

Effects of the US–China trade war on international supply chains

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Warsaw, May 2020 Author: Łukasz Ambroziak Consultation and cooperation: Janusz Chojna Substantive editing: Piotr Arak Editing: Dariusz Sielski Graphic design: Anna Olczak Graphic collaboration: Liliana Gałązka, Tomasz Gałązka, Sebastian Grzybowski Text and graphic composition: Sławomir Jarząbek Polish Economic Institute Al. Jerozolimskie 87 02-001 Warsaw, Poland © Copyright by Polish Economic Institute

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Key findings

- → Before early 2018, for a long time the world economy had not experienced such intensified protectionist measures as those observed in trade between the US and China. Over almost two years, the average tariff in US imports of goods from China rose from 3 per cent to 21 per cent at the beginning of 2020, whereas that in Chinese imports from the US – from 8 per cent to 21 per cent.
- → Sanctions in mutual trade contributed to a collapse in the US-China merchandise trade in 2019. At the same time, they benefited other countries, both as suppliers of goods to the US and China and as recipients of US and Chinese products. The greatest beneficiaries of the trade war became Vietnam and Taiwan whose exports to the US increased considerably.
- → Undoubtedly, the most evident effect of the trade war was a fall in the US deficit in trade in goods with China. In 2019, it declined by USD 73.9 billion, i.e. by 17.6 per cent (y/y).
- → The trade war caused disruptions in global supply chains, particularly in South Asia and South-East Asia. Owing to a fall in the US demand for articles made in China and subject to additional tariffs on imports to the US market, deliveries of semi-finished products from those countries showed a decline.
- → Undoubtedly, tensions between Washington and Beijing accelerated changes observed not only in world trade, but also in the global production system. Growing unit labour costs in China increasingly encouraged businesses to relocate manufacturing facilities to the neighbouring countries

characterised by lower production costs, e.g. Vietnam, Malaysia, Thailand and Taiwan. The sanctions introduced in US-China trade further stimulated those trends.

- → Changes in global supply chains driven by the trade dispute seem to be irreversible; even lifting the sanctions imposed on US trade with China will not restore the previous conditions.
- → As a matter of fact, the Economic and Trade Agreement (ETA) between the United States and China, effective as of 15 February 2020, did not reduce the level of protection in trade between the two countries. Additional tariffs still applied to more than two-thirds of US imports from China and to over 80 per cent of Chinese imports from the US. Those accounted for ca. 3 per cent of world trade in goods.
- → The ETA is of an asymmetric nature, providing for significantly more benefits for the US party and maintaining tariffs of 25 per cent on a major share of products from China. At the same time, China's commitments included purchasing US goods and services worth USD 200 billion in 2020–2021. In merchandise trade, additional imports should cover manufactured goods (e.g. vehicles, medicaments, machinery and equipment), agricultural products.
- → The entry into force of the ETA may result in typical trade diversion effects. In order to fulfil the commitments made to the US, Chinese importers are likely to reduce their purchases of such goods from other foreign suppliers, including from the EU. The Member State to be hit the most may be Germany – due to its strong trade links

with China. German exports will be most affected by falling demand, particularly exports of motor vehicles, machinery and equipment – goods manufactured within global value chains.

→ The coronavirus epidemic observed in China since early 2020 has raised doubts as to China's ability to purchase additional quantities of US goods under the ETA. The slowdown in the Chinese economy resulting from the prevalence of coronavirus has pushed down demand, both for consumer goods and for industrial inputs. One should expect that the longer the epidemic lasts, the more abrupt the fall in demand will be, accompanied by a lower likelihood of the Chinese party's fulfilling its commitments.



The report in numbers

3 per cent	of world trade was subject to additional tariffs resulting from the US-China trade war.
two-thirds	of US imports from China were covered by additional tariffs at the beginning of 2020.
80 per cent	of Chinese imports from the US were subject to additional tariffs at the beginning of 2020.
USD 200 billion	is the value of goods and services to be purchased by China from the United States in 2020–2021 as part of its commitments under the Economic and Trade Agreement.
USD 73.9 billion	represents the amount/rate of the fall in the US deficit in trade
17.6 per cent	in goods with China observed in 2019 against 2018.
EUR 153 billion	was the amount of the EU-27's surplus in trade with the US in 2019.
EUR 163 billion	was the amount of the EU-27's deficit in trade with China in 2019.

3.2 per cent	of the US value added was absorbed in Chinese exports of computer, electronic and optical products in 2015.
5.7 per cent	of Chinese value added was absorbed in US exports of motor vehicles in 2015.
49 per cent	of the EU-27's exports were German exports to China in 2018.

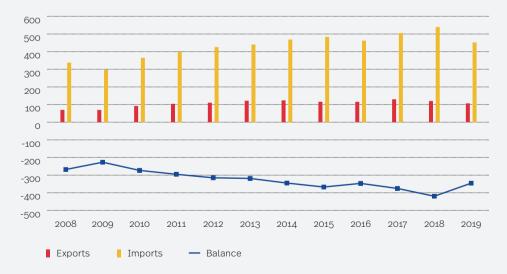
Introduction

ince early 2018, international trade has been facing a phenomenon not observed for a long time. Protectionist trends in trade in goods between the United States and China have increased on a scale unheard of for several decades. The protectionism consisted in imposing additional tariffs on mutual US-China trade. Over almost two years, the average tariff in US imports of goods from China rose from 3 per cent to 21 per cent at the beginning of 2020, whereas that in Chinese imports from the US - from 8 per cent to 21 per cent. At the beginning of 2020, additional tariffs applied to more than two-thirds of US imports from China and to over 80 per cent of Chinese imports from the US. Therefore,

those customs duties concerned ca. 3 per cent of world trade in goods.

One reason for the imposition of tariffs on imports of Chinese goods to the US was the deficit in trade with China increasing from 2001 (China's joining the World Trade Organisation). In 2018, it amounted to USD 420 billion, nearly double the 2009 figure (Chart 1). The US Administration also questioned the restrictions on investments in China, in particular the necessity for US corporations intending to enter the Chinese market to have a Chinese partner. The rules of the World Trade Organisation prohibit such restrictions. According to the US, Chinese practices failed to ensure a sufficient level of the protection of intellectual property rights and facilitated stealing US technologies.

Chart 1. Trade in goods of the United States with China in 2008-2019 (in USD billion)



Source: prepared by the PEI based on the USA Trade Online data (2020).

This study aims to assess the effects of the US-China trade war on developments observed in world trade and in global supply chains. Specifically, it presents the consequences to the European Union trade. The analysis covers the period of the trade war between the US and China until the entry into force of the Economic and Trade Agreement in February 2020 and includes estimates of its potential impact on international trade. For the purposes of the study, a number of information and data sources were used, in particular: information from the United States Trade Representative (USTR), data from the United States Department of Commerce, data from the International Trade Centre, data from the WITS-Comtrade, Eurostat-Comext databases as well as trade data from the Central Statistical Office (GUS). The value-added content of exports was analysed on the basis of data from the OECD Trade in Value Added (TiVA) database.



The war chronology: from the outbreak to the cease-fire

he ongoing trade dispute between the United States and China dates back to January 2018 when additional tariffs were imposed on US imports of washing machines and solar panels. In March, additional tariffs were introduced on imports of steel and steel products and of aluminium – 25 per cent and 10 per cent respectively. The legal basis for the measure was Section 232 of the Trade Expansion Act of 1962, allowing the imposition of tariffs where excessive imports of an article threatened or impaired the national security (Gadomski, 2018). Initially, the tariffs were supposed to apply to imports from all countries; eventually, however, a number of them, e.g. the European Union Member States, Australia, Brazil, Argentina, South Korea, were not covered by those sanctions.

In response to the actions of the US Administration, **at the beginning of April 2018**, **China introduced retaliatory tariffs of 15 to 25 per cent on imports of more than 100 products from the US.** Those covered articles such as pigmeat, nuts, various types of fruit and ethyl alcohol.

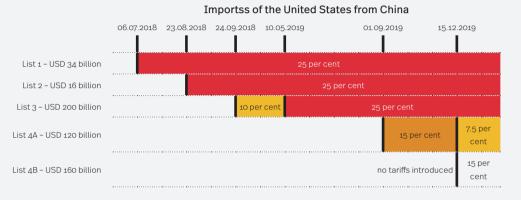
In early July 2018, the US sanctions were extended to another 1,700 Chinese goods whose imports were estimated at USD 34 billion (USTR, 2019). Additional tariffs were imposed on a number of goods representing machinery and mechanical appliances, electrical equipment, passenger cars, certain instruments and precision apparatus. As a rule, the sanctions did not apply to desktop or laptop computers, storage media, mobile phones, display screens, reception apparatus for television, video camera recorders or photographic cameras. The legal basis for the imposition of tariffs was Section 301 of the Trade Act of 1974. The relevant investigation conducted by the United States Trade Representative (USTR) demonstrated the application of unfair practices by the Chinese party. Those primarily included discriminatory practices against US entities. The Chinese government was found to force technology transfer and to simultaneously impose restrictions on foreign investors.

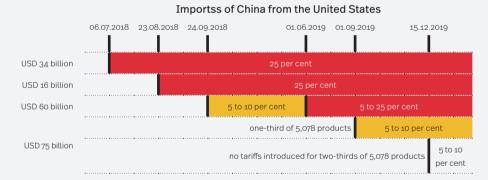
Retaliatory tariffs on deliveries to China covered more than 700 US articles whose imports amounted to USD 34 billion (Brown, 2019). The list comprised almost exclusively agri-food products – unprocessed raw materials (such as soybeans) and prepared foodstuffs (e.g. preparations of meat and of fish, butter, milk powder).

Further sanctions were imposed by the parties in August 2018.In deliveries both to China from the US and to the US from China, those covered imports worth USD 16 billion. The US introduced tariffs of 25 per cent on imports of over 300 articles from China, e.g. plastics and articles thereof, diesel engines, electronic integrated circuits, agricultural tractors. Additional tariffs of 25 per cent became applicable to imports to China of over 500 US articles, e.g. coal, crude oil, natural gas, various types of waste (e.g. of plastics, fabrics) and scrap (e.g. of steel, aluminium) as well as buses and motor cars.

In September 2018, the US Administration introduced tariffs of 10 per cent on deliveries of more than 8,600 articles from China. Imports of those goods were estimated at USD 200 billion. Tariffs on that group of products were increased to 25 per cent in May 2019 and to 30 per cent in October 2019. **In response to the sanctions imposed, China began to collect additional customs duties of 5 to 10 per cent on deliveries of more than 7,300 US articles (of** which agri-food products accounted for ca. 5 per cent), with imports worth approximately USD 60 billion. In June 2019, tariffs on those goods were raised to as much as 25 per cent.

Figure 1. The US-China trade war chronology





Source: prepared by the PEI based on: USTR (2019); Brown (2019).

In September 2019, additional tariffs of 15 per cent became applicable to over 5,600 Chinese products (of which agri-food products represented 20 per cent) whose imports to the US amounted to USD 112 billion. Another increase in penalty tariffs to 30 per cent was planned for October, with regard to deliveries to the US of Chinese products subject to tariffs introduced in three tranches in 2018. But the tariffs were not raised eventually. In September 2019, China introduced additional tariffs of 5 to 10 per cent on imports of one-third of goods from the list of more than 5,000 products worth USD 75 billion. Sanctions concerning the remainder of that list were scheduled to enter into force on 15 December 2019, as well as tariffs on imports to the US of nearly 900 Chinese goods whose imports were estimated at USD 160 billion. On 15 January 2020, after more than twelve months of trade war, the United States and China concluded the Economic and Trade Agreement (ETA) representing the first stage of a broader trade arrangement between the two countries (Phase 1 Deal) (ETA, 2020). The Agreement refers to a number of important issues relating to mutual trade, in particular: the protection of intellectual property rights, technology transfer, financial services, agriculture, currency or trade expansion opportunities (ETA, 2020). **But China's commitments primarily concern two issues: refraining from the devaluation** of the yuan for trade purposes and additional purchases (above the corresponding 2017 baseline amounts of imports from the US) of US goods and services worth USD 200 billion in 2020–2021 (the additional Chinese imports should amount to USD 76.7 billion and USD 123.3 billion in the first and second years respectively). The Agreement distinguished 23 categories of products and services to be delivered to China, divided into four product groups. Those were as follows: manufactured goods, agricultural goods, energy products and services (Table 1).

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	Product category	Year 1.	Year 2.	Total
Manufactured goods	industrial machinery, electrical machinery and equipment, pharmaceutical products, aircraft, vehicles, optical and medical instruments, iron and steel, other manufactured goods	32.9	44.8	77.7
Agricultural goods	oilseeds, meat, cereals, cotton, other agricultural commodities, seafood	12.5	19.5	32.0
Energy products	liquefied natural gas, crude oil, refined products, coal	18.5	33.9	52.4
Services	charges for the use of intellectual property, business travel and tourism, financial services and insurance, other services, cloud and related services	12.8	25.1	37.9
Total		76.7	123.3	200.0

> Table 1. Additional Chinese imports of US goods and services under the EPA (in USD billion)

Source: prepared by the PEI based on: ETA (2020).

In addition, the parties made commitments not to raise tariffs in mutual trade. The United States introduced no additional tariffs of 15 per cent on imports of Chinese goods worth USD 160 billion (list 4B) on 15 December. The tariffs of 15 per cent introduced in September 2019 on Chinese goods worth USD 120 billion (list 4A) were reduced to 7.5 per cent, whereas the tariffs of 25 per cent on articles worth USD 250 billion (lists 1, 2 and 3) remained unchanged. Neither did China introduce the sanctions scheduled for imports to China from the US of the remaining two-thirds of goods from the list of over 5,000 products. The Agreement includes no provisions concerning subsidies for Chinese enterprises, to be negotiated in the next phase of talks.

The effects of additional tariffs on US–China trade

The sanctions hit US exporters first

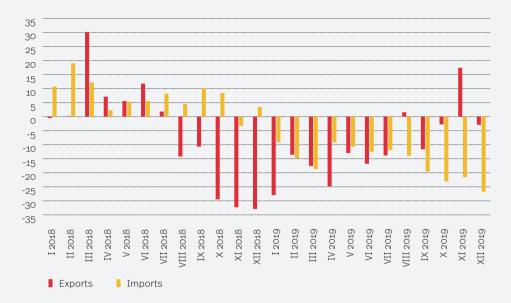
The imposition of additional tariffs in mutual trade between the US and China resulted in typical trade effects related to changed protection levels, i.e. the trade creation and trade diversion effects. Their directions were opposite to those observed for tariff reductions.

Additional tariffs imposed on imports of Chinese goods to the United States pushed up prices of those goods in the US market, undermined their price competitiveness, thus contributing to contracted demand and lower imports. A similar mechanism took place with regard to deliveries of US goods to China after the imposition of penalty tariffs. Therefore, the creation effect related to the tariffs imposed was negative.

US exporters were the first to be affected by the trade war. Starting from August 2018, exports to China decreased at a two-digit rate and the last two months of 2018 saw – in comparison with the corresponding period of the previous year – sales in the Chinese market falling by more than 30 per cent (Chart 2). In 2019, monthly decreases were less abrupt, but exports mostly declined at two-digit rates (with the exception of August and November, with positive growth rates, y/y).

The main reason for the collapse of US exports to China was a fall in deliveries of soybeans, covered by a tariff of 25 per cent from the beginning of July 2018. Prior to the introduction of sanctions, China received ca. 60 per cent of US soybeans sold abroad. In the second half of 2018, US exports of the product to China merely amounted to USD 0.2 billion, against nearly USD 8.4 billion a year before. US producers managed to only partly compensate for reduced sales in the Chinese market with increased supplies to EU Member States (e.g. Italy, Spain, the Netherlands, the United Kingdom) as well as to Argentina, Iran, Egypt, Mexico and Canada. In the second half of 2018, the United States' total exports of soybeans were 35 per cent lower than in the corresponding period of the previous year. China mostly replaced more expensive – by the value of the customs duties imposed – soybeans from the US with higher deliveries from Brazil. In 2018, three-fourths of Chinese imports of soybeans originated in the country in question; Brazilian supplies doubled on the 2016 figure.

In the last quarter of 2018, US exports to China were also pushed down by China's reduced demand for crude oil, vehicles with engines of a cylinder capacity from 1.5 dm3 to 3 dm3, waste and scrap of copper. Imports of those goods from the US to China were covered by tariffs of 25 per cent in the third quarter of 2018.



> Chart 2. Monthly changes in the value of US trade in goods with China in 2018-2019 (in per cent, y/y)

Source: prepared by the PEI based on: USA Trade Online (2020).

Chinese exporters were hit by effects of the sanctions at a later time. **US imports from China slowed down in late 2018 and collapsed in January 2019.** The value of Chinese deliveries to the US dropped by nearly 10 per cent on January 2018. In the following months, imports mostly fell at two-digit rates, whereas the last months of 2019 witnessed a further deterioration. In October and November, supplies of goods from China decreased by more than 20 per cent in comparison with the corresponding months of the previous year, whereas December saw a decline by nearly 27 per cent. Following the imposition of additional tariffs, mainly of 25 per cent, on imports of Chinese goods to the US, those became less competitive in terms of price, which discouraged demand and pushed down deliveries.

US-China trade fell abruptly

In 2019, the value of US exports (at current prices) declined by 1.2 per cent against the previous year, whereas that of imports – by 1.7 per cent. Chinese exports slowed down significantly, but they were still 0.2 per cent higher than a year before. At the same time, China's imports dropped by 3.1 per cent against 2018. The mutual trade of the two countries showed a marked collapse (Charts 3 and 4). In 2019, US imports from China went down – on the previous year – by 16.2 per cent, whereas exports to China – by 11.3 per cent (ITC, 2020). Therefore, China's share of US imports in comparison with 2018 decreased by 3.1 pps, to 18.1 per cent, and that of

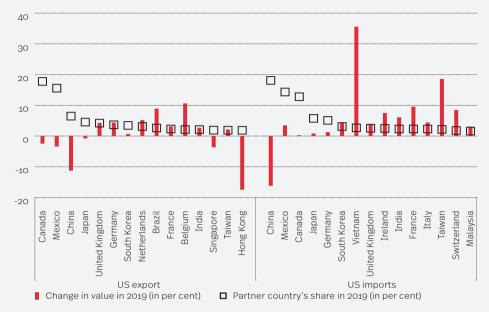


Chart 3. Changes in US trade with major trading partners in 2019 (in per cent, y/y)

Source: prepared by the PEI based on: USA Trade Online (2020).

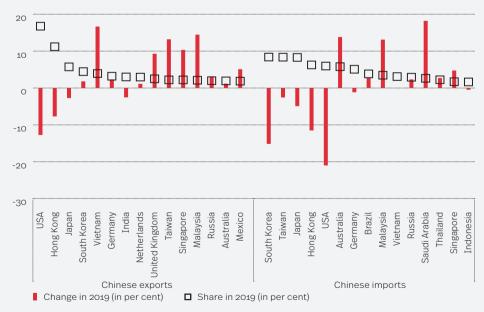


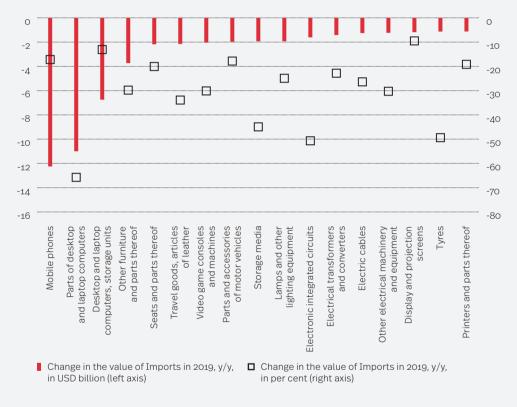
Chart 4. Changes in Chinese trade with major trading partners in 2019 (in per cent, y/y)

Source: prepared by the PEI based on: ITC (2020).

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US exports – dropped by 0.7 pp, to 6.5 per cent. As regards the US, in 2019 the US proportion of Chinese exports was 16.8 per cent (2.5 pps lower than a year before), whereas that of imports – 6 per cent (1.4 pps lower).

In 2019, the steepest decreases (in absolute terms) in supplies from China to the US were recorded for the following products: mobile phones (by USD 12.2 billion, y/y), parts of desktop and laptop computers (by USD 11 billion, y/y), desktop and laptop computers, storage units (by USD 6.7 billion, y/y), other furniture and parts thereof (by USD 3.7 billion, y/y), seats and parts thereof; travel goods, articles of leather; video game consoles and machines (by slightly more than USD 2 billion each, y/y) – Chart 5.



 $\,{\scriptstyle \Sigma}\,$ Chart 5. The steepest absolute decreases in US imports from China by group of goods

Source: prepared by the PEI based on: USA Trade Online (2020).

Considering the proportion of reduced deliveries in the value of imports of the product group concerned, in 2019 the most significant decreases were noted in the case of desktop and laptop computers (by 67 per cent, y/y), electronic integrated circuits (by 51 per cent), storage media (by 45 per cent), travel goods, articles of leather, video game consoles

and machines, other electrical machinery and equipment (by ca. 30 per cent) – Chart 6. Imports of desktop and laptop computers and storage units as well as of mobile phones dropped by 13 per cent and 17 per cent respectively. Therefore, decreases affected Chinese products subject to the additional tariffs imposed on imports to the US.

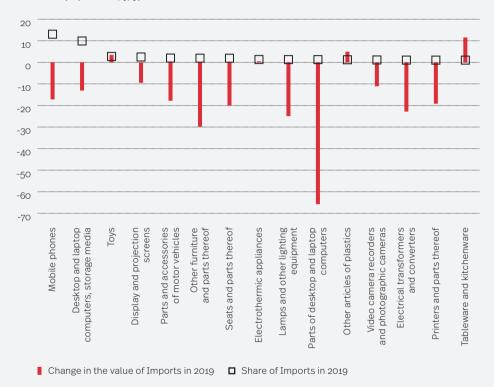


Chart 6. Changes in the value of US imports of major groups of goods from China in 2019 (in per cent, y/y)

Source: prepared by the PEI based on: USA Trade Online (2020).



Effects of the trade war on global value chains

The sanctions introduced caused shifts in flows of supplies to the US and China

Due to the tariffs imposed by the US, Chinese goods became relatively more expensive than products brought from other countries. It stimulated demand for goods from countries excluded from the sanctions, boosted their deliveries to the US and, as a consequence, re-orientated US imports in geographical terms. Therefore, it was a typical trade diversion effect.

Undoubtedly, the greatest beneficiary of the sanctions imposed in mutual trade between the US and China was Vietnam. In 2019, US imports from Vietnam were 35.6 per cent higher than a year before, mostly owing to a rapid increase in deliveries of mobile phones and – to a lesser degree – in supplies of other furniture and parts thereof and of seats and parts thereof (covered by additional tariffs on imports to the US from China).

Such a high growth rate of imports of goods from Vietnam to the US indicates that it was not only attributable to a typical trade diversion effect, i.e. the replacement of more expensive deliveries from China with supplies from other countries. To a certain extent, the rise in deliveries might also result from Chinese exporters' evading US tariffs through exports via third countries, excluded from the sanctions.

In 2019, there was also a marked fall in US imports from Taiwan (by 18.6 per cent, y/y). Specifically, it concerned goods affected by the

most abrupt decreases (in terms of value) in imports from China, i.e. desktop and laptop computers (including digital processing units and storage units), parts of desktop and laptop computers and, to a lesser degree, mobile phones (Chart 7).

In addition to Vietnam and Taiwan, other South-East and East Asian countries also benefited from the sanctions, in the form of increased exports to the US: e.g. Cambodia (travel goods, articles of leather; lamps and other lighting equipment), Indonesia (mobile phones; travel goods, articles of leather), the Philippines (storage media; mobile phones; parts of desktop and laptop computers), Thailand (parts and accessories of motor vehicles) as well as Japan and South Korea (storage media). There was also a rise in US imports of certain goods from Mexico. Increased supplies were recorded in the case of products such as parts and accessories of motor vehicles, display and projection screens as well as desktop and laptop computers and storage units.



Chart 7. Changes in the value of deliveries to the US of selected groups of goods in 2019 on the corresponding period of the previous year (in USD billion)

Notes: (1) Positive values indicate growth in US imports of products from the group concerned from particular countries in 2019 (y/y), whereas negative values represent decreases in those imports. (2) The chart includes groups of goods whose imports to the US showed the most significant absolute decreases in the value of deliveries in 2019 (y/y), expressed in USD.

Source: prepared by the PEI based on: USA Trade Online (2020).

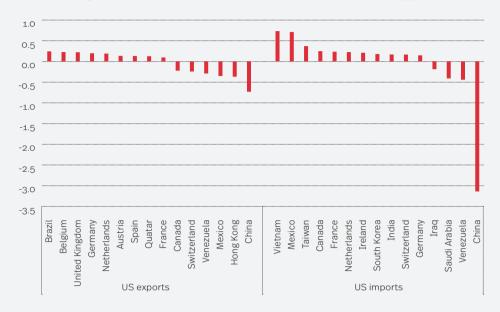
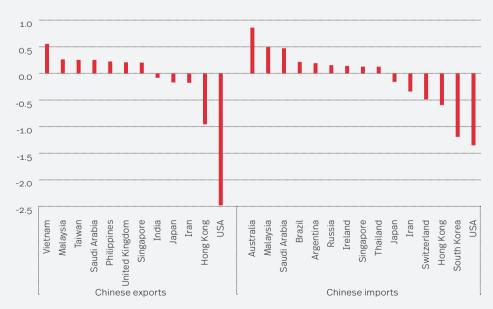


Chart 8. Changes in the shares of selected countries in US trade in 2019 (in pps, y/y)

Source: prepared by the PEI based on: USA Trade Online (2020).



> Chart 9. Changes in the shares of selected countries in Chinese trade in 2019 (in pps, y/y)

Source: prepared by the PEI based on: ITC (2020).

Assuming that changes in the importance of specific countries to US imports reflected benefits resulting from the introduction of the US sanctions, a major beneficiary – in addition to Vietnam – was Mexico as well. In 2019, its share of US imports was more than 0.7 pp higher than a year before (Chart 8). The share of Taiwan went up by nearly 0.4 pp, whereas those of Canada, France, the Netherlands and Ireland augmented by over 0.2 pp.

As regards Chinese imports, most countries from East and South-East Asia diminished in importance (e.g. South Korea, Hong Kong, Vietnam, Japan), as sub-suppliers of components to China within global value chains (as described in more detail below). At the same time, Australia, Saudi Arabia, Brazil, Argentina, Russia, Ireland as well as Malaysia and Thailand increased their contributions to Chinese imports (Chart 9).

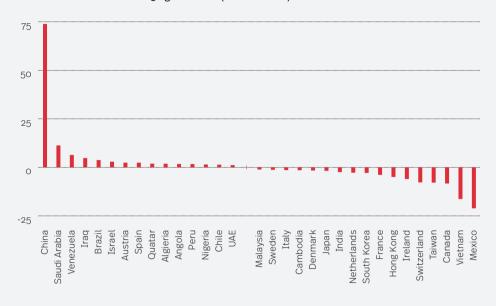
The sanctions imposed re-orientated US and Chinese exports

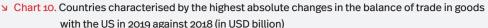
The sanctions introduced by the parties in mutual trade re-orientated the geographical directions in imports of goods to the US and China, but they also contributed to diverting the flows of US and Chinese exports. **The fall in US demand for products originating in China forced Chinese exporters to increase deliveries of those goods to other markets.** A similar development was observed in the United States – US exports of goods to countries other than China went up as well. It is reflected in shifted importance of particular countries to US and Chinese exports of goods. The Chinese sanctions benefited EU Member States (e.g. Belgium, the United Kingdom, Germany, the Netherlands, Austria) and Brazil as markets for US goods (Chart 8). Simultaneously, reduced shares were noted for Mexico (down by more than 0.3 pp) and Canada (by over 0.2 pp).

As regards China's exports, East and South-East Asian countries (e.g. Vietnam, Taiwan, Malaysia, the Philippines, Singapore) as well as the United Kingdom and Saudi Arabia gained in significance (Chart 9).

The trade war accelerated changes in global supply chains

Undoubtedly, the trade war resulted in a fall in the US deficit in trade in goods with China. In 2019, it amounted to USD 345.6 billion, i.e. USD 73.9 billion less than a year before, down by 17.6 per cent. However, the overall deficit in US trade only declined by USD 21.6 billion. As a consequence of increased imports, there was a distinct deterioration of the balance of trade in goods with the majority of East and South-East Asian countries (Chart 10). At the same time, lower exports contributed to a deteriorated balance of trade with partners such as Mexico and Canada. It must be emphasised that – in the light of value added statistics – the US deficit in trade with China is even 20 to 25 per cent lower than in terms of gross statistics used on a daily basis (TiVA OECD, 2018). It results from the fact that the Chinese value added content of products imported from China is rather insignificant. At the same time, such goods contain relatively much value added in other countries, e.g. Taiwan, Japan, South Korea (as described in more detail below).





Source: prepared by the PEI based on: USA Trade Online (2020).

Undoubtedly, the trade war of the United States with China accelerated changes observed for some time not only in world trade, but also in the global production system. Growing unit labour costs in China increasingly encouraged corporations to relocate production – the whole plants, selected production segments or selected production lines – to the neighbouring countries offering lower manufacturing costs. Those included Vietnam, Malaysia, Thailand. The sanctions introduced in US-China trade further stimulated those trends.

As demonstrated by the robust growth in foreign direct investment inflows to Vietnam observed in the first half of 2019, some investors could decide to relocate certain production segments of their goods from China. Although statistics of the Foreign Investment Agency of Vietnam indicate that the largest direct investor in Vietnam is Hong Kong, various experts stress that the actual investment capital comes from China (FIA, 2019). The firms having relocated or planning to relocate all or part of their production facilities from China to other Asian countries include HP, Nintendo, Dell, Microsoft, Amazon, Apple, Google and Lenovo.

Changes in global supply chains driven by the trade conflict seem to be irreversible; even lifting the sanctions imposed on US trade with China will not restore the previous conditions. China will no longer gain importance to the global economy at the same pace as before since other Asian emerging economies will play a growing role, e.g. Vietnam, Thailand, Malaysia, India and the Philippines.

The buoyant development of the Vietnamese economy observed as a result of the US-China trade restrictions seems to be of particular significance to the European Union Member States. On 30 June 2019, the EU and Vietnam signed the EU-Vietnam Free Trade Agreement (EVFTA). The Agreement is another trade arrangement concluded by the EU with an Asian country in recent years (in addition to the agreements in force with South Korea and Japan and

the agreement signed with Singapore). It provides for improvements in conditions for mutual trade and investment cooperation. **Thanks** to the liberalisation of tariffs on imports to Vietnam, EU producers will gain better access to Vietnam's fast-growing market.

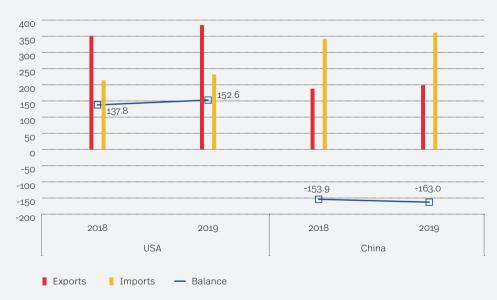


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EU trade with the US and China during the trade war

hanks to the US-China trade dispute, in 2019 the EU-27 trade with the US and China remained dynamic (Charts 11 and 12). It was partly attributable to the trade diversion effect caused by the tensions between Washington and Beijing. **There was an increase in supplies of certain EU goods to the US and China**

as the imposition of tariffs in mutual trade between the two countries made products from the EU relatively cheaper than those subject to the additional tariffs. In 2019, the EU-27 exports to the US showed a rise – in comparison with the previous year – by 9.5 per cent, whereas exports to China went up by 6.5 per cent.



Locat 11. The EU-27 trade with the US and China in 2018–2019 (in EUR billion)

Source: prepared by the PEI based on the EUROSTAT-Comext data (2020).

In EU exports to the US, increased deliveries resulting from the trade diversion effect observed in 2019 concerned products such as turbojets, turbopropellers and other gas turbines (and parts thereof), medical instruments and apparatus, desktop and laptop computers (including processing units and storage units), machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits, etc. At the same time, as



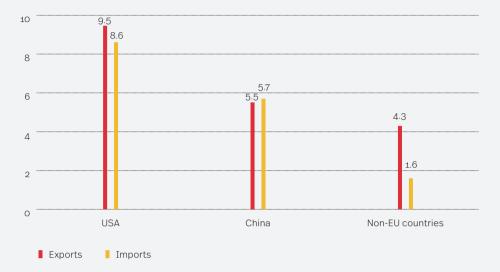
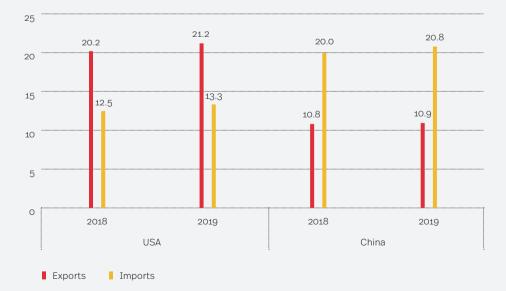


Chart 12. Changes in the EU-27 trade with selected trading partners in 2019 (in per cent, y/y)

Source: prepared by the PEI based on the EUROSTAT-Comext data (2020).



> Chart 13. Shares of the USA and China in the EU-27's external trade in 2018–2019 (in per cent)

Source: prepared by the PEI based on the EUROSTAT-Comext data (2020).

a consequence of the trade war, the EU-27 exported to China more goods from the following groups: electronic integrated circuits, cosmetics, articles of copper, filtering or purifying machinery and apparatus for liquids or gases. The year 2019 also witnessed a nearly 2.5-fold increase in EU exports of pork to China, but it was primarily related to China's greater demand for pigmeat as a result of the epidemic of the African swine fever.

At the same time, in 2019 imports of US and Chinese goods to the EU-27 went up by 8.6 per cent and 5.7 per cent respectively (y/y). **Exporters from the US and China attempted to compensate for contracted demand in the Chinese and US markets respectively by raising deliveries of goods subject to the tariffs to other markets, including to the EU market.** Therefore, EU imports from the US increased in product groups such as crude petroleum oils, parts and accessories of motor vehicles, hormones, sanitary ware and fixtures, electronic integrated circuits. Imports from China expanded in categories such as desktop and laptop computers (including processing units and storage units), semiconductors, seats and parts thereof, electrical transformers and converters, electric storage batteries and electrothermic appliances.

As a result of those developments, the USA and China gained in importance as both the markets for EU goods and as suppliers to the EU (Chart 13). In 2019, the US share of the EU-27's external exports was 1.0 pp higher than in 2018 (at 21.2 per cent), whereas that of China – 0.1 pp higher (10.9 per cent). On the import side, the US share augmented by 0.9 per cent (to 13.3 per cent) and China's proportion went up by 0.8 per cent (to 20.8 per cent).



Potential effects of the ETA on international trade

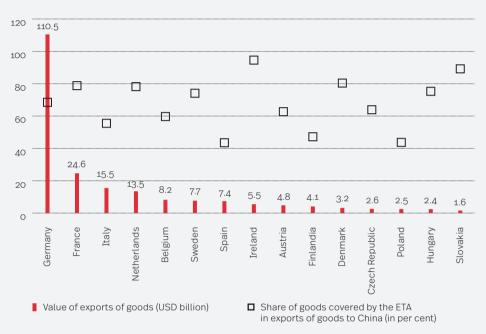
he most important provision of the Economic and Trade Agreement (ETA) signed between the United States and China on 15 January 2020 is the Chinese party's commitment to purchase US goods and services worth USD 200 billion in 2020-**2021.** In 2017 (the last year before the outbreak of the US-China trade war), the value of sales in China of US goods covered by the ETA was USD 95 billion, i.e. 72 per cent of total US exports of goods to China. According to the schedule contained in the ETA, sales of US goods in China should amount to USD 159 billion in 2020 (USD 95 billion – the value of 2017 exports plus USD 64 billion - China's additional purchases) and USD 193 billion in 2021 (USD 95 billion plus USD 98 billion). Assuming that in 2020–2021 exports of goods excluded from China's additional purchases will be at the 2017 level, total US exports of goods to the Chinese market would be 48 per cent and 74 per cent, respectively, higher than in 2017. Therefore, the Chinese party's fulfilment of its commitment to make additional purchases of goods would imply an enormous increase in Chinese imports from the US.

The ETA, effective as of 14 February 2020, may result in typical trade diversion effects. **In order to fulfil the commitments made to the US, Chinese importers are likely to reduce their purchases of the goods concerned from other foreign suppliers, including from the EU.** In 2018, the EU-27's exports to China of goods covered by the additional purchase arrangements under the ETA amounted to USD 149 billion. They accounted for 68 per cent of the EU-27's exports to China (Chart 14). Therefore, that part of EU exports to the Chinese market will be at risk of reduced deliveries.

The ETA implementation may hit Germany the most as the country has strong trade links with China (and accounts for half of the EU-27's exports) – as follows from analyses by the Kiel Institute for the World Economy (Chowdhry, Ferbermayr, 2020a; 2020b). **German exports are likely to be most affected by falling demand, in product categories such as motor vehicles, machinery and equipment – goods manufactured within global value chains.**

China's commitment to the USA with regard to additional purchases of goods seemed to be an ambitious goal at the time of signing the ETA. But the first quarter of 2020 has shown that it may be even more difficult to achieve. As part of efforts to contain the spread of the coronavirus (COVID-19) epidemic, the Chinese authorities took restrictive steps and imposed limitations on the movement of persons. In particular, those measures affected the population of the Hubei province, China's major economic centre.

Firstly, the restrictions introduced pushed down China's domestic and import demand for goods and services. Secondly, the closing of factories caused serious disruptions in global supply chains – not only in China, but also worldwide. The coronavirus epidemic is estimated to drive down the 2020 GDP growth rate in China even below 5 per cent, in comparison with the previously projected growth by more than 6 per cent. **The slowdown in the Chinese economy will reduce demand not only for imported consumer goods, but also for** semi-finished products, components and raw materials for manufacturing. That, in turn, gives rise to concerns whether it is possible for China to fulfil the commitments to the USA with regard to purchases of US goods and services.



Schart 14. The EU-27's exports of goods to China in 2018

Source: prepared by the PEI based on data from the WITS-Comtrade (2020) and ETA (2020).

The first data for 2020 from the Chinese economy indicate a marked collapse of trade in goods. In January and February 2020, exports of goods from China dropped by as much as 17.2 per cent on the corresponding period of the previous year, whereas imports decreased by 4 per cent, y/y (NBS, 2020). According to the US data, in January 2020 exports of goods from the US to China augmented by 1 per cent (y/y), whereas imports of Chinese goods declined by 20 per cent, y/y (USA Trade Online, 2020). The first assessment of the ETA implementation may only be carried out on the basis of trade data for subsequent months as the Agreement entered into force in mid-February 2020.

Effectiveness of trade policy instruments in the days of global value chains

he increased role of global value chains observed since the 1980s has significantly shaped the world economy; consequently, traditional trade policy instruments not always produce the intended results. Individual countries have become specialised in selected stages of production (trade in tasks) rather than in the manufacture of specific products. In the production process, every product crosses the customs borders of the countries engaged in the relevant value chain several times. Thus, it may be subject to tariffs (or encounter non-tariff barriers) many times. As protectionist trends intensify the cumulation of tariffs may push up import input prices and, as a result, drive down demand for the product concerned by increasing its price. Furthermore, the imposition of tariffs on imports of a product affects not only the direct supplier of the product, but also the supplier's backward linkages (suppliers of import inputs into production) and forward linkages (recipients of products covered by such additional tariffs in the country of importation) in the value chain.

The functioning of the above-mentioned mechanisms also materialised in the period of the US-China trade war. In imports to the USA, increased tariffs covered articles such as Chinese electronic devices and equipment (mobile phones, video camera recorders, laptops, display screens, etc.), i.e. products manufactured within global value chains. China specialised in production processes relying on various imported parts and components (generating relatively little value added)¹. Chinese producers were characterised by strong backward linkages within value chains, i.e. with suppliers of semi-finished products from other South-East and East Asian countries and, to a lesser degree, also with those from the United States, delivering design or software inputs into a variety of devices and equipment.

According to the OECD Trade in Value Added database (TiVA OECD, 2018), in 2015 the value added in other South-East and East Asian countries, especially in South Korea, Taiwan and Japan, accounted for more than 18 per cent of Chinese exports of computer, electronic and optical products (Chart 15). At the same time, the US value added content represented 3.2 per cent of gross exports in the product group. In other manufacturing divisions characterised by highly internationalised production processes (e.g. the manufacture of electrical equipment, of machinery and equipment and of motor vehicles), backward linkages with US and Asian suppliers of import inputs within value chains were slightly weaker.

¹ Imports of iPhone 4 from China to the US had a Chinese value added content of merely several per cent. The device was composed of parts and components originating in other countries (South Korea, Japan, Taiwan, Vietnam, Germany, France) and contained US value added (design, product management, device software). The tariing imposed on the imports to the US of iPhone made in China drove down demand for the device, thus decreasing Chinese exports of iPhone and imports of parts and components for its production (Kaliszuk, 2013, p. 67).

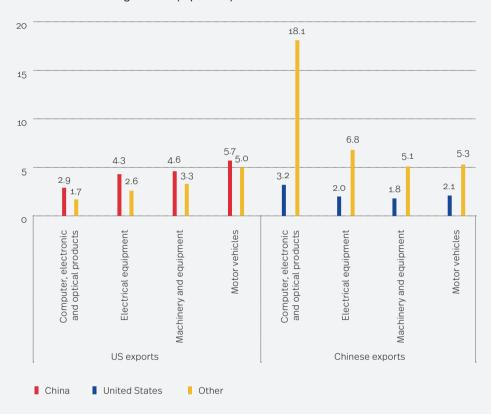


Chart 15. Foreign value added content of Chinese and US gross exports of products of certain manufacturing divisions (in per cent)

Source: prepared by the PEI based on: TiVA OECD (2018).

The effects of trade sanctions on the functioning of global value chains are reflected in China's trade data. Between January and November 2019 – as compared to the corresponding period of the previous year – there was a fall in the value of Chinese imports from other South-East and East Asian countries. Among those countries, the most significant decreases were noted in imports from South Korea (by 23 per cent, y/y), Hong Kong (by 21 per cent), Vietnam (by 19 per cent) and Japan (by 15 per cent).

US export-orientated producers also showed backward linkages within value chains

with suppliers of parts and components from China. **Chinese value added accounted for 5.7 per cent of US exports of motor vehicles and parts thereof.** In exports of electrical equipment and of machinery and equipment, that proportion exceeded 4 per cent, whereas in exports of computer, electronic and optical products is was up to 3 per cent. Disrupted supplies from China might drive down US exports to Canada and Mexico – in 2019, they dropped by 2.5 per cent and 3.4 per cent respectively.

In the days of global value chains, additional tariffs imposed on imports of Chinese goods to the US affected all the participants in the chains where products subject to the sanctions were manufactured. Basically, the United States managed to achieve the intended purpose of the trade war: to reduce the deficit in trade with China. The effects of the war have hit other countries as well.

The imposition of tariffs on Chinese final products (e.g. motor vehicles, computers, mobile phones) reduced their production and exports from China, which translated into shrunk demand for parts and components supplied from other countries, e.g. East and South-East Asia. Additional tariffs on Chinese intermediate goods (e.g. parts and components for production) imported to the US implied their lower domestic production and, thus, reduced exports. Those affected recipients of US goods (e.g. Mexico and Canada) manufactured from components subject to additional tariffs on imports.



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The US–China trade dispute and the World Trade Organisation

The trade dispute between the United States and China lasted and - despite the entry into force of the ETA - continues to last in conditions of increasing crisis at the World Trade Organisation (WTO). On 10 December 2019, the terms of two of the three remaining judges of the WTO's Appellate Body expired and, as a result, the AB lost the right to settle trade disputes - a key area of the WTO activities (WTO. 2020). The normal functioning of the seven-person panel requires the presence of three members. The effective paralysis of the body stems from the blockage of any new appointments to the panel by the US Administration. However, such a situation may lead to a backlog of unsettled disputes and make it easy for countries to violate the adopted trade principles without suffering the consequences.

The functioning of countries at the WTO is based on the principles of non-discrimination and national (most-favoured-nation) treatment, as set out in Article I of the General Agreement on Tariffs and Trade (GATT). Preferential trade agreements are essentially discriminatory in nature as preferences are only granted to the parties to the agreement concerned, thus being contrary to the most-favoured-nation obligation. However, under Article XXIV of the GATT, WTO member countries may enter into free trade agreements and form customs unions. Pursuant to the provisions of the article, such agreements must cover all the trade between the constituent territories.

But the Economic and Trade Agreement concluded between the United States and China is inconsistent with the fundamental principle of non-discrimination and mostfavoured-nation treatment. A preferential agreement should provide for eliminating or reducing tariffs on all the trade between the contracting parties. However, the EPA contains China's commitment to purchase specified quantities of US goods. Therefore, it discriminates against countries excluded from the Agreement.

Due to the paralysis of the WTO Appellate Body resulting from the blockage of new appointments, it is impossible for an affected country to appeal against the provisions of the ETA. Only the EU, China and 15 other WTO members participate in talks on an interim appeal arbitration arrangement. However, the work has not been joined by representatives of the United States (Chowdhry, Felbermayr, 2020b).

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