China's trade surplus with the United States recorded the highest level ever last year, followed by hard-line trade actions. The Trump administration, which has viewed the persistent trade imbalance with China as a threat to America's economic health, subsequently announced a list of Chinese goods imports to be subject to tariffs as penalty for the alleged unfair trade practices. The Chinese government has threatened to retaliate with its own tariff hikes on American goods. Despite three rounds of bilateral trade negotiation, the two countries have not reached an agreement on how to resolve the trade disputes.

China's goods trade surplus with U.S. is hardly new. Since China's accession to the World Trade Organization in 2001, it has rapidly increased from $83 billion in 2001 to $375 billion in 2017.¹ On the other hand, China has persistently posted a deficit in service trade with the U.S. and the service trade deficit has surged from $1.3 billion in 2007 to

¹ These numbers are based on statistics released by the United States. The Chinese statistics state $28 billion in 2001 and $282 billion in 2017. This statistical discrepancy mainly comes from conceptual and methodological differences in the compilation and processing of trade data.
$40.2 billion in 2017. Most of China's service trade deficit comes from travel and charges on the use of intellectual property.

In Shin et al. (2018), we identify three features in China's goods trade surplus with the United States. First, it is highly concentrated in a few products including cellular phones, automatic data processing machines, monitors and projectors. The surplus in top ten products consists of 55.5% of the overall surplus with the United States. Second, the surplus in capital goods has begun to exceed the surplus in consumer goods since 2016. The surplus in capital goods in 2017 grew by 21.3% from the previous year, recording $185.2 billion while the surplus in consumer goods decreased from $157.3 billion in 2016 to $135.8 billion in 2017. This suggests that the trade between the two countries is associated with production as well as consumption. Third, the surplus in high-technology products has caught up to that in low-technology products. This is not only due to the upgrade of Chinese manufacturing industries, but also due to the dominant share of processing trade in high-technology products. According to Xing (2014), the share of processing exports in Chinese high-technology exports recorded 79.9% as of 2010 while processing exports accounted for 46.9% of Chinese total exports.

While the ongoing trade disputes focus on the U.S.-China trade balance, we have to note that the gross trade balance can be misleading when considering that China is deeply integrated in the international fragmentation of production. The domestic value added contents of Chinese exports to the United States only accounted for 65.3% in 2011. This ratio shrinks for high-technology products. For example, the domestic contents account for 45.9% of Chinese electrical and optical equipment exports to the United States. This means that the trade balance measured in value added is much smaller than the gross trade balance. OECD estimates for 2013 show the U.S. deficit with China in value-added term is 25% smaller.

It is questionable whether Trump's recent trade policy to resolve America's trade deficit is essentially beneficial for the U.S. economy. Since imported capital goods from China are used to produce goods and services, tariffs levied on capital goods imports will have a backlash on U.S. business. Tariffs targeting high-technology items will hurt other countries on the supply

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2 Statistics are calculated for 2017 data and products are classified according to Harmonized System code 4 digit.
4 Trade in Value Added (TiVA) data is used. The most recent data is for the year 2011.
chain rather than China, due to the low domestic content of Chinese exports to the United States. In addition, if China imposes reciprocal tariffs on U.S. goods, this will have an even more severe effect on the U.S. trade balance. It will be beneficial for both sides to settle the trade disputes as soon as possible through U.S.-China trade talks to ease the tension and reduce uncertainty.