Develop Distinct Trade and National Security Strategies

Although technology is central to both the trade and national security concerns at issue in the US-China relationship, addressing them effectively will require two separate strategies. The Executive Branch has diverse tools to address trade policy priorities (e.g., international negotiations, trade enforcement) and wide-ranging authorities to safeguard US national security interests (e.g., sanctions, export controls). However, the tools should be kept distinct. For example, the effectiveness of those national security tools is undermined if they are deployed in a manner that is perceived as an effort to advance economic interests rather than national security interests.

Strengthen Strategic Relationships

In both the security and trade arenas, the United States should coordinate closely with allies in responding to distortive Chinese trade and technology practices. Deepening US participation in regional trade, technology, and security cooperative mechanisms and increased bilateral cooperation with key partners are critical to a forward-looking and clear-eyed strategy on economic, technology, and security priorities for the digital 21st century.

Ensure That Security Controls Enhance US Technological Leadership and Security

The United States must develop a comprehensive security strategy related to the export and import of sensitive technologies. Because the long-term national security interests of the United States are enhanced by US industry leadership in the development of the technologies of tomorrow, such a strategy must ensure that controls are designed carefully. As the incoming Administration develops its technology control strategy, we encourage it to:

- Narrowly Tailor Export Controls. As the incoming Administration undertakes the important work of implementing the Export Control Reform Act, it should ensure that new controls on “emerging” and “foundational” technologies are narrowly tailored to avoid undermining US technological leadership. Technologies that are available from foreign competitors should not be subject to unilateral export controls. We also encourage that Commerce focus controls on end uses and users of concern rather than broad technology segments and explore ways to use technology to make controls easier to implement.

- Reevaluate Recent Changes to the Military End Use/User Rule. Recent amendments to the Export Administration Regulation’s “military end use/user”
rule should be reassessed. The revised rule is overbroad and ambiguous, restricting exports of widely available commercial software that presents no threat to US national security and creating complex challenges for companies seeking to comply with the rule. These changes will not appreciably advance the national security consideration that gave rise to the rule, but they will have a detrimental impact on the competitiveness of the US commercial software industry.

☑ Clarify the Executive Order on Supply Chain Security. Effectively safeguarding the US information and communications technology ("ICT") supply chain requires risk-based policies that are clear, predictable, and enforceable. The proposed rule for implementing the Trump Administration’s Executive Order on Securing the ICT Supply Chain sets out a framework that is subjective, reliant on opaque processes, and lacking in meaningful safeguards. Accordingly, the Executive Order is likely to have only a marginal impact on improving supply chain security, while severely constraining US companies’ ability to innovate and lead in the future.

Embrace a “Run Faster” Strategy

A strategy that focuses only on blocking access to US technology will do little to preserve the United States’ position as the preeminent technological superpower. To strengthen the US innovation base, the incoming Administration should pursue a comprehensive strategy that includes:

☑ Coalition Building and Coordination with US Allies. Rebalancing the trade relationship with China and addressing the longer-term national security objectives will both require close coordination with US allies.

☑ Investing in Long-Term US Innovation. US investments in R&D have played a critical role in the development of fundamental technologies, from the microprocessor to the internet, that have helped launch entire new industries and establish America as the hub for global innovation. However, at a time when our global competitors are ramping up their investments in R&D, US spending on R&D as a percentage of GDP has steadily declined since 1976. The incoming Administration should develop a long-term strategy for ramping up investments in fundamental research that will be critical to strategically important technologies, such as AI.

☑ Growing the High-Tech Workforce. Global competition to train and recruit the next generation of tech talent is fierce. There are worrying signs that the US is falling behind. The US Bureau of Labor Statistics estimates that one million computer programming jobs in the United States went unfilled in 2020. Unfortunately, the number of students seeking computer science degrees is growing at ten times the rate of the tenure-track faculty that are needed to train them. Solving the high-tech workforce shortage will require an “all of the above” strategy that includes investments in K–12 STEM education, an examination of how to address the shortage of PhD-level experts graduating from US institutions, and an expansion of “non-traditional” graduate programs. The United States must also take steps to ensure that it remains the most lucrative market for foreign talent by expanding the opportunities available for high-skilled immigration.

☑ Spurring Demand for Leading Technology. Government can also bolster the US innovation ecosystem by using appropriations to send a powerful demand signal to industry. The US should invest in modernizing federal IT systems—not only because they are “unwieldy and out-of-date”—but because doing so will help US companies reinvest in R&D that will keep them on the cutting-edge. In addition, the United States should examine policy opportunities for creating commercial incentives that can encourage the development and adoption of emerging technologies that are certain to play a foundational role in the digital 21st century.