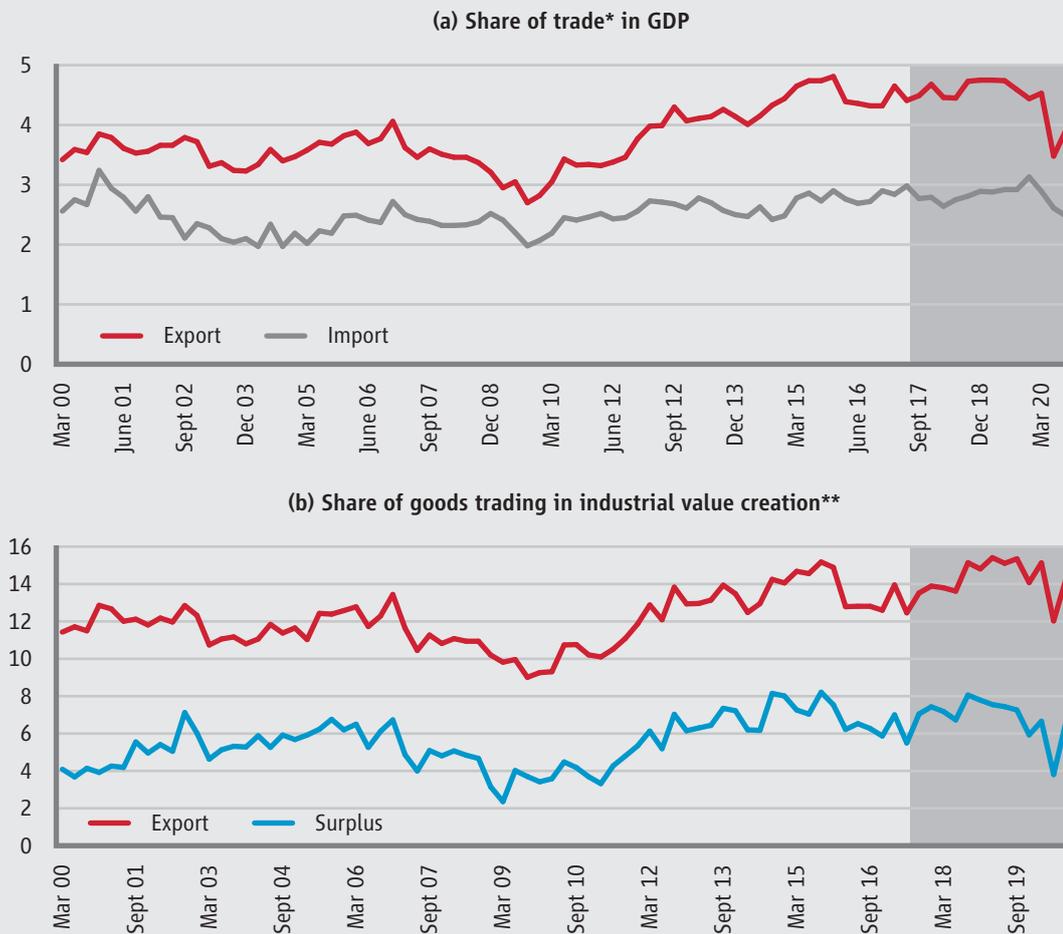
Figure 4: Share (in %) of Germany's foreign trade with the United States



The significance of the United States as a trading partner for Germany relative to other trading partners has increased over the past decade; see Figure 4(a). Up to the year 2009, the share of German exports to the United States decreased from approximately 11 per cent to about 6 per cent; since then their relative importance has stabilised at around 9 per cent. On the import side, after an extended period of decline, the share of supplies from the United States has been rising again since 2014. Figure 4(b) shows that, for the German services trade, the relative role played by the United States is about twice as large as for the goods trade. There were no major changes in imports in recent years. While there was a relative decline in exports until 2010, since then the United States' share has been fluctuating around 15 per cent. In Figure 4, the four years of President Trump's administration are shaded in grey. They reveal a relatively dynamic picture in goods trading during the first two thirds of his presidency for both exports and imports; after that, new trade barriers have an effect, especially on exports. The last year of the Trump era is dominated by the coronavirus crisis. The situation is different in

services trading, where there has been a decline in relative importance in the past four years; however, it should be taken into account that these accounts are strongly influenced by fiscal processes and intra-EU trade; see the earlier comments above.

Figure 5: Macroeconomic importance of Germany's US trade in %



Source: Bundesbank and Destatis. Unadjusted quarterly figures. Own calculations and presentation. Area shaded in grey marks President Trump's term of office (Jan 2017 to Dec 2020). \*Goods and services trading. \*\*Gross value creation by the manufacturing sector minus the construction industry.

Finally, it is useful to put Germany's trade with the United States in relation to macroeconomic aggregates. Figure 5(a) shows that goods exports to the United States have fluctuated around 4.5 per cent of GDP in recent years; goods imports have varied around 2.5 per cent, with a slight upward trend. Since almost all goods trade with the United States occurs in the area of industrial products, Figure 5(b) shows the share of German exports to the United States as a percentage of gross value creation by the manufacturing sector; this has been approximately 14 per cent in recent years. The surplus in goods trading amounted to an average of 7 per cent of industrial gross value creation. These figures provide very clear evidence of the United States' paramount importance for Germany's economic prosperity. Conversely, they also

suggest that political disagreements in bilateral relations between Germany and the United States entail high economic risks.

### III. Relative importance of the EU27 for the United States

Figure 6 shows the share of US foreign trade conducted with EU27 countries. Following an upswing that lasted until the major economic and financial crisis, the share attributable to the EU mostly followed a declining trend in both goods trading and services trading.

Figure 6: The EU27's share of US foreign trade in %

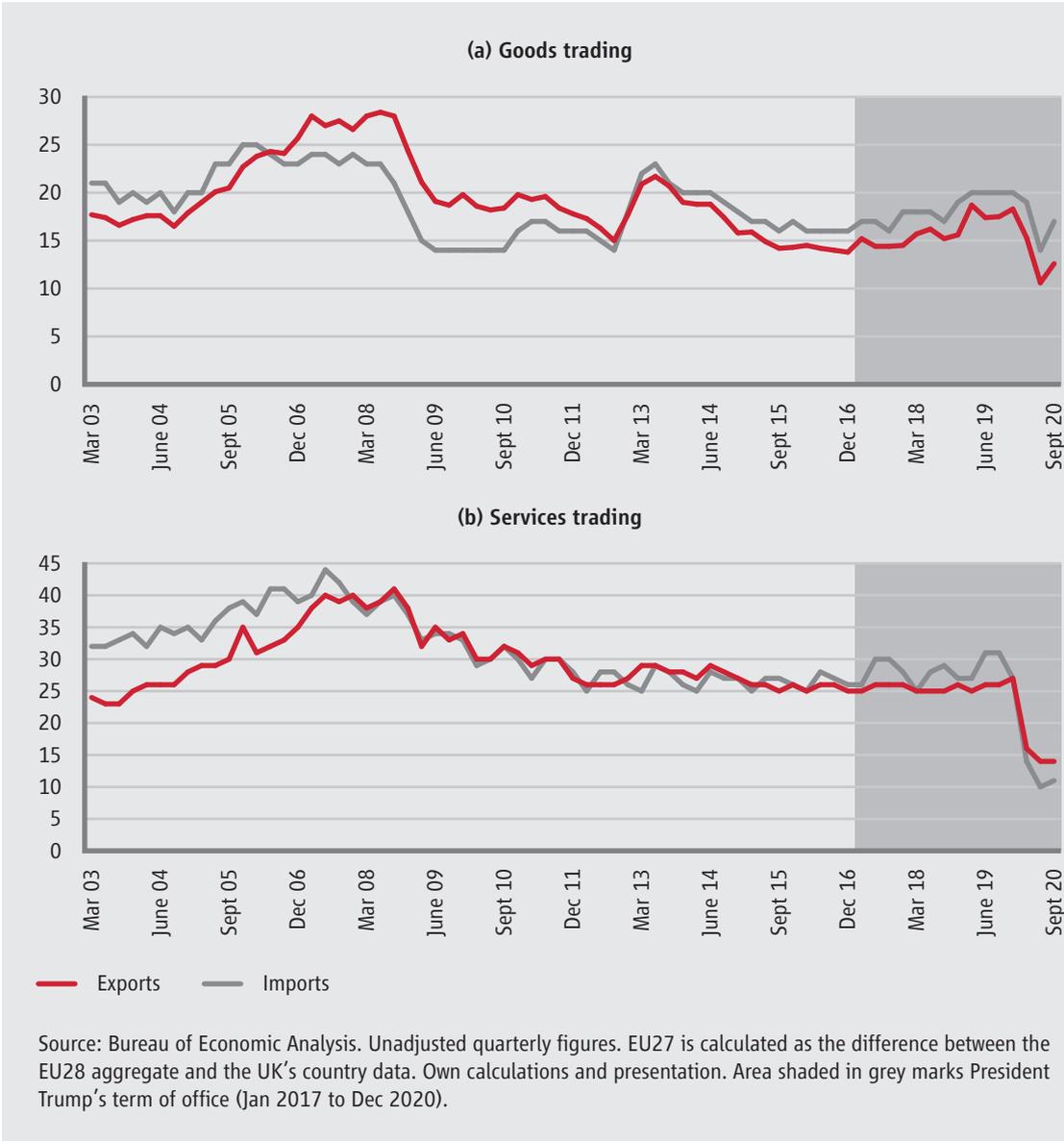


Figure 6 reveals that the importance of the EU27 increased considerably in the years of the Trump administration. The share of US exports shipped to Europe rose from approximately

15 per cent to between 18 and 19 per cent, while the share of imports from Europe grew from 16 to over 20 per cent – before the coronavirus crisis. During the crisis, transatlantic trade decreased more sharply than the United States’ trade with its North American partners Canada and Mexico. The rise in the EU’s share during the Trump years is presumably linked to the effects of trade diversion as a result of the imposition of high tariffs on Chinese goods in the United States and on US goods in China.

#### **IV. No clear “Trump effect” in aggregated data**

During Donald Trump’s term in office, bilateral relations between the EU and the United States were severely strained; more information on the specific disputes will follow in the next subsection. US trade policy measures during this time caused major damage in some sectors, but were limited to a small number of sectors in total. What is more, the relatively good economic performance in the United States, especially in 2017 and 2018, boosted demand for European products and services. Interestingly, in the first three years of the Trump presidency, European goods exports to the United States increased by a nominal average of 7.2 per cent per year compared with annual growth of around 5.6 per cent during the eight years under Barack Obama. Imports increased by 3.2 per cent a year under Obama, compared with 7.1 per cent under Trump. In the services trade, the annual rate of export growth was the same – 5.0 per cent – in the Obama era and under Trump; imports, on the other hand, expanded much more rapidly between 2008 and 2016 (7.0 per cent) than between 2016 and 2019 (4.4 per cent).

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*No “Trump effect”  
found in overall  
assessment*

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Aggregated German trade data likewise does not show any clear “Trump effect”; on the contrary, in the first three years of the Trump presidency, German goods exports to the United States rose by a nominal average of 7 per cent a year compared with annual growth of around 5 per cent during the eight Obama years. The difference in annual growth rates was even more significant for imports, where it stood at approximately 5 per cent. The situation was the reverse in the services trade, where higher annual growth rates occurred during the Obama era.

These figures prove that, despite the disagreements, the transatlantic economic relations of recent years are fundamentally on a solid foundation. This does not, however, apply to the sectors particularly affected by the trade disputes.

Figure 7: EU27 exports to and imports from the United States in € billions

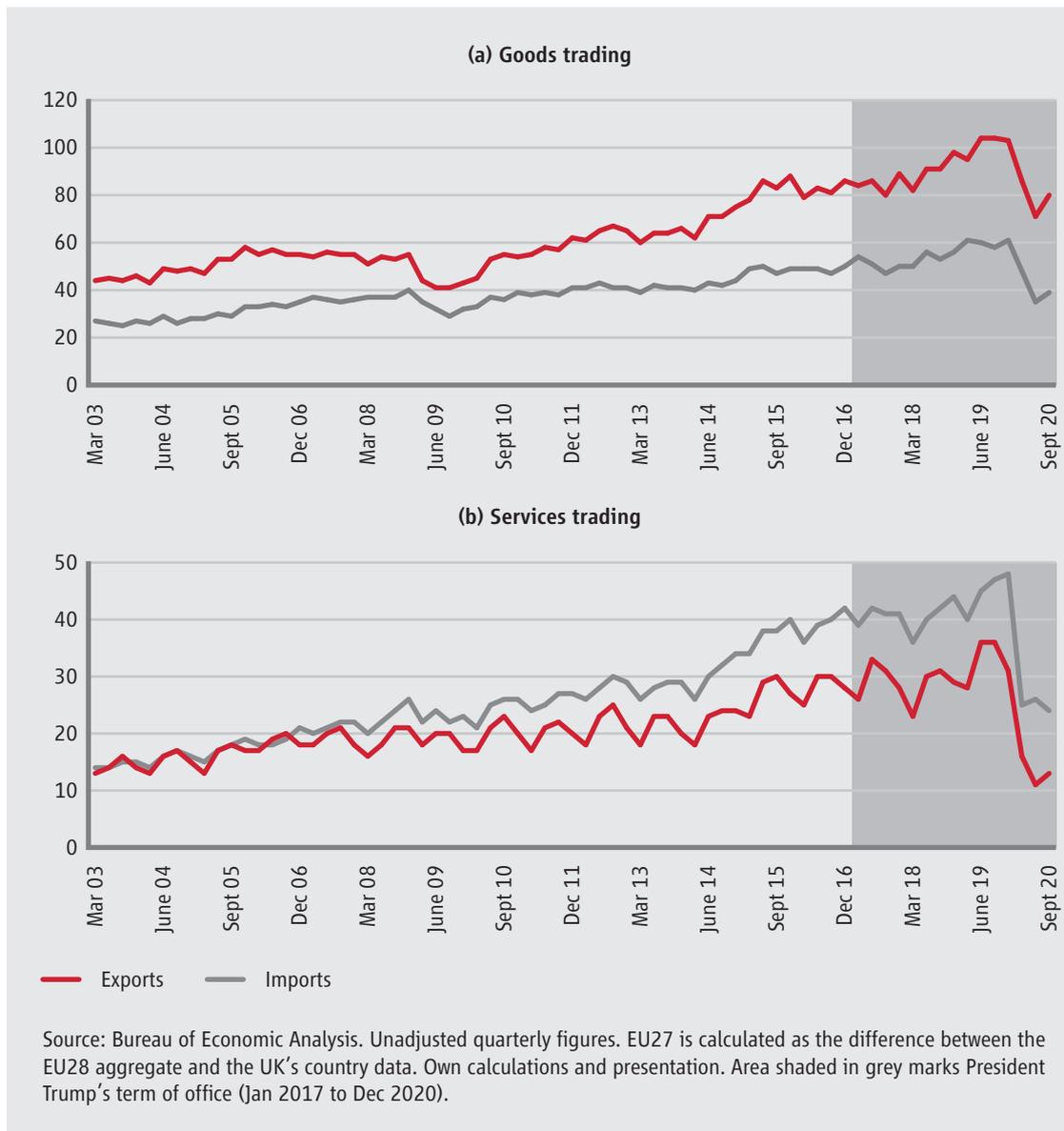
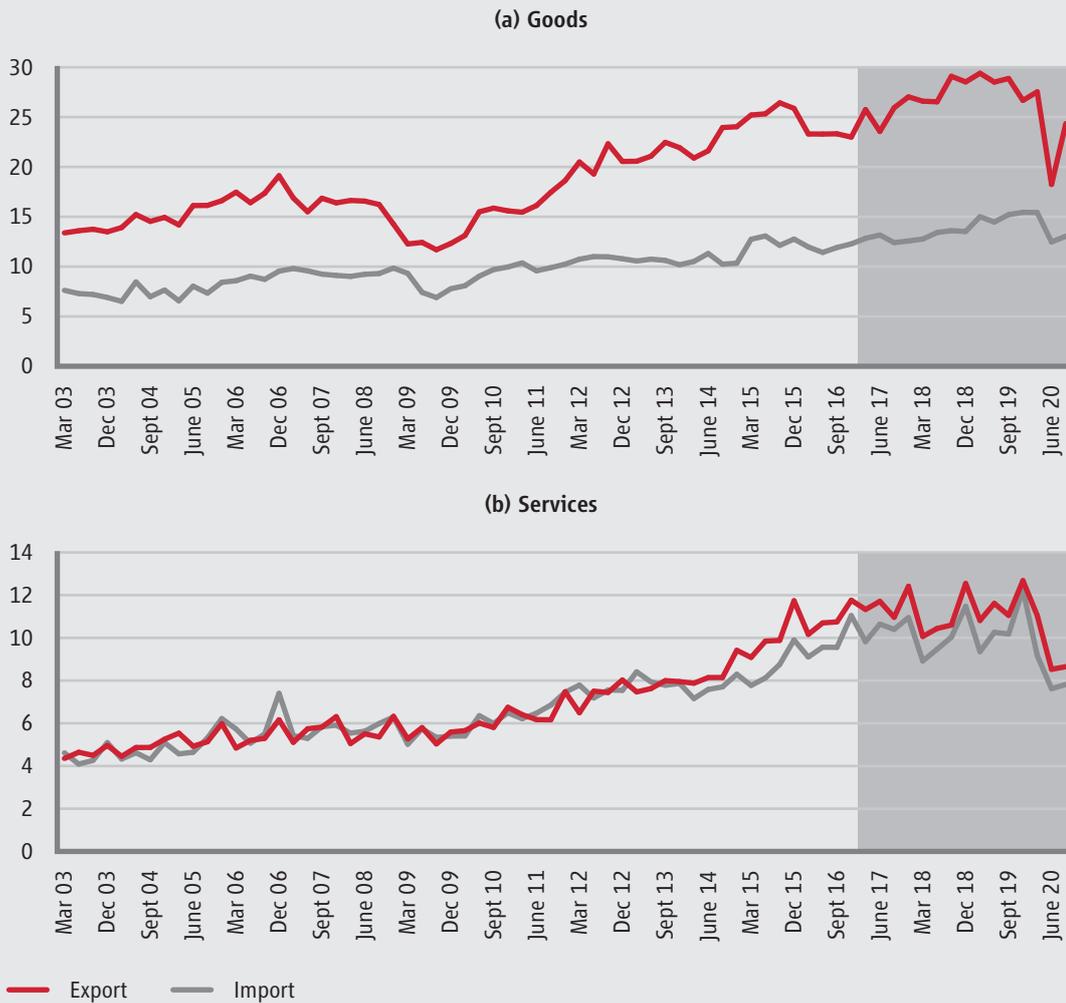


Figure 8: German exports to and imports from the United States in € billions



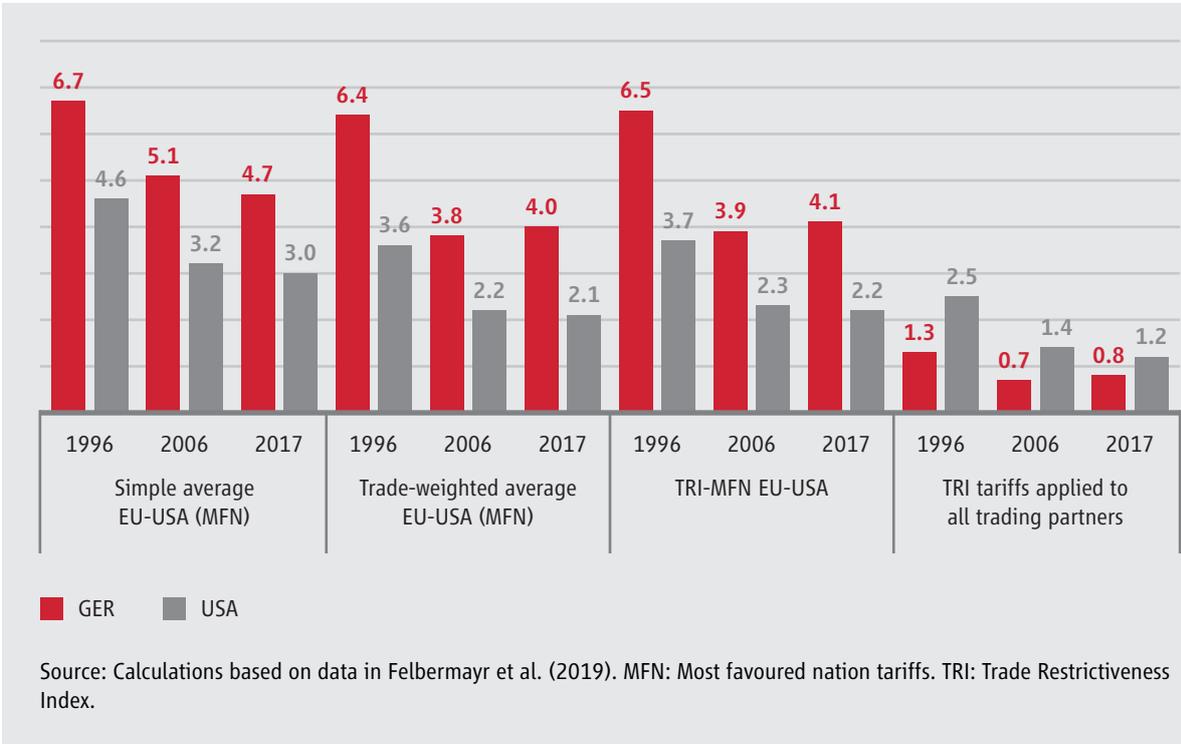
Source: Bundesbank. Unadjusted quarterly figures. Own calculations and presentation. Area shaded in grey marks President Trump's term of office (Jan 2017 to Dec 2020).

# C. Transatlantic trade disputes

## I. EU tariffs are twice as high as US tariffs

As president, Donald Trump frequently complained about high EU tariffs on goods from the United States, saying that they were responsible for the high deficits in the United States’ balance of trade in goods. Resentment of European protectionism is common to many political groupings in the United States, and indeed, it is indisputable that EU import tariffs are significantly higher than those of the United States. Figure 9 demonstrates this clearly. However, the calculation of average tariffs is not straightforward: how can the thousands of very different rates of duty levied on the various products be averaged and compared with each other?

Figure 9: Average rates of duty in transatlantic trade before Trump tariffs in %



One approach is to calculate a simple average on the basis of the thousands of rates of duty. Trade between the United States and the EU is subject to most favoured nation (MFN) tariffs agreed in the World Trade Organisation, since no specific free trade agreement is in place. In 2017, before Donald Trump introduced his tariff policy, this unweighted average rate of duty was 3.0 per cent in the United States and 4.7 per cent in the EU.<sup>6</sup> Among these figures, the external tariffs diverge especially in the area of agriculture trade: here average US tariffs on goods traded with the EU are around 7 per cent, while those imposed by the EU on goods

<sup>6</sup> The average rate of duty is at exactly the same level for all EU member states. When weighted by import value, however, the tariff burden differs across the EU member states, because they have different import weightings.

imported from the United States are 14.5 per cent. But there are also important industrial goods on which US tariffs are significantly lower than European tariffs, such as the 10 per cent tariff on EU car imports, compared with 2.5 per cent levied by the United States.<sup>7</sup>

Unweighted averages, however, are poor indicators of the actual tariff burden. Customs statistics in the area of agriculture are extremely detailed, in many cases with very low trading volumes per tariff line; in industry, the opposite often applies. Weighting the rates of duty by import value shows that the average tariff levied by the EU is 4 per cent, but the United States' average is only half that, at 2.1 per cent. However, this way of calculating averages is also misleading, since products with very high tariffs only have very small trading volumes and are therefore included in the calculation at very low weightings. Model simulations must be used to solve this problem. The Trade Restrictiveness Index (TRI) calculates the value of a (counterfactual) rate of duty identical across all products that is necessary to replicate the actually observable aggregated volume of trade for the tariffs that factually apply. Yet this exercise does not change the general finding: the EU's tariff protection is roughly twice as high as the United States' (TRI-MFN in Figure 9). If we consider not only the MFN tariffs applied between the EU and the United States but also the tariff concessions that apply under free trade agreements, we find that German imports attract lower TRI tariffs than the US ones because Germany has duty-free trade with many key trading partners – first and foremost in the EU. This makes it clear not only that exporters from the United States are burdened directly by high European tariffs but also that they have a relative disadvantage compared with exporters from countries with which the EU has a free trade agreement.

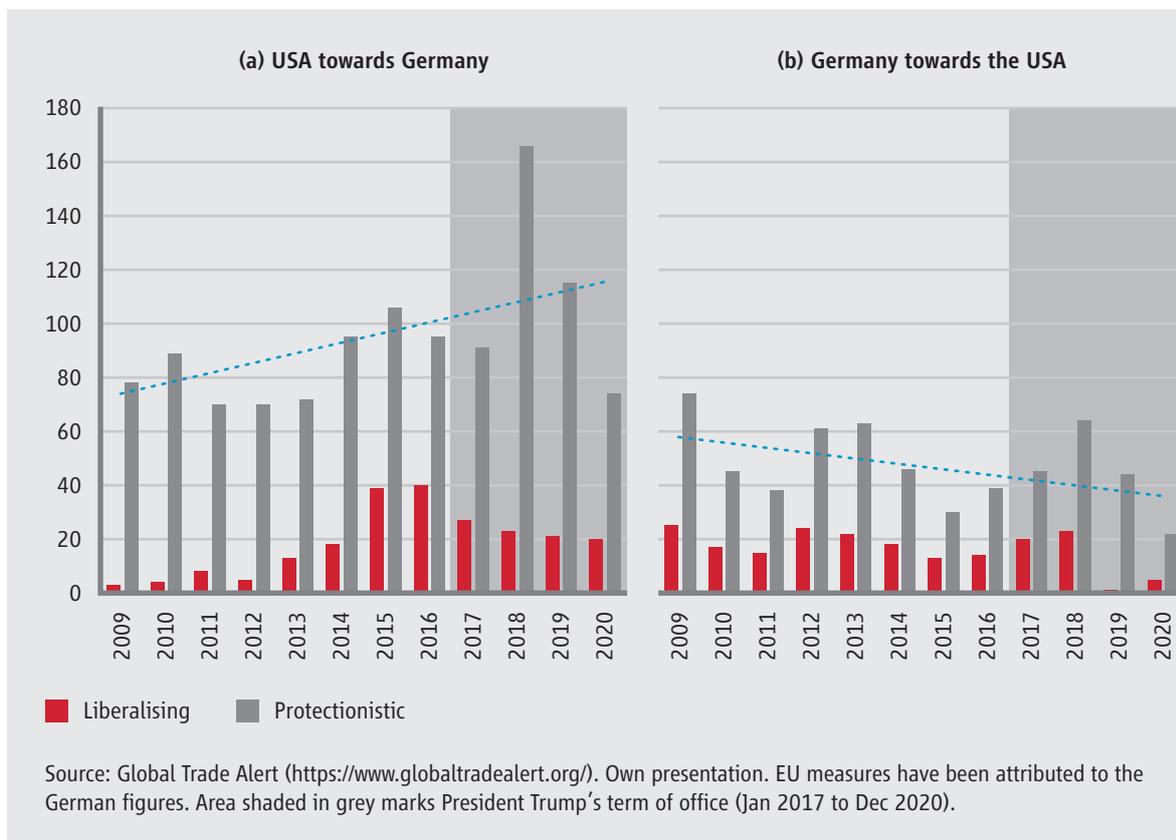
## **II. Increasing protectionism in transatlantic trade**

Even before Donald Trump became the 45<sup>th</sup> President of the United States, protectionist trends had manifested themselves on both sides of the Atlantic. This is very evident, for example, in the Global Trade Alert database of the University of Sankt Gallen. Before Trump, however, distortion in trade was caused first and foremost by non-tariff barriers, such as regulatory disadvantages for foreign providers. Figure 10 shows that, starting in 2009, the number of new protectionist measures significantly exceeded the number of liberalising measures. It also reveals that the United States made much more extensive use of protectionist measures than Germany (in the figure, EU interventions have also been attributed to Germany). For this reason, the United States and the EU launched negotiations for a free trade agreement in 2013 intended to reduce not only tariff measures, but also non-tariff trade barriers.

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<sup>7</sup> Felbermayr (2018) discusses the differences in tariffs between the EU and the United States in more detail.

Figure 10: New bilateral trade barriers between the United States and Germany



At the start of Trump's term of office, the negotiations for a transatlantic free trade agreement were put on ice. What is more, there was also a rapid increase in the number of new barriers: Figure 10 shows a significant increase in the number of protectionist interventions during Trump's term of office.

First, in January 2018 US tariffs justified on the basis of Article XIX of the General Agreement on Tariffs and Trade (GATT) were imposed on washing machines and solar panels. The trade agreements allow such tariffs on a temporary basis, if there has been a sudden sharp rise in imports that cause major economic disruptions in the domestic market, but in this case, use of that justification was and still is highly controversial. Germany is only indirectly affected by these tariff measures, since German manufacturers of washing machines and similar appliances often produce their products in Turkey.

In March 2018, the US administration then started to levy tariffs on steel (25 per cent) and aluminium (10 per cent) as well as products made from these metals. Initially the tariffs applied only to supplies from specific countries, but in June 2018, the list was extended to include the EU. Once again the US administration tried to justify the tariffs on the basis of the rules of the World Trade Organisation, this time citing Article XXI, which allows trade restrictions

if there is a threat to the national security of the importing country. Yet such a threat is hard to imagine between NATO allies, which is why on 22 June 2018 the European Commission imposed counter-tariffs and lodged a complaint with the WTO.

The US tariffs on steel and aluminium affect a European export value of €6.4 billion (base year 2016) and apply to a list of 186 products, although the list has repeatedly been amended. There are also exemptions. The measures affect Germany's trade value in an amount of 1.7 billion; this corresponds to 0.14 per cent of total German exports or 0.05 per cent of German gross domestic product.<sup>8</sup>

The EU's counter-tariffs apply to an import volume of approximately €2.8 billion from the United States. They affect a variety of different goods, ranging from steel and aluminium products through various agricultural products such as orange juice, processed foods such as ketchup or peanut butter down to jeans, motorcycles and beverages such as bourbon whisky. The additional rate of duty is 25 per cent in virtually all cases, although some of the imported goods had already attracted relatively high tariffs from the outset.

However, the tariff of 25 per cent on European cars threatened by President Trump in response to European counter-tariffs was not imposed. The President of the European Commission, Jean-Claude Juncker, and President Trump met at the White House in Washington on 26 July 2018. They agreed to refrain from further escalation in the trade dispute and to scale back the tariffs on industrial products. However, negotiations have not begun in earnest in recent years for reasons that include the United States' insistence on including agricultural products – a demand that was rejected by the EU. Only a mini-deal on lobster and other marine animals was concluded in August 2020, and it applies to a total trade volume of a mere USD 168 million.

### **III. The dispute over aircraft subsidies**

Much more important are developments in the long-smouldering conflict over subsidies to the EU and US aircraft manufacturers Airbus and Boeing in contravention of WTO law. In a study for the Foundation of Family Businesses (2020), Felbermayr and Herrmann cover the dispute in detail and discuss its legal, historical and economic bases. Their study analyses the collateral damage caused by the US tariffs since autumn 2019, but does not address the tariffs imposed by the EU. Since then, the United States has also amended and expanded the list of affected goods, and we will examine this in the following subsection.

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<sup>8</sup> Felbermayr/Sandkamp (2018) provide a more detailed overview of the products and trading volumes affected.

In October 2019, the WTO authorised the United States to levy tariffs on imports from the EU worth USD 7.5 billion; in September 2020, it also authorised the EU, for its part, to impose tariffs on imports from the United States worth USD 4 billion. The compensation claims in the aircraft dispute are the highest such claims that the WTO has awarded in its history; see Figure 11. They are, however, not the first major measures compliant with WTO law to be imposed in transatlantic trade.

Figure 11: Key WTO disputes, approved compensation in USD billion

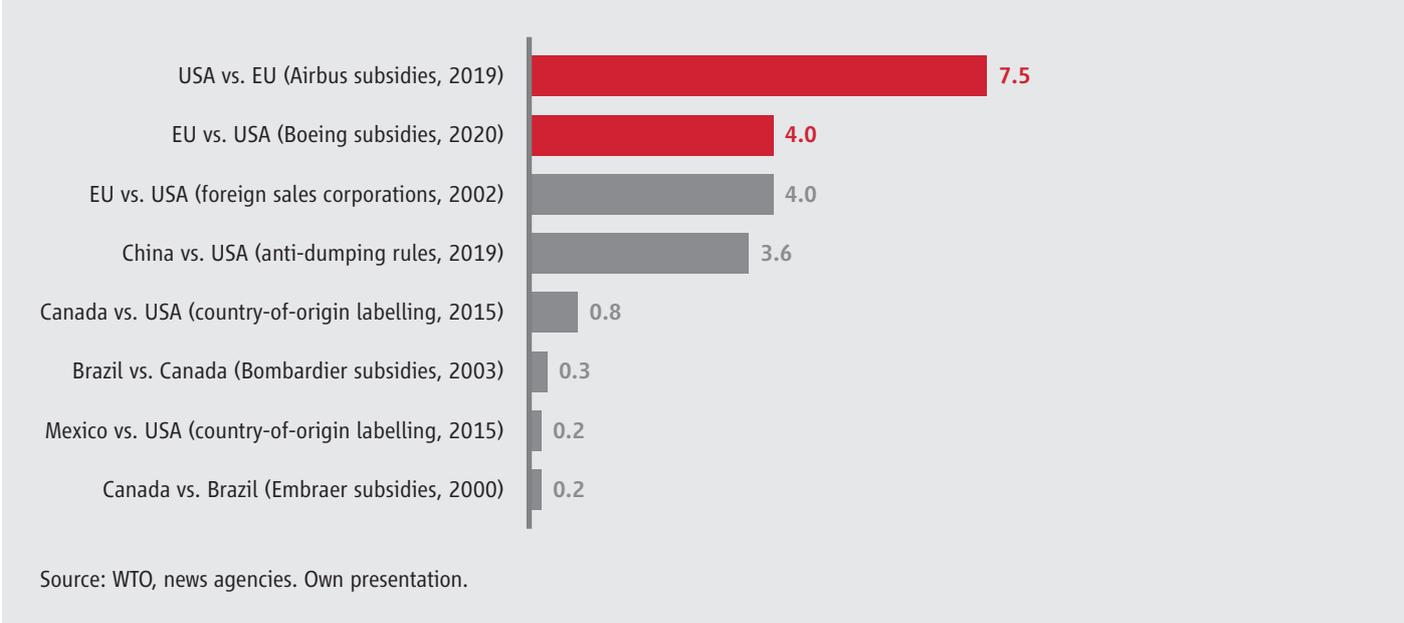


Figure 12 shows the sectors affected by additional tariffs imposed by the United States and the proportion that trade with the United States represents. The largest category is aircraft manufacture, where an additional tariff of 15 per cent has been levied since the autumn of 2019. Here, exports from the EU amounted to €47.7 billion in 2018 (before the United States imposed the additional tariffs); €5.9 billion of this amount was attributable to the United States. In all other sectors, the punitive tariff is 25 per cent. The second-worst affected sector is alcoholic beverages: here, US tariffs are levied on German spirits, French wine and Irish whisky. Here, the relative importance of the United States is high: in 2018, almost a third of total exports of €9.7 billion were attributable to the United States. This importance is lower in the dairy products sector, where new tariffs affect an export volume of €1.1 billion (although this is only about one fifth of the EU’s total exports), and higher in other sectors where additional US tariffs are concentrated, even though the overall relevance of these sectors is lower. For example, an export volume of €400 million is affected in the area of food oils, around €300 million in the area of fruit and nuts and of mechanical hand-working tools, and €200 million in the area of print media. It should be noted that the additional US tariffs do not apply to the entire trade volume shown in Figure 12. One problem of the statistical allocation of tariffs to trade

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*European beverage manufacturers hit hard*

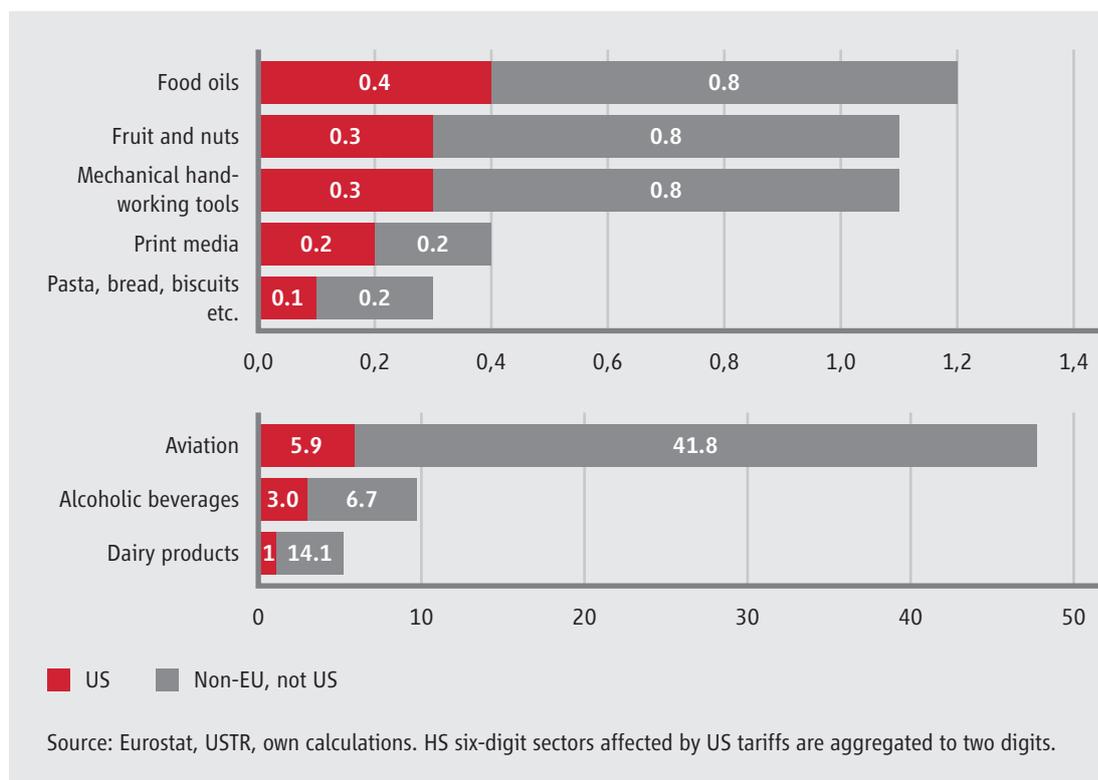
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flows is that the tariffs are defined on the basis of extremely detailed US customs statistics, but data on the trade flows is not available at this highly disaggregated level. What is more, the trading volume in the most important affected sector, aviation, is very volatile and driven by a small number of large transactions, so that the export value indicated for 2018 would have been very different in subsequent years even without the additional tariffs imposed by the United States.

The United States has made a number of changes during the period in which the additional tariffs have been in effect. In March 2020, it slightly modified the composition of the product list. This practice, known as tariff carousel, is compliant with WTO law, but poses a problem for European exporters since new, previously unaffected products could be affected at any time by the additional 25-per cent tariffs levied by the United States. This uncertainty is damaging and hampers international business to at least the same extent as the actual tariffs themselves; see for example Osnago et al. (2015).

At the beginning of 2021, the United States expanded the list of products, newly including aircraft parts in the list subject to the additional 15-per cent tariffs. New product lines have also been added to the list subject to tariffs in other affected sectors. This adjustment, which was made in the final days of the Trump administration, is a response to the European practice of levying additional tariffs due to the Boeing subsidies. The US government argued that, due to the effects of the coronavirus crisis, the volumes subject to tariffs were significantly smaller than they had been in the 2018 base year, so that the additional tariffs were now less effective. In order nonetheless to reach a total volume of USD 7.5 billion, as approved by the WTO, the product list would have to be expanded. There is a certain logic to this: the EU bases its tariff calculations on trading volumes that have already been greatly affected by the coronavirus crisis, resulting in a larger range of US products subject to tariffs than would have been the case if the calculation had been based on the year 2018. The amendment of the product list due to changes in export volumes poses a major problem from the exporters' perspective. It is also problematic in terms of WTO law because a decline in bilateral export as a result of the punitive tariffs is intended; it is objectively almost impossible to separate this kind of endogenous decline from cyclical exogenous factors at the product level. It is also clear that exporters can escape this "punishment" by diverting their business to other markets, thus hollowing out the WTO's logic of compensation. This case illustrates very clearly the kinds of legal and economic uncertainties in the Airbus-Boeing dispute. To escalate the dispute in the middle of a recession is highly problematic, whatever the circumstances.

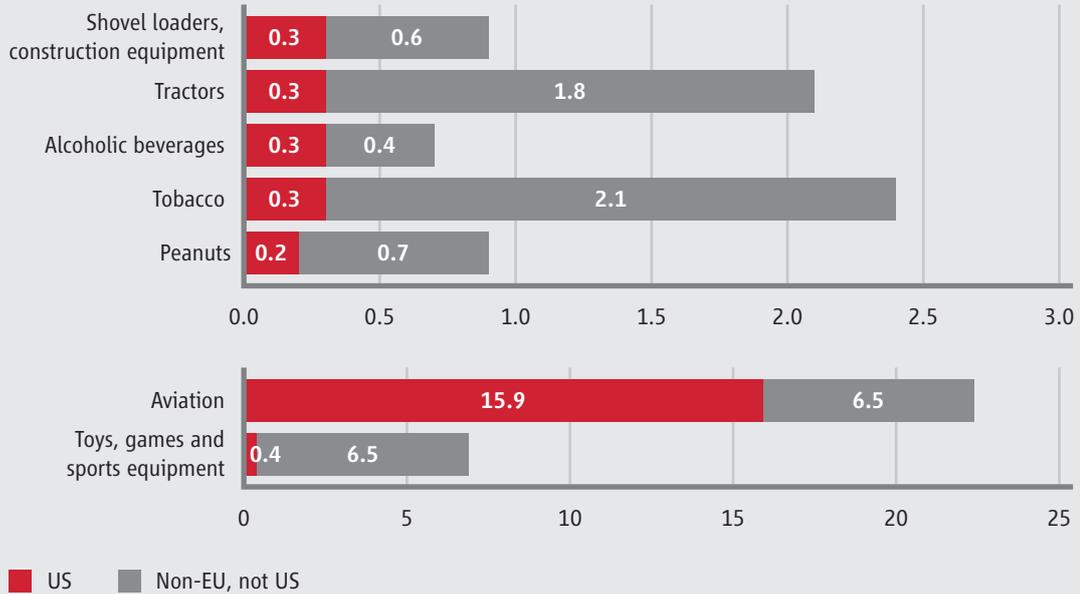
Figure 12: Airbus case – allocation of approved punitive US tariffs in € billions in export value (2018) from the EU



In the autumn of 2020, the EU began to impose additional tariffs on US imports. Figure 13 shows which sectors are affected and to what extent. Again, the analysis is hampered by the fact that customs statistics and trade statistics are not available at the same level of aggregation. The figure shows that most of the tariff burden is attributable to the aircraft sector, which bought over 70 per cent of its imports – amounting to €22.4 billion in 2018 – from the United States. However, only a portion of the goods in this sector, representing a value of €2 billion, is affected by the new tariffs (smaller aircraft, military aircraft and aircraft parts are not affected). One reason for this is that current levels of trade are much lower than the figure reported in 2018. The EU based its calculations on the 12-month period to August 2020, although the recession makes this a very singular time period.

The other sectors are affected to a much lesser extent. The sector of toys, games and sports equipment (also including gaming consoles), which has a total import value into the EU of almost €7 billion, is affected in an amount of €400 million. The United States' relative importance as a source of supply is very much greater in the sectors of shovel loaders, construction equipment (Caterpillar), alcoholic beverages and peanuts. The tobacco and tractor sectors are also significant, with imports from the United States amounting to around €300 million in 2018.

Figure 13: Boeing case – allocation of approved punitive EU tariffs in € billions in import value (2018) into the EU



Source: Eurostat, EU, own calculations. HS-6 digit sector affected by US tariffs are aggregated to two digits.

The additional United States and EU tariffs are a burden on exporting and importing companies in the EU and in Germany. It takes great effort to adapt distribution and procurement processes, especially for smaller and medium-sized companies, and it is beyond dispute that the economic costs of these tariffs and counter-tariffs are born by producers, participants in the supply chain and end consumers. The extent to which these costs are passed down is not easy to determine: it is likely to be different from product to product and varies according to their long-term or short-term nature. What is clear, though, is that the trade conflict is causing considerable damage on both sides.

The United States and the UK have agreed to waive the tariffs in the Airbus-Boeing dispute on both sides, starting at the beginning of 2021. This puts exporters from Germany and EU27 countries under pressure, since they will continue to be charged tariffs, while their competitors from the UK will not. The problem is relevant in the aviation supply industry, but also in the area of alcoholic spirits.

On 5 March 2021, the additional United States and EU tariffs were suspended for four months. This will give German exporters and importers some breathing space. Even so, a revival of transatlantic trade is only realistic if the dispute is settled permanently.

## IV. The economic effects of the new tariffs

The US tariffs in the Airbus dispute have been in force since the autumn of 2019. This makes it possible to provide a graphic presentation of the change in trading volumes since the tariffs were imposed, as shown in Figure 14, which shows German exports to the United States in three sectors: the aircraft sector, the other areas affected by US tariffs, and goods not subject to additional tariffs. We can see that, by the middle of 2020, exports to the United States had fallen by approximately 25 per cent below the starting level owing to the crisis (January 2018 figure standardised to 100). Presumably, this level of contraction would on average also be expected in those sectors that are impacted by the new tariffs. In fact, however, the decline was much sharper: exports of affected goods outside the aircraft manufacturing sector fell by around 50 per cent compared with the beginning of 2018; if we take the average trade in the two years prior to the imposition of the tariffs, we see an even more pronounced drop of around 65 per cent that began very close to the date on which the new tariffs were imposed. Compared with the other sectors, a fall in exports by around 40 per cent can therefore be attributed to the new tariffs.<sup>9</sup> This finding is confirmed by recent developments, which saw a normalisation in trade in goods not affected by the new tariffs, while the affected goods experienced only a very minor recovery. Against this backdrop, the 40 per cent just mentioned seems to indicate the bottom end of the actual level of impact.

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*Punitive tariffs  
lead to falls in  
exports*

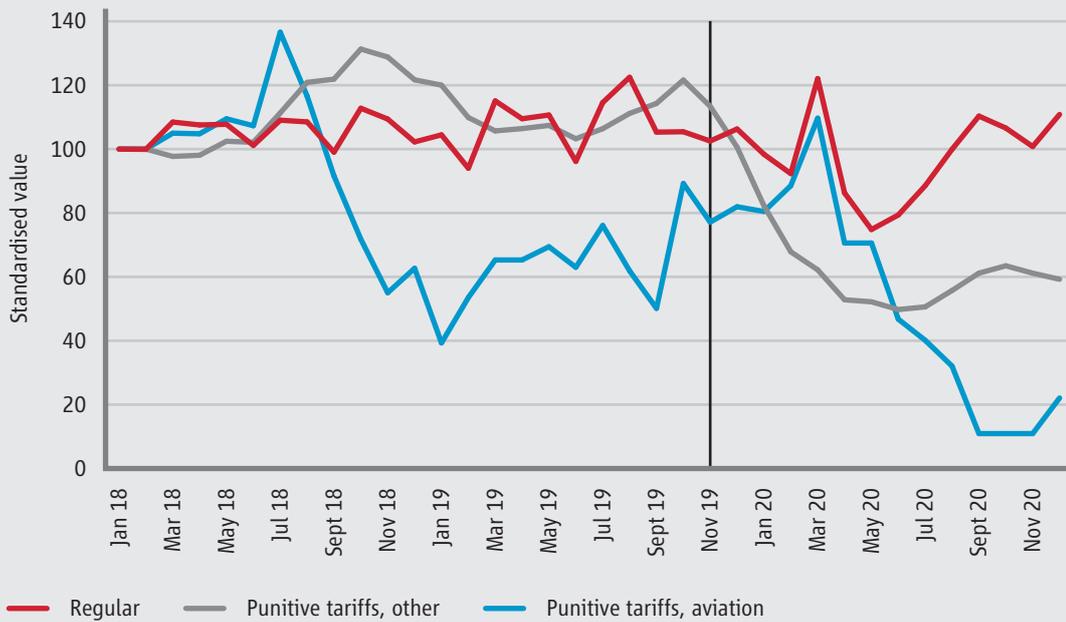
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As pointed out above, the aviation sector is much more volatile; the effects of the coronavirus crisis are much more pronounced and the significance of very long-term contracts is high. For this reason, it is very difficult to arrive at a causal interpretation of the picture that emerges from Figure 14. What is clear, though, is that German exports of aircraft and aircraft parts to the United States collapsed almost completely in the last 12 months and are recovering only very slowly.

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<sup>9</sup> The existing time series are still too short for a complete econometric causal analysis, especially since the elimination of coronavirus-induced effects poses a challenge.

Figure 14: Effects of punitive US tariffs on German exports to the United States



Source: US Census Bureau, own calculations.

These findings correlate well with the simulation results in Felbermayr/Herrmann (2020). They reveal declines in exports of up to almost 20 per cent in the affected sectors; at the sectoral level, products with additional tariffs are always referenced against products without new tariff charges. Table 1 shows the effects of the new tariffs expected in the long term on the basis of sectoral simulation results. Scenario 1 corresponds to the case calculated in Felbermayr/Herrmann (2020); scenario 2 relates to the now expanded US product lists and the new EU tariffs on US goods. The largest percentage reduction in exports from Germany to the United States can be seen in aircraft manufacture, which would lose almost a quarter of its sales to the United States. Here, a tightening of the conditions in the last few months leads to significantly greater losses than in scenario 1, losses concentrated among suppliers of the Airbus plant in Mobile, Alabama. Suppliers in Germany and the EU are often medium-sized businesses. The amendments to the product list have made the situation slightly worse for the food products, beverages and tobacco sector, while the metal products sector is expected to be slightly less severely affected.

On aggregate, reductions in exports as a result of the amended product list have widened significantly for Germany, from €650 million to almost €900 million.

Table 1: Effects of US Airbus tariffs on German exports to the United States

Sector	Exports in 2018	Exports in 2019	Scenario 1		Scenario 2	
	Data	Without punitive tariffs (estimate)				
	€ million	€ million	€ million	%	€ million	%
Agricultural commodities	344	361	2	0.47	2	0.44
Forest commodities	104	109	1	0.46	0	0.46
Fisheries	1	1	0	0.00	0	0.43
Mining	50	53	1	1.90	1	2.21
<b>Food products, beverages and tobacco</b>	<b>2,124</b>	<b>2,226</b>	<b>-319</b>	<b>-14.34</b>	<b>-324</b>	<b>-14.56</b>
Textiles, wearing apparel, leather	916	961	3	0.29	3	0.35
Wood and wood products	300	314	1	0.29	1	0.32
Paper	2,015	2,112	9	0.45	10	0.49
Printed matter, media	20	21	0	0.00	0	0.16
Refinery products	508	532	4	0.68	4	0.73
Chemical products	12,877	13,497	50	0.37	56	0.41
Pharmaceutical products	6,494	6,806	28	0.42	33	0.49
Rubber and plastic	2,659	2,788	12	0.42	13	0.46
Non-metallic minerals	1,297	1,359	4	0.31	5	0.34
Metals	4,569	4,789	13	0.28	12	0.25
<b>Fabricated metal products</b>	<b>4,568</b>	<b>4,788</b>	<b>-36</b>	<b>-0.76</b>	<b>-17</b>	<b>-0.36</b>
Electronic and optical equipment	6,864	7,195	-1	-0.01	-2	-0.03
Electrical equipment	5,849	6,131	16	0.27	18	0.29
<b>Machinery</b>	<b>20,905</b>	<b>21,911</b>	<b>-142</b>	<b>-0.65</b>	<b>-150</b>	<b>-0.69</b>
Road vehicles	33,688	35,310	111	0.32	127	0.36
<b>Other vehicles (incl. aircraft/aircraft parts)</b>	<b>2,859</b>	<b>2,997</b>	<b>-414</b>	<b>-13.80</b>	<b>-683</b>	<b>-22.79</b>
Furniture	4,332	4,540	9	0.20	10	0.22
<b>Total</b>	<b>113,342</b>	<b>118,801</b>	<b>-648</b>	<b>-0.55</b>	<b>-883</b>	<b>-0.74</b>

Source: Calculations by the ifo and IfW based on Aichele et al. (2016) and on the KITE model.

In addition to German exports, the new EU tariffs on US products as a result of the WTO's Boeing ruling now also affect Germany's imports. The largest reductions in percentage terms are expected in the food products, beverages and tobacco sector, where the trade volume could drop by almost 10 per cent. This sector will also have the largest decline in absolute terms

(approximately €100 million). In the chemical and mechanical engineering sectors, decreases of between 1 and 2 per cent are expected (approximately €60 million). Although the size of the reductions is not extreme, they add up to a total of €400 million across the sectors.

Table 2: *Effects of EU Boeing tariffs on German imports from the United States*

Sector	Exports in 2019	Scenario 2	
	Without punitive tariffs (estimate)		
	€ million	€ million	%
<b>Agricultural commodities</b>	<b>1,061</b>	<b>-37</b>	<b>-3.48</b>
Forest commodities	7	0	-0.57
<b>Fisheries</b>	<b>15</b>	<b>-1</b>	<b>-3.40</b>
Mining	382	-1	-0.24
<b>Food products, beverages and tobacco</b>	<b>1,231</b>	<b>-101</b>	<b>-8.22</b>
<b>Textiles, wearing apparel, leather</b>	<b>190</b>	<b>-4</b>	<b>-1.85</b>
Wood and wood products	103	-1	-0.85
Paper	618	-2	-0.33
Printed matter, media	236	-1	-0.22
Refinery products	1,415	-7	-0.50
<b>Chemical products</b>	<b>5,905</b>	<b>-60</b>	<b>-1.01</b>
Pharmaceutical products	2,590	-11	-0.42
Rubber and plastic	759	-4	-0.55
Non-metallic minerals	791	-3	-0.39
Metals	840	-6	-0.69
<b>Fabricated metal products</b>	<b>1,179</b>	<b>-13</b>	<b>-1.09</b>
Electronic and optical equipment	4,833	-12	-0.24
Electrical equipment	1,094	-5	-0.46
<b>Machinery</b>	<b>3,699</b>	<b>-61</b>	<b>-1.65</b>
Road vehicles	5,270	-26	-0.50
<b>Other vehicles (incl. aircraft/aircraft parts)</b>	<b>5,105</b>	<b>-37</b>	<b>-0.72</b>
Furniture	1,745	-23	-1.32
<b>Total</b>	<b>39,066</b>	<b>-414</b>	<b>-0.55</b>

Source: Calculations by the ifo and IfW based on Aichele et al. (2016) and on the KITE model.

Table 3 shows the economic costs to be expected. For the EU as a whole, the Airbus-Boeing dispute is expected to result in a reduction in GDP of approximately €800 million. This effect is made up of a loss of around €1,600 million caused by the Airbus tariffs imposed by the United States and a gain of €800 million generated by the EU's own tariffs. The latter represent income for the EU and improve the terms of trade because they make US goods cheaper on the global market. For the United States, by contrast, expectations are that the benefits from the Airbus tariffs will exceed the losses from the Boeing tariffs by approximately €800 million. As a result of the dispute, global GDP is €285 million lower in total than it would otherwise have been. Third countries are impacted in different ways: firstly, they suffer from the decline in global gross domestic product, because demand for their exported goods drops. Secondly, they are also negatively affected as suppliers of commodities and intermediate products to the sectors particularly burdened by tariffs in the EU and the United States. Ultimately, there will also be opportunities in some areas: trade with the United States or the EU is likely to increase if suppliers based in these territories are less competitive as a result of the tariffs. For example, manufacturers of aircraft parts in Canada or Mexico could establish themselves as suppliers to Boeing or the Airbus plant in Mobile, Alabama, at the expense of European competitors.

Table 3: *Effects of the transatlantic disputes on real GDP*

	Steel, aluminium <sup>a)</sup>		Airbus case		Boeing case	
	€ million	% of GDP	€ million	% of GDP	€ million	% of GDP
<b>EU 28</b>	<b>223</b>	<b>0.00</b>	<b>-1,600</b>	<b>-0.01</b>	<b>820</b>	<b>0.01</b>
Germany	344	0.00	-130	-0.00	160	0.00
Mexico	-991	-0.10	110	0.02	-30	-0.00
Canada	-2,577	-0.21	150	0.01	-45	-0.00
China	237	0.00	-190	-0.00	80	0.00
United Kingdom <sup>b)</sup>	-268	-0.01	-480	-0.02	120	0.00
United States	-4,325	0.02	1,580	0.01	<b>-860</b>	<b>0.01</b>
World (42 countries) <sup>c)</sup>	-8,041	-0.01	-200	0.00	-85	0.00

Source: Calculations by the ifo and IfW based on Aichele et al. (2016) and on the KITE model.

<sup>a)</sup> Damage caused by US tariffs and counter-tariffs of the EU and other trading partners; see scenario 2d in Felbermayr/Steininger (2018). <sup>b)</sup> The United States and the UK have agreed not to levy tariffs in the Airbus and Boeing cases. This adjustment has not been taken into account. <sup>c)</sup> The countries included cover over 95 per cent of global GDP.

The suspension of the Airbus-Boeing tariffs announced on 5 March 2021 is an encouraging first step towards de-escalating the trade dispute. Initially, however, they were only suspended for four months. This short period of time is not expected to result in a real recovery of transatlantic trade in the sectors hit hard by the tariffs, since high uncertainty persists over

future developments. Even so, importers on both sides of the Atlantic can now replenish their inventories without having to pay additional tariffs, and in the short term, this will noticeably revive revenues, including those of German manufacturers.

## **V. Summary of the state of transatlantic trade relations**

Table 4 summarises the state of transatlantic trade relations after the four-year Trump era. It lists the ten most important sectors on each side in which the United States and the EU intervened in trade policy in the period from 2017 to 2020, again focusing on how Germany is affected in particular. The situation is dominated by the United States' tariffs on steel and aluminium and by the Airbus-Boeing dispute although, as explained earlier, this dispute produced a large number of tariff measures outside the actually affected aircraft sector. It is not surprising that around 60 per cent of the total of 1,054 new protectionist measures introduced by the United States can be found in the areas of iron, steel and other metal products as well as raw iron and steel goods.

Table 4 demonstrates that the bilateral relationship urgently requires reorganisation. This process must firstly involve a reduction of the trade barriers that have recently been created. They cause damage to both sides and tend to benefit third countries such as China. The four-month suspension of the Airbus-Boeing tariffs announced on 5 March 2021 is a first step in the right direction, but as the table clearly shows, there is still much more to do. It is high time to take further measures quickly to scale back transatlantic trade barriers.

Table 4: Trump era trade barriers: top 10 affected sectors

Sector	€ million	%
<b>(a) United States against Germany</b>		
Other metal products	224	21.3%
Iron and steel products	221	21.0%
Raw iron and steel goods	209	19.8%
Motor vehicles, trailers and semi-trailers; parts thereof and accessories	17	1.6%
Audio-visual and related services	17	1.6%
Other plastic products	12	1.1%
Other dairy products	11	1.0%
Solenoid valves and tubes; electronic components; parts thereof	11	1.0%
Other electrical appliances and parts thereof	9	0.9%
Pharmaceutical products	9	0.9%
<b>All measures</b>	<b>1,054</b>	<b>100.00%</b>
<b>(b) Germany against the United States</b>		
Other machines for special purposes and parts thereof	24	5.0%
Motor vehicles, trailers and semi-trailers; parts thereof and accessories	18	3.8%
Organic base chemicals	13	2.7%
Medical and surgical appliances and orthopaedic appliances	13	2.7%
Instruments, other than optical instruments	12	2.5%
Primary forms of plastics	11	2.3%
Other machines for general purposes and parts thereof	11	2.3%
Prepared and preserved fruits and nuts	11	2.3%
Bodies for motor vehicles; trailers and semi-trailers	10	2.1%
Other electrical appliances and parts thereof	10	2.1%
<b>All measures</b>	<b>478</b>	<b>100.00%</b>

Source: Global Trade Alert, own analysis and presentation. Data relates to the period from 2017 to 2020.



## D. Multilateral challenges and transatlantic cooperation

Both the United States and the EU have changed their thinking in recent years about the role played by China; overall, their assessment has become much more critical. China is a political and economic rival as well as a cooperation partner for both trading powers.

### I. In terms of GDP and global trade, the transatlantic partners are always ahead

When the Transatlantic Trade and Investment Partnership (TTIP) was negotiated between 2013 and 2016, the focus was on stronger regulatory cooperation with the aim of continuing to set standards for new products and services in the future on the basis of a transatlantic understanding. There has also recently been a return to discussions of how “western” ideas about standards can be made to prevail globally. The changes in the gross domestic product of China, the United States and the EU27 over the past decades show that China has made tremendous gains in relative importance. Figure 15 also shows that China has overtaken both the EU and the United States and is already the world's largest economy when measured in terms of purchasing power parity (PPP), which takes into account that non-tradable goods and services may have different prices in different countries. Measurement of gross domestic products in standardised international currency shows that China is set to overtake the EU27 in the wake of the coronavirus crisis, but will likely not surpass the United States until the end of the current decade. For projections of economic power, for example in global trade or in the financial system, GDP in international currency is relevant; for projections of military power, GDP in PPP is probably a better indicator.

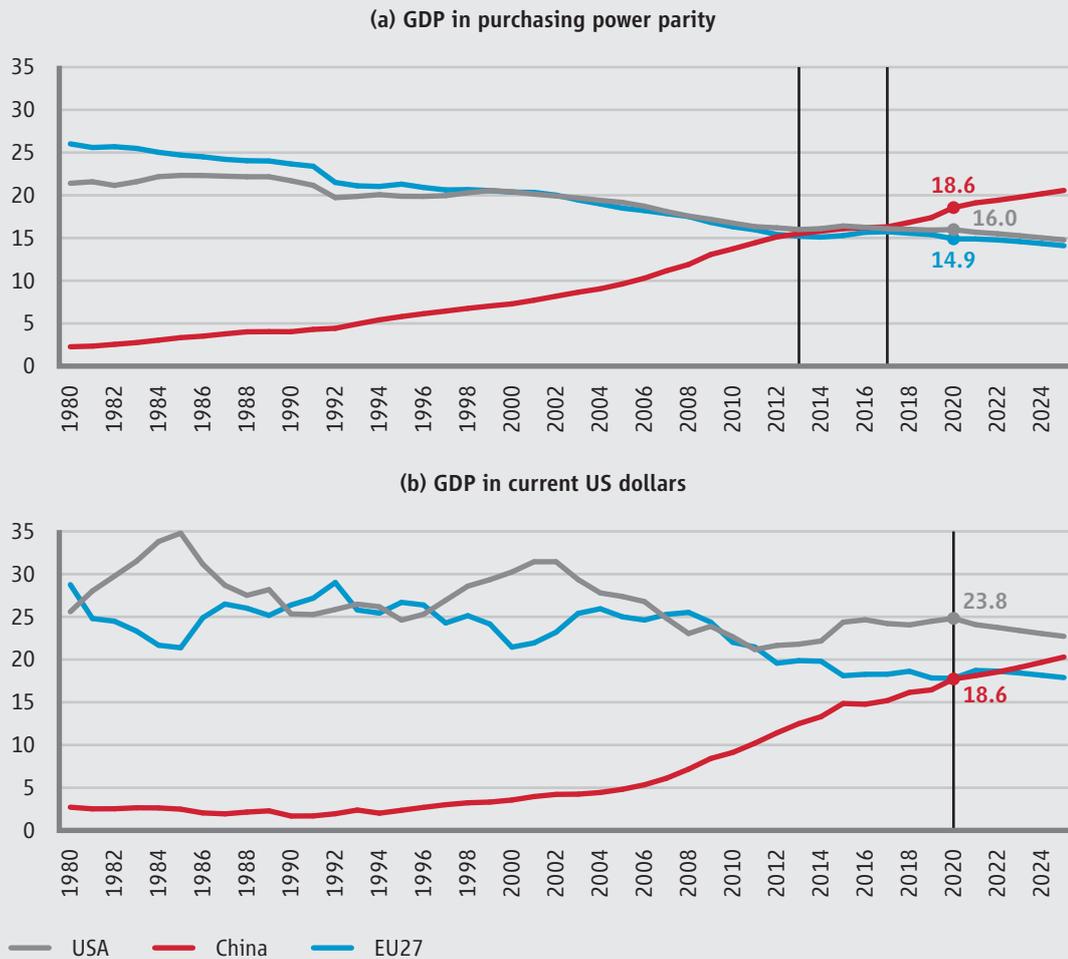
Figure 15(a) shows that in 2020 China's share of global GDP, measured in PPP, was 18.6 per cent, compared with 14.9 per cent for the EU and 16.0 per cent for the United States. But this also means that, jointly, the transatlantic alliance still has a lead of 12.3 percentage points. Moreover, close allies (such as Canada, Mexico, the EFTA countries, the UK, Australia and New Zealand) could be added. If we look at the share of GDP expressed in current US dollars (Figure 15(a)), the EU27 and the United States together account will still account for 42.4 per cent in 2022 (as forecast by the IfW), 23.8 percentage points more than China's share. Whichever way you look at it, China's position can only be called dominant in bilateral relations with the EU27 or the United States, but never if the transatlantic alliance is considered jointly.

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*China  
not economically  
dominant*

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Figure 15: Share of global aggregate attributable to EU27, United States and China



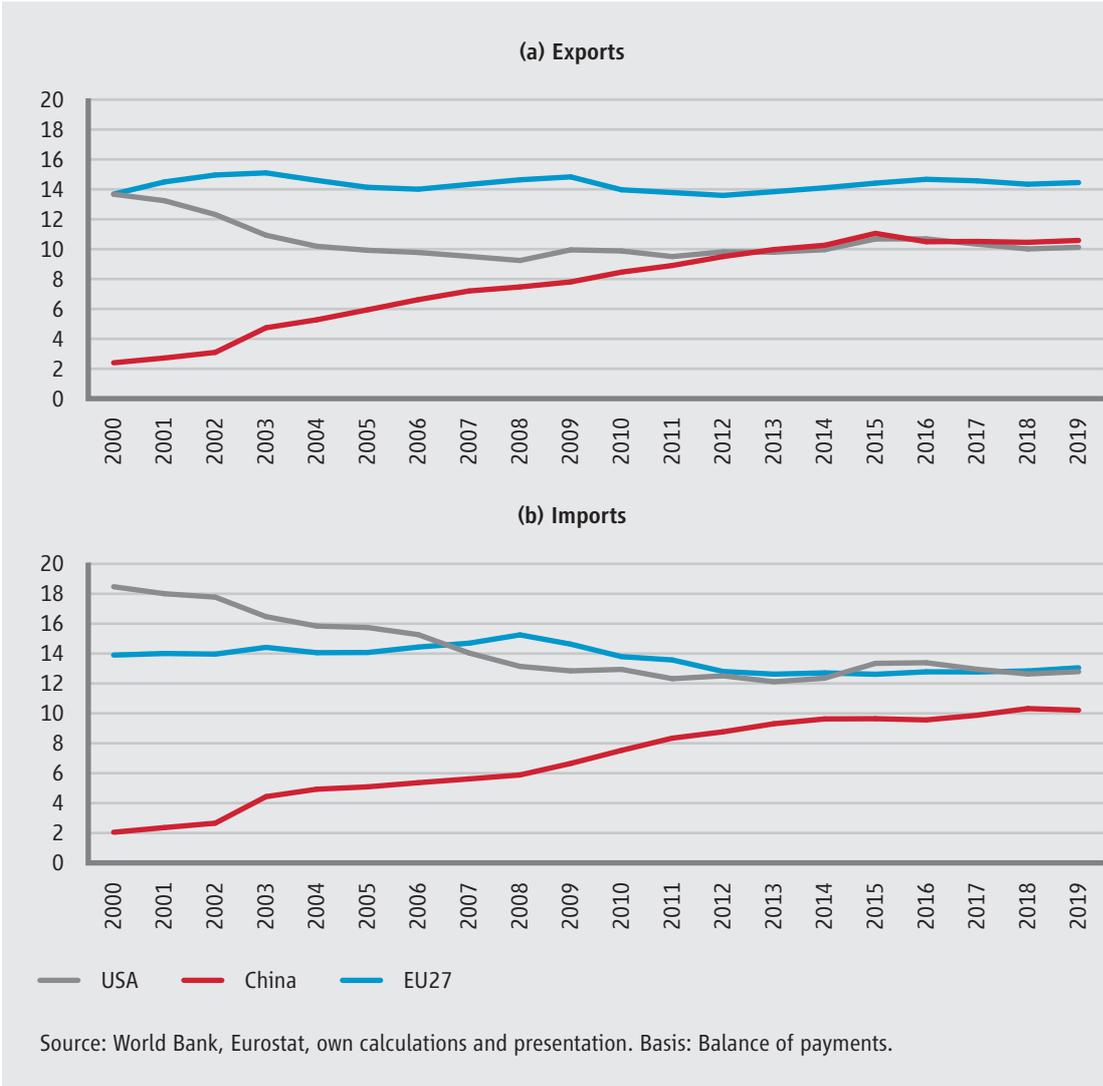
Source: IfW, own calculations and presentation.

This situation is made even clearer when the respective shares of global trade (goods and services) are analysed (Figure 16). In terms of both exports and imports, the EU27 is still the world's most important trading power, while China lags behind: in terms of exports, the country accounts for around 10 per cent of global trade, roughly equal to the United States; on the imports side, China also stands at around 10 per cent, while the EU and the United States combined represent approximately 26 per cent of global trade. The transatlantic partners account for a roughly similar percentage of exports. Global trade is likewise far from being dominated by China.

Figure 17 shows the proportion of countries for which the EU27, the United States or China is the most important goods trading partner. For almost 57 per cent of the world's countries, the EU single market is the most important export destination, for almost 24 per cent it is China, and for around 19 per cent it is the United States. In terms of imports, China's relative

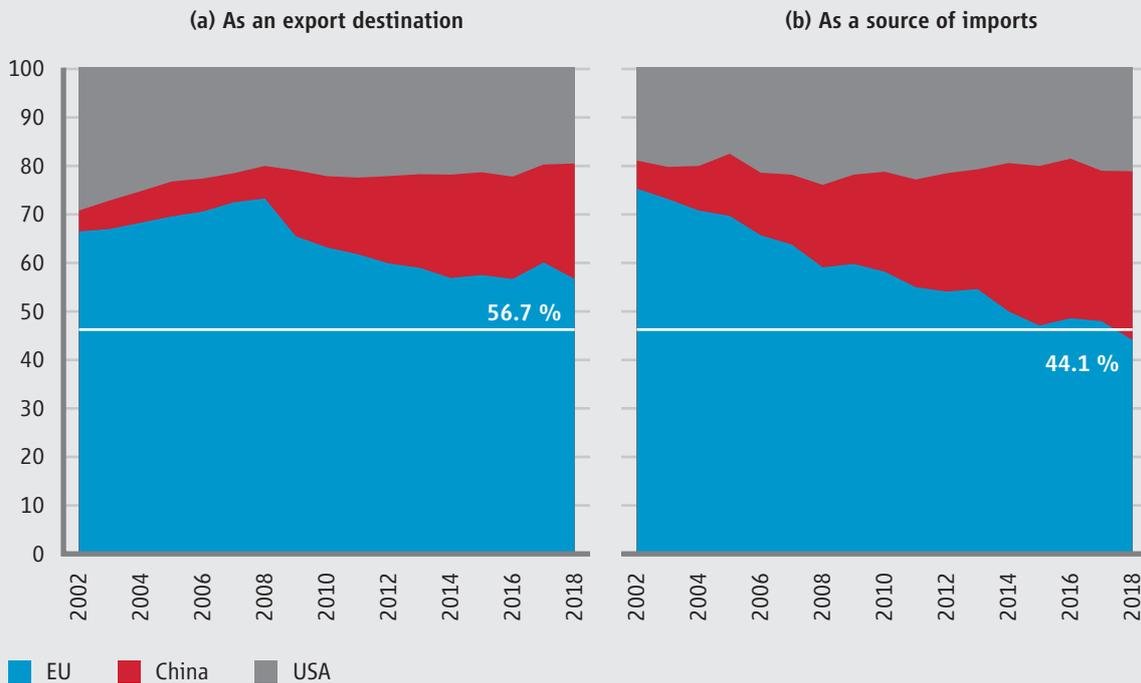
importance is higher because of the country's large surplus in the goods trade: for around 35 per cent of countries, China is the most important source of goods supplies. Even here, though, the EU is still much more important, accounting for 44 per cent. We can therefore say that China is the most important export market for “only” a quarter of the world’s countries and the most important import market for a third. The West dominates.

Figure 16: Share of global goods and services trade in %



You could argue now that these analyses reflect on the past and that the West will continue to lose in relative importance in the coming years. That is indeed what the projections suggest. They also suggest, however, that China’s gain in relative importance will come to a halt in the 2040s. The main reason for this is China’s demographic development. This is why Fouré et al. (2013) or PwC (2015) expects that even in 2050, the transatlantic economy (EU28 plus United States) will have a larger GDP in current US dollars and in PPPs than China.

Figure 17: Shares attributable to countries for which the EU27, the United States and China are the most important partners in goods trade



Source: UN Comtrade, goods trading, own calculations and presentation. Only the EU27, the USA and China are considered and presented for all the world's countries; for about 10 per cent of countries, another country is the most important trading partner.

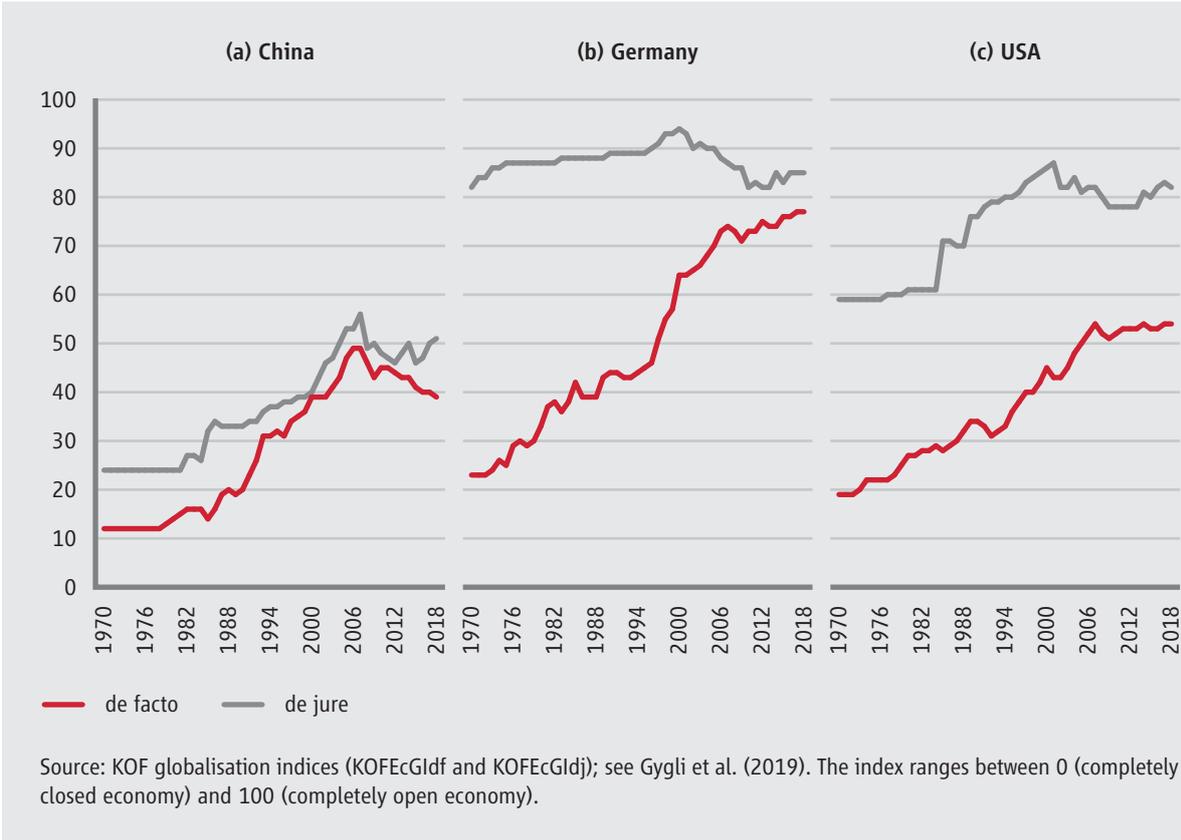
It follows from these observations that the transatlantic alliance continues to have the economic power to shape the rules of the international trading system. By the same token, it is also clear that this can only be achieved if the EU and the United States work together. This cooperation is, however, not a trivial matter, since the interests of the two parties are not identical in some areas.

## II. Convergent and divergent interests in dealings with China

Both the EU and the United States have a long list of shared concerns when it comes to China. This study is not the place for detailed presentation of this; readers are referred to Felbermayr et al. (2020) or BDI (2019). The basic problem is that China's state capitalist economic system is not readily compatible with the EU's and the United States' free market capitalist system. Chinese companies often receive state protection, explicitly and implicitly, which gives them advantages in competing with Western companies. The various state aids are used strategically to localise value creation in China, and access to its market is permitted or refused in a similarly very targeted manner. When China joined the WTO in November 2001 after years of negotiations, the country was implementing a process of gradual economic opening. However,

since 2008 no further progress can be seen; see Figure 18(a). On the contrary, globalisation indices show that the de-jure openness of the Chinese economy was reversed in the context of the 2008/2009 global economic crisis, and there has been no further reopening since then. China’s de-facto openness has also declined significantly, because international and capital flows have increased less rapidly than the country’s GDP.

Figure 18: Index of economic openness over time

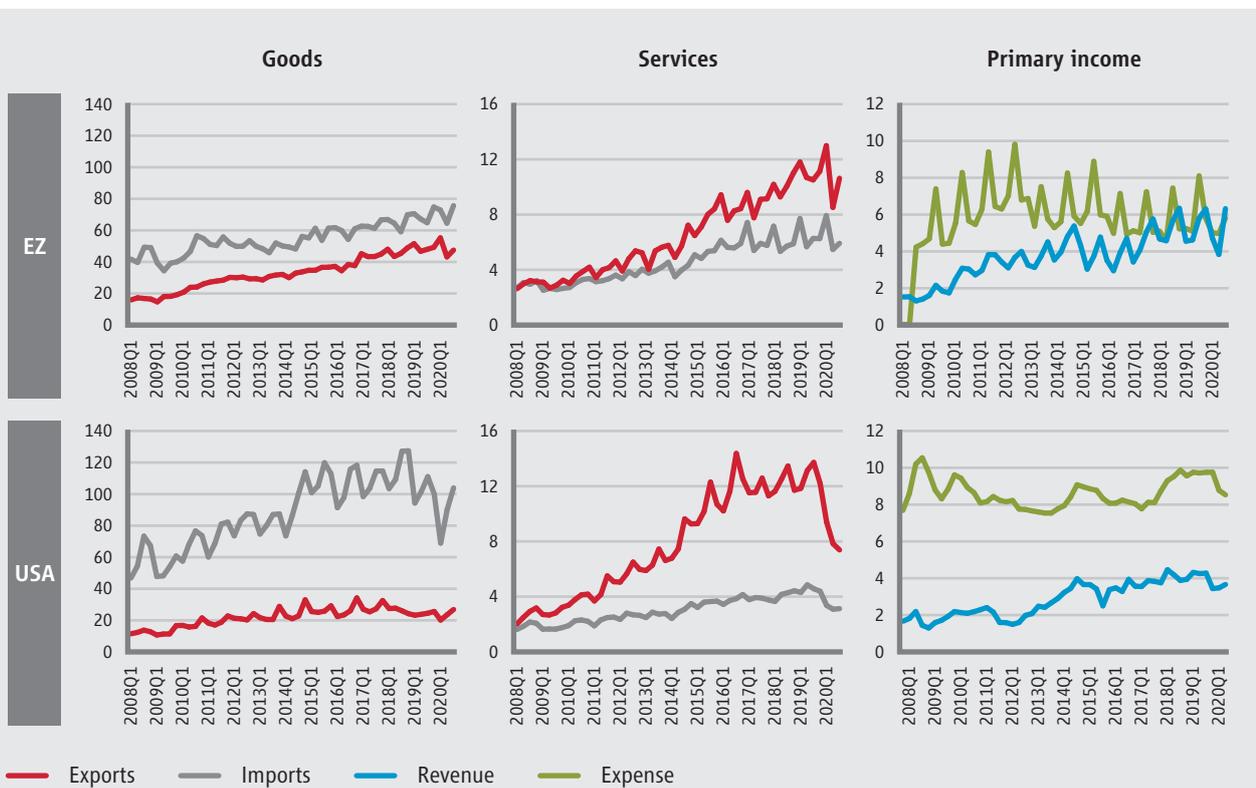


Compared with Germany or the United States, barriers to market access continue to be significantly higher in China, as shown by the de-jure openness indicators in Figure 18. The Chinese services sector in particular continues to be inaccessible, foreign providers are excluded from public procurement processes, and market access regulation is often opaque and unpredictable. However, the new trade barriers of the EU and the United States shown in Figure 10 can also be identified in the indicators presented. In Germany and the United States, too, economic openness has tended to decline over the past 20 years, and growth in de-facto openness has ended – with a certain delay – as well. Nevertheless, the lack of reciprocity in dealings with China is the core problem common to the EU and the United States, and it is the reason why

the EU and the United States have higher trade deficits with China than they would otherwise have, as well as a trading structure skewed in favour of services.<sup>10</sup>

That said, the United States and Europe differ in terms of their economic links with China, as Figure 19 shows. Eurozone countries export goods worth around €50 billion per quarter; United States' exports only come to about half of this figure. Germany alone exports goods to China in roughly the same amount as the United States, although the US economy is approximately five and a half times the size of that of Germany. The reverse is true for imports: despite a significant decrease as a result of the introduction of punitive tariffs on both sides since 2018, US imports from China are about 20 per cent higher than those of the eurozone, and at its peak the goods trade deficit with China, which amounted to €100 billion a quarter, was more than five times as high as that of the eurozone.

Figure 19: Quarterly current account balances with China in € billions



Source: Bureau of Economic Analyses, European Central Bank, own calculations and presentation.

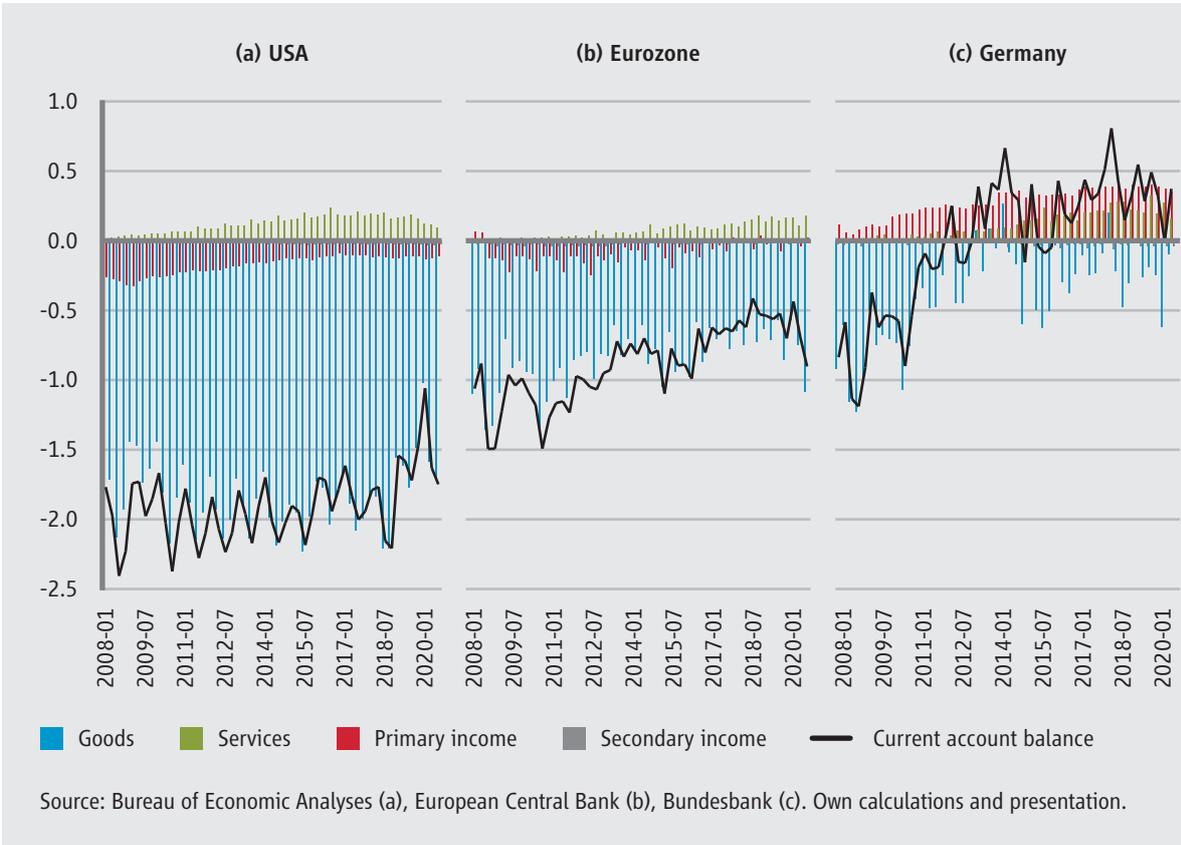
What is striking in regard to the services trade is that it is very underdeveloped relative to the goods trade, accounting for less than one tenth of overall trade (the global average is

10 Non-reciprocal trade barriers cause aggregated trade imbalances to be distributed differently across trading partners than they would be if there was reciprocity; see Felbermayr/Yotov (2019) and Cunat/Zymek (2019).

more than 20 per cent). As for primary incomes, the eurozone’s account is fairly balanced, while that of the United States is in deficit. This has to do with the relatively high levels of US government bonds in Chinese hands.

Figure 20 reinforces this point by taking a look at the current account balances. The United States’ average deficit with China was around 2 per cent of GDP during the years of Trump’s tariff measures, and showed no signs of narrowing. The EU’s deficit in relation to GDP has always been significantly below the United States’ and has been on a downward trend for ten years.<sup>11</sup>

Figure 20: Current account balances with China in per cent of GDP



Bilateral relations between Germany and China have changed dramatically in the past five years. The goods trade deficit has fallen sharply, accounting for only 0.25 per cent of GDP on average for the past 24 quarters, after reaching levels of over 1 per cent during earlier peaks. Germany generates a surplus in services trading whose rate of change and structure do not materially differ from those of the United States or the eurozone. In terms of primary income, in contrast, Germany has built up very considerable surpluses that doubled to around 0.5 per

11 During the coronavirus crisis, there was a temporary increase in the current account deficit in both the United States and the eurozone because goods imports from China rose significantly.

cent in the period presented. In absolute numbers, the bilateral primary income balance for the past four quarters totalled about €13 billion according to Bundesbank figures, despite the coronavirus crisis, whereas in the boom year of 2007, i.e. before the major economic crisis, the surplus was less than €2 billion. China is thus very much more important to Germany than it is to the United States or the average eurozone country, and German companies are performing much better in the Chinese market.

Yet this better starting position with China has little to do with preferential trade treatment; exporters from all the regions under consideration face the same customs regime, the same regulatory environment and the same intense competition from domestic providers. Market access conditions do, however, differ according to sector: the services sector is much more tightly regulated than industry. Since Germany has a comparative advantage in the industrial sector, unlike the United States, its aggregated results are significantly better. Conversely, however, Germany would be expected to benefit from an opening of the Chinese services market – financial services, software, business-related services etc. – to a lesser extent than the United States or other eurozone countries.

### III. Transatlantic climate club for global climate protection

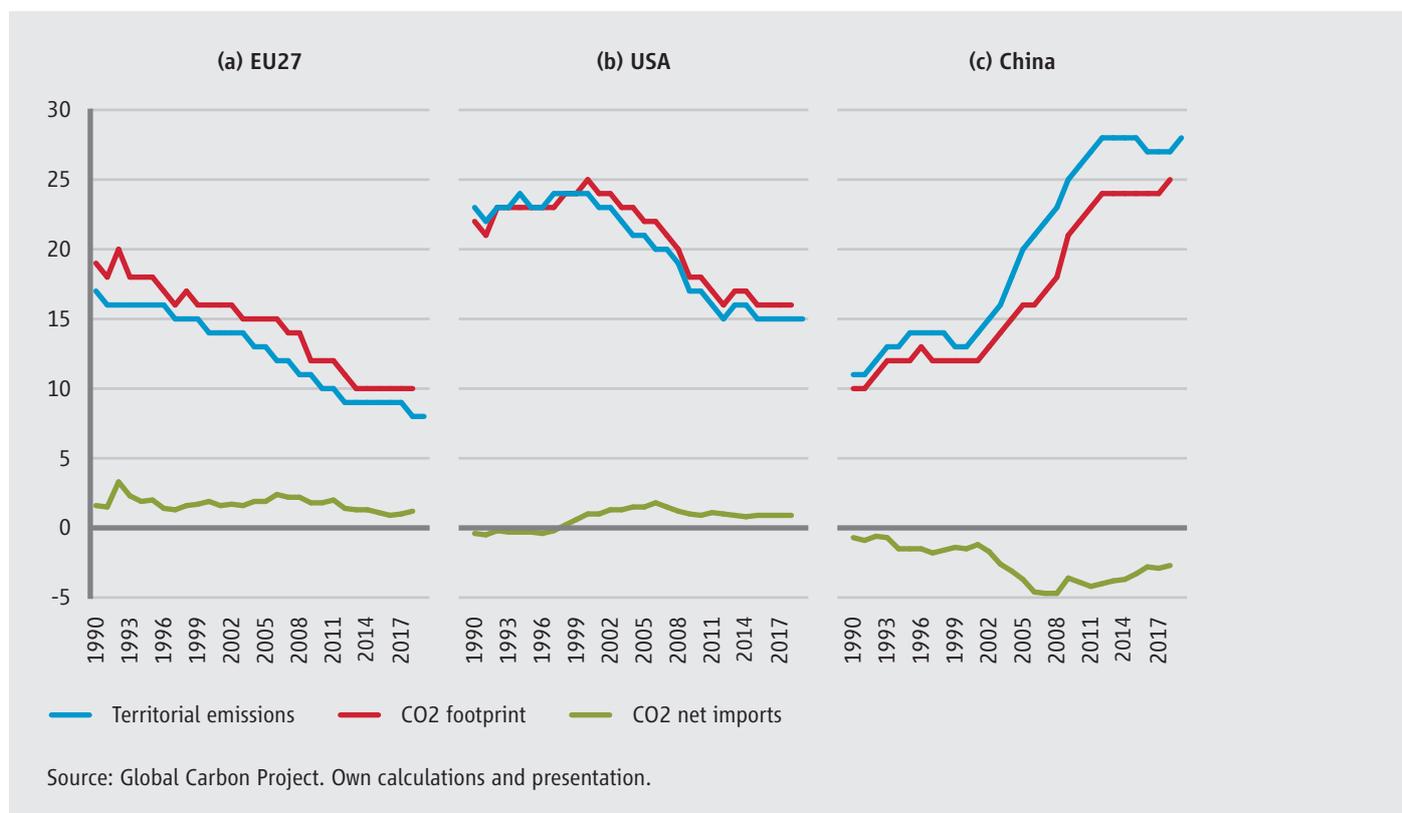
If the EU and/or the United States were to back their climate policy actions unilaterally with countervailing duties at their borders, further transatlantic disputes might arise. Both the EU and the United States have increased their climate targets, both aiming to reduce net CO<sub>2</sub> emissions to zero by 2050. The implementation of this project will require sizable efforts in the coming years, especially since those emissions that are relatively easy to eliminate have already been cut. As shown in Figure 21, the EU27's and the United States' share of global CO<sub>2</sub> emissions has been declining since the turn of the millennium; by contrast, China's share has more than doubled and has been moving laterally in the past five years.<sup>12</sup> Currently, the EU27 accounts for around 8 per cent of global CO<sub>2</sub> emissions, while the United States is responsible for 15 per cent and China for 28 per cent. To ensure that emissions-avoidance policies are cost-effective, it is essential for emissions to carry a price tag. A policy of subsidising green sources of energy may be politically easier to implement, but should always be backed by an ambitious CO<sub>2</sub> price. A high domestic price of CO<sub>2</sub> combined with a low share of global CO<sub>2</sub> emissions will, however, make little difference to global climate protection.<sup>13</sup>

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12 The EU27's absolute territorial CO<sub>2</sub> emissions decreased by approximately 25 per cent between 1990 and 2019; those of the United States, by contrast, rose by 3 per cent and those of China by 320 per cent.

13 See the latest expert report of the Scientific Advisory Board of the German Federal Ministry for Economic Affairs and Energy (2021) and the Annual Bulletin of the Scientific Advisory Board of the Foundation for Family Businesses (2021).

Figure 21:  $CO_2$  emissions,  $CO_2$  footprint and implicit  $CO_2$  imports in per cent of global  $CO_2$  emissions



Against the backdrop of these figures, any European climate policy aiming to be effective in the fight against the rise in global average temperatures will especially need to keep an eye on the  $CO_2$  emissions of other countries. If they fail to decline at sufficient speed, even the most stringent  $CO_2$  avoidance policies adopted by the EU27 will make little or no difference to the global climate, while incurring a high risk of substantial economic costs. In particular, there will be a risk of energy-intensive industries migrating abroad, where they can manufacture without restrictions. The EU is already the world's largest importer of  $CO_2$ : the  $CO_2$  emissions required for domestic consumption significantly exceed domestic  $CO_2$  emissions. In other words,  $CO_2$  emissions are created abroad for the production of goods that are consumed in the EU. The situation is similar in the United States. China, by contrast, is by far the world's largest exporter of  $CO_2$ . Almost 3 per cent of global emissions originate in China for foreign consumers.

If the prices for  $CO_2$  emissions rise sharply in the EU27 countries or in the United States, this could lead to an increase in imported emissions because it will accelerate the shift of energy-intensive production to countries without  $CO_2$  pricing. To prevent that from happening, ambitious countries could introduce a  $CO_2$  border adjustment that charges the domestic  $CO_2$  price retrospectively, but exempts exports. But such an adjustment is risky from a trade policy

perspective: trading partners could respond by taking retaliatory action because they consider a tax on their own territorial emissions invasive.<sup>14</sup>

One way out of this dilemma could be for the EU27 and the United States to form a climate club with their close allies (such as Canada, Mexico, the UK and EFTA countries) to jointly set a minimum price for CO<sub>2</sub> emissions and protect it against third parties by using a border adjustment system.<sup>15</sup> From the outset, such an arrangement would eliminate the dangers of disputes over CO<sub>2</sub> pricing among participating countries. If other countries also introduce a minimum price and join the climate club, exports from these countries would also become exempt from the subsequent charge. In this scenario, the instrument of border adjustments acquires an incentive function and can contribute to turning the climate club, initially conceived as a bilateral arrangement, into a multilateral facility.

The EU and the United States should take the lead with this idea, firstly to prevent bilateral disputes over subsequent levies imposed against each other on the CO<sub>2</sub> content of traded goods, and secondly to improve the national and global effectiveness of their own climate policies.

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14 For an overview of the debate on CO<sub>2</sub> border adjustments, see Felbermayr/Peterson (2020).

15 Such a climate club has been proposed by the Scientific Advisory Board of the German Federal Ministry for Economic Affairs (2021).

## E. Recommendations on trade policy

The EU and the United States should make use of the next few years to remove the new trade barriers erected during the Trump era and to level the asymmetries in bilateral trade that existed even before the latest round of disputes. Realism will be needed to turn this agenda into a success.

A comprehensive agreement such as the abandoned Transatlantic Trade and Investment Partnership would probably encounter difficulties even if a second attempt were to be made. It makes sense to separate the trade policy agendas for which the EU has exclusive competence from issues related to investment policy. For the latter, responsibilities are mixed – i.e. they are shared between the EU and the member states.

As experience in recent years has shown, tariffs continue to play a major role. The objective for both parties has to be to abolish all tariffs in the transatlantic goods trade and to this end enter into an arrangement similar to the one agreed in the summer of 2018 between European Commission president Jean-Claude Juncker and US president Donald Trump. It is evident that this process will require greater concessions from the EU than from the United States because its tariffs are significantly higher. It is also clear that the EU will have to take steps towards opening its market, especially in the agricultural and food sectors, because the United States would otherwise derive little benefit from an agreement: its comparative advantages are not in the industrial sector, but in the agricultural and services sectors. The EU must make it a priority to think of ways to prop up agricultural incomes by means other than tariffs. In exchange, it would attain valuable levels of freedom in the pursuit of foreign trade policy objectives. The European Commission's transatlantic trade ambitions, which it describes in a communication published on 2 December 2020,<sup>16</sup> will require significant readjustment. It will not be enough to align the transatlantic agenda with the short-term challenges of the coronavirus pandemic and the issue of climate change; the EU must also aim to balance the existing trade asymmetries, which include tariffs. Only if unjustified and highly asymmetric tariffs are removed, can there be forward-looking transatlantic cooperation in other areas.

In return, the United States will have to abolish immediately the illegal steel and aluminium tariffs introduced in 2018. What is more, in recent years the United States have introduced non-tariff trade barriers to a greater extent than the EU, and these measures frequently have a discriminatory effect. They are often controversial and difficult to identify and quantify. For this reason, the focus should initially be on tariffs. In relation to technical standards, the EU should additionally negotiate reciprocal recognition of approvals as far as possible, especially

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*Abolish all tariffs  
in transatlantic  
goods trading*

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16 [https://ec.europa.eu/info/sites/info/files/joint-communication-eu-us-agenda\\_en.pdf](https://ec.europa.eu/info/sites/info/files/joint-communication-eu-us-agenda_en.pdf)

of new products and services, or at least the mutual recognition of standards. Deep divisions exist in the area of public procurement, where past US administrations have used a variety of buy-American rules to put European companies at a systematic disadvantage. The EU will have to apply pressure, but without closing off its own procurement market. No quick wins can be expected in this area.

A prerequisite for the successful negotiation of other issues between the EU and the United States is the settlement of the unfortunate conflict over aircraft subsidies, which has been smouldering for 16 years. The mutual suspension of the WTO-compliant additional tariffs is a correct first step towards de-escalation, but the situation requires a permanent agreement not to apply tariffs. Should that prove impossible, the parties to the conflict should at least agree to offset the compensation sums awarded by the WTO, which would reduce the burden on European exporters to the United States by more than half and altogether eliminate that on European importers. It is also clear that any real solution to the dispute over subsidies can only be found in a multilateral context. Other countries, above all China, distort competition to a much greater extent. At the WTO level, we need close, well defined rules of engagement that give countries the opportunity to grant subsidies where appropriate, but also compensation mechanisms to ensure fair conditions in all countries. These rules of engagement must be defined as legislation at the level of the WTO, partly in order to drive the modernisation of WTO law. This would also allow courts of arbitration to refer to primary law without having to re-interpret old legal texts and turn court rulings into new de facto legislation in the process – a situation rightly criticised by the United States.

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*Establish EU-US  
climate club with  
minimum price for  
CO<sub>2</sub> emissions*

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Climate protection is a key concern of the current European Commission and the new US administration. Both want to achieve climate neutrality by 2050. To meet this target, high CO<sub>2</sub> prices will be required. Since many other countries are not prepared to take such a step at present, it makes sense for the EU and the United States, together with their closest trading allies, to form a climate club that sets a joint minimum price for CO<sub>2</sub> emissions, and waives CO<sub>2</sub> border adjustments among its members, but subsequently charges the minimum CO<sub>2</sub> price on imports from third countries outside the club. This will prevent transatlantic disputes over unilateral border adjustment measures and give greater incentives to other countries to join the climate club.

The climate club is aimed at implementing ambitious climate targets by using CO<sub>2</sub> pricing without distorting international trade to a major extent. Although a climate club may resemble a free trade agreement, it differs from such an agreement in that it does not focus on tariffs or ways of reducing them. It should nevertheless be noted that the elimination of industrial tariffs in transatlantic trade will also be useful in terms of climate policy, because better opportunities to generate revenue will accelerate the payback period of investments in new technologies.

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