

A tech Cold War is brewing

Out of the Box

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THERE IS A new “tech Cold War” between the United States and China – spurred by several recent policy decisions by the US government.

First, the United States disapproved the proposed purchase of chip maker Qualcomm by Singapore-based Broadcom, fearing that this would empower China to lead in 5G. But the main shot was the US decision to punish Chinese telecommunication firm ZTE for violation of export rules by banning shipment of vital US-made chips to it.

Because of this, ZTE will collapse. Negotiations are continuing. Huawei and other Chinese tech companies may be next.

One wonders how any company can be so dependent on one supplier. Are there other suppliers globally that ZTE can turn to? Can it, and China nationally, produce these chips itself?

Apparently, no, at least not yet. It demonstrates the real technological lead that the United States enjoys.

It has also caused a lot of soul searching within China. Despite its historically unprecedented economic rise and huge investment in science and technology, China is still very vulnerable in certain key technologies.

President Xi Jinping has vowed that this will not happen again in the future.

I have tried to think of a corresponding tech product that China produces which would have the same impact on the United States if its exports there were banned and cannot think of any.

Huawei is effectively banned from the United States anyway, and Alibaba and Tencent have not penetrated the United States yet.

DJI drones are desired worldwide but not indispensable. Banning the manufacturing of iPhones would probably hurt China more than the United States. That is one measure of national technological prowess and competitiveness.

Science is global, but technology is often subject to national protection. There are many reasons: economic competitiveness, job creation and protection, national security concerns, and ideological considerations.

Increasingly, these factors are intertwined. Computer chips is only one example. Artificial intelligence is another.

The cover article of the March 27 issue of *The Economist* was the most prescient. It was published before the ZTE ban and yet it had predicted a “battle

for digital supremacy” between the United States and China. It described this new tech war as the US-USSR Cold War and the US-Japan economic war in the 1980s, “rolled into one but twice as big.”

But China is perceived by the United States as a much more formidable foe than the Soviets or Japanese. Tencent and Alibaba have market caps rivaling Facebook’s. China leads in mobile payment. Huawei is the world’s largest telecommunication company and is poised to lead in 5G. The

United States views “Made in China 2025” as trying to dominate the industries of the future.

China now has the world’s fastest supercomputer (and accounts for 35 percent of the Top 500 fastest supercomputers in the world versus 30 percent for the United States), the world’s only quantum communication satellite in orbit, and the world’s

biggest and most advanced radio telescope. China has a national plan to lead in AI in the near future.

Together with its population size, vast talent pool (especially in STEM), the world’s largest market, sharp difference in political ideology and national security concerns, one can easily imagine that the United States views China as an unprecedented challenge that requires drastic measures to deal with.

This feeling is not just coming from the White House but is quite widely shared among US politicians and corporate leaders, including those who are old “China hands.” This Cold War may have a way to go.

But this US strategy may have an uncertain outcome. Forcing a Cold War on China may only delay but not prevent China’s technological rise.

It may actually accelerate it by strengthening China’s resolve to develop its own technological capabilities.

What may work better for the United States is a new Sputnik – by investing in science and technology and education, and welcoming global talents.

I have written about Thucydides’ Trap before. Out of the 16 rivalries that Graham Allison studied over the last 500 years the US-USSR Cold War is the only one of four that did not lead to actual war.

I certainly hope that this new tech Cold War will be the fifth instead of the 13th – for the good of the two countries and also for the whole world.

