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Geopolitics and Technology

The Sharp Reversal: Whither China-US Technological Ties?

By Jia Qingguo

SYNOPSIS

The sharp reversal of China-US technological relationship in recent years has inflicted much harm to the interests of the two countries. Fear, politics and short-sighted policies are among the major factors underlining this development.

COMMENTARY

THE ARREST of Huawei's CFO Meng Wanzhou in Canada at the request of the US Government marked a turning point in China-US technological relationship. Before that, the relationship was largely cooperative and mutually beneficial despite concerns over issues such as intellectual property rights (IPR) violations and US high-tech export restrictions.

The two countries had signed more than 50 agreements on technological cooperation. They had also engaged in cooperation in many areas ranging from agriculture and new energies to meteorology and environment. High-tech trade grew steadily. Both countries had benefited tremendously from such cooperation. Whereas the US had gained an ever increasing market in China for its high-tech products and used the revenue to reinvest to maintain its technological edge, China had benefited from increase in employment and upgrade of its manufacturing capacity.

The Turning Point

All this has changed since Trump came into office. The Trump administration characterises the relationship between the two countries in terms of strategic

competition. It claims that China's technological development is a result of theft of American technologies.

And on the basis of these questionable assumptions it has undertaken various measures to contain China's technological development. These include banning the use of Huawei products in the US; putting various Chinese high companies on the blacklist; tightening restrictions on US high-tech sales to China; denying visas to increasing number of Chinese scholars and students working and studying in the high-tech fields; and demanding other countries not to use the Huawei products.

How should we explain this abrupt policy change on the part of the US Government on technological exchanges between the two countries? Careful analysis suggests that at least three factors may have contributed to this.

To begin with, there is the question of *neophobia* (fear of new things) or *technophobia* (fear of technologies). Because new things especially new technological breakthroughs often bring about new changes that people are not familiar with, people have a difficult time to figure out the implications for their work or life and therefore many get nervous and sometimes even unnecessarily fearful about the new technologies.

This is the case now with the arrival of the 5G technology. To many, 5G is about the Internet of Things (IoT) and super high speed transmission of information. Internet of Things means unprecedented technological penetration into various aspects of work and life, from office to bedroom. Therefore, it sharply increases the risk of one's privacy or secrets of being invaded or stolen and computer network attacked or taken over by others.

Super high speed means that 5G makes it much more difficult if not impossible to monitor and stop hostile activities on the Internet. It requires a certain level of trust for countries to stay connected. If one follows this line of logic, since China and the US have little trust in each other, economic decoupling or disengagement between the two countries is something inevitable.

US Technological Containment of China

In the second place, the rapid development of China's high tech sector has heightened the concern on the part of many in the US. According to a recent report by the Council of Foreign Relations in New York:

"China is closing the technological gap with the United States, and though it may not match US capabilities across the board, it will soon be one of the leading powers in technologies such as AI, robotics, energy storage, 5G, quantum information systems, and possibly biotechnology."

Many people in the US are worried that China may overtake the US if the US does not keep up with its efforts to stay ahead.

In the third place, to many Americans, the fact that China is a very large country and practises a different political system makes this situation not only worrisome but also

threatening. And, despite its efforts to alleviate such concerns, China has not been successful in this regard.

Impact and Implications of US Strategy

The US approach to contain China's high-tech development has at least the following implications for the two countries and their relationship. Firstly, it has caused much harm to Chinese high-tech companies: for example, the restriction of sale of some hardware software and services by Google has complicated Huawei's efforts to sell its cell phones in many parts of the world and also, under the US pressure, some countries have drastically reduced purchase of Huawei products.

Secondly, it has caused a lot of damage to the American high tech companies and threatens to do more in the long run. Because of the Trump administration's ban on exports of certain technologies to Chinese companies, some American high tech companies have seen sharp decline in the sale of their products to China. And if this situation continues, they are likely to lose the China market.

Thirdly, the loss of the China market has also made it more difficult for American companies to keep up with its international competitiveness because it means loss in production of scale as well as revenue for these companies. This will in turn undermine their ability to develop the next generation of technologies so as to stay competitive in the future.

Finally, the US high-tech export restrictions have also forced the Chinese to redouble their efforts to develop alternatives to American technologies. The process has already begun. On the one hand, Chinese companies are looking for non-American suppliers, European or Japanese. On the other hand, the Chinese Government is also investing more to develop China's own technologies to hedge against the possibility that the US may force European and Japanese suppliers to cut off high-tech sales to China.

Future Prospects

What is the future like? It is likely to get worse before it gets better.

To begin with, even though President Trump may be pragmatic as a businessman as many believe, his people are not: senior trade official Peter Navarro, Vice-President Mike Pence, and Secretary of State Mike Pompeo to name just a few. Judging from the way they talk about China, they are determined to contain China's technological development as a way to maintain US technological advantage.

In the second place, Washington is paranoid about China. Many policymakers around Trump are frustrated in the way China is going; fear that China will take over the US especially in the high technology area; see anything China does from the worst possible perspective; and endorse anything that sounds tough on China.

In the third place, the US is in election season. If history is of any guide, it is also a time for the two political parties to compete on being tough on China. Any demonstration of pragmatism is likely to be condemned as appeasement to China, as in the case with the reactions to Joe Biden's pragmatic remarks on China.

Finally, certain Chinese behaviour is not helpful to alleviate the situation either. This includes some extreme nationalistic rhetoric on the Internet; ineffective explanation of what is going on in China; and insufficient consultation with the US on China's important projects on the world stage such as the Belt and Road Initiative.

Because of these and other reasons, chances are, in the short run, the relationship is likely to head south rather than north. However, in the long run, one should not be too pessimistic for the following reasons:

Sooner or later Americans would realise that it is a bad idea to contain China's technological development as a way to keep its own technological advantage. A much better way to stay ahead in technological competition is to secure access to the China market so that they can recoup money by selling their existing technologies for the development of future technologies.

Sooner or later Chinese would realise that it is unrealistic to try to catch up and outdo the US on everything and it is better to focus on some technologies it can do better and benefit from trading with other countries for technologies that they can do better.

Sooner or later, both Americans and Chinese will find that it is in their best interests to work together and with others to make good use of such technologies for their mutual benefit and those of the world as a whole.

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