Questions for the Record from Senator Charles E. Grassley  
To Dean Cheng  
U.S. Senate Committee on the Judiciary  
“China’s Non-Traditional Espionage Against the United States: The Threat and Potential Policy Responses”  
Submitted on December 19, 2018

1. Chinese cyber attacks appear to have continued even after the 2015 accord between then-President Obama and Chinese President Xi. What has your research shown about the status of Chinese cyber attacks against the United States since the agreement?

Response to question 1:

Discussions with cyber security specialists and reviews of available literature provide a very unclear picture of just how much China actually reduced cyber economic espionage after the 2015 agreement. There seems to be broad agreement that attacks from known Chinese hacking sites, especially ones associated with known advanced persistent threats (APTs) did decline after 2015. However, what is less clear is whether the overall level of attacks dropped. Indeed, it would seem quite possible that any reduction was in observed attacks, based upon monitoring of certain Chinese IP addresses. If the Chinese shifted their attacks to previously unidentified or unmonitored sites, it is unclear whether that shift would have been captured by the observation methods. There does not appear to have been a decline in the overall level of Chinese cyber activity.

Certainly, since Donald Trump took office, public reporting indicates that the scale of Chinese cyber activity has returned to previous levels, if not higher. New reports also indicate new tactics, such as redirection of significant portions of global Internet traffic to China, which is believed to be deliberate. [See: Chris Demchak, Yuval Shavitt, “China’s Maxim—Leave No Access Point Unexploited: The Hidden Story of China Telecom’s BGP Hijacking,” Military Cyber Affairs (Vol. III, #1, 2018), https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1050&context=mca

2. The Chinese government overtly advertises numerous “Talents Programs.” These programs encourage academics and other leaders in their field to apply for funding, or to move their research to China. It is currently not illegal to be a member of a Talents Program. Is there more to the Chinese “Talents Programs” than academic funding? Are there incentives in place for Talent Program participants to steal research? We do not want to discourage scientific collaboration. But if there is theft of research going on, what can we do about it?

Response to question 2:
Given the Chinese focus on “comprehensive national power,” the “Talents Program” in all variations should be seen as an attempt to improve China’s overall level of teaching, business, science and technology, etc. The Chinese are clearly intent on having their educational system become world-class, and have created multiple programs in the past to improve their colleges and universities. These include Project 211, established in 1995 to make 100 Chinese universities competitive internationally. This was followed by Project 985 in 1998, which designated 39 of those universities for additional funding and support.

The number of Chinese students abroad is very large, but there apparently are very large percentages who then choose not to return to China. The “Talents Programs” should therefore be seen as not only a means of attracting foreign scholars and academics to China to teach, but also to entice Chinese scholars and academics to return to China.

Any Chinese student or professor who returns to China is, by definition, going to be bringing the knowledge they have gained back with them. Whether that is “theft” depends on the conditions that were imposed on them before they returned (e.g., whether they signed non-disclosure agreements, whether the knowledge they have gained is proprietary, etc.). It is certainly possible that scholars and students associated with the various “Talents Programs” are more susceptible to targeting by Chinese authorities, but it would probably be a mistake to presume that participants in these programs were dispatched to the West as conduits for information or technology.

At the same time, any student or academic who returns to China, even for part-time teaching, is likely to be targeted by the Chinese surveillance infrastructure, including penetration of their personal computers, phones, and other electronics. At the same time, they are likely to be probed, either overtly or covertly, with regards to past and current research that might be useful to improving China’s “comprehensive national power.”

It would be wise to at least implement a program of informing returning and visiting students and academics, of any nationality, that visiting China carries with it the risk of having their personal electronics penetrated and the resulting potential loss of intellectual property.
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U.S. Senate Judiciary Committee Hearing on  
China’s Non-Traditional Espionage against the United States  
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QUESTIONS FROM SENATOR COONS

1. I am concerned by China’s apparent forced technology transfer practices as a component of their industrial policy to become a world leader in state-identified areas of high technology. While these practices are harmful to the United States, I believe that they do not affect the United States alone, but also hurt many U.S. allies.

   a. Do you agree, and if so, what more can be done to build a coalition of other countries to mount a coordinated response to China’s industrial policies?

   b. How effective have the United States’ unilateral tariffs on Chinese imports been in forcing China to change its behavior in these areas?

Response to question 1a:

I would agree that Chinese actions affect, adversely, not only the United States but also many of our allies. (Ironically, it also affects Russia, which has demonstrated reluctance to transfer advanced military items such as the Su-37 to China, for fear that the Chinese would copy the Russian equipment.)

In order to counter the PRC, I think that the United States should consider reviving the old “COCOM,” the Coordinating Committee that tried to coordinate exports among key Western allies (including NATO, Japan, South Korea) to the Soviet Union. The idea behind COCOM restrictions was that, once the COCOM agreed to restrict exports of an item to the USSR, then all nations were subject to that restriction. This curtailed the ability of the Soviets to then try and play one or another nation or exporter off against others.

The system was not perfect, of course. Both Norway and Japan at one point exported multi-axis milling machines to the USSR, which helped improve their submarines’ stealthiness. Nonetheless, without such cooperation and coordination, the Chinese can exploit our respective economic interests to weaken and dilute any sanctions that are put in place.

A similar coordinating effort should probably be developed among key US allies, including NATO, Japan, South Korea, Israel, whereby we reconcile CFIUS-type oversight and export control laws and regulations. There should also be mutual informing, when the Chinese do try to acquire a given company or technology, since they are likely to be pursuing similar targets across all of these nations.

Response to question 1b:

It is unclear what impact the tariffs themselves have had thus far, or what, if any, impact they will have in the future. The tariffs do serve, however, to signal the Chinese of the seriousness of the American position, since no president has employed tariffs against any
other state for at least the last twenty years.

2. In your written testimony, you state, “Chinese leaders have long described the [People’s Republic of China] economy as a ‘socialist market economy,’ where the state sets broad policies and retains control of key parts of the economy, yet reaps the benefits and efficiencies of the market in resource allocation and demand signals. However, this outsize government role, which far exceeds that present in places like Western Europe, means that the PRC is not a market economy[.]” In your view, do China’s market practices run afoul of World Trade Organization (WTO) rules? What reforms could be made to the WTO to improve its enforcement against these violations?

Response to question 2:

China has conformed to some of its WTO obligations since joining in 2001, and it would be a mistake to presume that China has utterly failed to meet its obligations. China has lowered its cross-border tariffs schedules and is participating in the WTO’s dispute settlement mechanisms. China has resolved, through that mechanism, 22 of the 27 issues filed against it since 2004.

The mechanism, however, can only resolve those disputes that are filed, and many of the issues currently being raised have not been brought before the WTO. Part of the issue here rests with the U.S., which has blocked appointments to its Appellate Body. Allowing appointments may reduce the backlog (which also prevent timely addressing of issues that are placed before the WTO’s dispute resolution mechanism).

In addition, there are concerns about non-tariff issues, as has been noted by the US Trade Representative’s Office. This area also includes Chinese national security and cyber security laws that have threatened to require disclosure of proprietary information. Finally,