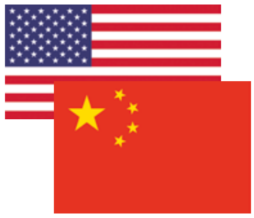
US-China trade war: who will suffer the most?



by Ousmène Mandeng

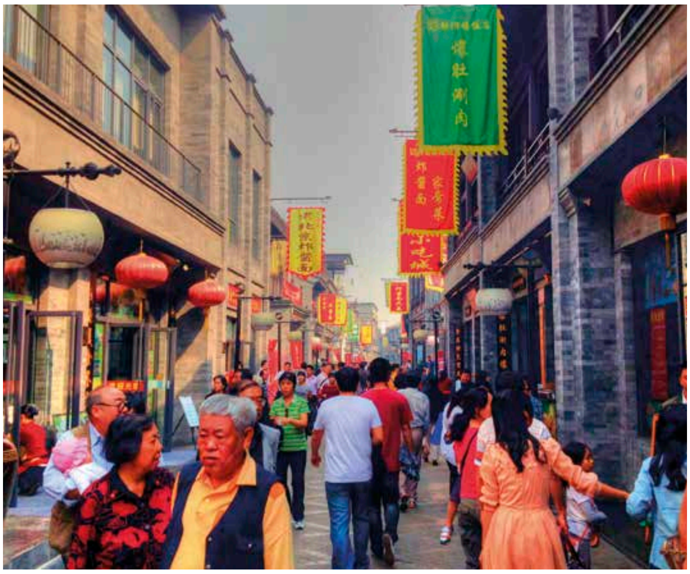
The escalation of the US-China trade war serves as a reminder that countries suffer differently under trade frictions depending on their relative trade positions. The impact of tariffs on trade and trade diversion are notoriously difficult to estimate. However, looking at trade sectors, past expansions should reveal where trade frictions are likely to have the biggest impact. China and the US maintain very narrow trade patterns in their bilateral goods trade and are therefore highly susceptible to adverse sector-specific shocks. Trade concentration and trade dependence define trade vulnerabilities. On that count, the US looks more vulnerable.

Flux

International trade is in constant flux. The past ten years from 2007 through 2017 saw a significant decline in trade volumes followed by a gradual recovery. International trade is the complex interaction of hundreds of sectors and dozens of countries where sectors and countries continuously advance or fall behind relative to one another. The escalation of trade frictions will likely impact those sectors the most that had seen the most vigorous expansion. The fastest growing sectors in Chinese and US imports highlight where the trade war will hurt most.

The US's most dynamic imports are dominated by China. The 20 fastest growing sectors in US imports in 2007-17 represent 35 percent of total American imports in 2017 up from 25 per cent in 2007. China has a market share in these 20 sectors of 22 per cent in 2017, up from 15 per cent in 2007 reaching in 2017 e.g. 64 per cent in transmission apparatus and 61 per cent in automatic data processing machines. The 20 sectors represent 22 per cent of US imports from China in 2017.

China's imports from the US are highly concentrated in China's fastest growing sectors. The 20 fastest growing sectors in China's imports in 2007-16 represent 38 per cent of total Chinese imports in 2016 up from 23 per cent in 2007. The US has a market share in these 20 sectors of 11 per cent in 2016 up from 10 per cent in 2007 reaching in 2016 e.g. 62 per cent in aircraft and 41 per cent in soy beans. The fastest growing Chinese imports represent 50 per cent of China's imports from the US in 2016.



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Frictions

The comparisons between Chinese and US imports show that trade frictions will likely have a highly asymmetric impact. China's imports from the US represent more than double what the US imports from China. In 2017, in US imports, China maintains a very high contribution of 14 percent in transmission apparatus, that is, 14 per cent of US imports from China in trade value terms are in transmission apparatus, and 11 per cent in automatic data processing machines while the contribution of the other groupings is relatively small. In 2016, in Chinese imports, the U.S. maintains relatively high contributions in several sectors including 10 per cent in soy beans, nine per cent in aircraft and motor cars, and seven per cent in electronic integrated circuit boards.

The fastest growing U.S. imports illustrate China's ability to compete in the most dynamic sectors. Similarly, the U.S. has been able to expand its market share in China's most dynamic imports though at a far more modest level.

Frictions

The differences in the relative dependence on a given range of sectors underscore the vulnerabilities to targeted trade frictions. Any reversal in sector expansion will mean resources, labour and capital, that have been deployed to follow the sector expansion will no longer be needed. The US therefore seems more vulnerable than China amid its greater dependence on a narrow range of sectors. China is also vulnerable in transmission apparatus and automatic data processing machines but significantly less in other sectors.

The tit-for-tat trade war between the US and China will hurt both but probably the US more. The greater concentration of Chinese imports from America implies that the US is vulnerable to targeted trade restrictions. China's dominance in US imports though implies that trade restrictions can be highly disruptive for the American economy. At the same time, China has significantly more money at stake with US annual imports of $526 billion from China and China with only $135 billion of imports from the US. Yet trade disruptions will likely be greatest where trade concentration is highest and import dependence most pronounced. That would be the US.

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