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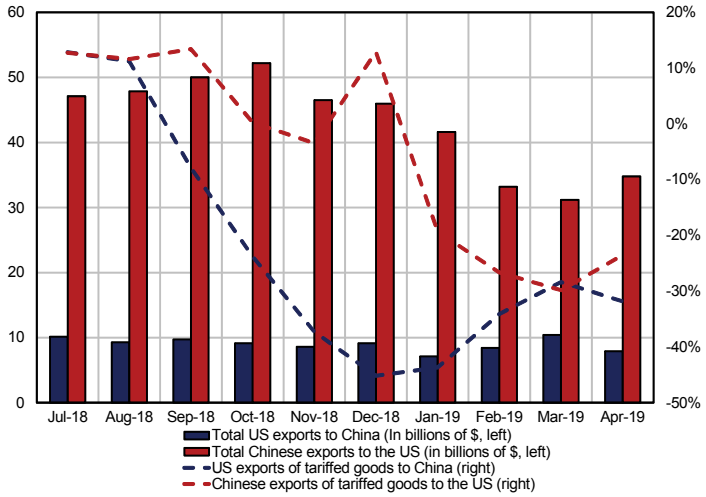
Effects of initial trade tensions between China and the United States

- In July, August and September of 2018, the United States successively raised tariffs on a total of $250 billion in annual imports of Chinese goods, stating that it wanted to protect American companies from unfair Chinese practices and reduce the bilateral trade deficit. China responded with tariffs on $110 billion of imports from the United States.
- Trade tensions between China and the US have resulted in a significant and rapid reduction in bilateral trade in taxed goods. Chinese imports of US goods subject to tariffs fell, while US imports of Chinese goods for which tariffs had been imposed also fell, but to a lesser extent. The reduction in US imports from China appears to have been accentuated by significant front loading of purchases between the announcement of the measures and their entry into force. At the time of writing, tensions between the US and China have not resulted in a noticeable redirection of demand to other countries, except in certain well-identified sectors (soybeans in particular) or to a few relatively small economies such as Vietnam.
- Trade tensions are felt in both countries, but in different ways, with repercussions on foreign trade and domestic demand. The US trade deficit has not been reduced. At this stage, the impact on US growth is not discernible, but tariffs are expected to have inflationary effects on some goods. In China, trade tensions have accentuated the current economic slowdown through lower confidence and have had a negative impact on domestic demand. The contraction in trade flows has affected China's overall foreign trade, and that of its Asian partners. Although domestic demand in both countries has been buoyed by the policy mix, for the time being it is China's economy that seems to be harder hit.
- Globally, the initial effects of trade tensions are more significant than had been expected, reflecting the combined effect of lower Chinese demand vis-à-vis its partners and a notable uncertainty shock. Tensions have led to a sharp decline in world trade, although their impact on business activity is, for the moment, moderate.

Trade in goods between the United States and China



Source: US Census Bureau; data not seasonally adjusted.

1. The return of protectionism

1.1 Background and timeline of trade tensions up to May 2019[1]

Breaking with its trade practices since the 1980s[2] – or even since the end of the Second World War – in the spring of 2018, the US administration introduced a series of tariffs vis-à-vis most of its trading partners. The targeted countries responded with rebalancing or retaliatory measures, leading to a historic increase in tariff levels.

Although American tariff levels were amongst the lowest of WTO members at the end of 2017 (3.4%), the measures adopted since then are expected to bring them closer to the levels applied by emerging countries, including China (see Box 1).

US protectionist measures have taken different forms and targeted a number of countries (e.g. withdrawal of preferential trade status for India and Turkey, exit of the United States from the Trans-Pacific Partnership Agreement negotiations, etc.), but trade tensions have mainly focused on mainland China (see Figure 1), in line with President Trump's pronouncements during his election campaign.[3] The introduction of customs barriers for Chinese imports have been conducted with the official objective to protect US companies from unfair Chinese practices. Other objectives put forward by the US administration or President Trump include reducing the total and bilateral trade deficit, boosting industrial production and employment, technological sovereignty, and geostrategic considerations.

Thus far, tariffs specific to Chinese goods have been implemented in several phases (see Figure 1). Only the first two phases are covered in this paper due to data available at the time this report was written.

The first phase (lists 1 and 2), covering some $50 billion of US imports from China, was announced in April 2018. The first list covered $34 billion in goods and was implemented on 6 July 2018 and the second list worth $16 billion was implemented on 23 August, both of them subject to a 25% customs duty. This first phase targets goods with a high technological content (mainly intermediate and capital goods).[4] These measures led to China retaliating with similar amounts and customs duties.

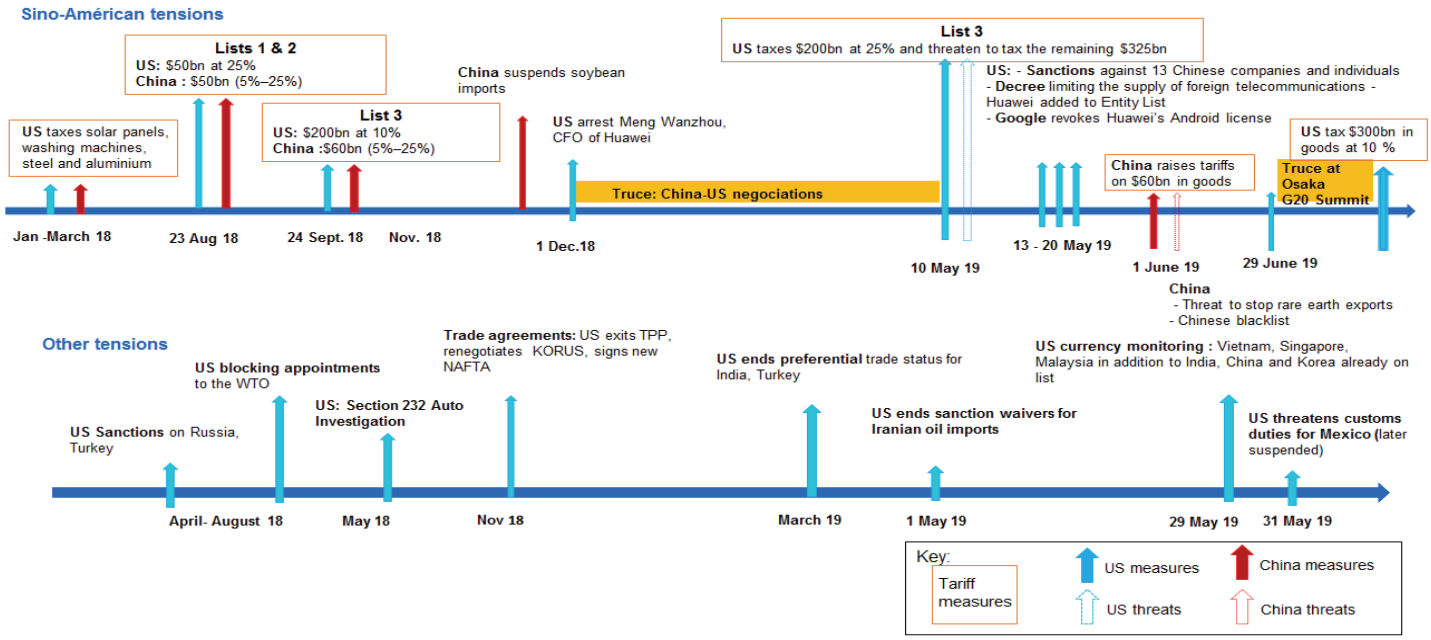
The second phase, announced in June 2018 and implemented at the end of September, involves a 10% duty on US imports from China worth some $200 billion (the third list, a quarter of which is made up mostly of final goods). This time, the Chinese response was more limited in scope and amount, introducing taxes ranging from 5% to 25% on $60 billion in American goods. At this level of tax base, given the imbalance in trade between the two countries, the Chinese authorities were unable to match the US: in 2017, the US imported $505 billion worth of goods from China (source: US Customs; see chart on first page) while China imported $150 billion worth of American goods (according to Chinese Customs; $120 billion according to US Customs).

In a third phase, tariffs on the third US list were increased by 15 percentage points (from 10% to 25%) on 10 May 2019. China responded by applying even higher duties on $36 billion of goods that had already appeared in the $60 billion list. Almost all Chinese imports from the US are now subject to higher tariffs than those applicable to other WTO trading partners.

It should be noted that, after May 2019, escalating tensions led to a fourth phase of American tariff increases, applying to US imports from China not previously affected by tariff increases with an initial rate of 10%, which is scheduled to come into effect on 1 September 2019 for $112 billion worth of goods, and on 15 December for $160 billion. In response, China announced an additional increase (from 5% to 10%) in tariffs on $75 billion in imports of US goods as from 1 September. The United States immediately responded by raising duties from 10% to 15% on the above-mentioned goods, and increasing duties for goods on the third US list from 25% to 30%, effective on 1 October 2019.

(1) This paper takes into account the tariff measures adopted up to 10 May 2019.
(2) The last episode of trade restriction by a major developed country dates back to the series of tariff increases and export restrictions imposed by the US on Japan in the 1980s.
(3) The term "China" refers to the People's Republic of China (Mainland China), and excludes the territories of Hong Kong and Macao. Macao and Hong Kong's customs zones are separate from the rest of the PRC and are therefore not affected by US customs measures.
(4) Classification by broad economic categories allows foreign trade data to be broken down by purpose: final goods, intermediate goods and capital goods.

Diagram 1: Timeline of international trade tensions to August 2019



Source: DG Trésor.

Box 1: Comparison between US tariffs and those of its partners

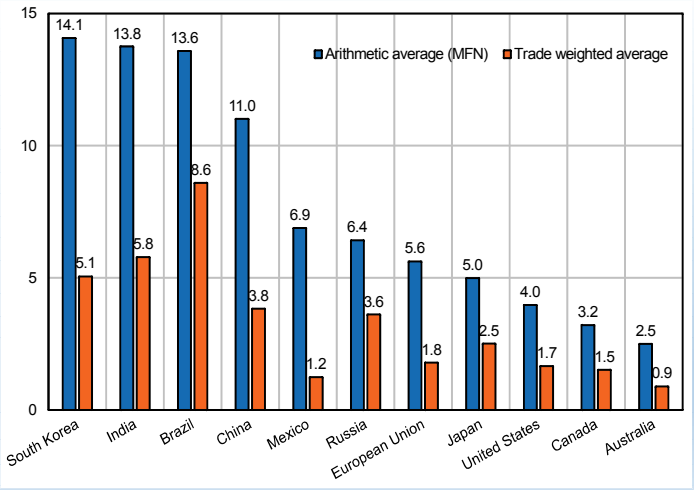
Prior to rising trade tensions (2017), the average US most-favoured-nation (MFN) tariff (4.0%) was amongst the lowest of WTO members (see Figure 1), lower than both the Chinese (11.0%) and European (5.6%) arithmetic averages.[a] The average of actual trade-weighted tariffs in 2017 also shows that the United States was among the countries with the lowest tariffs: 1.7%, compared to 1.8% for the EU and 3.8% for China. Taking only actual bilateral trade into consideration (excluding agri-food products), the United States collected, on average, lower tariffs in 2017 than its partners (see Table 1). However, these comparisons must be interpreted with caution: the arithmetic average takes into account all goods, even those that are imported little or not at all, while the weighted average tends to mask tariff peaks that discourage certain exchanges.

When assessed using the more precise "reference group" methodology, customs duties applied by the EU and the United States are similar. This method consists in calibrating the weighting of customs duties according to the significance of each customs line by referring to a group of countries considered similar to the country in question.[b] This approach avoids the issue of endogeneity of the flow-weighted average (*i.e.* the higher the barriers, the lower the flows). According to Ho *et al.* (2012),[c] using this method of calculation, the EU and US tariffs in 2007 with regard to the rest of the world were 1.5% for both, compared to 2.4% and 1.2% respectively using a weighted average, reflecting higher US tariffs on a limited number of goods where demand for foreign goods is high or particularly sensitive to price changes.

The tariff measures adopted by the US starting in early 2018 could raise the US weighted average customs duty rate above the level of the Chinese average rate. In total, taking into account all the Trump administration's tariff measures that were in force at the end of April 2019, the weighted average US import duty rate is expected to reach its 1971 level, according to UBS,[d] at about 8%. However, the bank accepts that the estimate of trade flows remaining after the application of the measures and used in the calculation of the weighted average rate is very uncertain.

a. The arithmetic average of MFN duties does not take into account those applied to bilateral trade agreements, unilateral preferences granted to most least-developed countries, or those in force for trade defence measures.
b. The methodology is described in "Assessing Applied Protection across the World" (A. Bouët, Y. Decreux, L. Fontagné and S. Jean, *Review of International Economics*, 2008).
c. Guimbard Ho., S. Jean, M. Mimouni and X. Pichot, "MAcMap-HS6 2007, an Exhaustive and Consistent Measure of Applied Protection in 2007", *International Economics* 130(2), February 2012.
d. US Weekly: "Tariffs may go from bad to worse", UBS, 7 September 2018.

Chart 1: Average customs duties applied in 2017 (in %)



Source: World Bank.

Table 1: Tariff average weighted by US bilateral trade in 2017 (in %)

	Customs duties applied to US exports, by country of destination (excluding agri-food, 2017)	US customs duties on imports, by country of origin (excluding agri-food, 2017)
Canada	0.0	0.0
Mexico	nd	0.1
Japan	0.5	1.7
European Union	**2.0**	**1.4**
France	2.0	1.2
Germany	2.5	1.5
China	6.3	3.0
Brazil	7.9	0.3
India	6.7	2.3

Source: UN Comtrade, WTO, calculations by DG Trésor (weighted average at SH6 level).

1.2 The *ex-ante* effects of protectionism

In a rather consensual manner,[5] economic literature considers that openness to trade is beneficial in the long term for wealth creation and well-being. Trade openness leads to productivity gains by exploiting comparative advantages and returns to scale, increased competition, access to a wider variety of goods and the stimulation of innovation.[6] In the short term, the effects of increasing or lowering tariffs are not symmetrical. Thus, protectionism leads to negative effects of a magnitude greater than the beneficial effects of a reduction in tariff barriers[7] with, over and beyond the loss of the positive effects, confidence and uncertainty shocks (higher financing costs and reduced investment). In the medium term, trade barriers introduce costs for sectoral reallocation and reorganisation of global value chains. Finally, in the long term, prolonging this phase could permanently undermine the credibility of any stable, rules-based multilateral system.[8]

In the importing country, by increasing import prices and reducing competition, tariffs mainly affect consumers. This leads to a decline in consumer purchasing power. Besides, increased barriers reduce trade, which provides more productive and better-paid jobs.[9] In addition, barriers mainly affect the poorest households, which spend a high proportion of their income on imported goods.[10] Customs measures may allow some domestic companies to benefit from rents or slow their productivity gains[11] due to less competition. Domestic firms' productivity is likely to also be affected by a more limited access to foreign produced inputs. Lastly, although the government benefits from customs revenue, it is limited by the sensitivity of the tax base to additional duties (see 2.1 and 2.2.). Also, reduced economic activity has negative repercussions for public finances.

Ex-ante estimates of the effects of customs duties lead to substantial recessive impacts. The OECD considers that the measures announced up to May 2019 will lead to a 0.2% to 0.3% fall-off in US and Chinese GDP by 2021-2022 compared to a scenario of no measures. Tariffs of 25% on all Sino-American trade would, according to the OECD, result in a further decline of 0.4% in the United States and 0.5% in China.[12] However, the difficulty of factoring in certain complex phenomena[13] and the absence of any such

(5) See Barry V, L. Boisset and M. Lefort (207), "Globalisation, Growth and Inequality: Implications for Economic Policy," *Trésor-Economics* no. 210.
(6) Jean S. and A. Reshef (2017), "Why Trade, and What Would Be the Consequences of Protectionism?"; CEPII ; A. Berthou, C. Jardet, and D. Siena (2018), "Quantifying the losses from a global trade war", *Banque de France*; Furceri D., S.A. Hannan, J.D. Ostry and A.K. Rose (2018), "Macroeconomic Consequences of Tariffs", *NBER*.
(7) This asymmetry is linked to intertemporal consumption.
(8) Mattoo A., and R.W. Staiger (2019), "Trade wars: what do they mean? Why are they happening now? What are the costs?", NBER.
(9) Brambilla I., N. Depetris, G. Porto (2015), "Wage and employment gains from exports: evidence from developing countries", CEPII.
(10) See Cohen V. L. Rabier and L. Shimi (2017), "Globalisation, Growth and Inequality: Implications for Economic Policy," *Trésor-Economics* no. 210
(11) Domestic companies importing intermediate goods would be penalised.
(12) Based on NiGEM model simulations assuming rational expectations (*Economic Outlook*, May 2019, OECD).

precedent since the end of the Second World War limit the models' predictive capacity.

The main ex-ante studies of recent tariff measures predict that China will suffer greater negative effects than the US, due to several factors:[14]

(a) The most open economies are the most affected, not just those applying or coping with tariff increases. The trade openness rate[15] is about 9% for the United States, 16% for China and 20% for the EU (excluding intra-area trade). Thus, the euro area could also be exposed to bilateral Sino-American tensions.

(b) A "large economy" whose demand influences world prices can benefit from increasing tariffs on its imports, subject to a large number of parameters, including the absence of retaliatory measures by its partners. However, there is no consensus in economic literature on the "optimal" level of US tariffs (see Box 2).

Theoretically, moreover, passing on additional customs duties favours the partner with the greatest market power. Faced with a tariff increase, an exporter can maintain prices (and therefore not reduce margins) – shifting the cost of customs duties to the importer, to the detriment of the price competitiveness of its exports and penalising its market share – or it can lower prices and absorb a share of the customs duties by trimming margins. This allocation of the additional cost resulting from customs duties depends largely on the respective market powers of exporters and importers. Several factors reduce the importer's share of customs duty, known as the degree of pass-through. These include the relative significance of the destination market, the sophistication of exports and the size of exporting companies.[16] Under these criteria, the pass-through of additional tariffs should be unfavourable to China, (*i.e.* exporters from China would have to further reduce their margins compared to their US counterparts) given the characteristics of Chinese exports to the US (still limited sophistication, large exporting companies and size of the US market).

In the light of these factors, trade tensions are likely to weigh more heavily on the Chinese economy than on the US economy.

Tariffs' effect on inflation is also difficult to anticipate, especially since there is little empirical work and the recent tariff hike is unprecedented. An increase in customs duties can lead to:

- An increase in the prices of imported goods directly affected by tariffs (see pass-through above).
- An increase in the prices of comparable goods from other producers due to lower competition. This effect could account for 50% of the domestic price increases caused by higher duties.[17]
- Runoff from the import prices of intermediate goods to the prices of final goods produced by the importing country.
- The recessive effect of tariff increases dampens demand and, as a result, prices. On the other hand, a more flexible policy mix in response to the introduction of tariffs can bolster price changes.

A CEPII study[18] forecasts, on the basis of an average pass-through of 80%, a significant effect on US prices of +0.3% in 2019 of the measures taken until September 2018, and +0.8% in the event that all US imports from China are subject to the +25 percentage pts increase in customs duties. Several bank analyses point to a risk that inflation will pick up a similar rate.[19] The price dynamics of the initial goods concerned by new tariffs under the Trump administration seem to confirm these estimates.[20]

Bilateral measures between the US and China could also lead to a geographical restructuring of trade in the medium term, in the form of:[21] (i) diversion of demand: an increase in

(13) Some limitations of models used to predict the effects of agreements on trade, and thus on economic activity, are explained in greater detail in Egger and Erhardt ("Heterogeneous Effects of Tariff and Non-tariff Trade-Policy Barriers in Quantitative General Equilibrium," CEPR, 2019). In addition, the effects of trade on innovation are difficult to model (Aghion P., A. Bergeaud, M. Lequien and M. J. Melitz (2018), "The impact of exports on innovation: theory and evidence", *Banque de France Working Paper*).
(14) See 4.4 of the IMF's *World Economic Outlook*, April 2019.
(15) Trade openness is measured by the average of exports and imports of goods as a percentage of GDP.
(16) Flaaen A.B., A. Hortaçsu and F. Tintelnot (2019), "The Production Relocation and Price Effects of U.S. Trade Policy: The Case of Washing Machines", *NBER Working Paper* No. 25767, April 2019; Amiti M., O. Itskhoki anad J. Konings (2019), "International Shocks, Variable Markups and Domestic Prices", *Princeton Review of Economic Studies,* January 2019.
(17) Amiti M., O. Itskhoki and J. Konings (2019), "International Shocks, Variable Markups and Domestic Prices", *Princeton Review of Economic Studies*.
(18) Jean S. and G Santoni (2018), "How Far Will Trump Protectionism Push Up Inflation?", *CEPII Policy Brief*.
(19) "Tariffs and Inflation", UBS Global Research, Oct. 2018; "China's Retaliation in the Trade War", Institute of International Finance, February 2019; "Tariffs Begin to Leave a Mark on US-China Trade", Goldman Sachs, December 2018.
(20) The price dynamics in the US of washing machines and steel, driven by the 25% increase in customs duties in January 2018 and April 2018, respectively, was +12% year-on-year at the end of 2018 and +9% at the end of November 2018 (Trump Administration Tariff Actions; Congressional Research Service, 2019; Hufbauer G.C. and E. Jung (2018), "Steel Profits Gain, But Steel Users Pay, Under Trump's Protectionism", Peterson Institute for International Economics).
(21) Brown C. and M. Crowley (2003), "Trade Deflection and Trade Depression", FRB of Chicago *Working Paper* No. 2003-26.

US and Chinese imports of "taxed" goods from the rest of the world; (ii) diversion of supply: disposal of Chinese and US goods affected by customs measures on other markets; (iii) trade depression: disposal of domestically produced goods initially dedicated to exports on domestic markets due to the dampening effect of tensions on foreign demand. In the long term, protectionism could lead to a more substantial reorganisation of global production chains that could benefit the EU,[22] provided that positive diversion effects take precedence over negative recessive effects and diversions.

Box 2: "Optimal" customs duties of the major economies

An optimal level of customs duties is one that maximises a country's well-being through improved terms of trade (relative prices of imported goods compared to the price of exported ones). This improvement arises from a drop in world prices caused by the decrease in domestic demand, which in turn is due to the increase in customs duties. As a result, only a country that has sufficient presence within a market to wield market power can benefit from such an improvement. The improvement in the terms of trade enjoyed by the country could then – depending on the elasticity of substitution levels between foreign and domestic demand and the price elasticity of supply – compensate for the deadweight loss linked to the general decline in activity caused by trade restrictions, at least vis-à-vis a moderate increase in customs duties.

The optimal level depends on a large number of factors and remains very uncertain, empirically speaking. If these conditions are not met, a large country will lose when import tariffs are introduced, even in the absence of retaliatory measures by third countries. When partners take retaliatory measures, the possible positive effect of improving the terms of trade disappears and the effect on both partners becomes negative. Lastly, global value chains limit the potential positive effect of an optimal tariff, as imports (exports) contain domestic (foreign) added value.

2. Initial effects of customs tariffs on the development of taxed trade

The introduction of tariff barriers has resulted in a significant and rapid falloff in tariffed trade between China and the United States. However, the measures have not as yet led to any significant diversion of trade to third countries.

2.1 US imports of tariffed goods have been significantly affected

In 2018, US imports from China rose by 7% over the previous year to reach $540 billion in nominal terms. This was a slightly smaller increase than total US imports (an 8.6% increase to $2.563 trillion). This reverses the trend of previous years, since between 2012 and 2018, the average annual growth of US bilateral imports from China was twice that of total US imports.[23]

To identify the specific effect of customs barriers, we need to distinguish within the trade flow data between the various lists of goods affected by successive customs duties increases.[24]

With respect to the initial list of Chinese imports ($34 billion), announced at the beginning of April, for which the increase in customs duties entered into effect at the beginning of July 2018, imports from China fell as soon as the measures were put in place, reaching –26% year-on-year in April 2019[25] (see Chart 2). On this list of goods, China accounts for about 8% of US imports, compared to 18% for Mexico and 17% for Japan. No diversion effects have yet been observed, as the momentum of US imports excluding China of goods on this list remains relatively stable.

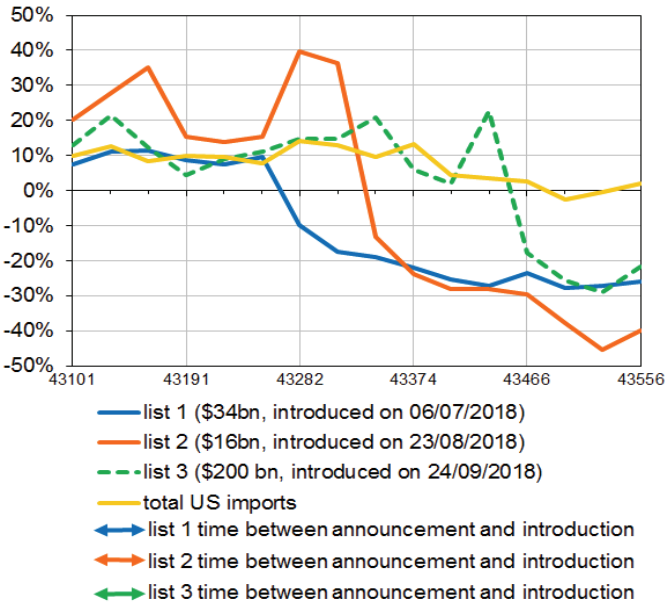
With regard to the second list of goods ($16 billion), which was also announced at the beginning of April 2018 but which entered into force on 23 August, US imports from China picked up in July and August (respectively +40% and +36% year-on-year), doubtless in anticipation of customs duties being introduced. This front-loading effect was followed by a fall-off in US imports from China, which reached –40% year-on-year in April 2019. For these goods, China is the US's second largest supplier (14% of imports in 2017). It is also difficult to ascertain if diversion of trade has

(22) 20 Surveillance Note, 21-22 July 2018 : https://www.imf.org/external/np/g20/071818.htm
(23) This represents an average annual growth of US imports from China of 4.0% between 2012 and 2018, compared to 1.8% for total US imports over the same period.
(24) The flows analysed in Sections 2.1 and 2.2 are in nominal terms, excluding taxes and customs duties.
(25) For all lists studied, the decreases observed would mainly result from a volume effect because the price effect would be small, as Chinese producers have not as yet lowered their prices (see Section 3.1).

occurred: whereas the March 2019 data shows an acceleration in US imports excluding China (+11% year-on-year, against +4.5% in Q4 2018), this phenomenon still appears insignificant and is not confirmed by the April data.

The taxation of a third list of goods ($200 billion), announced in June 2018 and implemented at the end of September, initially gave rise to slight front-loading in September, before having a more telling effect by the year end in anticipation of the second increase in customs duties, which was initially announced for January 2019 and then suspended. This front-loading was followed by a sharp drop (–22% year-on-year in April 2019; see Chart 2). The effects of this tariff increase could be significant, given the amounts in question ($200 billion versus a total of $50 billion for the first two lists) and China's US market share for these goods (22% of US imports in 2018, with China being the leading supplier). On this list, US imports from Vietnam rose by 38% in Q1 2019, but their share of the total remains low (1.8% of imports of the listed goods in April 2019). Thus, like the first two lists, the data does not reveal a significant trade diversion effect.

Chart 2: US imports from China (year-on-year in nominal terms, excluding taxes)



Source: United States Trade Representative, DG Trésor calculations.

2.2 Chinese imports of US goods affected by tariff measures have lost ground

In 2018, Chinese imports from the US rose by only 3% over 2017 to reach $154 billion in nominal terms. There was a notable slowdown from Q3 onwards, compared to an 18% increase ($2.109 trillion) in Chinese imports overall, resulting in a significant discrepancy between two historically very similar scenarios.

In response to the US measures, China raised tariffs on three lists of goods (different from the American lists). The amounts concerned were equal to the US sanctions imposed on the same dates for the first two lists ($50 billion in total), but much lower for the third ($60 billion in total compared to $200 billion for the US).

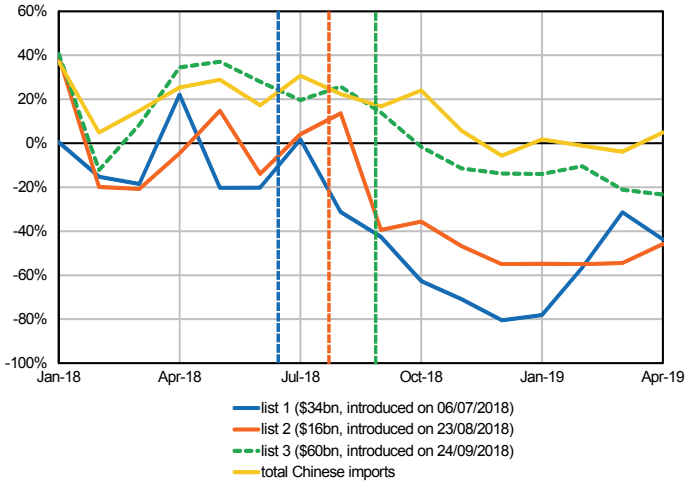
Chinese imports from the United States of goods from the first list[26] ($34 billion) – primarily transport equipment (including automobiles)[27] and agricultural goods – fell sharply starting in August 2018: –31% year-on-year in August 2018, –80% in December, and –44% in April 2019 (see Chart 2). This drop was mainly due to a decline in soybean imports (from $12.2 billion in 2017 to $3.1 billion in 2018; see Box 3) and automobile manufacturing goods (from $15.1 billion to $12.6 billion between 2017 and 2018). Concurrently, overall Chinese imports of the goods on the first list continued to rise (+5% in 2018).

Chinese imports from the US of goods on the second list ($16 billion) – mostly mineral fuels, chemicals, plastics, metals and some automotive goods not on the first list – also fell starting in September (–39% year-on-year) and continued to fall off (–46% year-on-year in April 2019). The introduction of retaliatory measures at the end of August 2018 (compared to early July for the first list) explains why the slope-off in imports came later. In 2018, Chinese imports of these goods remained robust (overall increase of 9%).

Chinese imports from the United States of goods on the third list ($60 billion), primarily intermediate and capital goods, also declined gradually but to a lesser extent: from –2% year-on-year in October 2018 to –23% year-on-year in April 2019 (see Chart 3). However, total Chinese imports of US goods continue to increase (+5% year-on-year in April 2019).

(26) As before, imports of US goods that have been subject to a tariff increase by the Chinese authorities are examined in isolation.
(27) In December 2018, China announced an exemption for automobile manufacturing goods, which entered into force on 1 January 2019 for an initial three-month period. When it expired on 31 March, China extended the exemption for an unspecified period.

Chart 3: Chinese imports from the US (year-on-year in nominal terms, excluding taxes)



Source: Global Trade Atlas, DG Trésor calculations.

Since each list of goods targeted by the retaliatory measures were published only a few days prior to their introduction, there was no front-loading phenomenon in the case of Chinese imports.

Box 3: American soybeans, victim of trade tensions

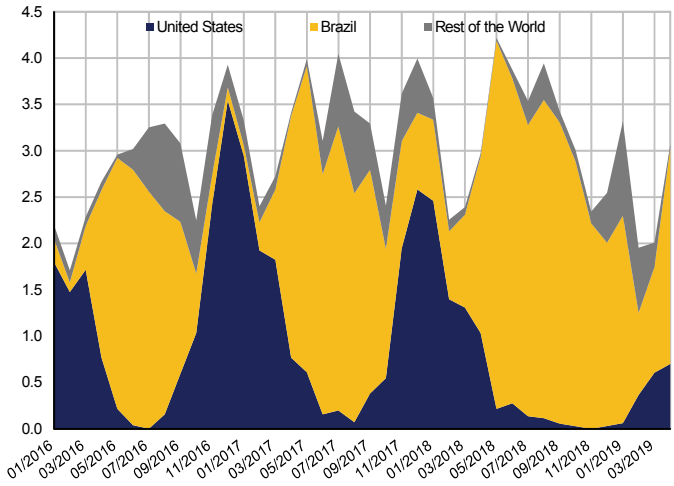
In July 2018, Beijing placed a 25% import tariff on American soybeans, which quickly became the product most affected by trade tensions between China and the United States: US soybean exports to China fell from $12.2 billion in 2017 to $3.1 billion in 2018 (collapsing to $0.3 billion in the second half of the year). The American soybean industry has grown robustly over the past two decades, based on China's increased demand for protein-based livestock feed: China's meat consumption rose from 35 kg/head in 1998 to 50 kg/head in 2018 (source: OECD). At the same time, its annual soybean imports rose from $0.8 billion to $38.1 billion.

Chinese soybean imports are centralised by a state-owned enterprise, and the speed of the drop is likely attributable to a non-tariff administrative measure rather than a market reaction to the new 25% tariff. This shows that trade tensions are not limited to tariff measures.

China continues to import between $3 and $4 billion worth of soybeans every month, but now imports almost exclusively from Brazil (see Chart 4). However, due to the devastation to China's pigs by African swine fever, China trimmed its soybean imports in 2018 (88 Mt) in comparison to 2017 (91 Mt) for the first time in 15 years. China's import volume is expected to continue to fall in 2019, which will put a damper on world soybean prices.

American soybean exporters were able to tap other markets, in particular the EU (where imports rose from $1.6 billion in 2017 to $2.9 billion in 2018), Egypt ($0.4 billion to $1.2 billion) and Argentina (zero to $0.7 billion), suggesting some trade diversion. However, once again, the movements observed are marginal and losses remain significant: total US soybean exports fell from $21.5 billion in 2017 to $17.1 billion in 2018.

Chart 4: Chinese soybean imports (in billions of $), by source



Source: GTA, data not seasonally adjusted.

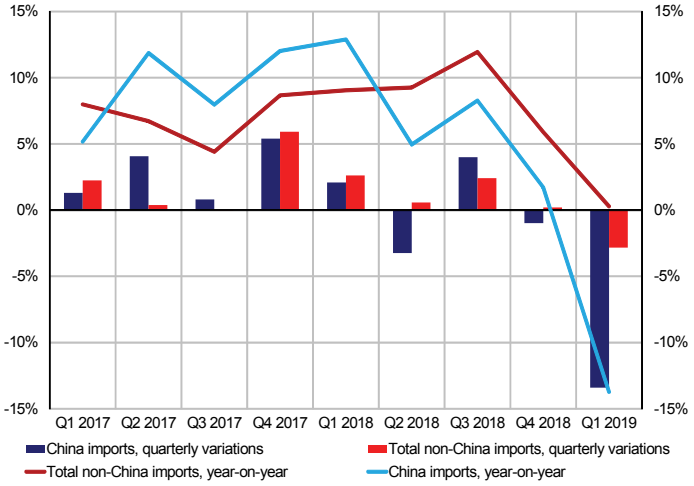
3. Initial macroeconomic effects of trade tensions

3.1 As expected, protectionism has negative short-term effects

Both China and the US are experiencing the macroeconomic impact of trade tensions on trade and domestic demand.

Bilateral trade between the two countries has fallen sharply. In the US, the trade deficit continued to grow in 2018, in line with the buoyancy of the US economy thanks to fiscal stimulus measures, reaching $875 billion. This was partly due to the increase in the bilateral deficit in goods traded with China, which is equivalent to 48% of the total deficit (see Chart 5).

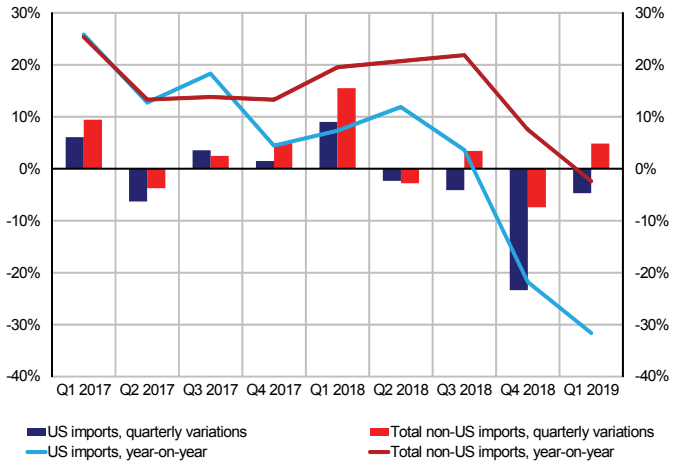
Chart 5: Bilateral and non-Chinese US imports (in nominal terms, quarterly variations and year-on-year)



Source: Census.

However, for China, the contraction in trade flows went beyond bilateral trade with the United States alone, and affected the full scope of the country's foreign trade. Chinese imports from elsewhere that the US fell significantly (−2% or a $12.1 billion decrease in Q1 2019 year-on-year, see Chart 6), reflecting China's role in the processing trade, *i.e.* importing large volumes of intermediate goods, particularly from the Asian value chain, and applying low value-added processing (assembly, packaging, etc.) with a view to re-exporting them, particularly to the United States.

Chart 6: Bilateral and non-US Chinese imports (in nominal terms, quarterly variations and year-on-year)



Source: National Bureau of Statistics of China, seasonally-adjusted data (cvs).

In terms of economic growth, the effects of Sino-American trade tensions are, at present, mixed. In China, over and beyond the current rebalancing of the growth model, the slowdown in activity is heightened by the direct effect of the fall-off in exports to the United States in real terms. In addition, domestic and foreign investment declined, reflecting lower demand and increased uncertainty,[28] as well as a drop in consumption by households, whose confidence has been shaken in the wake of the slowdown, resulting in a rise in precautionary savings. This decline in business and household confidence is reflected in the financial markets through a sharp depreciation of the yuan.[29]

Since there is no slowdown in the US, business activity currently seems to be much less adversely affected. This is primarily due to the fact that US exports to China account for only a relatively small share of GDP, but also to the fact that higher customs duties have had little impact on consumer prices. However, these tariffs are expected to have inflationary effects on some US goods. Thus, contrary to the indications of some theoretical models (see Section 1.2), the cost of customs duties with respect to the initial measures (lists 1 and 2) should be almost entirely passed on to American companies and households (Chinese exporters having reduced their prices only slightly).[30] [31] Moreover, for the time being, fiscal stimulus

(28) Foreign investments in China fell by 40% in Q1 2019 (in nominal terms, year-on-year), while total Chinese investment flatlined, according to AmCham's "China Business Climate Survey" (May 2019), a survey of US companies operating in China that export abroad. The same survey also shows that 33% of respondents have delayed or cancelled investments due to trade tensions, while 23% say they are reorganising their production lines outside China.
(29) −6% in nominal terms against the dollar between 1 January 2018 and 13 June 2019.
(30) According to AmCham's "China Business Climate Survey" (May 2019), 42% of US companies operating in China report higher production costs and 38% an increase in selling prices.
(31) See Amiti M., S. Redding and D. Weinstein (2019), NBER Working Paper No. 25672, Fajgelbaum P., P. Goldberg, P. Kennedy, and A. Khandelwal (2019), *NBER Working Paper* No. 25638, and Cerutti E., G. Gopinath and A. Mohommad (2019), "The Impact of US-China Trade Tensions" IMF Blog of May 23, 2019.

measures (the Tax Cuts and Jobs Act of 2017 and the Bipartisan Budget Act of 2018) more than offset the negative effects of the tensions. As for the goal of bringing investment back to the US, no substantial relocation phenomenon has thus far been observed.[32]

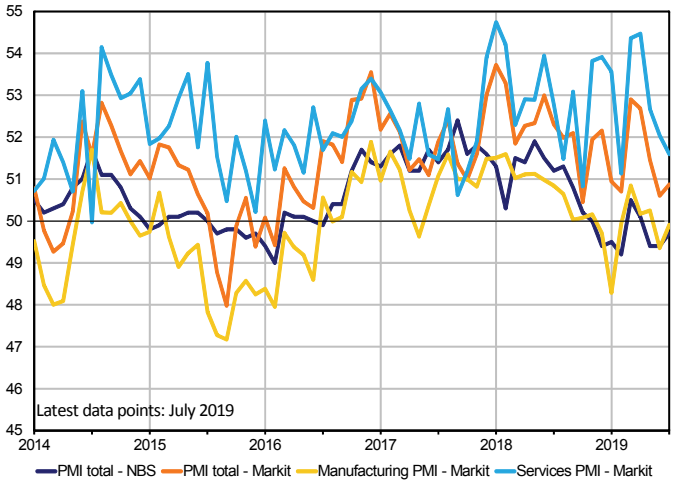
On a global scale, the effects of the 2018 Sino-American trade tensions and negotiations between the US and its partners (China and the EU) have been significant, under the twofold effect of the drop in Chinese demand from its trading partners and a major worldwide uncertainty shock. In addition to the fall-off in bilateral Sino-American trade, the tensions contributed to the sharp slowdown in international trade starting in the second half of 2018,[33] threatening to dampen global growth. In particular, the euro area experienced a slowdown in exports, and European industry bore the brunt of accumulating uncertainties over and beyond Chinese-American trade tensions - US trade threats to the European automotive sector, and risks related to Brexit and Italian fiscal policy. However, global activity remains less compromised than trade, thanks to 1) the resilience of the tertiary sector, which is less exposed to trade and whose business climate indicators remain high, and 2) Chinese and American macroeconomic stimuli.

3.2 More flexible economic policies in response to trade tensions

The policy mix in both countries eased in response to tensions, buoying domestic demand. Since the beginning of the year, the Fed has relaxed its monetary policy, stating that it is closely monitoring shifts in trade tensions, and that it is prepared to take further action, where necessary, to support ongoing growth.

When confronting the slowdown, the Chinese authorities found themselves on the horns of an economic policy dilemma between (i) extending measures to reduce the debt and rebalancing the growth model at the risk of a more severe slowdown, or (ii) implementing a stimulus policy to limit the slowdown and remain on track with the long-term objective of doubling GDP between 2010 and 2020, at the cost of greater medium-term imbalances. The government opted for economic stabilisation by introducing fiscal and monetary stimulus that targets purchasing power and private companies (tax breaks and easier access to credit), without resorting to massive recovery efforts as in 2011 or 2015. For the time being, on the basis of the latest Chinese economic indicators, this strategy does not seem sufficient to stabilise growth. Specifically, consumption slowed sharply, as illustrated by heightened savings and the slowdown in retail sales, which rose by only 7.2% (year-on-year) in April, a 20-year low. In addition, the PMI index has remained below the 50 mark since May (see Chart 7).

Chart 7: China's PMI indexes



Source: NBS, Markit.

In both the US and China, support measures beg the question of what room for manoeuvre is still available and the risks to the sustainability of growth in the medium term.

3.3 Rising uncertainties have stronger-than-expected effects

The scope of the direct effects of increasing trade tensions has been surprising, particularly the extent of the uncertainty shocks (including in China) that are affecting industrial investment and business climates. In autumn 2018, several international organisations forecast the impact on business investment of an uncertainty shock related to trade policies. These forecasts were presented as an additional risk, concomitant with the primary estimates (see Table 2). Since then, the IMF, the OECD and the European Commission have downwardly revised their forecasts for world growth in 2019 by an average of 0.3% and world trade by 1.0% (forecasts issued in spring 2019, prior to the introduction of new US and Chinese tariffs starting in mid-May). With the third phase in May, the OECD has estimated the additional effect at −0.1% of global GDP and −0.3% of trade in 2022.[34] Given the extent of these revisions, uncertainty appears to be a central theme in recent developments in world trade.

(32) Debever C., D. de Waziers, A. Dray, C. Hentzgen, E. Kerrand, and J. Lecumberry (2019), "World economic outlook in spring 2019: Diverging performances in the global slowdown", *Tresor-Economics* no. 237.
(33) Debever C. *et al.* (2019), *op. cit.*
(34) OECD, *Economic Outlook*, May 2019.

Table 2: Estimated *ex-ante* impacts of trade tensions*

Effect of customs tariffs introduced in 2018 (in %)		
	On global GDP	**On world trade**
IMF (for 2019)	−0.15 pt	nc
OECD (for 2021)	−0.15 pt	−0.4 pt
Effect of an uncertainty shock related to trade policies on business investment (in %)		
	On global GDP	**On world trade**
IMF (for 2019)	−0.5 pt	nc
OECD (for 2021)	−0.8 pt	−2 pt

Source: IMF, World Economic Outlook, October 2018 and OECD, Economic Outlook, November 2018.
** Deviation from a base scenario without tariffs.*

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