China Watch

HOW ESCALATION OF THE TRADE WAR WILL AFFECT CHINA GROWTH

Bo Zhuang / Lawrence Brainard / Jonathan Fenby

Economics

- The direct first-order negative impact could be up to 1% of GDP growth
- The second-order economic impacts will come later
- The trade war will stimulate international industrial cluster migration and reduced US-China trade ties

Markets

- The US-China tit-for-tat tariff escalation will likely persist into 2019
- Tariffs have had little impact so far on Chinese prices for key affected commodities
- US businesses and farms are suffering from the trade war but there is no evidence of any impact on the Chinese economy so far

Politics

- China is seeking EU allies in the trade fight
- Germany is the prime target
- The EU will be leery of a joint front against Washington

Economics: How escalation of the trade war will affect China growth

- **The direct first-order negative impact could be up to 1% of GDP growth**
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- **The trade war will stimulate international industrial cluster migration and reduced US-China trade ties**

This week the Trump administration published a list with an additional US$200bn in Chinese products that may face US tariffs of 10%. While these new tariffs will not take effect until September after public consultations have been held, they nonetheless mark the escalation of trade tensions between China and the US. As we highlighted in the Markets section below, the tit-for-tat escalation of tariffs will likely spill over into 2019. Below we assess the overall impact of this new stage of the trade war.

So far, most market studies have suggested that the direct impact is relatively minor, in the range of minus 0.1-0.5ppt of China's GDP growth. But the indirect impact on investment, inflation and profits is much harder to identify and hence is too often ignored. To evaluate whether the recent market response is warranted or exaggerated, we measure the impact of additional import tariffs on Chinese growth based on economic theory; more importantly, we look at the other main factors that will influence how the trade war develops.

Direct economic impact will not be catastrophic

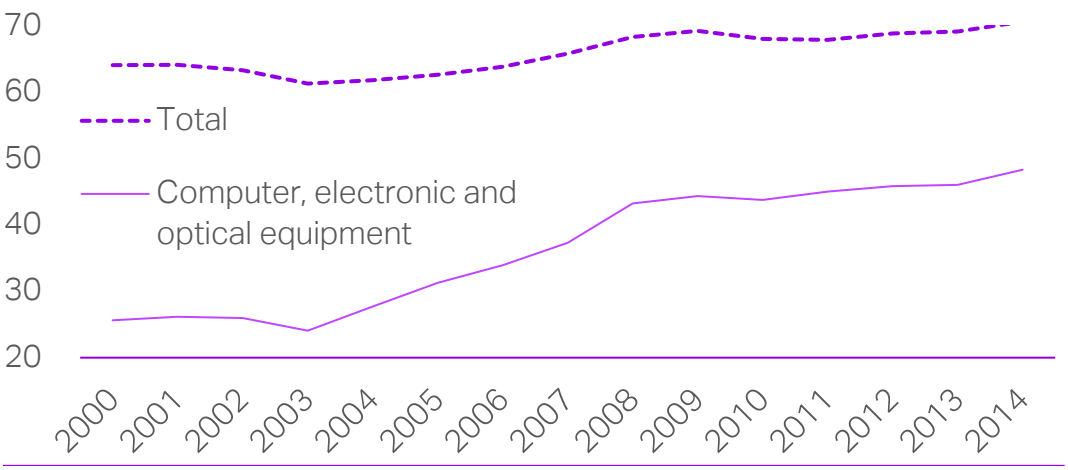
From the top-down macroeconomic perspective, we consider three scenarios of the Sino-US trade war over the next 18 months. Under the first scenario, we assume only the 10% and 25% tariffs already in place on US imports will be maintained, respectively $3bn of steel and aluminium and $50bn of goods that were announced earlier. The second scenario assesses the impact of a 10% tariff on the $200bn of goods announced this week but not yet implemented. The third scenario evaluates another 10% tariff that might be imposed on a second tranche of $200bn of goods, which would take the aggregate value of affected Chinese exports to $453bn.

We assess the potential effect on Chinese growth using assumptions on the price elasticity of Chinese exports to the US. With an end-user price hike resulting from import tariffs, demand for the affected products among US consumers will be reduced. The average estimate by various academic research papers is a between 1.5 and 4 – a price elasticity above 1 indicates a more than one-to-one adjustment of the export volume compared with prices. Because more persistent and abrupt tariff changes would generally lead to higher demand elasticity in the short run, we take a price elasticity of 3 for our analysis, which means we assume that US demand for Chinese goods would slow by 3% in response to a 1% rise in the price of a product owing to the imposition of the tariff.

While the tariff is imposed on the gross value, the impact on the economy (as measured by GDP) will depend on gross domestic value added. In 2017 the processing trade accounted for about 40% of China's total trade – this reflects the high volumes of components and intermediate products imported by China from other economies such as Korea, Taiwan and Japan for assembly and re-exporting to the rest of the world. China's headline exports to the US and thus its trade surplus encompasses significant contributions of value-added from other economies. While China runs a large surplus against the US, it runs sizable trade deficit against

Korea, Japan, Taiwan and Germany. According to OECD-TiVA data, the weighted average domestic value added of Chinese goods was just 70.7% in 2014, which means a full 29.3% came from foreign sources.

China's domestic value-added (% gross exports)

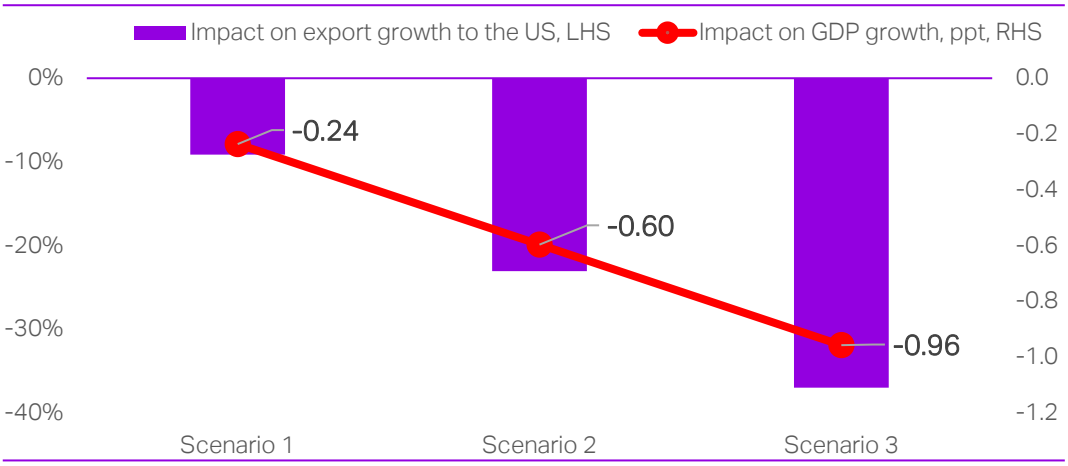


Sources: OECD and TS Lombard.

While these shares may have risen somewhat since then, they may remain relatively modest given that 40% of Chinese exports were still intermediate exports in 2017. Meanwhile, a large chunk of Chinese goods that may eventually be targeted by US tariffs come under machinery and electronics equipment categories; these are susceptible to changes in global supply chains, especially for computer equipment, where China's domestic value added is low only just 50%. After extrapolating the trend based on changes in the re-export share of China's gross exports, we estimate that domestic value added for each unit of Chinese exports was 74% in 2017.

Combining the two key factors described above, we estimate that the different tariffs under our three scenarios would reduce China's merchandise exports to the US by a maximum of $39bn, $99bn and $159bn, respectively. However, by excluding the 30% import content from other countries in China's exports to the US, the reduction of aggregate Chinese value added will fall to $29bn, $73bn and $118bn, respectively, translating into a potential 0.24%, 0.6% and 0.96% loss of nominal GDP for China under the direct first-order impact of the tariffs through trade.

US trade tariff impact on China



Source: TS Lombard.

Too many pieces of the puzzle are still missing…

All scenarios of course have limitations. First, we make a very strong assumption about the price elasticity of demand, which, together with the substitution to other suppliers, is extremely uncertain. Second, our calculations are static. The direct first-order impact through trade channels fails to take into account any second-round effects on confidence, accelerator effects of business capex, the labour market and domestic consumption and the most sophisticated global supply chain, all of which are likely to be impacted by trade wars. Moreover, China will certainly take offsetting measures which could be the single-most important driving factor (overriding all other factors).

Macro-wise, the negative impact on trade could spill over via other channels. The magnitude of that impact depends not only on the size of the trade tariff imposed by the US but also on the pass-through coefficients of income and consumption.

From a micro perspective, exporters in either country have leeway through re-routing via third countries, such as Hong Kong or other locations that have free trade agreement with either side. Therefore, the impact on both countries' aggregate external trade will be smaller than suggested above. Moreover, exporters may decide to absorb part of the tariff increase at the cost of their profit margins, which would result in a smaller impact on export volume and trade surplus. Lastly, the consequences of the trade war escalation are difficult to quantify because China will introduce "qualitative measures" that might not fall into the trade category.

…But the indirect impact could be far-reaching

Owing to the sheer size of the Chinese economy and China's declining reliance on exports, the immediate impact of the trade war on growth should be manageable through trade channels. However, a long-term economic confrontation with the US could still have major indirect effects on the Chinese economy and therefore government policy implications.

The net impact of the trade war is likely to be disinflationary. China's imposition of tit-for-tat higher tariffs on imports from the US, particularly agriculture products, will boost imported inflation. For instance, increased prices of imported soybeans could drive up the costs of animal husbandry. On the other hand, the impact from reduced exports to the US could increase the oversupply of goods in the domestic market and thus be disinflationary. We believe that non-energy imported inflation due to trade tariffs will be relatively small compared with domestic oversupply. So we predict that the net impact of the trade war will be disinflationary. A deflationary tendency in China would put more downward pressure on nominal GDP growth, which, in turn, will drive down corporate revenue growth and make banks wary of their exposure to affected industries, hurting the price and flow of credit.

So far, China's deleveraging effort through controlling public debt and infrastructure investment is the key focus of the authorities in controlling financial system risk. But if the concerns about an economic growth slowdown intensify – see our third scenario above – the PBoC might have to run an aggressive monetary policy, which, once again, will exaggerate the weakness in Chinese financial system.

Unemployment will not be an issue. The share of Chinese exports and related sectors in overall employment has significantly declined in the past decade. We estimate that total employment in the export and export-related sectors was about 20 million in 2017 or about 13% of total manufacturing employment. If we include export-related employment in the services sectors, total export-related employment rises to about 36 million or 6.4% of total non-farming

employment in China. Therefore, potential job losses related to the trade war will have a minor impact on overall unemployment rate in China.

The transfer of technologies and foreign know-how will likely stall. Compared with other industries, exports accounted for a much higher share in the electronics and electrical machinery sector – the US is a key market for these products. A worsened trade outlook could affect investment in this sector, which accounted for more than half of industrial-sector investment in 2017. Thus, escalation of the trade war could hinder the recovery of domestic investment.

Restrictions on Chinese investment in the US, especially in technology-related areas, may have limited near-term macroeconomic impact; however, it may deter China's acquisition of technology and talent and delay its moving up the value chain in the long term. This will hinder China's technology development process and put China in a disadvantageous position vis-à-vis other exporting countries.

Over the past two decades, the import of high-tech products has had a significant influence on China's economic growth. According to the domestic think-tank CF40, a 1 ppt increase in high-tech imports generally boosts Chinese GDP growth by 0.06% in short term and by 0.49% in the long run. In addition, a 1 ppt increase in the actual use of foreign capital can increase GDP growth by 0.05% in short term and by 0.39% in the long run. The trade war would erode longer-term competitiveness and prevent/have a negative impact on productivity spill-overs.

The trade war will accelerate the long-term trend of international industrial cluster migration. Over the long term, it could be damaging for businesses as uncertainty and ongoing trade frictions would deter business investment in China or incentivize companies to reallocate capacity to other regional economies or back to the US.

Although foreign direct investment has not been a main investment driver for China since the global financial crisis, it could come under pressure to be repatriated as and when export-oriented manufacturers see advantages to leaving China and reallocating capacity to other regional economies. In fact, US tariff-targeted goods that bear the "Made in China" label will automatically be considered an "original sin" and thus potentially subject to US tariff regardless of its brand name. Therefore, global supply chains will be reshaped, with the likely relocation of clusters and producers to avoid tariffs. Although "cluster migration" may not happen anytime soon, the eventual impact on China's production in the long run may be much bigger than implied by "rule of thumb" estimation.

Markets: Trump's trade war is already backfiring

- **The US-China tit-for-tat tariff escalation will likely persist into 2019**
- **Tariffs have had little impact so far on Chinese prices for key affected commodities**
- **US businesses and farms are suffering from the trade war but there is no evidence of any impact on the Chinese economy so far**

It is still early days but Trump's trade war is not exactly working out the way he or anyone else expected. The president's trade strategy appears based on expectations that the US can force trade and investment concessions on the part of trading partners by imposing or threatening tariffs on their exports to the US. In the case of China, the White House seems to believe that the large Chinese trade surplus is a critical vulnerability of China's economic growth strategy. What is important is that Trump sold his tariffs to US farmers and businesses as "short-term pain for long-term gain".

Below we examine whether or not Trump's strategy so far is working. We focus on soybeans, the dominant soft commodity in US-China trade, as well as on aluminium and steel, the two hard commodities that were the targets of a broad-based tariff action by the Trump administration at the beginning of June.

We find that as far as these products are concerned, there has been little effect on domestic Chinese prices. The primary effects of Trump's trade war have been on US prices of these products: soybean prices have collapsed 25% since China said it would retaliate and, at US$8.30/bu, are at a nine-year low, while aluminium and steel prices have risen noticeably, reflecting the impact of the June tariffs. In short, Trump's trade war is imposing significant costs and revenue losses on US businesses and farms but there is no evidence so far of any impact evident on the Chinese economy, the intended target of these measures. The short-term pain on the US economy is evident but the promised long-term gain is not.

The US launched its trade wars in early June, when tariffs on steel and aluminium imports became effective at 25% and 10%, respectively. These had broad international coverage, hitting most exporters of such products to the US. Although China is a major producer of both commodities, it is not a significant supplier to US buyers of either steel or aluminium because earlier trade restrictions reduced Chinese sales significantly. The impact of this action on the Chinese economy therefore comes mostly via secondary market effects.

The second round of tariffs, specifically targeting some US$50bn of Chinese exports with a 25% levy, was confirmed by Trump on 15 June. Tariffs were imposed on the first batch of approximately US$34bn of imports on 6 July and a second action affecting US$16bn of imports will follow soon after a mandatory public review and comment period.

Immediately after Trump had confirmed the June actions, Beijing said it would respond in kind. This triggered an angry response from Trump, who quickly threatened 10% tariffs on an additional US$200bn of Chinese exports to the US. He has now confirmed that those tariffs will be imposed after public hearings on 20-23 August. A 200-page list of products affected was published yesterday by the office of the USTR; these new tariffs will piggyback on the US$50bn tariff; that levy is being brought under Section 301, which cites damage from China's alleged unfair trade practices. Trump also threatened that if China retaliated against this new action he

would introduce tariffs on an additional US$200bn of Chinese exports. Since China was quick to confirm it would retaliate against such threatened actions, the aggregate value of affected Chinese exports is likely to rise to US$450bn later this year, which is nearly as much as the US$500bn in total sales expected this year to the US.

China's retaliation in June targeted a broad range of US agricultural products, vehicles (especially SUVs) and various chemicals and plastics. Among the 400 or so items on China's tariff list, soybeans occupy a special place. In 2017, 55% of US soybean exports, valued at US$12.4bn, went to China. Cotton was the second-ranking agricultural export but lagged far behind with US$1bn in total sales and accounting for 17% of overall US cotton exports. Hides and skins were in third place followed by sorghum, the only other agricultural export of which China is a dominant buyer, representing 78% of total US exports of this product but just US$800mn in sales. Corn imports from the US are negligible because China produces a domestic surplus.

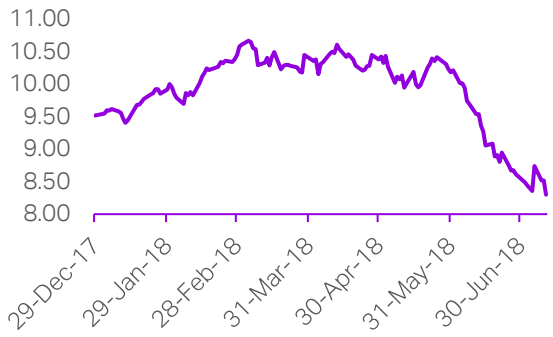
Given China's apparent dependence on the US for soybeans, the White House trade hawks may well have thought that China's leaders would be reluctant to slap tariffs on them. If that was the case, they were clearly mistaken. Since trade is a two-way street, Beijing seized on the fact that US farmers are heavily dependent on China to buy their beans. This gave China significant leverage over the livelihood of large numbers of Midwestern farmers, many of whom voted for Trump.

China has options that US farmers do not have. China accounts for nearly 70% of global trade in soybeans, but Brazil is the main supplier, accounting for more than 50% of imports; the US comes second with a 40% share. In any case, income losses for US farmers are likely to be significant; at the current US$8.50/bu price, many US soy farmers will struggle to break even.

Brazil will make up some of the lost US sales thanks to record harvests and the redirection of some of their foreign sales. Brazil exported slightly more than 50mn tonnes of soybeans to China last year and will likely be able to increase exports this year by an additional 15mn tonnes, roughly half of the 33mn tonnes the US exported to China last year. Moreover, since China's tariffs are imposed only on US beans large multinational commodity firms will be able to operate a profitable arbitrage, buying US soybeans cheaply and sourcing beans elsewhere to avoid China's tariffs. A combination of increased Brazilian sales and soy arbitrage by the big grain trading firms will largely eliminate China's dependence on US soybean supply. In addition, Beijing has said it will reimburse tariffs collected on purchases for the country's strategic reserves.

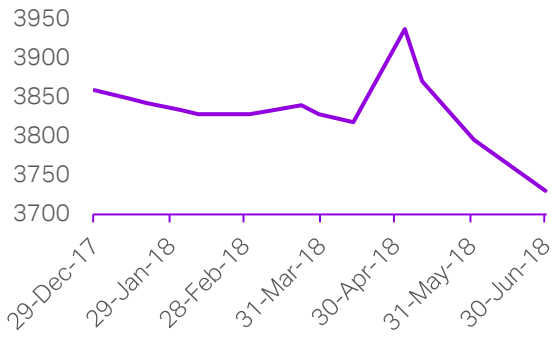
In the soybean wars, China is emerging the winner. Below we look at the effects of these developments on soybean prices in the US and China. The left-hand chart shows that soybean prices on the Chicago Board of Trade are down around 25% from the end of May. The right-hand chart shows thrice-monthly readings of Chinese domestic soybean prices by the National Bureau of Statistics; the latest reading is for end-June. Chinese domestic prices fell 5.5% after hitting a peak in late May; the sharp price increase in April reflected market concerns about a potential soybean shortage triggered by Trump's initial tariff threats and China's promise to retaliate. Since mid-May these fears have eased. Thus, following the temporary price spike in April there is no sign of panic buying driven by fears of a looming soybean shortage.

Soybean price, CBOT current contract, US$/bu



Source: Bloomberg

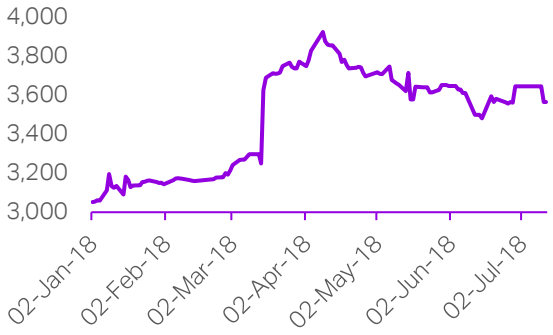
China soybean price, RMB/MT



Source: Bloomberg

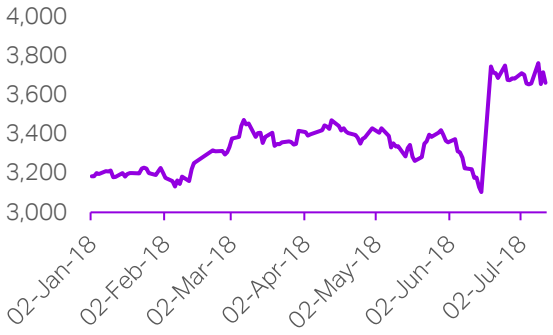
The panel of charts below shows two other readings on Chinese soybean prices. The left-hand chart presents prices for the current July soybean futures contract on the Dalian Commodity Exchange: futures prices reacted earlier than domestic prices, spiking initially in mid-March, then rising to a peak in early April before easing about 9% to their current level. The right-hand chart shows the roughly 18% jump in the FOB prices of imported US soybeans as a result of China's 25% tariff; it is unlikely, however, that significant imports are being transacted at these prices.

Soybean price, Dalian current contract, RMB/MT



Source: Bloomberg

FOB price US soybeans, Gulf ports, RMB/MT



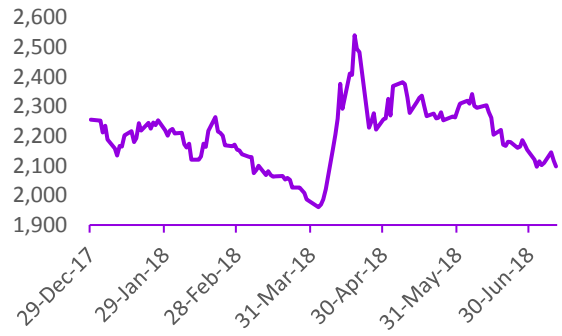
Source: Bloomberg

Evidence for the impact of Trump's tariff actions on Chinese aluminium and steel prices is weak. In the case of aluminium, prices were buffeted by the early-April US sanctions imposed on Rusal, the world's second-largest producer of the metal. The US intended to sanction Oleg Deripaska, who controls Rusal, and did not consider the impact their action would have on the global market for aluminium: Rusal was effectively banned from doing business in US dollars and in the US, which accounting for about 15% of its revenues and thus an important part of its business.

As can be seen in the left-hand chart below, prices on the LME rose more than 25% from 6 April to a peak on 18 April before falling sharply, when the US eased its Rusal sanctions on 23 April. Currently, LME prices are about 7.5% above the level reached just before the April price spike. This price rise provides a "ballpark" estimate of the effect of Trump's 10% tariff, which took effect at the beginning of June.

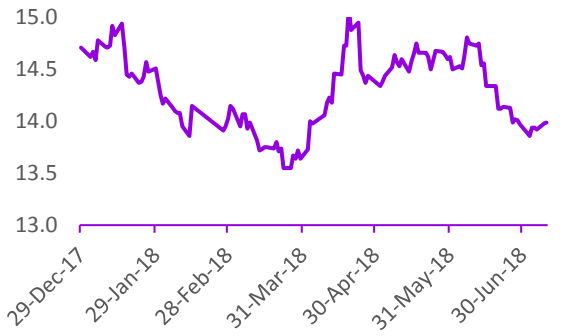
The pattern of aluminium price movements in China largely follows the LME price trends. The right-hand chart presents spot prices for primary aluminium on Shanghai's Changjiang nonferrous metals market. Overall price trends in China for primary aluminium are very similar, though somewhat less extreme, than observed on the LME: the current spot price has returned to its pre-Rusal sanctions level. Hence, there is no compelling evidence that the tariff on aluminium has had a significant impact on domestic Chinese prices.

LME primary aluminium price, US$/MT



Source: Bloomberg

Primary Aluminium, spot price, RMBths/MT

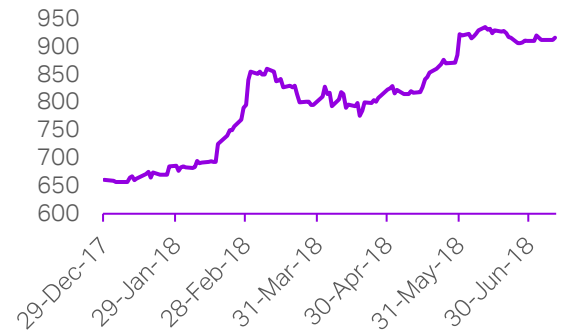


Source: Bloomberg

The overall effect of Trump's steel tariffs on prices is difficult to disentangle from multiple demand/supply factors. The left-hand chart below presents the US price trend for hot rolled steel. We choose this product to serve as a proxy for US steel prices; other US steel price indices reflect similar trends. As a major importer of steel, the US was significantly affected by the imposition of a 25% tariff on steel and steel products. US steel prices are currently up about 30% from mid-February.

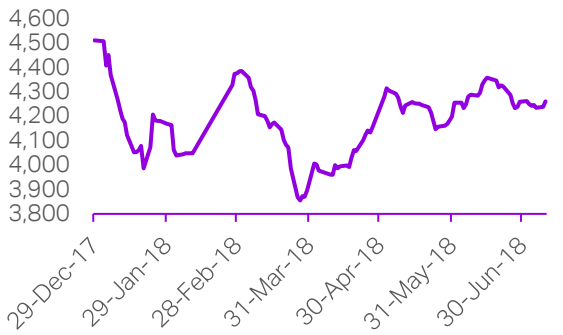
Chinese domestic steel prices display no marked trend, having fluctuated within a 15% price band for most of the year. The right-hand chart shows the price trend for steel rebar, which is a key input to the construction sector. Prices are relatively well supported currently; but a strong rising trend, such as can be seen in US steel prices, is not evident. We conclude that Trump's steel tariffs had no noticeable effect on Chinese steel prices.

US steel price, hot rolled, Midwest US, US$/T



Source: Bloomberg

Spot price steel rebar 25mm, CNY/MT



Source: Bloomberg

Our assessment is that Trump's trade war on China is showing no signs of producing the results the White House is promising. Nonetheless, the pushback from US business circles and the Congress has so far been underwhelming. Earlier this week the US Senate passed a spending bill that included a provision giving a role to Congress when the executive branch imposes tariffs based on national security concerns. While symbolic, this provision would cover only Trump's steel and aluminium tariffs and the threatened car import levies; all the other China-related tariffs are based on Section 301 of US trade legislation, which, in turn, is based on findings of economic damage from unfair trade practices.

Meanwhile, Trump appears little concerned as the midterm elections in November approach, most likely because his trade policies vs China find broad support among his base; his downside political risks are therefore negligible at the present time. We are still far from the point where the economic costs and disruptions from his policies will force him to de-escalate his trade wars.

Meanwhile, a popular but misleading perception by many analysts that China is on the defensive in this confrontation is likely to continue to obscure the reality that China's leaders have other options to counter Trump's actions. As Jonathan Fenby notes below in the "Politics" section, China has stepped up expanding economic ties with regional partners, such as Japan and South Korea, as well as with Europe and in particular Germany. China will suffer from new US legislation restricting acquisitions and licencing arrangements with US firms, but these were likely in any case before Trump's trade war initiative.

Xi Jinping is clearly aware that China is in for long-term confrontation with the US and that new alliances and blocs will have to be secured and built. We think this will lead to the creation of regional trading blocs, the most powerful of which is likely to be the Asian one centred on China. While these are being created, the catchphrase of "short-term pain but long-term gain" is appropriate for China's outlook but not for US trade and investment prospects.

Politics: China seeks EU allies in trade fight

- **Germany is the prime target**
- **EU will be leery of a joint front against Washington**

As Donald Trump escalates the tariff war, China is busy seeking allies for a long-term confrontation with the US. After starting with regional partners, including Japan and South Korea (as we explained in our 5 July 2018 China Watch, Beijing has now turned its attention to Europe and, in particular, Germany. The campaign is being conducted on two fronts – contracts such as the $10 billion project for a fully-owned BASF chemical plant in Guangdong province allied with assurances of access to mainland markets, and repeated assertions of the PRC's commitment to globalization and open trade.

China-EU meetings in Beijing on 16-17 July will see the next stage in the PRC's flanking move designed to isolate the US and gain access to advanced technology imports that will be blocked by the Trump administration. Discussions on an investment treaty may then be revived, with China expressing a readiness to exercise greater openness and pressing for an easing of restrictions on acquisitions of technology companies in return. The timing of the BASF agreement, together with the release of the widow of Nobel Peace Prize winner Liu Xiaobo, who will fly to Germany this week, is clear evidence of how the Xi Jinping administration is seeking to play the wider global politics of the trade fight with the US.

Trump's attack on Germany and Merkel before the NATO summit can only encourage China to try to warm up the Beijing-Berlin relationship further. A flurry of other promises of better operating conditions were proffered for BMW, Daimler, Volkswagen, Siemens and Bosch during Prime Minister Li Keqiang's visit to Berlin this week. The BASF ethylene plant agreement was notable as a rare instance of a foreign company being given sole ownership of a major project in a sector where SOEs predominate. Moreover, it was concluded unusually fast in a sign of Beijing's anxiety to play the European card as the trade war with the US takes shape. Angela Merkel was moved to remark that PRC market opening "isn't just talk but action" and that the two countries have a common desire "to sustain the system of WTO rules", a theme Beijing has hammered away at as the trade fight with the US has escalated, thereby overlooking its own flaunting of undertakings dating back to the start of the century.

While Germany is the most important target for Chinese economic diplomacy, Premier Li also attended a summit of east and central European leaders, eleven of them EU members, before travelling to Berlin. Building on China's campaign to spread its influence among the sixteen states, including through infrastructure aid under the Belt and Road Initiative, he assured them of greater market access to the PRC in "a two-way street" of trade. But China's charm offensive in central and east Europe arouses suspicions in Brussels and among major players, like France, in the EU, which Beijing is trying to divide in its own interests.

Against the background of its own reservations about Chinese policy since WTO adhesion seventeen years ago, the EU remains leery of teaming up with Beijing against the Trump administration. It will snap up benefits such as those on offer to Germany this week but has more than enough complaints of its own to hold it back from deeper collaboration. China knows that and may well be satisfied if it gets rhetorical unity on the value of free trade and, more important, heads off the potential for a US-EU joint front on issues such a market access, joint ventures, the role of SOEs and enforced technology transfer as it moves to the next stage of its showdown with Trump.

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