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# The significance of Huawei's "death sentence"

### ~ An enormous change is likely in the high-tech market ~

The United States has been announcing extremely damaging China-bashing measures since the beginning of August. (1) Cutting off all shipments of semiconductors to Huawei; (2) Announcement of the clean network concept that would completely remove China and its Communist Party from the global internet; (3) Banned the TikTok video sharing app in the United States. All of these steps are following up on the strategy of viewing China as an enemy, as US Secretary of State Mike Pompeo announced on July 23. Actions by the United States have advanced to a different level.

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#### (1) Huawei receives a death sentence (FT)

#### A complete ban on semiconductor shipments to Huawei

On August 17, the US Department of Commerce announced a new and devastating step regarding Huawei. The Financial Times (August 22) called it a death sentence. The United States immediately stopped all shipments to Huawei of semiconductors and electronic components that were developed or manufactured using US software or other technologies. The ban applies to US-made products as well as products made in other countries. Furthermore, Huawei is unable to purchase these goods directly, through intermediaries or as an end user. Selling these chips and components to Huawei may be allowed in some instances by obtaining a license.

On May 15, the United States banned sales to Huawei of foreign-made semiconductors that are fabricated using US-made machinery or design software. But this was not a complete ban (chips with no more than 25% US content were exempt) and there were ways to avoid the ban, such as by using third-country exports. There was also a grace period. But this time the US is using punishing steps that apply to all products, block third-country channels and have no grace period (immediate enactment). Furthermore, Huawei cannot buy parts from substitute suppliers like Samsung Electronics and Media Tek in Taiwan. US permission is required for buying even general-purpose memory chips, which means purchases are effectively prohibited.

The US Semiconductor Industry Association, which had been maintaining consistency with the US government's imposing sanction for China, reacted with a statement including the following points (excerpts): "We are surprised and concerned by the administration's sudden shift. We reiterate our view that sales of non-sensitive, commercial products to China are critical to America's economic strength and national security." This statement clearly shows exactly how abrupt and punishing these US actions are. Huawei is one of the largest buyers in the world of the chips of US semiconductor companies. Even though the United States decides to permit some companies to continue selling chips to Huawei, only a few carefully selected firms would most likely receive permission.

### Huawei's fate and precarious position as a leading manufacturer of telecommunications equipment

Huawei is believed to have an inventory of semiconductors for six months of operations. Blocking the supply of these devices would therefore stop the company's production of



smartphones and base stations, which are 90% of sales, early in 2021. Furthermore, Huawei is starting a cloud services business that will depend on servers and data centers using a very large volume of semiconductors (95% are believed to use Intel CPUs). The performance of semiconductors made in China is not good enough for these servers. Is this a problem China can solve? The United States may enact even more punishing measures, but there is no possibility that existing restrictions will be eased. Even if the Chinese government decides to support Huawei, any assistance will probably be limited to business activities in China. Perhaps Huawei's position at the forefront of the world's telecommunications equipment industry is about to come to an end.

In the smartphone market, Huawei is the global leader with a market share of 20.2% in the second quarter of 2020. But this is probably the final burst of strength prior to the company's death. In 2019, restrictions were imposed on Huawei's use of OS Android updates and the use of Google apps was prohibited. These measures were expected to greatly reduce sales of Huawei products outside China. Adding the cutoff of semiconductors is certain to cause Huawei's market share to plunge. In 2019, Huawei shipped 238 million smartphones worldwide with almost 40% sold in countries other than China. As a result, the new restrictions will inflict serious damage.

#### US demands for shutting out Huawei 5G base stations are gaining momentum

In the 5G base station market, Huawei has an enormous lead in terms of technology and prices. Everyone believed that Huawei would be the preeminent player in the market for next-generation 5G networks. However, the inability to purchase semiconductors may prevent Huawei from manufacturing 5G products. If this happens, companies worldwide will be forced to reexamine from the bottom up how to build 5G networks without Huawei as the core supplier. Even Chancellor Angela Merkel, who resisted US demands to shut out Huawei, had to give up and reverse her stance.

#### A new opening in the telecommunications equipment market

Normally, every country's telecom carrier has its own specifications for core base stations. Manufacturers need to make equipment designed for specific carriers, which gives Huawei a big advantage because of its experience and high market share. To make it easier for other companies to replace Huawei as suppliers, a multi-purpose standard called O-RAN (Open Radio Access Network) is being created, partly with the encouragement of the US Defense Department. O-RAN will soon allow even smaller companies to start supplying 5G equipment. Britain, which was one of the first countries to ban Huawei, is asking for open system specifications for core base stations to enable companies to replace Huawei as 5G equipment suppliers. Britain has asked the Japanese government for assistance with this initiative. These developments are likely to create 5G business opportunities for NTT Docomo as well as NEC and Fujitsu, which were latecomers to this market. All three companies now have a combined 5G global market share of less than 1%.

#### (2) The Clean Network Concept

#### A blatant step to contain China's internet access

On August 5, Secretary of State Pompeo unveiled a program called Clean Network. The objective of this program is protecting the privacy of individuals and the sensitive information of companies from malicious threat actors, specifically the Chinese government and Chinese Communist Party. In other words, the goal is to remove them from every element of communication networks. Ultimately, Clean Network may prevent Huawei as well as OPPO and other smartphone producers, Baidu, Alibaba, Tencent and other internet platformers, Chinese mobile communication carriers and other companies from accessing the global internet. Clean Network could even close down the overseas activities of Alipay, WeChat Pay and other Chinese e-payment services.

Clean Network has five components, all of which have the goal of keeping China out of every part of the internet.

- 1) Clean carriers Untrusted Chinese carriers are prohibited from using to US telecommunications networks.
- 2) Clean stores Removal of untrusted Chinese apps from Google Play Store, App Store and other US app stores
- 3) Clean apps Untrusted Chinese smartphone producers are prohibited from preinstalling or downloading the reliable apps of the United States and other countries.
- 4) Clean cloud Alibaba, Baidu, Tencent and other Chinese companies providing cloud services are prohibited from storing US data.
- 5) Clean cables Prevention of internet undersea cable damage caused by extremely high-volume information collection activities by China



The United States plans to strengthen these activities by asking for the support of companies of US allies and of countries that cooperate with the United States.

#### (3) Shutting Down TikTok the United States

#### TikTok could be a modern-day opium

President Donald Trump has declared that TikTok, a short video app created in China that is extremely popular in Europe and North America, is a threat to national security. ByteDance, the unicorn start-up company that operates this app, has the option of either selling this business to a US company or shutting down all US activities. Microsoft and Oracle are believed to be potential buyers. In an article in Global Economic Trends (August 23) titled "Is TikTok Dangerous? The Relationship between Substitute Data and Countries," Nikkei Editorial Committee member Hiroyuki Nishimura analyzes this issue as follows.

"This is an entertainment app where young people can enjoy singing and dancing. What country's safety is threatened? It is a fact that TikTok has collected a massive amount of data. According to a cybersecurity firm that took a close look at the data, the app can access smartphone cameras and microphones, picture and audio data, GPS location information, IP addresses, browser histories, and messages sent between TikTok users. But remarkably, these data collection capabilities do not differ significantly from those of other apps. With high-performance mobile devices now widely used, everyone is giving out huge amounts of information without realizing it in exchange for the convenience of using these devices. Outstanding algorithms exist that automatically identify an individual's interests and recommends specific content based on each person's characteristics, browsing history and countless other types of information. These algorithms increase the addictiveness of an app to a level that other social media cannot match.

"The prominent historian Niall Ferguson has stated that TikTok is 'a superweapon in China's culture war.' He believes that TikTok is 'China's revenge for a century of humiliation between the opium wars and Mao's revolution.' He also regards TikTok as 'digital fentanyl.' Mr. Ferguson also believes that TikTok is laying the groundwork for ensuring that children today will be happy when we are controlled by China. In fact, China regards the collection of a vast quantity of information along with artificial intelligence as important methods for fostering a favorable global view of China. In addition, he views TikTok as the global version of the social control utilized within China."

## (4) The Current Phase of the US-China Struggle for Supremacy – Advancing to the Stage of Containing the Chinese Economy

#### Economic containment - A new stage of US-China hostility

Since Secretary of State Pompeo's July 23 declaration of China as an enemy, the United States has taken many extreme actions. The United States has on its own created a hostile relationship with China. The Chinese Communist Party was declared an enemy and actions have been taken as stated in the enemy declaration in order to destroy this party. In August, the United States started bashing Huawei and other high-tech companies. These may not be ad hoc initiatives, but the United States is using these measures as part of a carefully formulated and far-reaching strategy to deal with China as an enemy.

If the United States has really embraced the strategy of destroying the Chinese Communist Party, there are four possible stages: (1) Economic negotiations and sanctions; (2) Containment of Chinese industries and blocking access to raw materials and parts; (3) Financial containment; and (4) Hot war. As of now, there is no hope for the first stage to produce benefits because trade war negotiations have failed to produce meaningful damage to Chinese economy. Consequently, the United States has moved on to stage two by targeting Chinese industries and supply lines in order to inflict even more damage. Cutting off China's access to semiconductors and communication networks, which have the economic clout of oil many years ago, will create enormous damage in China if the United States does what it says it will do (as is very likely). How would President Xi Jinping respond to a Huawei bankruptcy, the weakening of Baidu, Alibaba and Tencent, and other consequences of US actions? There will be no moves to advance to the third or fourth stage until the effects of the second stage are known.

As President Trump says, the United States is even willing to cut off relations with China. Isolation and containment measures would be devastating and perhaps even fatal to China's economy. At that point, China's only options would be to surrender or start a war. This situation is very similar to how the United States treated Japan between the late 1930s and 1941. The United States started with an ABCD encirclement and banning oil shipments to Japan. The



final step was freezing Japan's dollar-denominated assets, which shut Japan out of the payment settlement network. These are economic containment measures rather than merely sanctions and are therefore, in effect, a tactic aimed at destroying a country. Starting a war was Japan's only course of action as surrender was no option. Incidentally, the Financial Times article about China's death sentence used an illustration of an attack by a severely damaged Zero fighter plane (?).

#### (5) A well planned and farsighted strategy of using Apple as a Trojan horse?

#### Apple and Tesla have discovered opportunities in China

The US government's treatment of Apple and Tesla is strange. The United States wants US-China decoupling and the removal of China from international supply chains by using the Economic Prosperity Network. On the other hand, there are no US restrictions on the business activities of Apple and Tesla in China. In a July speech, US Attorney General William Barr said, "Do you think Apple phones in China are impervious to penetration by Chinese authorities? They wouldn't be sold if they were impervious."

Apple CEO Tim Cook at one time said that Apple can procure all the technological knowhow, suppliers and labor it needs in China thanks to the country's outstanding ecosystem for technology. And he went on to say this is possible only in China. Mr. Cook clearly holds China in high regard. Apple supports more than 5 million jobs in China, making it the country's largest source of employment. Consequently, Apple's sales activities in China are receiving substantial political support. Apple is taking steps to move some operations out of China, partly due to President Trump's requests for US companies to downsize in China. For example, both apple and Foxconn, its subcontractor, have started operating factories in India. However, the pace of this movement out of China is slower than at other companies. Many people believe the reason is that no other country is able to produce goods that meet the rigorous quality standards used in China.

If restrictions are imposed on the provision of Google's OS and apps in China's smartphone market, there may be delays in the development in China of Android products. These delays could result in a significant advantage for the new product development activities of Apple, which is the only supplier of iOS products.

Even in the midst of the US-China trade war, Tesla has started operating an assembly plant in Shanghai. This accomplishment may be proof that a strong business plan has enough power to overcome challenges even during this period of hostile US-China relations.