## Trump effort to keep U.S. tech out of China alarms American firms

The administration wants to protect national security by restricting the flow of technology to China. But technology companies worry it could undermine them instead.

By Ana Swanson and David McCabe February 16, 2020 – *The New York Times* 

The Trump administration's push to prevent China from dominating the market for advanced technologies has put it on a collision course with the same American companies it wants to protect.

Firms that specialize in microchips, artificial intelligence, biotechnology and other industries have grown increasingly alarmed by the administration's efforts to restrict the flow of technology to China, saying it could siphon expertise, research and revenue away from the United States, ultimately eroding America's advantage.

The concerns, which have been simmering for months, have taken on new urgency as the Commerce Department considers adopting a sweeping proposal that would allow the United States to block transactions between American firms and Chinese counterparts. Those rules, on top of new restrictions on Chinese investment in the United States and proposed measures that would prevent American companies from exporting certain products and sharing technology with foreign nationals, have the tech industry scrambling to respond.

The Trump administration's crackdown has already prompted foreign firms to shun American components and technology over concerns that access to parts they need could be abruptly cut off. American companies are watching warily as the United States considers restricting export licenses for companies that sell products or share intellectual property with China, including General Electric, which sells aircraft parts to China as part of a joint venture with Safran, a French firm.

Top administration officials plan to meet on Feb. 28 to discuss further restrictions on China, including whether to block G.E.'s license to sell jet engines and whether to further curtail the ability of Huawei, the Chinese telecom giant, to have access to American technology.

There is growing bipartisan consensus in Washington that China poses a security threat and that the United States must protect domestic industries to retain a technological edge. While President Trump's trade war with China was aimed at forcing Beijing to end practices that gave Chinese industries an advantage, the initial deal signed last month did little to address the security concerns.

The tech industry has warned that limiting access to China, both in terms of selling and buying products, could cripple American companies and end up undercutting the United States as the biggest global hub of research and development.

Companies, along with the lawyers and consultants who advise them, say firms increasingly have no choice but to locate more research and development outside the United States, to ensure that they have uninterrupted access to China, a fast-growing consumer market and the center of the global electronics supply chain. New investment dollars are being funneled to research hubs near University of Waterloo in Canada, as well as Israel, Britain and other places beyond the reach of the American government, they say.

"Anyone who thinks our concerns are exaggerated should talk to the U.S. semiconductor industry workers who are already losing their jobs due to walling off our

largest market," said John Neuffer, the president and chief executive of the Semiconductor Industry Association, which represents chip makers. "Revenue from that big market fuels our big research investments, which allows us to innovate and drive America's economic growth and national security."

The RISC-V Foundation, a nonprofit that has created an open-source software standard for the chips that power smartphones and other electronics, acknowledged in recent months that it had chosen to move its incorporation from Delaware to Switzerland because of concerns from its members about more stringent regulations in the United States.

"If this administration proceeds with the current trajectory, we'll see more defections of companies, of scientists," said Scott Jones, a nonresident fellow with the Stimson Center. "They'll take their toys and they'll go elsewhere, and other economies will be the beneficiary of that."

The most recent source of concern stems from a Commerce Department plan to vet and potentially block technology transactions that pose a risk to the United States. The proposed rule would allow the commerce secretary to block transactions involving technology that was tied to a "foreign adversary" and that posed a significant risk to the United States.

The rule grew out of an executive order Mr. Trump signed last year to try to shut out Huawei by authorizing the commerce secretary to bar any purchase of technology designed by a "foreign adversary" that put America at risk. American companies say the regulations are written so broadly that they could give the United States authority to block transactions or unwind existing ones in areas far afield from telecom gear.

While tech companies say they support efforts to protect U.S. national security, dozens of

companies and industry lobbying groups have expressed concerns about the proposal.

IBM, in a January comment letter, told the Commerce Department to "go back to the drawing board" and said the rules "will lead to a broad disengagement of U.S. business from global markets and suppliers."

"Its reach, breadth and vagueness are unprecedented," IBM said.

The Internet Association, which counts Google and Facebook among its members, said the proposal lacked "substantive safeguards." The Motion Picture Association warned that it could affect Hollywood's ability to pursue transactions around special effects or animation.

The Commerce Department said in a statement that the process would ensure that "all points of view have been considered and the U.S. national security considerations are balanced against corporate commercial interests."

The tougher measures have come in response to what the administration and even the tech industry view as a rising economic and security threat. China is gaining ground in a range of technologies that experts say could give the country an economic and military edge, including artificial intelligence, facial recognition, microchips and quantum computing.

To try to dominate these advanced industries, China has deployed subsidies, targeted acquisitions of American firms and created industrial plans like Made in China 2025 to leap ahead. The administration has repeatedly accused China and its companies of engaging in corporate espionage, hacking and intellectual property theft.

Last week, the U.S. government charged Huawei and two of its subsidiaries with federal racketeering and conspiracy to steal trade secrets from six American companies. It also charged four members of China's military with hacking into Equifax, one of the nation's largest credit reporting agencies, and stealing trade secrets and the personal data of about 145 million Americans in 2017.

Beijing's actions have created an overwhelming fear in Washington that China will come to dominate advanced industries and put American competitors out of business, in the same way it did for steel, furniture and solar panels. But the stakes are even higher this time, given that many of these new technologies are critical for the military.

"The Chinese have long been a commercial people, but for China, purely economic success is not an end in itself," Attorney General William P. Barr said in a speech this month. "It is a means to wider political and strategic objectives."

The Trump administration's response has been to offer a new definition of national security, one that encompasses economic threats. The distinction has allowed the United States to enact powerful rules restricting commercial exchanges with China.

Mr. Trump has cited national security in his decision to tax foreign metals, propose new limits on the technology that can be transferred outside the United States and bar Chinese companies like Huawei from buying American components.

While tech companies found a way around the initial Huawei ban, the administration is considering much more severe restrictions. A new proposal would extend the reach of the U.S. government to regulate products made around the world, prohibiting companies from using American components and technologies in foreign-made products that are then supplied to Huawei.

The proposals have set off panic within the technology industry, which fears the new restrictions will hamper its ability to tap into the Chinese market. Industry lawyers and trade groups have begun warning that, unless the

administration can persuade its allies to adopt similar restrictions, companies will decide the safest course is to try to limit their use of American technology.

Critics point to past incidents where tight regulation pushed American industries offshore — including machine tool makers in the 1990s, and commercial satellites in the 2000s. While it is illegal for companies to move existing operations abroad to try to circumvent export control rules, there are no such constraints on new investments.

"Their incentive is shareholder value and making money," Jim McGregor, the chairman of greater China for APCO Worldwide, said of America's biggest technology companies. "It's not defending what is good for America. You can say that's terrible, but that's the way our system works."

Mr. McGregor said the economic incentives of the Chinese market would encourage companies to "decouple from America."

Chinese companies are also working to weed American components out of their supply chains — a long-running effort toward self-sufficiency that has accelerated under the threat of harsher U.S. measures.

In recent months, some Chinese companies have begun asking their suppliers to certify that their products are made with a minimal amount of American content, so they are not at risk from American export controls, people familiar with the conversations say.

Chinese telecom companies have been asked to find an alternative to using Oracle's software in their systems. And CITIC Capital, a giant investment management firm with deep links in China, has embraced helping Chinese companies find alternatives to American technology as an investment theme for this year.

Some who favor tougher China rules say companies are exaggerating the potential

impact in an attempt to influence new regulations. They say that the United States retains big advantages in research and development, and that companies are trying to scare the government into loosening rules by saying they will leave.

Others say the national security threat from China is so serious that some short-term revenue loss is warranted.

"You can't avoid paying that price," said Clyde Prestowitz, a former Reagan administration official who led trade negotiations with Japan and China. "Your only choice is to pay it now or later. Now, you still have a cutting-edge industry that will take a hit, but that can survive and prosper if high tech does not become a Chinese playground."

The administration's view is not monolithic. Within the Commerce Department, some are

pressing for stricter rules while others say crippling American business will do more to endanger national security.

The Pentagon is also split, with some officials calling for tighter regulations and others saying the government should not put innovation at risk, given that military technologies typically draw on commercial products.

Some China experts say that American companies are deluding themselves and that, without safeguards, China will eventually steal their technology and drive them out of business.

"We've seen what happens to many foreign firms who 'have to be there' in steel, telecom, et cetera," Derek Scissors, a resident scholar at the American Enterprise Institute, said of China. "They get progressively more desperate, until they die."