Stopping China's Mercantilism: A Doctrine of Constructive, Alliance-Backed Confrontation

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Effectively managing the U.S.-China trade and economic relationship will be one of the most significant international challenges the Trump administration faces.

There is a growing understanding that China is an outlier when it comes to global norms and rules governing trade, investment, and economic policy, and that the unremitting and even accelerating "innovation-mercantilist" behavior on the part of the Chinese government represents a threat not only to the U.S. economy, particularly its advanced industries, but indeed to the entire global economic and trade system. The previous three U.S. administrations sought engagement and dialogue with China's leaders, in the belief and hope that this would lead the Chinese government to retreat from its mercantilist path. It should by now be clear that this approach has failed. For, rather than reform, China has doubled down on its innovation-mercantilist strategies, seeking global dominance across a wide array of advanced industries that are key to U.S. economic and national security interests. And despite the claims of some apologists for Chinese behavior, it's clear what the end game is: Chinese-owned companies across a range of advanced industries gaining significant global market share at the expense of American, European, Japanese, and Korean competitors. A far more proactive, whole-of-government response, in tight partnership with our allies, is needed to ensure that Chinese innovation mercantilism is contained and then rolled back and a genuine market- and rules-based global trading system restored.

Unless U.S. policymakers want to blithely accept Chinese innovation mercantilism and the damage it inflicts on the U.S. economy and its advanced industries as beyond their control, it's time for a new approach that moves beyond the naïve push for further dialogue and instead makes it clear to Chinese leaders that such unfair, harmful policies cannot be practiced with impunity. But this fight cannot be about individual tactics, for the Chinese government has shown itself to be quite adept at abandoning certain tactics when they become discredited due to global pressure, only to adopt new and more effective ones in service of its overall mercantilist strategy. The focus needs to be not just on tactical wins, but on more broadly enlisting the global community to help roll back the entire Chinese innovation-mercantilist enterprise and getting China to finally become a responsible player in the global trading system. As such, the Trump administration has a unique opportunity to work with our allies to press Chinese leaders for a fundamental economic policy reset that will move the world economy back toward the rule of law and market-based policies.

However, to succeed, a new approach to U.S.-China economic and trade policy from the U.S. government will need to be pursued with great care and sophistication. The Chinese government is not without weapons, and it has demonstrated a strong willingness to use them to fight back against legitimate efforts to try to get it to stop manipulating the global trade system. And because of the lack of rule of law in China, the Chinese government could very well use its powers to capriciously punish U.S. firms producing or selling there. But doing nothing due to the fear of retaliation should not be an option.

As such, the Trump administration needs to make crystal clear that any such strategy is based not on punishing China nor seeking to hold it down. Indeed, it is in America's interest to have China rapidly increase its citizens' per-capita incomes. The administration also needs to make clear that the strategy is not based on making America great again or putting America first, but rather that it is based on saving the global trading system by restoring it to a rules-based one. In essence, the Trump administration should make clear that it is acting more "in sorrow, than in anger," and that any punitive actions are temporary, only in place until the Chinese government makes needed reforms.

Further, the time when unilateral U.S. action alone would suffice has gone. The last time that was perhaps possible was in the first few years of the Obama administration when the United States possessed enough leverage to press China on its own. But after at least two decades of unrelenting mercantilism, China is no longer as dependent on the United States economically, and thus our leverage acting alone is more limited. As such, any action toward China needs to be articulated through a strong and unified coalition, particularly with nations such as Australia, Canada, Germany, Japan, South Korea, the United Kingdom, and the European Union. All of these economies have been harmed by Chinese mercantilism and are even more likely to be hurt going forward as China ramps up its strategy of innovation mercantilism to obtain global technology leadership. And that means the focus of Trump administration trade policy complaints should be focused first and foremost on China, not on other nations such as Mexico, Germany, and others which may run trade surpluses with America, but are generally playing by the rules and should be our natural allies in this confrontation with China, not antagonists.

Perhaps the single most important strategic factor to guide the Trump administration's policy toward China should be to differentiate between protectionism and prosecution. In other words, enforcement should be used to contest Chinese protectionism that is affecting the global trade system, not simply as a tool to make the United States more competitive or to provide shelter to certain parties from the rigors and turmoil of global competition. This may sound like a semantic difference, and indeed, most in the Washington trade establishment refuse to accept the difference—seeing both as "protectionism"—but there is in fact a difference, and it's a critical one. In this sense, it's hard to see how the relatively modest Mexican trade surplus is the result of mercantilist Mexican policies and easy to conclude that the threat of tariffs on Mexican imports represents nothing more than U.S. protectionism. In contrast, the large trade deficit with China results from its mercantilist policies that regularly violate the spirit, and in many cases the letter, of World Trade Organization (WTO) rules. Since 2002, the United States has accumulated a goods trade deficit with China of over $3.5 trillion, and trade with China alone accounted for about 50 percent of the U.S. trade deficit in goods in 2016.[1] As such, tough action in return, even so-called "protectionist" policies, are justified. But again, the goal here is not permanent "protectionist" policies against China but rather an array of policies used as tools to pressure China into significantly reducing, and ultimately eliminating entirely, its use of mercantilist policies. Should China do that, the U.S. economy should remain open to China's enterprises and to robust trade and investment between the two nations. Indeed, the United States should pursue a "selective" prosecution: China should be rewarded when it plays by the rules and progress is visible, but be met with resolute action where it does not play by the rules. Blanket, punitive trade taxes against China will not prove productive; U.S. strategy in response to China's mercantilism will have to be more nuanced.

The focus needs to be not just on tactical wins, but on more broadly rolling back the entire Chinese innovation-mercantilist enterprise and getting China to finally become a responsible player in the global trading system.

A U.S.-China economic and trade relationship that evolves according to equitable, rules- and market-based trade, with both nations competing by implementing constructive innovation- and productivity-enhancing policies, will produce win-win-win results for the United States, China, and the rest of the world. To be sure, it's in the world's interest for China's economy to grow and for Chinese citizens to enjoy a significantly higher standard of living, but China should achieve this outcome within the boundaries of the rules set for international economic competition by the WTO and by pursuing an across-the-board productivity growth strategy (e.g., where it seeks to grow productivity in all industries, not just export-based ones), not an innovation-mercantilist growth strategy. But if China continues to compete substantially through the use of innovation-mercantilist policies, this will inflict significant damage on the U.S. and the global economy, forestalling global innovation progress in the process.[2]

As such we advocate that the Trump administration, supported by Congress, acknowledge the following:

- Recognize that while the United States has trade disputes with many nations, the vast majority of critical issues concern one and only one nation: China. China is so large and its innovation-mercantilist practices so egregious and all-encompassing that it should be the principal focus of U.S. trade enforcement policy. Moreover, prevailing upon China to reduce its use of innovation-mercantilist practices will relieve pressure on other nations, such as Indonesia, Malaysia, Vietnam, and even India, whose policymakers believe they have no choice but to keep up with China and to emulate its unfair trade practices.[3] It will be of central importance not to get distracted by disputes with other nations of significantly less strategic importance.

- Embrace a realistic, clear-eyed understanding of China's economic strategy. As it stands, that strategy is a fundamentally mercantilist one, which seeks to autarkically serve domestic markets through local production—including increasingly by developing China's own high-tech, innovation-based industries even as it excludes foreign competition in such sectors—all the while still maintaining unfettered access to global markets for exports of Chinese products.

- Recognize that—as articulated initially in China's "National Medium- and Long-Term Program for Science and Technology Development (2006-2020)," and more recently in the "Made in China 2025 Strategy" and the "13th Five-Year Plan for Science and Technology"—China seeks leadership in over 400 advanced technologies, from semiconductors, high-performance computers, and cloud computing to aerospace and biotechnology. When China pursues innovation-mercantilist policies—such as the acquisition of foreign technology enterprises leveraged by nonmarket, government-backed funds; forced transfer of technology or intellectual property (IP); IP theft; abuse of antitrust/antimonopoly policy; denial or restrictions of foreign firms' access to Chinese markets; development of China-only standards; massive subsidies for Chinese firms; refusing to allow access to key resources (e.g., rare earth elements) unless companies locate in China; or any number of other unfair trade practices—such policies directly threaten the health and very viability of American (and other foreign) enterprises and thus need to be contested in the most vigorous manner possible by U.S. government agencies with enforcement power, whether under U.S. law or pursuant to international agreements.

- Steadfastly hold China to the commitments it made when it joined the community of trading nations in the World Trade Organization. This means not only adhering to the technical rules of the WTO, but in all instances abiding by the fundamental free-market tenets on which the WTO is based: those of national treatment, nondiscrimination, reciprocity, and transparency.

- Adopt a policy of "constructive, alliance-backed confrontation" with China that moves from legalistic or "meeting-by-meeting" engagements with China to a results-oriented one.[4] This should entail holding China to specific goals, such as significantly reducing its global current account surplus and reducing its forced technology transfer and IP theft, as well as procedural goals, such as securing results demonstrating a shift from predominantly export-led growth to growth generated chiefly by raising productivity in the country's non-traded (e.g., non-export) sectors. An approach that systematically addresses the fundamental problems is needed instead of contesting individual measures, because Chinese innovation mercantilism has proven hydra-headed: For every one policy effectively countermanded, two more appear.

- Take a "whole-of-government" approach to confronting Chinese innovation mercantilism. This means that the United States Trade Representative (USTR) plays a key strategic and convening role, but that agencies across the federal government, including the Department of Commerce, the State Department, the U.S. Patent and Trademark Office (PTO), and others are empowered and enrolled with their distinctive strengths and capabilities to play a greater role in countering the threat.

- Recognize that Chinese economic policy has tremendous implications for U.S. national security beyond U.S. economic competitiveness through the vitality of the U.S. industrial base, the security of components which pass through defense industrial supply chains, and the ability of U.S. economic strength to finance a robust national security and defense apparatus.

- Recognize that the United States must continue to take the leading role in shaping the rules guiding a liberalized international trade system and that this means completing even higher-standard trade, investment, and other multilateral international agreements. If the Trans-Pacific Partnership Agreement (TPP), the Trade in Services Agreement (TiSA), and the Transatlantic Trade and Investment Partnership Agreement (T-TIP) can be improved upon and completed, this would serve U.S. interests. In contrast, a failure to complete and to implement next-generation trade agreements that establish higher-standard rules, principles, and norms for market-based global trade will only cede the terms and structure of global trade to Chinese leadership. It's imperative the United States seek alliances and build next-generation trade deals with countries that are committed to the rule of law and principles of rules- and market-based trade.

- Ensure much better access to China's market on fair terms, so that U.S. enterprises and industries (along with those of other foreign countries) have every opportunity to be competitive global players in the sectors in which they compete.

- Seek ultimately a win-win economic and trade relationship with China grounded in the framework of rules-based, market-determined, enterprise-led trade activity. This needs to be achieved with the assistance of like-minded allies to make this outcome a reality.

To realize this broad vision, however, the United States needs a new approach supported by improved strategic positioning, organizational improvements within the federal government, stronger processes, new policies, and new administrative and legislative actions. This should include the following:

Improve Strategic Positioning

The Trump administration needs to adopt a new strategic direction for trade. It should:

- Lead a reinvigorated and reformed market- and rules-based global trading system, working in close collaboration with like-minded countries. This should include not only administration-to-administration cooperation, but also legislative-to-legislative cooperation.
- Work with our allies to create and maintain a comprehensive "bill of particulars" on Chinese innovation-mercantilist policies and practices, and decide which elements can be brought to the WTO for action and which need new rules.
- Develop new and improved rules that fully address Chinese innovation mercantilism, and agree to pursue implementation of them with like-minded countries. Reevaluate the effectiveness of existing trade institutions in confronting Chinese innovation mercantilism, building new trade agreements and institutions as needed.
- Make sure any agreements with China include these new rules, and complete agreements with China, such as a Bilateral Investment Treaty (BIT), only after China complies with its existing trade commitments and is prepared to bind itself to new rules that prohibit its mercantilist proclivities.

The United States needs to take a more assertive lead in defending, promoting, and building upon the open and rules-based global trading system.

Improve Organizational Arrangements Within the Federal Government

Any new strategy will not be fully effective without organizational reforms within the U.S. federal government. To achieve this, the Trump administration or Congress should:

- Establish an Industrial Intelligence Unit within the National Intelligence Council.
- Create a sub-directorate within the National Security Council responsible for raising to the highest levels of U.S. government the need to develop and coordinate a whole-of-government response to combatting foreign innovation mercantilism.
- Create an Office of Competitiveness within the United States Trade Representative's Office, whose job it would be to identify, in collaboration with the interagency trade task force, foreign government policies and practices that do not necessarily violate the WTO but that hurt U.S. commerce. Staff and resource this new office with economists with sectoral industry expertise, lawyers, and other professionals who understand the legal implications of China's mercantilist practices, and make it a key task for a deputy trade representative to closely supervise this work.
- Staff and resource USTR and other federal agencies playing an important role in confronting Chinese innovation mercantilism to reflect the scale and importance of their duties. Ensure adequate funding and staffing for the Interagency Center on Trade Implementation, Monitoring, and Enforcement (ITEC) and those working under the Assistant U.S. Trade Representative (AUSTR) for Monitoring and Enforcement.

- Expand America's network of intellectual property and digital trade attachés around the world.

- Inculcate a more tech- and IP-focused foreign commercial service and Patent and Trademark Office, in particular with staff that can help U.S. enterprises identify opportunities to license greater amounts of IP or technology on legitimate, market-based terms, in China.

Establish Stronger Processes to Contest Chinese Innovation Mercantilism

Organizational reforms will need to be accompanied by new approaches and processes responding to China's innovation-mercantilist policies. To do that, the Trump administration or Congress should:

- Ensure that free trade agreements (FTAs), BITs, and other agreements have new and improved rules that address Chinese innovation mercantilism. These would include looking at stronger performance requirements for goods, services, and investment; rules on competition/unfair government practices (e.g., against governments involved in setting licensing fees for standards); more vigorous transparency requirements (for China covering their "normative documents"); stronger national treatment requirement for IP; etc.

- Elevate trade enforcement in the interagency process.

- Permit USTR to hire outside counsel for WTO disputes, as many countries (such as China) do, particularly for more technically complex matters.

- Strengthen the rules of engagement in negotiations with Chinese trade negotiators.

- Bring more trade disputes before the WTO.

- Task USTR with considering development of a non-violation nullification and impairment case, given that many Chinese policies undercut the benefits and rights the United States thought it was getting when it allowed China to join the WTO.

- Improve monitoring and transparency regarding China's WTO-contravening industrial policies (such as subsidies), making up for Chinese failure to provide timely notification to the WTO of such policies.

- Revise and use discretionary powers under the U.S. Trade Act to address unfair trade practices.

- Enhance application of Section 337 of the U.S. Tariff Act and develop a strategy to counter possible Chinese retaliation from increased use of this instrument.

- Permit the U.S. International Trade Commission (ITC) to issue Trade Enforcement Advisory Opinions.

- Encourage the ITC to examine and make findings regarding the impact/threat of unfair mercantilist practices on U.S. commerce, and exclude foreign products, services, and technologies that benefit from such policies.

Rethink Key Policies Toward Contesting Chinese Innovation Mercantilism

A number of key policy areas, such as antitrust and foreign investment review, need to be rethought as they apply to China. As such, the Trump administration or Congress should:

- Push back against China's use of antitrust policies as a tool of industrial policy and take into account competitiveness impacts in antitrust policy.
- Pass legislation that allows firms to ask the Department of Justice (DOJ) for an exemption to coordinate actions regarding technology transfer and investment to nations like China.
- Ensure reciprocity in intellectual property and technology licensing.
- Insist on reciprocally equivalent access and treatment regarding foreign direct investment.
- Reform the Committee on Foreign Investment (CFIUS) to reflect the realities of modern state-led capitalism and if necessary require separate investment reviews for investment from state-directed economies.
- Protect and retain U.S. comparative advantage in advanced-technology industries by passing legislation requiring notification to the U.S. government on a confidential basis of technology licenses to China and of transactions in China in which the Chinese government or Chinese government-affiliated entities are involved.
- Address Chinese currency manipulation.

A broad government strategy to addressing U.S.-China trade policy issues needs to be translated into a framework that aligns strategy, agencies, resources, and actions.

Take Additional Administrative and Legislative Actions

Finally, there are a number of specific changes and actions the administration should push for. As such, the Trump administration and Congress should:

- Increase number of fact-finding investigations initiated by the U.S. International Trade Commission to include investigations related to issues such as licensing, antitrust, and indigenous innovation.
- Task the Department of Commerce with issuing more reports on strategic economic and trade issues.
- Deny use of the U.S. banking system to companies benefitting from stolen IP.
- More closely coordinate domestic IP actions with foreign actions, such as by targeting companies or regions in China that engage in widespread IP theft for criminal

enforcement actions and significantly increasing inspections of Chinese imports by U.S. customs.

- Provide enhanced small-claims mechanisms for small- and medium-sized enterprises to bring IP actions against importers and overseas manufacturers stealing their IP, including under the Defend Trade Secrets Act.

- Provide technical assistance and support for companies retaliated against in China for bringing trade complaints.

- Continue not to recognize China as a market economy and amend U.S. trade law to reflect that nonmarket economy status includes state planning and control over intellectual property and technology.

- Adjust, curtail, or cut off scientific and other cooperation in the absence of progress on Chinese mercantilism and insist on reciprocity in treatment of technology transferred so that the U.S. government can own improvements in any joint technology agreement.

INTRODUCTION

It's imperative the Trump administration be guided by a clear-eyed understanding of the nature of China's economic and competitive strategy and the implications this entails for the U.S. economy and its firms, industries, and workers.

Effectively managing U.S.-China economic and trade relations, particularly in the context of geopolitical considerations, will be one of the most significant challenges faced by the Trump administration. As Michael Schuman notes, writing for *Bloomberg*'s *Business Week*, "China is an economic rival to the U.S., and Washington has to start acting like it."[5] Rolling back Chinese innovation mercantilism will be vital for the competitiveness of both the U.S. economy and U.S. enterprises, particularly those in advanced industries. Moreover, the United States is the leading representative for a community of nations that have chosen market-led capitalism over state-led capitalism, and so it bears particular responsibility for containing and rolling back Chinese mercantilism, thus encouraging other nations to choose a more rules-based approach to trade and investment.

This report lays out strategic trade and economic policy prescriptions, articulating key principles, conceptualizations, and policy responses that should guide the Trump administration and Congress in dealing with China. The report continues by detailing the evolution of modern Chinese economic strategy in "innovation-mercantilist" terms; summarizing the deleterious impact these policies have inflicted on the U.S. economy and U.S. workers, particularly in advanced industries; and then articulating how to reset the U.S.-China bilateral trade and economic framework on fair, market-based, and mutually beneficial terms. The report distinguishes between strategic and tactical approaches the United States should adopt, grouping the tactical elements into organization changes, process reforms, policy reforms, and administrative actions, many of which can be undertaken in the first year of the Trump administration.

A BRIEF OVERVIEW OF THE EVOLUTION OF CHINESE ECONOMIC STRATEGY

In 2015, Chinese President Xi Jinping unabashedly trumpeted a goal of making China the "master of its own technologies," by which he meant that Chinese firms, operating in China, would produce virtually all technology goods and services for Chinese consumers.[6] China's arrival at such a point resulted from the evolution of Chinese economic policy over the past two decades. Up until the mid-2000s, Chinese economic-development strategy sought principally to attract foreign direct investment (FDI) and induce foreign multinational corporations to shift production to China.[7] That production was mostly in more traditional manufacturing. China used an array of unfair tactics to achieve that goal, including systemic currency manipulation, massive subsidies to firms, and limits on imports (including requirements for forced local production for firms wishing to sell products in China).

That strategy changed in 2006, as China shifted to a "China Inc." development model of indigenous innovation, which focused on helping Chinese firms, particularly those in advanced, innovation-based industries, often at the expense of foreign firms. Marking the shift was a seminal document called the "National Medium- and Long-Term Program for Science and Technology Development (2006-2020)," the so-called "MLP," which called on China to master 402 core technologies, everything from intelligent automobiles to semiconductors and high-performance computers.

The MLP essentially announced that modern Chinese economic strategy sought *absolute advantage* across virtually all advanced industries. It fundamentally rejected the notion of *comparative advantage*—which holds that nations should specialize in the production of products or services at which they are the most efficient and trade for the rest. Instead, China's goal today is to dominate in production of both advanced-technology products such as airplanes, semiconductors, computers, pharmaceuticals, *and* commodity manufacturing. Ultimately, Chinese policymakers wish to autarkically supply Chinese markets for advanced-technology goods and services with their own production while still benefitting from unfettered access to global markets for their technology exports and foreign investment, the latter designed to acquire and integrate into Chinese firms' know-how, often based on foreign technology. As the Mercator Institute for China Studies (MERICS) in Germany writes in its report, "Made in China 2025: The Making of a High-Tech Superpower and Consequences for Industrial Countries," "Made in China 2025 in its current form [means that] China's leadership systematically intervenes in domestic markets so as to benefit and facilitate the economic dominance of Chinese enterprises and to disadvantage foreign competitors."[8]

In recent years, President Xi has only doubled down on this approach through new promulgations such as the "Made in China 2025 Strategy," the "13th Five-Year Plan for Science and Technology," the "13th Five-Year Plan for National Informatization," and "The National Cybersecurity Strategy," among other policies. The "Made in China 2025 Strategy," for instance, calls for 70 percent local content in manufacturing components in China, while policies enumerated in documents such as the "13th Five-Year Plan for

National Informatization" and "The National Cybersecurity Strategy" effectively deny access to U.S. enterprises seeking to compete in emerging information and communications technology (ICT) industries, such as cloud computing, in China. China's National Cybersecurity Strategy further outlines a goal for China to become a strong cyberpower by 2020, and that includes mastering core technologies, many of which the United States is currently the international leader in, such as operating systems, integrated circuits, big data, cloud computing, the Internet of Things, etc. Put simply, China is increasingly pursuing a strategy of shutting out foreign competitors in these sectors in the interest of advantaging domestic industries.

As the Information Technology and Innovation Foundation (ITIF) has documented across a series of reports—including "False Promises: The Yawning Gap Between China's WTO Commitments and Practices," *Enough Is Enough: Confronting Chinese Innovation Mercantilism*, "The Worst Innovation Mercantilist Policies of 2016," and most recently in testimony before the congressionally chartered U.S.-China Economic and Security Review Commission on Chinese investment in the United States—China has deployed a vast panoply of innovation-mercantilist practices that seek to unfairly advantage Chinese producers over foreign competitors.[9] These practices have included forced IP and technology transfer or forced local production as a condition of market access; theft of foreign IP; curtailment and even outright denial of access to Chinese markets in certain sectors; manipulation of technology standards; special benefits for state-owned enterprises (SOEs); capricious cases designed to force foreign companies to license technology at a discount; refusing to allow access to key resources (e.g., rare earth elements) unless companies locate in China; and even government-subsidized acquisitions of foreign technology firms.

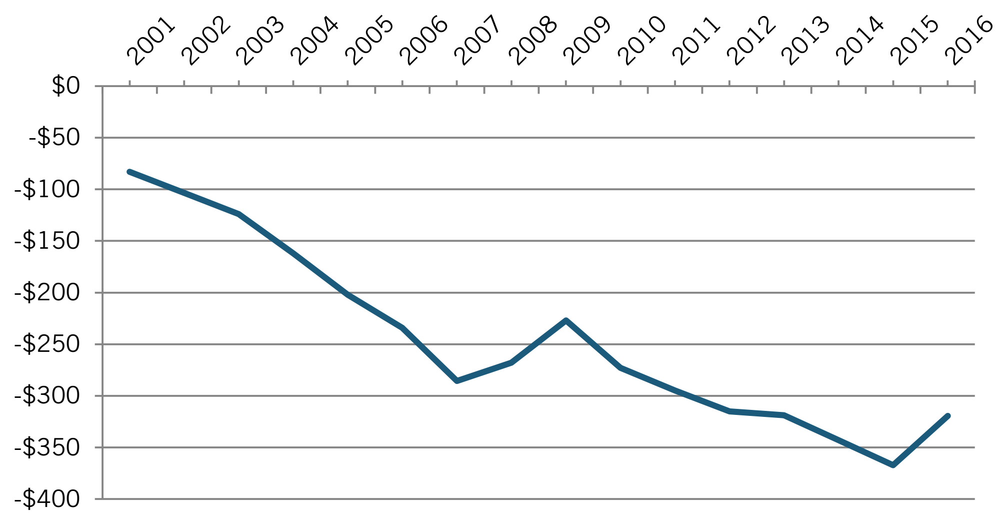
Chinese policymakers wish to autarkically supply Chinese markets for advanced-technology products with their own production while still benefitting from unfettered access to global markets for their technology exports and FDI.

To be sure, no country is completely free from mercantilist policies, not even the United States. But what is different about China is not just the scope and depth of its policies, but the fact that the extent of state involvement in all aspects of China's economy, which is not restrained by legal protections including balance of powers and independent courts, effectively means there is no rule of law to constrain Chinese officials from implementing arbitrary and capricious mercantilist policies. As such, China is in a class of its own when it comes to the practice of mercantilism.

U.S. enterprises across virtually all manufacturing sectors and every advanced-technology sector—from aerospace and biotechnology to ICT products, Internet, digital media, and clean energy—have been harmed by China's aggressive use of innovation-mercantilist policies. Moreover, China's policies have inflicted considerable harm upon the U.S. economy, its exports, and employment. Consider U.S.-China trade balances, which are heavily distorted due to China's economic and trade strategy. From the beginning of 2002 through the end of November 2016, China accumulated an aggregate $3.5 trillion trade surplus in goods with the United States, as Figure 1 shows.[10] Moreover, the annual U.S. trade deficit with China has steadily increased. The U.S. deficit in trade in goods with

China in 2001, the year China entered the WTO, stood at just $83 billion; but by 2015, it had ballooned to $367 billion.

Figure 1: Annual U.S. Deficit in Goods Trade With China, 2001 to Nov. 2016 ($ billions)[11]

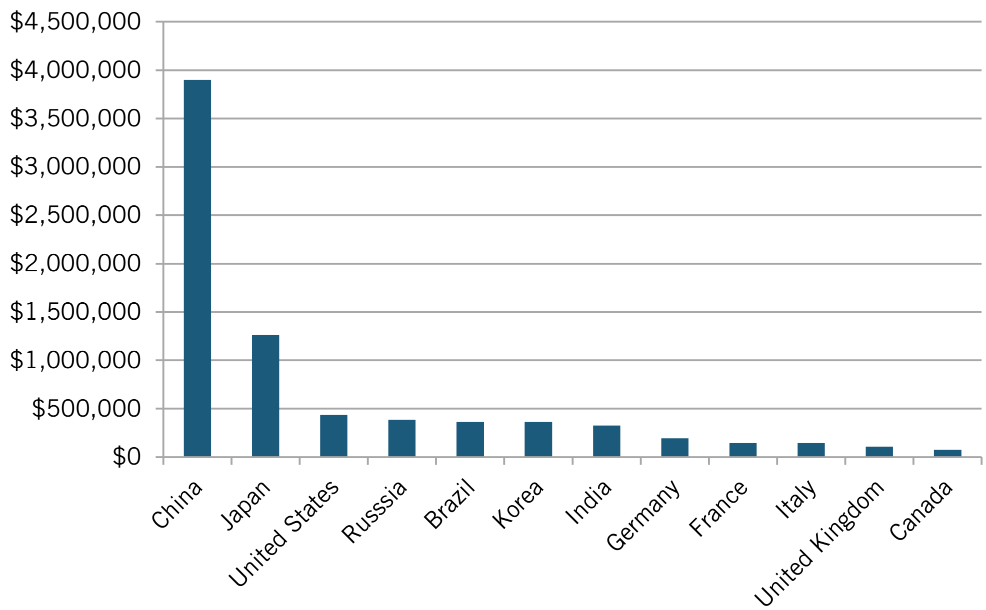


In fact, 60 percent of the global U.S. trade deficit in 2015 was with China, with U.S. manufactured imports from China six times larger than U.S. exports to China that year.[12] Moreover, in 2015, in the 10 largest high-technology sectors in U.S.-China trade, Chinese exports were $1.12 trillion—50 percent larger than America's $752 billion of exports. Furthermore, overall Chinese trade in these same 10 high-tech sectors was in surplus by $354 billion while the U.S. was in deficit by $357 billion. Worse, since 2009, the Chinese surplus in these sectors has soared by 128 percent, while the U.S. deficit has grown by 166 percent.[13] This shift has coincided with a cratering of the U.S. share of global exports of manufactured products. Indeed, the U.S. share of global exports of manufactures plunged from 18 percent in 2000 to 12 percent in 2015, while China's share quadrupled from 6 to 24 percent over that time period.[14] To put this in absolute terms, U.S. exports of manufactures of $650 billion in 2000 were almost three times larger than Chinese exports of $220 billion that year while, by 2014, Chinese exports of $2,202 billion were almost double U.S. exports of $1,164 billion.[15]

To be sure, some have argued that such U.S.-China trade balance statistics do not reflect trade in value-added, and note that Organisation for Economic Cooperation and Development (OECD) research into trade in value-added data finds that "China's trade surplus with the United States shrinks by a quarter when calculated according to which countries provide the parts and services that go into its exports and imports."[16] But even if that is the case, a gross imbalance in U.S.-China goods trade over the past decade and a half remains.

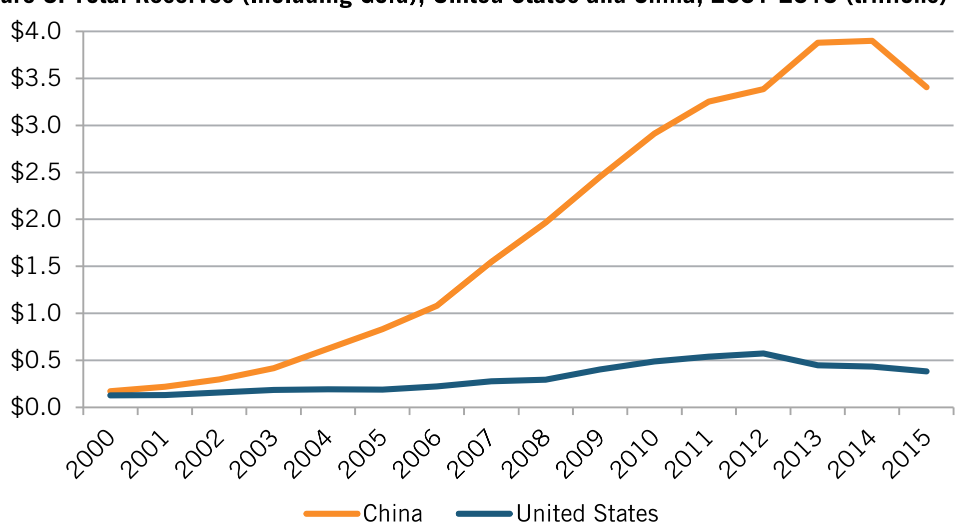
Moreover, the reality is that China's stock of foreign currency reserves grew from $212 billion in 2001 to $3.5 trillion by August 2015, and that accumulation of foreign currency reserves has come principally from Chinese trade surpluses with other nations, most notably the United States.[17] In fact, as of year-end 2014, China's total reserves (including gold) of $3.9 trillion were greater than those of Japan, the United States, Russia, Brazil, Korea, India, Germany, France, Italy, the United Kingdom, and Canada combined, as Figure 2 shows.

Figure 2: Total Reserves (Including Gold), Select Countries, 2014[18]



In fact, the disparity in growth of foreign currency reserves between the United States and China since 2001, when China entered the WTO, is quite noticeable, as Figure 3 shows. And while certainly many factors contribute to the depth of countries' foreign currency reserves, China's trade surpluses, particularly with the United States, have been a key driver in this differential.

Figure 3: Total Reserves (Including Gold), United States and China, 2001-2015 (trillions)[19]



But to focus only on the trade deficit or foreign currency reserves is to miss what is really at stake. We could very well envision a world where U.S.-China trade is in balance, but where the structure of both the trade and national economies has radically shifted, with China's exports and economy shifting to higher-value-added advanced industries, while America's exports and economy become more commodity- and natural-resource based, with increases in food, fiber, and mineral exports (along with waste paper, our fastest growing export to China, by volume). Indeed, the fastest-growing U.S. exports to China from 2005 to 2015 were vegetables, tobacco, cereals, food residue and waste, beverages, explosives, and mineral fuels.[20] At this rate, America can go back to being an economy made up of "hewers of wood and drawers of water."[21]

WHY CHINESE INNOVATION MERCANTILISM MATTERS

Many defenders of the status quo argue that there is no real need to confront China because its polices have not materially harmed the U.S. economy and won't in the future. Status quo supporters further blame technology for destroying the lion's share of the 5.5 million U.S. manufacturing jobs lost in the 2000s. But, in fact, this "nothing-to-see-here" narrative is wrong.

The United States has trade disputes with most nations in the world, but the vast majority of the most critical issues concern one and only one nation: China.

The reality is that U.S.-China trade imbalances have exerted significant deleterious impact on U.S. employment. As *Bloomberg* recently noted, "Studies examining the impact of China's entry to the WTO in late 2001 have made the case that between 1 million and more than 2 million of the 5 million American factory jobs lost since 2000 are traceable to low-cost imports."[22] As MIT economists David Autor, David Dorn, and Gordon Hanson write about the effect of China's trade surpluses on U.S. labor markets, "Amplifying China's potential impact on the U.S. labor market are sizable current account imbalances in the two countries. In the 2000s, China's average current-account surplus was 5 percent of GDP, a figure equal to the contemporaneous average U.S. current-account *deficit*."[23] The authors estimate that the United States lost 982,000 manufacturing jobs between 2000 and 2007 because of Chinese import competition.[24] In particular, they find that the U.S. regions most exposed to China tended not only to lose more manufacturing jobs, but also to see overall employment decline.[25] Further, they calculate that the cost to the economy from increased government payments (e.g., unemployment compensation, worker retraining, etc.) amounts to one- to two-thirds of the consumer-welfare gains from trade with China.[26]

Similarly, ITIF has found that a growing trade deficit was responsible for almost two-thirds of jobs lost in the 2000s (i.e., approximately 3.8 million jobs), with a significant share of this the result of unbalanced trade with China.[27] Elsewhere, Robert Scott of the Economic Policy Institute has estimated that the growing U.S. trade deficit with China cost 3.4 million American workers their jobs between 2001 and 2015, with nearly three-fourths, or 2.6 million, of those jobs lost in the manufacturing sector.[28]

To be sure, not all U.S. job loss due to trade with China since 2001 has been the result of mercantilist trade practices—some is reflective of low-cost, labor-intensive industries, such as commodity apparel, where the United States and its workers are no longer cost competitive—and where that type of work sensibly has been performed in low-wage nations such as China.[29] But had China not been running an export-led, government-directed economy, not only would some jobs not have been lost, but these kinds of "natural" losses would have been made up with an equal or even greater increase in higher-value-added exports to China. They were not because China refused to allow that to happen. In short, the clear reality is that since China's entry into the WTO in 2001, whatever the perfectly exact number, far too many American jobs have been lost due to China's innovation-mercantilist trade practices.

Still, the last contest was about low- and mid-tech manufacturing, in which Chinese policies hollowed out many sectors of traditional U.S. manufacturing; whereas the current contest revolves around who is going to lead in advanced industries. Nevertheless, one reason why so many in the Washington trade establishment have been and remain so sanguine about China's mercantilism is that they believe it simply accelerated a natural global division of labor, with China specializing in commodity, labor-cost-based production and the United States in advanced, knowledge-based production.

Of course, that view is misguided in part because it ignores how Chinese policy significantly distorted market forces to hasten that outcome without generating an accompanying significant increase in U.S. exports to China to match their increased exports. But regardless, the new challenge will be over advanced industries, in which many U.S. enterprises lead and where many believe their lead in global markets is dominant. As Schuman reiterates, the U.S.-China contest now is nothing less than "a battle for the high-tech industries of tomorrow."[30] One needs to look no further than China's "2014 National Guidelines for Development and Promotion of the IC Industry," to see this battle for leadership in advanced industries unfolding. China's integrated circuit (IC) strategy unabashedly calls for eliminating its trade deficit in integrated circuits by 2030 and making China the world's leader in IC manufacturing by then. This includes IC manufacturing, design, packaging, testing, materials, and equipment.[31] As part of this plan, China wants 70 percent of the semiconductor chips used by companies operating in China to be domestically produced by the year 2025.[32] Between national and provincial government funds, the industry is expected to be supported with at least $160 billion of government-backed funds.

China's government harbors similar goals for replacing foreign imports with domestic production (while still expecting unfettered access to global markets for exports and direct investment) in virtually all advanced sectors, from life sciences to high-speed rail to clean energy. As the "2016 Report to the Congress of the U.S.-China Economic and Security Review Commission" summarizes:

> China's renewed focus on indigenous innovation and creation of globally competitive firms in key emerging industries, such as integrated circuits, biomedicines, cloud computing, and e-commerce, targets sectors in which the

> United States is a global leader. Continued preferential government treatment and financial support of state-owned enterprises and designated industries have lowered these firms' cost of capital and production, creating a competitive advantage over U.S. and other private firms both within China and abroad.[33]

Take, for example, commercial aviation, a natural oligopoly industry because of the massive costs of developing and producing the next generation of commercial jet airplanes. There are only two major producers, Airbus and Boeing, who are in intense, slug-it-out competition. Because of the incredible technological complexity of jet-aircraft production, there is simply no way that market forces would generate a third competitor, especially from scratch. But that has not deterred the Chinese government from massively subsidizing its state-owned champion, the Aviation Industry Corporation of China (AVIC), and making foreign airplane sales into China contingent on transferring technology to AVIC. China's goal is to become self-sufficient in aviation, while also exporting to the world.

The last contest with China was about low- and mid-tech manufacturing, but the new challenge will be over who leads in advanced industries.

Thus, it's no exaggeration to suggest that, without aggressive action, the United States may face a world within 15 years where U.S. jobs in industries as diverse as semiconductors, computers, biopharmaceuticals, aerospace, Internet, digital media, and automobiles are significantly reduced due to Chinese policies unabashedly targeting domestic and global market share in those industries. This not only has potentially serious implications for America's future economic security, it has perhaps even more serious implications for America's national security and military superiority.

WHY STRONG ACTION HAS BEEN LACKING

Most conventional neoclassical economist hold that the same principles of economics apply to all economies across all times and in all places. Indeed, it is this conceit more than any other that explains the intellectual reluctance to confront Chinese innovation mercantilism. For if one believes that there is nothing fundamentally different between the Chinese economy and Western, market-based ones and that any deviation from the Western model is suboptimal, then one will look at any problems from China as only limited and temporary. As one congressional subcommittee chairman dismissively noted, "The Chinese only hurt themselves with their mercantilist actions."

This macroeconomic view makes it seem as if Chinese market distortions are creating some ripples in an otherwise smooth market pond, ripples that hurt both them and us, but ones that ideally resolve themselves as the two economies find a new equilibrium. But this view misses what's really at stake. For it's not just that Chinese government policies are distorting markets, it's that they represent a coherent array of measures designed to attack U.S. (and other foreign) companies with the goal of defeating them. As former Procter and Gamble CEO Alan Lafley wrote in his business strategy book, *Playing to Win: How Strategy Really Works*, "Winning is what matters—and it is the ultimate criterion of a successful strategy."[34] Indeed, business strategy doesn't concern itself with whether there's market distortion or not; rather, it focuses on the ultimate goal: gaining competitive advantage, ideally by defeating one's competitors. But in the United States most policymakers and experts worry about distorted markets while Chinese officials worry about attacking and defeating their business opponents, so their businesses can win and even dominate. The type of strategy with which China competes is reflected in a *Harvard Business Review* article titled "Hardball: Five Killer Strategies for Trouncing the Competition."[35] The authors use terms like "relentless," "uncompromising," "ruthless," and "playing rough." In describing companies that don't play by these rules, they write:

> Softball players, by contrast, may look good—they may report decent earnings and even get favorable ink in the business press—but they aren't intensely serious about winning. They don't accept that you sometimes must hurt your rivals, and risk being hurt yourself, to get what you want. Instead of running smart and hard, they seem almost to be standing around and watching. They play to play. And though they may not end up out-and-out losers, they certainly don't win.[36]

When it comes to the economic competition between China and the United States, the United States is playing recreational softball to China's major league hardball.

In contrast, hardball players play to win. The authors write:

> In sports, after all, playing hardball means brushing back an aggressive batter with a 100-mile-an-hour pitch. It means bare-knuckle boxing, John L. Sullivan–style. It means giving someone a head fake in a pickup basketball game on a city court littered with broken glass—and leaving him sitting on his rear.[37]

When it comes to the economic competition between China and the United States, the United States is playing recreational softball to China's major league hardball.

In fact, if U.S. policymakers are to effectively respond to Chinese mercantilism, they will need to understand that China is not like us, as most economists would contend, but rather that the country is unique in the history of the world economy. There are at least seven factors that together make China fundamentally different from U.S. and other Western economies.

1) China's growth strategy is predicated on mercantilism: seeking to grow by cranking up exports and limiting imports. To be clear, this is not unique to China; many Asian nations have relied on this strategy. But when combined with the other factors, China does become unique.

2) Chinese strategy is not just about mercantilism (limiting imports and boosting exports), it's about autarky: becoming self-sufficient. The Chinse government has proven that it seeks autarky in many traditional industries, such as steel and shipbuilding, and now wants it in emerging industries such as aerospace, computers, and semiconductors, placing itself counter to the fundamental tenet of comparative advantage that underlies liberalized trade in the global economy.

3) China seeks to achieve its mercantilist goals by moving far up the value chain to more complex, higher-value-added industries. Again, other nations, particularly the Asian tigers (e.g., Japan, South Korea, and Taiwan) have pursued such policies. But the big difference is that they did so when they were much closer to the leaders, especially in terms of per-capita income. For a nation with a per-capita GDP about one-quarter of the global leaders to seek to produce the same type of products as the leaders is unprecedented and can only be achieved by policies that seriously distort markets and harm U.S. enterprises, such as IP theft, forced technology transfer, government fixed prices for key inputs, investment incentives that cajole firms to take carrots or be less cost-competitive than rivals, subsidies that can't be traced and therefore can't be disciplined through the WTO, etc.

4) It's not just that China's focus is to transform its industrial structure to higher-value-added industries; it's also that this goal is to be achieved principally by Chinese firms. In contrast to some nations that sought to do this and relied at least in part on foreign firms, such as Singapore and Ireland, China has made clear through its indigenous innovation strategy that foreign firms in China serve a means—transferring technology to Chinese firms—and are not an end in themselves.

Those who would protest that more aggressive action against China's innovation mercantilism would trigger a trade war miss that the United States is already in one.

5) Unlike market-oriented democracies, China lacks separation between the state and the market. Not only are SOEs a major component of China's economy, but many private firms are not fully autonomous, subject to influence by the Chinese state.[38]

6) While China is not the only nation lacking a rule of law, the lack thereof makes enforcing actions against China in venues such as the WTO difficult to say the least. For example, while the Chinese government is correct when it states that it does not have official rules mandating technology transfer in exchange for market access by foreign firms, the fact that these requirements are systematically enforced in informal ways makes them just as effective, but almost impossible to prosecute.

7) China's size: as the second-largest economy by gross domestic product and largest in terms of population, China is unique. Its size plays out in two ways. First, because its market is so large, no multinational firm can easily walk away from the Chinese market. As such, Chinese officials know that they have foreign firms over a barrel: either comply with their discriminatory policies or lose market access. Second, the country's large size means that China's policies have an outsized effect on many nations. If a smaller nation such as Thailand did everything China does, it would be an irritant, but only that. When China uses these types of polices, it represents a fundamental threat to the very fabric of the global trading system.

But won't confronting Chinese innovation mercantilism cause a trade war? In Davos, Chinese President Xi argued that "pursuing protectionism is like locking oneself in a dark room" in the hope of avoiding danger but, in doing so, cutting off all "light and air."[39] He added that, "No one will emerge as a winner in a trade war." This is wonderful spin, worthy of the best New York public relations firm, but it overlooks that it is China that has started and continues the trade war through its actions. What President Xi means by a trade war is another nation challenging unbridled Chinese economic aggression. Indeed, Chinese officials threaten that any efforts to hold them to global trade norms will be met with overwhelming force in response. Mei Xinyu, a researcher with the Commerce Ministry, "warned that if the United States played 'low,' China could play 'lower,'" neglecting to mention that it is China that has been and continues to "play low."[40] We can expect more such threats as a way to cow the United States into submission, particularly if members of the Washington trade establishment weakly persist in calling action against foreign mercantilism "protectionism."

ADOPTING THE PROPER FRAMEWORK TO CONTEST CHINESE MERCANTILISM

As this section explains, the United States has five strategic options it can choose from in confronting Chinese innovation mercantilism: 1) be patient/wait for conversion to the Washington consensus; 2) harangue and implore; 3) resigned defeat; 4) global isolation; and 5) constructive, alliance-based confrontation. It should choose the last one: constructive, alliance-based confrontation.

In 1989, economist John Williamson coined the term "Washington Consensus" to describe the dominant logic of the prevailing global neoclassical economic and trade framework. His Washington Consensus consisted of 10 staple policy recommendations, such as fiscal discipline, openness to trade, liberalization of inward FDI, privatization of SOEs, deregulation, legal protection for property rights, and redirection of public spending from subsidies to investment, among others.[41] Many persist in believing that the Washington Consensus represents the only logical and rational prescription for a country to pursue as it seeks economic growth, despite the fact that while components of the Consensus are useful, it places too many limitations on legitimate government roles to spur innovation and competitiveness.[42] Nevertheless, many persist in viewing the Washington Consensus as the high religion of economics—the only right and true path—and believe that it is only time before the heretics and unbelievers, especially China, will be forced to confront the error of their ways and repent. The job of the faithful, then, is to patiently encourage the unbelievers to find the true faith.

One manifestation of this view is the argument made by some that China is just learning how to be a market economy and needs more time. They contend that China is still a developing country on a learning curve, trying to make things better. As one Chinese official stated to us, "There are still some loopholes in IP laws, but it's not due to lack of trying. We are still learning."[43] But it is not really a question of learning. There are a multitude of institutions, including the World Bank and the U.S. government, that have spent considerable time and effort (and in the case of the World Bank, considerable expense) helping Chinese officials learn the Washington Consensus approach to development.[44] While it is true that many nations do learn and improve their economic development policies as they develop, China has actually become more mercantilist in recent years, not less, and shows no signs of improvement. As China scholar Dieter Ernst argues, "China's evolving standards system provides little evidence that convergence to the American system is likely to materialize."[45] Chinese economists and other scholars study Western economics, policy journals, and development policies. Chinese officials know how to make China a market-oriented, rather than mercantilist, economy; they just do not want China to become one. Instead, China stands at the center of an increasingly widespread "Beijing Consensus," an economic approach that combines elements of state capitalism and innovation mercantilism, both undergirded by a government unconstrained by the courts and the rule of law, and which represents a direct challenge to the traditional Western model of capitalism supported by global organizations such as the World Bank, the International Monetary Fund (IMF), and WTO. The path of "be patient, China will become like us" shows no signs of coming to fruition, at least as long as China remains a one-party state.

What President Xi means by a trade war is another nation challenging unbridled Chinese economic aggression.

To be sure, there have been some modest improvements, including partial liberalization in financial markets (e.g., interest rates), deregulation of various prices, and some liberalization in China's investment regime (e.g., expanded free trade zones and negative lists). And there are some economic reformers in China that U.S. policy should seek to support and empower. But even the minor liberalizing reforms mentioned above are at best cosmetic in nature and moreover at odds with the vast panoply of innovation-mercantilist policies China continues to introduce and employ.

If the "be patient and wait for them to convert to the true religion" approach represents a false path, what else can we do? The other prevailing view can be described as the "harangue and implore" strategy. As it becomes clear that the "patience" strategy is a dead end, haranguing and imploring now appears to be the default strategy, to the extent the United States has had any coherent "strategy" regarding Chinese economic policy. In other words, through a combination of "technical assistance," informal exchanges between policymakers, and formal institutional cooperation such as the Strategic and Economic Dialogue and Joint Commission on Commerce and Trade (JCCT), U.S. policymakers express their concerns to Chinese policymakers and hope that they will respond. Sometimes they do if the pressure is strong enough and the cost to China not very high, as was the case when Chinese officials promised to modify their Indigenous Innovation Product Catalogue scheme after U.S. and European governments and businesses put their feet down. But most of the time the best that can be achieved is a slight delay in mercantilist policies as China's policymakers simply wait until the heat and publicity have died down. In addition, commitments on paper can mean very little in the real world, as the 2016 JCCT outcomes factsheet demonstrates:

> In 2011, after global expressions of concern and intensive U.S. engagement, China ordered subnational governments to abolish government procurement preferences for innovative products developed indigenously. While that action represented a key recognition by China, compliance with the measure

> proved to be incomplete, and new inconsistent measures continue to come into force.[46]

So even here, China's government promised to reverse its indigenous innovation policies, but subsequently found new ways to get around the promises, including by moving much of the indigenous innovation product catalogue activities to regional or provincial governments and by introducing new policies having substantially the same effect. This doesn't engender confidence that China respects its commitments.

With it becoming increasingly clear that the harangue and implore strategy plays into China's hands and produces few real results, many appear to be defaulting to a third strategy of "resigned defeat." According to this view, it is inevitable that China will become the largest economy in the world and as part of that rise will inevitably dominate advanced-industry global value chains. Accordingly, the view goes, America and Europe should accept "defeat" and focus on what they can still do economically and what China will let us do (e.g., exports of agricultural goods and other commodities). But capitulating to this approach is to accept the cognitive dissonance that accompanies the fact that China is a part of the WTO, which implies a rules-based restraint on innovation mercantilism but which in reality accepts it in most of its forms.

A variant of this view largely argues that we shouldn't worry because the Chinese economy will collapse under its own weight, brought down by its deviations from the Washington Consensus (e.g., too many SOEs, too much corruption). It is a common view in Washington that the Chinese Communist party is hanging on by its fingernails as China's economy continues to falter. In other words, we can avoid taking tough action because China is unlikely to succeed. But this ignores the fact that in many advanced industries Chinese government-supported companies are already succeeding in gaining global market share, inflicting real harm upon U.S. and other foreign advanced enterprises and industries as well as innovation more broadly.

The first two strategies will not prevent China from taking significant global market share in advanced industries from Europe and the United States, not to mention Pacific allies such as Japan and South Korea. The third strategy, resigned defeat, would be an abdication of responsibility for the economic well-being of future generations of Americans. That then leaves only two other strategies.

Of these, the first is "global isolation" and an "economic nationalist agenda," attempting to restore the kind of economic and trade regime that was prevalent before World War II, when groups like the American Protective Tariff League argued for tariffs so that "the American people should not, and will not, submit to the low standard of wages prevailing in other countries."[47] According to this view, globalization itself is suspect, and America should just turn inward and reduce trade and investment ties with lower-wage nations, including China. And if U.S. firms are foolish enough to invest in nations such as China and be taken to the cleaners, so to speak, that's their problem. But it's a quite misguided view to believe that what U.S. companies do in China is simply "their own business" and thus not a concern for the U.S. government and that the U.S. government shouldn't have to confront mercantilist trade practices on behalf of U.S. companies.

For the reality is that the well-paying U.S. jobs in U.S. multinationals are dependent on global markets, and if we cede both the Chinese and the rest of world market to China, we will be consigning millions of American workers with good, middle-class jobs to the unemployment line. U.S. companies have a reasonable expectation that they should be able to sell to China without having to enter into China and to be able to enter China and play by a clear set of fair rules. It's the job of the U.S. government to back them up on this. For if America leaves the global playing field (or is just patient, or just harangues and implores), U.S. multinational jobs in the United States will shrink. Moreover, China will be assured of being the new global economic hegemon, and our allies will have no choice but to cut their own certainly flawed deals with China to get the best deal they can on their own.

To capitulate to resigned defeat is to accept the cognitive dissonance that accompanies the fact that China is a part of a WTO, which implies a rules-based restraint on innovation mercantilism, but which in reality accepts it in most of its forms.

As a result, the only real choice is "constructive, alliance-based confrontation." It is confrontation because that is the only tactic that the Chinese respond to. It is alliance-based because only a strong, united front by free-trading nations, led by the United States, will have the force required to persuade China to roll back its mercantilist policies. It is constructive because, at the end of the day, the Chinese government demands respect, even when facing opposition. The following section lays out the contours of a constructive confrontation approach to addressing Chinese innovation mercantilism.

CONFRONTING CHINA'S INNOVATION MERCANTILISM

To effectively confront the challenge posed by China's innovation mercantilism, the U.S. government needs to adopt a whole-of-government approach that pursues a results-oriented trade strategy, and coordinate this with like-minded countries. To productively rebalance the U.S.-China trade and economic relationship, both strategic and tactical changes will be needed, as this section details. Addressing Chinese mercantilism needs to be translated into a framework that aligns an overarching strategy executed through agencies, resources, and actions, and then extended internationally through coordination with like-minded countries.

Improve Strategic Positioning

The Trump administration needs to adopt a new strategic direction for trade. This should involve a number of steps.

Lead the Collective Defense of the Market- and Rules-Based Trading System

The United States needs to take a more assertive lead in defending, promoting, and building on the open and rules-based global trading system. It must lead determined efforts to contain and roll back Chinese mercantilism and enroll like-minded countries in that task. Our allies may follow, but they will not act without U.S. leadership.

Successive U.S. administrations have trusted that heavily scripted and structured dialogue is the best way to address trade issues with China, yet experience consistently shows that this trust is misplaced. Year after year the U.S.-China Joint Commission on Commerce and

Trade—the main high-level forum addressing specific U.S.-China trade issues—has sought to raise and address a range of technology, IP, and market-access issues.[48] Yet year after year this focus on individual measures proves ineffective—where one is addressed, others appear, or worse, China commits to rectify problems with no intention of really doing so. A Government Accountability Office (GAO) report into JCCT commitments from 2004 to 2012 shows that the largest share of China's commitments were related to intellectual property (62 commitments, or 34 percent of total commitments), along with many others in the ICT and other high-tech sectors.[49] Yet, in each year's JCCT, new issues are added to the JCCT agenda in these same areas, although China consistently breaks even these commitments. For example, in November 2015, the 26th U.S.-China JCCT included commitments by China not to discriminate against foreign ICT products, including through new cybersecurity measures.[50] Yet, by May 2016, President Xi pledged more support for Chinese technology firms, and in October 2016 Xi publicly stated that China is pursuing a foreign technology substitution policy (i.e., steal it or absorb it through technology transfer, and then replace it with Chinese-only owned technology firms). Indeed, the extensive range of localization measures in China's "Made in China 2025" plan for key technology sectors (released in May 2015) shows the futility in focusing on individual measures without forcing China to change its overarching economic and trade strategy.[51]

China's unique economic system is at the heart of the challenge facing the United States and the international community's efforts to painstakingly set up (and defend) a market- and rules-based trading system. As noted above, China is unique due to the interaction of several factors, but especially the Communist Party's central role in governing the economy, including many parts of the private sector, as well as the lack of transparency and rule of law.[52] China's unique approach was neither fully appreciated nor accounted for by negotiators at the time of China's WTO accession.[53] Since accession, China has not converged (as negotiators hoped) toward an economic model of the type which the WTO was built to accommodate. This mismatch is much clearer now that China has grown into a major player in the global economy yet still unabashedly uses its unique system to manipulate loopholes in the system. It is becoming even clearer now that a special time-limited "nonmarket economy" WTO accession provision, which was supposed to provide time for an economic transition, has run out without China's transition to a market economy occurring. This clash of systems requires the United States and other major economies to confront head on—and beyond mere WTO litigation—the challenge that China's actions pose to their individual trading relationships and to the trading system as a whole.

China has shown how the WTO, and its dispute-settlement system, has real limits when it comes to dealing with the anomaly that is China. As Robert Lighthizer noted in Senate confirmation hearings held on March 14, 2017 to become the United States Trade Representative for the Trump administration, the World Trade Organization is ill-equipped to deal with Beijing's industrial policy and this will call for creative new U.S.

approaches outside the WTO.[54] As Lighthizer said, "I don't believe that the WTO was set up to deal effectively for a country like China and their industrial policy."[55] Dialogue doesn't work with a nation that already knows what it wants and will do whatever it can to get it. Dispute resolution often does not work because the entire current WTO process is premised on adjudicating laws, rules, and regulations, not opaque "administrative guidance." Although China's basic law, the Law on Legislation, does not recognize "normative" or "regulatory" documents (China's terms for administrative guidance), Chinese agencies adopt and enforce these normative/regulatory documents, frequently without publishing them in draft or final form, even though publication of all final trade-related measures is required by the WTO. America's FTAs and BITs sidestep this issue by requiring the publication of regulations, because regulations are binding in the United States, but do not require trading partners to publish all of their binding administrative measures. A further difference in China's system, as compared with the U.S. system, is that in China parties cannot challenge widely binding measures. The bottom line is that neither U.S. domestic law, or our FTAs and BITs as currently configured, nor multilateral WTO approaches are working; China will not systematically ameliorate its mercantilist strategies and policies unless it is proactively compelled to do so by outside pressure that goes beyond the narrow, legalistic limits of the WTO.

This contest will be won, first and foremost, not in the tribunals of Geneva, but in the court of global opinion.

That means this contest will be won, first and foremost, not in the tribunals of Geneva, but in the court of global opinion. Accordingly, the Trump administration's first step should be to build an ironclad prosecutor's case that lays out the "bill of particulars"—in other words, enumerating the vast extent of Chinese innovation-mercantilist policies—in great detail. This is not about recycling the China chapter from the annual USTR National Trade Estimate report. It is about comprehensively detailing the array of unfair, mercantilist practices China engages in and concretely demonstrating how those practices harm the United States and the entire world economy, rich and poor nations alike.

Second, once the Administration has established an ironclad case, President Trump should assign Vice President Pence, Secretary Tillerson, Secretary Ross, and other top officials to travel the world lining up allies at the highest levels in an effort to develop a coordinated response to Chinese mercantilism, including countries in Europe (and the European Commission itself), the Commonwealth nations, and Japan and South Korea. This could even include orchestrating a G19 meeting that excludes China—for the meeting's express purpose would be to discuss how the 18 nations (and the European Union) should respond to Chinese innovation mercantilism. Only the United States can do this, for it is uniquely placed to provide the political leadership necessary to save the global trading system, given its economic size, historical role, and enduring commitment to the underlying principles of global trade liberalization. Moreover, there is some precedent for this, as President Reagan showed when he orchestrated the Plaza Accord agreement in 1985. At the same time, the U.S. Congress should step up efforts to coordinate with members of the European Parliament and the legislatures of major trading partners, including France, Germany, Japan, and the United Kingdom, to discuss common concerns and legislative solutions that could help to roll back Chinese mercantilism.

Such an assertive response is further needed, because, too often, Chinese bad behavior is rewarded with bland statements, that, at best, result in minor revisions or rollbacks of the egregious policies. Also, broad bilateral engagement too easily bloats the structure such that it loses its central focus and ability to achieve outcomes on core interests.

Once these two key steps are done—documenting the case and mobilizing our allies—the next step is to begin negotiations, with a list of very specific, performance-based demands. If after a reasonable but short period of time results are lacking, the United States and our partners should begin to ratchet up consequences, using the kinds of tools described below. Should results be forthcoming, measures can be reduced; should they still be lacking, measures can be ratcheted up.

Throughout this three-step process, it's also important to note that the United States must lead the defense of the global trading system, because other countries lack the ability to push back against China on their own for the (very real) fear of retaliation. China has repeatedly shown that it treats its trade relationships in an "all business" fashion and that it is happy to dole out retribution where necessary, especially for nations that dare to challenge Chinese interests. In isolation, few countries have the ability or will to respond, but, if provided the leadership, countries can find strength, given the collective concerns—over the system and specific rules—that are at stake. The Trump administration needs to provide the leadership to build this cooperation as a way to defend the system, to recommit key trading partners to the rules and principles that underpin the system, to obtain commitments to collective action against Chinese mercantilist practices, and to build new rules that not only add additional layers of protection but also address emergent trade and investment issues.

It's important that U.S. allies understand that while their core industries may not be directly in China's sights now (or only coming into China's sights), many of their industries, especially nonconsumer-facing ones, such as machine tools and dyes, production equipment, robotics, and others are directly in the sights of Chinese policy. China clearly seeks leadership across virtually all advanced industries, whether the enterprises affected are American, European, Japanese, or Korean. Accordingly, the United States should do more industrial intelligence-sharing on China's innovation-mercantilist policies with allies. This could include helping them understand which Chinese entities (often government-backed) are truly behind Chinese FDI-acquisition activity, coordinating on bringing potential cases before the WTO, and collectively pushing back against Chinese unfair trade practices. Such coordination efforts have borne fruit before, as when U.S. and European stakeholders exerted joint pressure to push back on China's indigenous innovation product catalogues. This also matters because the more the United States and its allies are able to hold firm and push back with a coordinated response, the more this diminishes China's ability to employ its divide and conquer game of playing companies off one another to get them to make the best offer (e.g., coerced transfers of technology or IP) to be granted access to Chinese markets that should already be open anyway. As Hout and Ghemawat write in "China vs. The World: Whose Technology Is It?," that story has played out in sector after sector from high-speed rail to automotive to aerospace, and a better-coordinated response from like-minded, rule-of-law nations could do a much better job of putting a stop to it.

To be sure, China will respond. One of China's responses will be to portray itself as the victim and suggest that it is the United States that is being mercantilist, as President Xi did recently at Davos. Another response will be to claim that China is only doing what nations at its level of development need to do. Already China makes every effort to portray its mercantilist policies as enlightened and fair, even going so far as to produce a cartoon video with a happy song about the development of the 13th Five-Year Plan.[56] It will be incumbent on the Trump administration to forcefully, but respectfully, counter every disingenuous claim. And it will be incumbent for the Washington trade community not to side with China out of the fear that prosecution will turn into protectionism.

Left unchanged, China's rise, accompanied by its unremitting use of innovation-mercantilist practices, may accelerate the WTO's undoing.

Reevaluate the Effectiveness of Existing Trade Institutions in Confronting Chinese Mercantilism, Building New Trade Agreements and Institutions Accordingly

China has exposed significant gaps in the international trading system—in rules, decision-making, and enforcement—that the Trump Administration should address in future agreements. Sixteen years after China joined the WTO, it's clear the country has not used its WTO accession to pursue the reforms that would have made it compatible with the WTO-, rules-based trading system.

Statements at China's accession, when compared with the situation outlined in this report, betray a stark contrast. For instance, Mike Moore, the WTO's director-general in 2001, gushed that "China's decision to join the WTO is momentous. Committing itself to WTO rules will entrench market-based reform and strengthen the rule of law. … China's opaque and arbitrary trade and investment rules will become transparent, stable, and more predictable."[57] Moore assuaged those concerned China might not live up to its commitments, intoning that, "A more open China brings benefits for everybody. … China knows it has to stick to its WTO commitments. If it doesn't, the U.S. or any other WTO member government can use the organization's dispute-settlement procedures to ensure it does."[58] For its part, the WTO itself stated:

> China has agreed to undertake a series of important commitments to open and liberalize its regime in order to better integrate into the world economy and offer a more predictable environment for trade and foreign investment in accordance with WTO rules.[59]

With this history as background, the Trump administration should take a realistic, pragmatic view of the extent to which it can contest Chinese actions through the WTO framework, and the extent to which unilateral or alternative measures will be needed. In some instances, the Trump administration should use the WTO's dispute-settlement body more aggressively to adjudicate emergent issues that fall within WTO rules, such as those around subsides and "public bodies."[60] However, the WTO's usefulness is clearly limited in its current state. Its consensus-based approach to negotiations has become untenable. The WTO's notification, surveillance, and review of existing and proposed trade-related regulations is weak and ineffectual—a critical lapse as use of nontariff barriers become the protectionist tool of choice.[61] The WTO's inability to get countries to update the rules to account for modern trade issues—such as investment, competition policy, data flows, e-commerce, intellectual property in the digital era, and currency manipulation—means the Trump administration may need to initially work outside the WTO to make progress.

The fact that modern trade policy is not dependent on the WTO, but based on the variable geometry of bilateral, regional, and plurilateral deals, reflects the lamentable state of affairs at the WTO. It also reflects the fact that the United States and many free-trading countries are already moving on from the WTO. There is no secret sauce to this; it's going to require new trade agreements and potentially new institutions. This will create some overlap with the WTO and cause some fragmentation in the global trading system, but given the prospect for changes at the WTO, this is the next-best option forward. The reality may alarm some, but needs to be considered: that, left unchanged, China's rise, accompanied by its unremitting use of innovation-mercantilist practices, may accelerate the WTO's undoing.[62] One outcome should be new rules, transparency procedures, and enforcement mechanisms that make up for the WTO's failings, and that ultimately could lead to the creation of an alternative to the WTO. If the WTO cannot be reformed to effectively address the challenges China poses to the global trading system, it may be time to craft alternative instruments and organizations that, should China (and other mercantilist nations) want to join, would have the mechanisms to effectively discipline mercantilist behavior (similar to the scenario whereby China might eventually join a high-standard TPP agreement). To be clear, this should not be about exclusion. (Any nation would be welcome to join, providing it generally obeys the rules. If it doesn't, it would be required to leave.) Rather this is about reestablishing a faithful and trustworthy commitment, backed up by better transparency and enforcement, to trade rules that have supported decades of growing prosperity.

As an interim to that step, the Trump administration should use new and existing tools to form new global rules and norms with as many like-minded economies—those that have a vested interest in defending the rules- and market-based trading system—as possible. Renewed efforts to finalize agreements with the European Union about specific issues or as part of a broader trade deal will be critical to setting new norms. Moreover, updating existing bilateral free trade agreements (FTAs) will keep U.S. trade agreements relevant. Existing U.S. FTAs, or new ones the Trump administration has proposed, such as with Japan or the United Kingdom, would benefit from including new rules established in the TPP, such as on the treatment of state-owned enterprises, intellectual property, e-commerce, and services. Wherever possible, these new agreements should reinforce existing core principles that China has undermined—those of an open, transparent, enforceable, rules- and market-based trade and economic system.

Don't Pursue a BIT Until China Comes Into Compliance With Existing Trade Commitments

In this regard, there has been considerable effort by the United States to complete a U.S.-China Bilateral Investment Treaty, believing it could be a powerful vehicle to get China to address outstanding trade issues. However, while a BIT may have some merit, any clear-eyed view of it must recognize that it represents a two-edged sword. A strong investment treaty could make things better, especially if it included meaningful market-access commitments, a nondiscriminatory and participatory standards-making process that includes outside stakeholders, provisions that prohibit China from giving its state-owned and -influenced enterprises and private companies an unfair advantage over foreign firms, and obligations to improve regulatory transparency.[63] A review of the 2012 Model BIT, whose changes to the 2004 Model BIT were patently insufficient, is needed before proceeding. This review needs to be conducted specifically for the China BIT, based on the "bill of particulars" mentioned earlier fully detailing the Chinese practices the Trump Administration would like to see addressed, adequate time for public input, and full consultation with cleared advisors (e.g., perhaps a special set of cleared advisors with expertise in issues such as standards, state ownership/influence, subsidized investment, transparency, and competition).

Also, very importantly, China would need to pre-agree prior to a U.S. willingness to move ahead with the BIT that it will limit its CFIUS-like instruments to true national security concerns, and not use them for economic, trade, or competition purposes. The United States follows this standard, and so should China. There are numerous Chinese measures, including in the cybersecurity space (e.g., the 2016 Cybersecurity Law and related measures) where China is mixing commercial protectionism with the need to protect its national security. (For instance, Chinese President Xi noted on March 12, 2017 that the Communist Party of China (CPC) Central Committee had decided to establish a framework for the integration of military and civilian industries. As Xi stated to the CPC, "Civil technologies should better serve military purposes.")[64] China should be required prior to any re-start of BIT talks to re-set its appetite for using national security as a catch all for plain old protectionism.

Moreover, the actual starting point for BIT negotiations should be China showing meaningful, verifiable progress toward fulfilling its existing commitments at the WTO. New commitments will not count for much if China is not held to account for its disregard for current commitments, as ITIF argues in "False Promises: The Yawning Gap Between China's WTO Commitments and Practices."[65] China is already obliged under existing WTO commitments to address many issues that a potential BIT would contemplate, such as those that prohibit forced technology transfers as a condition of market access, yet China has made extensive use of such policies in a variety of sectors. China needs to fundamentally recommit to the rules of the international trading system and abide by the letter and the spirit of the rules, lest the United States again allow China to benefit from international trade rules without having to abide by them.

The bottom line is that the United States needs to be very clear-eyed here, as Germany, France, and Italy are proving. That's reflected by a recent letter those nations sent to the EU Commission requesting authority to establish investment reviews at the national level that would prevent or address foreign mercantilist investment practices.[66] The reality is that it will be very hard for the United States to get a strong BIT treaty with China, there is a high risk that it wouldn't be enforced well, and it risks legitimizing China's practices that are not included in the BIT and setting a ceiling (e.g., a seal of approval). The United States should be careful not to repeat the WTO experience, with China side-stepping the letter and spirit of a treaty intended to open its relatively closed investment markets when our investment markets are much more open. This is one area where coordination with like-minded trading partners will be very important.

China will not systematically ameliorate its mercantilist strategies and policies unless it is proactively compelled to do so by outside pressure.

Strengthen Organizational Capabilities Within the Federal Government

The Trump administration should confront Chinese mercantilism through a federal government organizational structure that reflects the significant nature of the challenge. The organizational capacity of trade-focused agencies and bodies in the federal government will need to be expanded and strengthened.

Establish a National Industrial Intelligence Unit with the National Intelligence Council

The United States largely continues to consider specific instances of Chinese innovation mercantilism—such as the challenge of Chinese acquisition of U.S. technology enterprises—on an ad hoc, case-by-case basis. There is no entity in government charged with considering the challenge from a holistic, strategic perspective across agencies to analyze, understand, anticipate, and respond. In particular, no entity analyzes China's capacity to absorb knowledge, to understand its determination to do something with it, or to understand the sources of its technology. A glaring example of this is that it took the U.S. government four years to recognize that China had articulated, and then to get translated into English, its "National Medium- and Long-Term Program for Science and Technology Development," and begin to understand what its implications might be for U.S. industry.[67] And it has been nearly two years since China announced its Manufacturing 2025 plan and we've not seen concrete steps by the United States to effectively counter this development.

To remedy this deficiency, the president should establish and staff a new National Industrial Intelligence Unit (which could be housed within the existing National Intelligence Council) charged with developing a better process and structure to understand the specifics and long-term implications of other nations' economic development strategies, particularly China's, so that the United States can respond more effectively.[68] In particular, this group would develop a better process and structure to understand the long-term implications of China's economic development strategy on U.S. competitiveness. It would also develop approaches to better leverage intelligence assets to boost the competitiveness of U.S. companies. This would not constitute industrial espionage, but rather sharing knowledge in the public domain (such as the MLP) about the competitiveness strategies of Chinese enterprises and industries as well as developing better intelligence on the true source of Chinese government involvement in and financing of Chinese companies and the front organizations they set up in the United States, as was the case in the attempted Canyon Bridge acquisition of Lattice Semiconductor.[69] And as part of the Council's mission, it should be charged with sharing commercial intelligence on China with our allies, particularly those in Europe, as they have much less developed capabilities vis-à-vis China.

The National Industrial Intelligence Unit should also prepare a report examining the extent to which Chinese innovation-mercantilist policies—such as forced joint ventures, forced tech and IP transfer, and completed or attempted Chinese acquisitions of U.S. advanced-technology enterprises—have contributed to the outsourcing of manufacturing and other activities to China and is leading to the hollowing out of the U.S. defense industrial base. As suggested in the U.S.-China Economic and Security Review Commission's 2016 Report to Congress, such a report "should detail the national security implications of a diminished domestic industrial base (including assessing any impact on U.S. military readiness), compromised U.S. military supply chains, and reduced capability to manufacture state-of-the-art military systems and equipment."[70]

Create a Sub-directorate at NSC Responsible for Combatting Innovation Mercantilism

There are very few special assistants to the president (SAPs) or senior directors in the International Economics Directorate of the National Security Council (NSC), and none who are clearly charged with the development of strategy or execution of tactics related to combatting foreign countries' innovation-mercantilist practices. Competitiveness issues have historically tended to fall through the cracks at the NSC; indeed, competitiveness has almost always been a second-order priority in U.S. policy compared with diplomacy and national security considerations.[71] Yet America's national security increasingly depends on its technological leadership. To address this, President Trump should create within the NSC a sub-directorate consisting of a senior director or SAP, supported by two to three directors, which can be the liaison to the highest levels of the executive branch in conceiving and executing a whole-of-government approach to combatting foreign innovation mercantilism. Congress should authorize and appropriate funds to adequately staff both the sub-directorate and industrial intelligence council unit.

Create an Office of Competitiveness at USTR, Responsible for, Among Other Things, Creating a Global Mercantilist Index

USTR is an agency staffed with hardworking experts, many of whom are lawyers and who can effectively work on negotiations and trade prosecution. But it is weaker when it comes to the ability to analyze strategic-level competitiveness issues. To remedy this, the Trump administration should establish within USTR a new "Office of Competitiveness" that would be charged with thinking systemically about the design of U.S. trade policy in the context of globalization and U.S. competitiveness. Too often, USTR isn't staffed to be able to do these analytics before marching into the next trade negotiation on the basis of the last agreed text, or is fighting—even if sometimes understandably—the trade wars of the past. It is not set up, either institutionally or philosophically, to fight the war that the country is engaged in today against rampant innovation mercantilism designed to capture U.S. advanced industry leadership. Similar to the State Department's Office of Policy Planning, this new USTR office would be charged with focusing on U.S. trade policy in the context of globalization and competitiveness. Toward that end, one of its roles would be to ensure strong interagency collaboration so that all relevant agencies and departments of government share a common understanding of both the threats posed by state-led capitalism and the innovation mercantilism it often entails and how the United States should respond. Another task would be to work with offices, especially regional offices, within USTR and in other agencies across the federal government to ensure that there is constant coordination with like-minded trading partners with respect to China. To date this type of coordination has been catch as catch can, but it is vital part of the successful development and execution of a strategy that can successfully counter Chinese mercantilism.

A "Global Mercantilist Index" report would marry the comprehensiveness of the "NTE" report with the "naming and shaming" function of the "Special 301" report.

One of the assignments for this new Office of Competitiveness at USTR would be to develop an annual comprehensive ranking of nations' mercantilist policies; in other words, to create a "Global Mercantilist Index," as ITIF suggests in "The Global Mercantilist Index: A New Approach to Ranking Nations' Trade Policies."[72] Such an index would both provide a comprehensive catalog of countries' trade barriers affecting the rights of U.S. intellectual-property holders—as the "National Trade Estimate Report on Foreign Trade Barriers" ("NTE") and "Special 301" reports currently do, respectively—but join this with a ranking system that comprehensively ranks and identifies the most egregious offenders. Such a Global Mercantilist Index should also be designed to pay particular attention to trade barriers that impact advanced-industry sectors, recognizing that a foreign mercantilist policy targeting an industry that is less important to the U.S. economy (e.g., chicken processing) is less problematic than a policy targeting an industry that is more important (e.g., semiconductors). In essence, such a report would marry the comprehensiveness of the "NTE" report with the "naming and shaming" function the "Special 301" report provides by unabashedly designating counties as Watch List or Priority Watch List countries.[73]

A Global Mercantilist Index would thus identify, assess, and rank those countries making the most extensive and damaging use of innovation-mercantilist policies. As ITIF found in constructing a similar index in its "The Global Mercantilist Index" report, China would likely be found the most significant purveyor of innovation-mercantilist practices.[74] For countries that perpetually appear on such a Global Mercantilist Index report, the United States Trade Representative's Office should require that the country develop an action plan for remediation. This would require a country to coordinate with U.S. embassy trade personnel in-country to develop an action plan for submission to USTR. The action plans would theoretically include proposed ideas and policies that indicate a commitment to a non-mercantilist strategy. Finally, not only should USTR begin to produce such a report, but USTR's proposed Office of Competitiveness should also push the WTO to issue a similar version of the report in order to provide an international lens on the issue.

Increase Resources and Staffing at USTR and Other Relevant Agencies to Reflect the Scale and Importance of the Task

USTR needs more resources if it's to effectively meet the growing challenge of innovation mercantilism, even as it works to develop new trade agreements and expand market access for U.S. enterprises. USTR has fewer than 250 professionals to negotiate new agreements and enforce existing ones. For 2017, USTR requested a budget for $59 million and 248 staff.[75] Yet this is not that different from USTR's 2008 budget request for $44 million and 225 staff.[76] USTR's budget is mainly for people and travel. In both regards, USTR needs more funding to put people in Washington, China, and Geneva, in part to coordinate with and travel to like-minded trading partners to develop policies and actions to resolve China issues; to fund people to focus on trade enforcement (both in Washington and Geneva); and to fund more frequent travel for D.C.-based staff to China and Geneva and to coordinate with like-minded trading partners to help address trade issues and build and execute enforcement cases involving China. As a comparison, USTR's budget is significantly less than the $86 million (2016) budget of the Department of Labor's International Labor Services program to protect workers outside the United States.[77] Put simply, USTR's budget is hardly commensurate with its role in shaping an issue of enormous consequence to the U.S. economy.

USTR should play a greater convening and coordinating role across the broad swath of federal agencies, including the PTO and Departments of Commerce, Treasury, and Justice, among others, that play important roles in contesting Chinese mercantilism.

Further, USTR's presence in China should be expanded, including new positions in secondary cities, such as Shanghai and Guangzhou. Beijing is one of the very few overseas postings maintained by USTR (the others being Brussels and Geneva), but the extent of U.S.-China trade issues suggests this presence needs to be substantially upgraded. The current USTR office at the U.S. embassy in Beijing only has two USTR officials (a minister counsellor and a deputy trade attaché) and two support staff. This is little changed from when USTR posted its first officer to Beijing—nearly a decade ago—in 2007.[78] USTR's budget for its office in Beijing has grown—from $400,000 in 2008 to $1.2 million in 2017—but this is miniscule in comparison with the trade issues being handled, the range and complexity of the issues, and the fact that these issues won't be resolved anytime soon. USTR should also expand its presence in Europe to be able to coordinate better with European capitals in Berlin, Paris, Rome, London, etc. The one official in Brussels should be fully subscribed dealing with EU matters, including on building what is already a good, but still basic, coordination pattern on China issues.

USTR makes the case for extra resources clear in its latest budget:

> The development of disputes with respect to the trade policies of China, however, requires a very significant commitment of time and resources to conduct Chinese-language research, translate uncovered legal measures, and analyze the WTO consistency of such measures. The nontransparent nature of China's trade regime makes these enforcement initiatives especially difficult, time-consuming, and resource-intensive.[79]

Accordingly, Congress should boost USTR's budget to at least $75 million, including providing resources to create an Office of Competitiveness within USTR. However, it's important to reiterate that increasing USTR's budget, while necessary, is not sufficient: USTR needs to better coordinate and leverage the capabilities of other key government agencies which play important roles in contesting Chinese innovation mercantilism and avoid what sometimes appears to be a "not developed here" policy that sometimes may not give as much attention to policy initiatives not originated from USTR.

Upgrade Trade Enforcement Capabilities and Strategy at USTR

The Trump administration should expand USTR's trade enforcement capacity. For instance, the ITEC team should be expanded, as its staff (of 22 trade analysts) would be stretched too thin to cover the full spectrum of current cases as well as a potentially bigger range of future cases.[80] Further, the White House should publish a national trade-enforcement strategy that reviews the adequacy of U.S. trade-enforcement mechanisms, with the goal of developing additional enforcement tools, focusing not just on China but also on the other worst-offender countries (notably Brazil, India, Indonesia, Russia, and Vietnam). The first part of this trade-enforcement strategy should be a concerted reemphasis on trade enforcement at USTR, including to assess and seek to bring cases that are perhaps riskier, or where U.S. industry isn't requesting a case but a case is in the interest of the United States overall. Unfortunately, USTR has let the balance shift away from enforcement for a number of reasons. One reason why is that it is simply easier to work on policy matters in cooperation with trade officials from other nations, especially to develop new trade agreements. Taking aggressive action against mercantilist policies is much harder. It's a natural inclination to want to play the "good cop" instead of the "bad cop" who is complaining, confronting, and pressing for change. Another is that creative and risky cases are hard to develop: it's easier when industry brings in all the facts and supporting information. This is why USTR needs to bolster the personnel and resources committed to enforcement.

The U.S. Interagency Trade Enforcement Center (ITEC) mobilizes resources and expertise across the federal government to develop and pursue trade-enforcement actions addressing unfair foreign trade practices.[81] Yet ITEC's budget of $9 million in 2015 was a pittance, and frankly, a bargain, compared with the value it produced for the American taxpayer.[82] ITEC's annual funding should be increased to at least $15 million per year. Congress should also direct increased funding to the U.S. Immigration and Customs Enforcement (ICE) and Customs and Border Protection (CBP) for much stronger border enforcement, particularly against illegal Chinese imports. The goal should be zero tolerance for Chinese imports to the United States that are counterfeit or otherwise illegal. The Chinese should know that if they take the time and effort to produce counterfeit or otherwise illegal products for export to the United States that they will not sell any in America.

Expand the Network of Intellectual Property and Digital Trade Attachés

To further support USTR, the Trump administration should ensure that the Department of Commerce deploys more staff overseas. The Department of Commerce should expand and upgrade its network of digital economy and intellectual property attaché positions in China and in other U.S. embassies around the world.[83] Given the number of ongoing concerns regarding both intellectual property and digital trade in China, both programs should have a substantive team of staff to help USTR and U.S. companies at the embassy and in consulates in secondary cities. Here, more attention is needed to what is happening in the Beijing district itself, because current Beijing staff are mostly focused on federal-level policy issues, but this can mean activity at the Beijing district level is neglected, which matters because more than half of the foreign IP litigation occurs in Beijing municipal courts. It's important that the these new attachés have the necessary skills and experiences, including the appropriate in-country language skills as well as a deep understanding of the IP, trade, and legal policies and issues (including US and Chinese IP laws) at play.

Furthermore, these staff need to be posted at suitably senior levels to ensure they have the status to access senior officials in a position to address relevant trade issues. For example, the highest rank an intellectual property attaché can go is "first secretary," which limits individuals' ability to participate in their own high-level routine meetings and while accompanying an ambassador or visiting senior officials. This may seem mundane, but when there are limited numbers of U.S. officials working on such trade issues, it is essential they are in the best position possible to assist U.S. businesses and assist in policy development.

USTR should compile a comprehensive "bill of particulars" listing all of the mercantilist actions China is taking, including all the ways in which it is not complying with the letter or spirit of WTO laws.

Inculcate a More Tech- and IP-Focused Foreign Commercial Service and PTO

U.S. export promotion efforts do not fully account for a critical basis of U.S. competitive advantage—U.S. technology and intellectual property. China's market conditions have changed considerably since its WTO accession, and it is highly capable of paying for foreign technology and IP (as opposed to stealing it). The Foreign Commercial Service should play a greater role in helping U.S. companies find and meet this demand (that is, to sell or license U.S. enterprises' technology or IP on fair, market-based terms).

The Trump administration should task the Department of Commerce with recruiting, training, and deploying U.S. Commercial Service officers (who are deployed to embassies around the world to help U.S. companies do business overseas) who are specialized in technology and IP issues, as this is an area where U.S. firms excel and where there is a large and growing demand for such goods and services, especially in China. The Foreign Commercial Service already has a good network of offices across China—in Beijing, Chengdu, Guangzhou, Hong Kong, Shanghai, Shenyang, and Wuhan—but would benefit from more resources focused on high-value-added technology and intellectual property.

Similarly, the U.S. Patent and Trademark Office should add a deputy director for international affairs. PTO currently has only one deputy director responsible for all purposes. It should add another deputy director to focus on international innovation and intellectual-property issues, similar to other offices that have an international affairs deputy director.

Develop Stronger Processes to Contest Chinese Innovation Mercantilism

Enhanced processes, particularly with regard to the trade-enforcement activities of the federal government, will be needed to complement the suggested organizational changes.

Elevate Trade Enforcement in the Interagency Process

U.S. trade agencies are often unable to respond to cases where China has broken trade rules because other government agencies—many with their own engagement with Chinese counterparts and agency-specific interests—veto stronger action. The growing range of issues discussed in bilateral engagement and the intersection of trade with many of these interests means that there are many agencies involved in the bilateral relationship. Each agency has its own specific interests in China, which are often either ignorant of China's economic strategy or have a desire not to rock the boat. Those agencies devoted to engaging with foreign nations on diplomatic, security, and financial concerns (such as the Departments of State, Judiciary, and Treasury) should be relegated to an advisory capacity in the interagency trade process. Enforcement should be left to those agencies that are equipped to do it best and have the largest stake in a strong and globally competitive U.S. economy, in particular, the Department of Commerce, USTR, and the new White House Trade Council.[84] For too long, trade enforcement has taken a back seat to other concerns. At the same time, the White House should make clear to cabinet secretaries in agencies such as Judiciary and Treasury that they should be spending more time and effort pushing back against Chinese mercantilism. A case in point is the DOJ antitrust division's singular lack of interest in speaking out and pressing China on abuse of the country's antimonopoly law.

Strengthen the Rules of Engagement in Negotiations With Chinese Negotiators

The increasingly diverse set of bilateral issues the United States has with China means that many agencies and officials have been drawn into the framework over time, making it difficult to have a single and consistent message and approach on key issues. If the bilateral framework for managing the relationship is not focused on getting outcomes on core issues, China will continue to rely on the disorganization of the U.S. government to use the complexity of the bilateral relationship to obfuscate and make minor trade-offs, all the while failing to focus on or respond to core U.S. interests.

The Trump administration should therefore prioritize issues, attention, and resources and weigh the value of each engagement based on progress toward outcomes. The ever-growing range of issues involved in the bilateral relationship is diluting and diverting attention from achieving outcomes on the most significant trade and economic issues at stake. The current bilateral framework for trade and economic issues—the U.S.-China Joint Commission on Commerce and Trade and the U.S.-China Strategic and Economic Dialogue, as well as the high-level cybersecurity dialogue—needs streamlining and strict management to ensure only core issues get addressed in the short periods in which senior officials are directly involved. Moreover, China all too often uses these forums as way to play a rope-a-dope, delaying strategy that would make University of North Carolina coach Dean Smith's fabled four-corners slowdown strategy look downright frenetic. Either there is real tangible progress from the Chinese government from these dialogues or the Trump administration should put them on hold until there is. And all agencies involved—from Agriculture to Treasury—should receive strict marching orders from the White House on strategy and tactics, so they are all working toward common goals, just as is the case with Chinese government agencies when they are involved in these dialogues.

Furthermore, the prevailing focus on presidential summits—though useful—threatens the ability to efficiently deal with the broad array of issues in the relationship. Too often, issues are passed up to respective leaders to resolve, as lower-level discussions prove unproductive. Such emphasis benefits the opaque Chinese system and China's strategy to delay and defer action, as the upward referral of issues is intended principally to stall and prevent progress. For the relationship to function, these lower-level dialogues should be expected to achieve results at a speed that reflects the maturity and capabilities of each side and which reflects the need for efficiency in addressing trade and economic issues that can have a significant impact during long, drawn-out processes that depend on the principals. Finally, U.S. officials must insist on meetings with Chinese interlocutors of equal rank and seniority; U.S. trade teams should walk out the door when Chinese negotiators of equal rank fail to appear, or when meeting requests are not answered in a timely fashion.

USTR should be more aggressive in initiating trade disputes, or using the threat of disputes, to change China's behavior, even in cases where it must launch disputes of its own volition, without industry initiating the request.

Bring More Trade Disputes at the WTO

The Trump administration should build on the previous administration's growing use of the WTO dispute-settlement mechanism to bring more trade cases. In his two terms, President Obama initiated 16 cases against China. To be sure, China is increasingly the focus of U.S. trade enforcement—since 2009, 11 of the 20 WTO complaints initiated by USTR were against China.[85] Despite this, more can be done.

As noted, many of China's policies violate the spirit, if not always the letter, of trade rules the country agreed to uphold in joining the WTO. In response, America often pushes back bilaterally rather than by initiating a trade dispute at the WTO. A contributing factor to the lack of more cases is that U.S. companies face the real threat of retaliation from the Chinese government if they provide evidence against it in a trade case. Nevertheless, USTR should bring more cases, whether industry supports them or not (assuming the facts can be adequately developed). In particular, USTR should be more aggressive in initiating trade disputes, or using the threat of disputes, to change China's behavior. USTR could also work to develop non-violation nullification and impairment cases, given that many Chinese policies undercut the benefits and rights the United States thought it was getting when it allowed China to join the WTO. The administration could also launch more cases related to notifications and transparency. For example, China fails to adequately and timely notify its subsidies, and China also regularly fails to publish measures in English, French, or Spanish before it implements them. In addition, more thought needs to be given as to whether and how to bring riskier cases. For example, in the standards area, China frequently adopts design requirements that violate principles of technology neutrality embodied in the WTO's Technical Barriers to Trade Agreement.

Another potential WTO case could concern China's continuing coerced technology-transfer requirements. The prospects for such a case would be greatly improved if U.S. law required notification to the U.S. government on a confidential basis of technology licenses to China and of transactions in China in which the Chinese government or Chinese government-affiliated entities are involved. When China joined the WTO in 2001, it agreed that foreign firms would not be pressured by government entities to transfer technology to a Chinese partner as part of the cost of doing business in China. China denies such practices by pointing out that they are not in writing. But government action in China can and does occur by informal "administrative guidance" and this is very much the case with coerced technology transfer. Not only does this continue to happen, it's actually getting worse, with Chinese officials insisting on transfers of more valuable technology. For instance, global auto brands are only allowed to manufacture cars domestically in China through joint ventures with local partners.[86] For example, China made General Motors' access to subsidies for electric-vehicle purchases contingent on the company handing over the IP behind its electric hybrid car, the Volt. Ford was forced to do the same.[87] In November 2016, Volkswagen was compelled to enter a joint venture (JV) if it was to be permitted to sell battery-electric and plug-in hybrid cars in China.[88] This is despite the fact that China promised to remove these types of measures at the JCCT in 2011.[89] Yet, USTR annual reports to Congress on China's WTO compliance continue to highlight its use of such discriminatory practices. Unfortunately, this shouldn't be a surprise, as China has explicitly outlined aims for domestic production in this sector, including through forced JVs and tech-transfer provisions, as part of its "Made in China 2025" strategic plan.[90]

Improve Monitoring and Transparency, Making Up for the WTO China Failure

Despite agreeing to do so when China joined the WTO, the Chinese government has consistently failed to provide the WTO and its trading partners with required information, translated into English (or another official WTO language), regarding policies related to trade in goods, services, intellectual property, subsidies, and foreign investment. Such transparency requirements may appear mundane and bureaucratic, but they are critically important to judging whether a country is abiding by its WTO commitments and whether grounds exist for a trade dispute. As noted above, USTR should bring a WTO case regarding this enduring lack of transparency.

Moreover, the lack of transparency is part of the reason why USTR needs more people on the ground: to better monitor Chinese government actions. The lack of transparency is part of the reason why USTR needs more people on the ground—to better monitor Chinese government actions. China's governance system is notoriously opaque, complex, and multi-layered with overlapping and often inconsistent national, provincial, and municipal government policies. While such an approach is unnecessary for most trade partners, there is as noted an ongoing need for more USTR officials in China, as USTR has repeatedly reported that many aspects of Chinese policy are hidden away in unpublished measures (including legally unrecognized normative or regulatory documents), oral directives, and Communist Party secret red letter documents. These transparency concerns extend to the provincial and municipal governments which also regularly fail to publish their measures.[91] Furthermore, China regularly fails to provide at least a 30-day period for public comment on drafts of trade- and economic-related regulations and rules as it agreed to at the U.S.-China Strategic and Economic Dialogue in 2008 and 2011. And Chinese agencies frequently adopt measures that take effect immediately when China's WTO obligations require it to allow comments by other agencies and then to translate the measures into a WTO official language and officially publish them before implementation, except in certain cases (such as emergency). Multiple USTR reports show that China's repeated failures to be transparent are part of a consistent pattern to avoid scrutiny for discriminatory and trade-distorting regulations rules and other measures involving subsidies, preferences, anti-competitive government practices, etc.[92]

China has consistently failed to provide the WTO and its trading partners with required notifications, translated into English, regarding its subsidy programs and other trade-relevant policies.

A specific example is China's extensive use of subsidies and its blatant disregard for WTO-required transparency regarding such measures, as well as its failure to release detailed information in the government's budget, the state capital operating budget (SCOB). Despite WTO commitments to submit regular notifications on what subsidies it provides, China did not file its first notification after WTO accession (in 2001) until 2006. Five years later, in 2011, it submitted a second notification for subsidies provided during the period 2005 to 2008. In 2015, it provided a third notification for the period 2009 to 2014. Beyond the delay, all three notifications were significantly incomplete and excluded numerous subsidies that the United States knows the Chinese central government provides, and none of these notifications included any of the extensive subsidies provided by provincial or local governments.[93] Since 2011, the United States has made formal requests (e.g., counter-notifications) for information from China regarding over 350 unreported Chinese subsidy measures. China has failed to provide a complete and comprehensive response. Furthermore, China fails to provide a period for public comment for new trade-related laws and regulations—as it agreed to as part of its WTO accession and (again) at the U.S.-China Strategic and Economic Dialogue in 2011. Multiple USTR reports show that this is part of a consistent pattern by China to avoid scrutiny for discriminatory and trade-distorting rules, regulations, and subsidies.[94]

This speaks to the need for a strengthened and emboldened USTR that can quickly respond to China's failure to abide by WTO transparency obligations and bilateral commitments. A revamped and properly resourced USTR, supported by strong interagency and U.S. embassy and consulate teams, should have the capability to identify, analyze, and publicly respond each and every single time China fails to play by the rules it has agreed to uphold. USTR can play a role in increasing transparency regarding China's innovation mercantilism, which the country purposely tries to obscure through the use of unaccountable federal or provincial government bodies issuing administrative orders or policies, sometimes informally, to foreign companies on a whole host of issues. This transparency focus should form part of a broader effort to build support among like-minded countries for a tougher response. The objective should be to not just rely on naming-and-shaming, but on identifying actionable cases. Literally, USTR should put out a statement each and every time China fails to deliver proper notification. And as noted above, USTR should go even further, by compiling a comprehensive "bill of particulars" listing all of the mercantilist actions China takes, including all the ways in which it is not complying with the letter or spirit of its WTO obligations, and then working to make U.S. allies, the media, and world aware of just how out of line Chinese policies are.

To complement larger USTR and Department of Commerce teams in China, the U.S. government should increase funding specifically for English-language translations of relevant documents, including key Chinese industrial-strategy publications. The language barrier adds another level of opacity around Chinese trade and economic policy. WTO reports on China's trade-policy regime have repeatedly stated that it was not possible to explain a Chinese policy or to confirm a statement made by the Chinese authorities because the underlying documents were only available in the Chinese language.[95] Yet China has an obligation to publish in a WTO language, and such a translation undertaking is not unique: the European Union translates all of its official documents, including those related to trade, into 24 languages, and other countries also have similar translation burdens (e.g., Canada, Belgium, and Switzerland).[96]

Enhance Application of Section 337 of the U.S. Tariff Act

U.S. companies not only face the challenge of protecting their technology and intellectual property from Chinese theft and forced transfer, but also from Chinese firms using this same technology and IP against them both in third-country (e.g., international) markets and even in their U.S. home market. The U.S. International Trade Commission applies Section 337 of the U.S. Tariff Act to fight these and other forms of unfair competition. Section 337 does not offer the ability to obtain monetary damages, but the ITC can issue exclusion orders that block a foreign product from entering the United States and a cease-and-desist order if the respondent continues to import the product in violation of the ITC's exclusion order.

Section 337 has become an important tool for U.S. companies to impede the importation of goods that use stolen intellectual property, including of patents, copyrights, registered trademarks, or even mask work.[97] Section 337 is a broad trade remedy, and while it does not specifically mention intellectual property, it has become an important tool for U.S. companies to impede the importation of goods that use stolen intellectual property. This flexibility is an asset in ensuring that ITC operations adapt to address ever-evolving unfair trade practices, (such as IP cybertheft). The need for this tool is evident from the ITC's caseload—in 2000, there were 25 active investigations; by 2005 this had risen to 57, and then increased again to 88 in 2015. In 2016 there were at least 117 active investigations.[98] This reflects the fact that the United States imports more and more technology-intensive products that rely on intellectual property.[99]

Section 337 has generally worked well, but could benefit from several enhancements in its application. First, the Trump administration and Congress should work to ensure that the ITC has the direction, resources, technical competence, and confidence to handle a broader range of IP-related cases, especially regarding trade secrets. As one complainant recently argued, Section 337 "never contemplated the technological advancements over the past 50 years."[100] Second, the Department of Commerce needs to broaden engagement with U.S.

small and medium sized enterprises (SMEs) and start-ups to ensure that a broader cross-section of companies is aware of Section 337. This matters because Chinese IP theft focuses on wherever the technology is based, whether in small or large companies. In line with this, the Department of Commerce should consider how the Section 337 process could be made easier for smaller firms to leverage.

Finally, as suggested by the Commission on the Theft of American IP, the current 337 process could be made even faster to prevent goods containing or benefitting from stolen IP from entering the United States. A speedier process, managed by a strong interagency group led by the Secretary of Commerce, could both prevent counterfeit goods from entering the United States and serve as a deterrent to future offenders. The speedier process would impound imports suspected of containing or benefitting from IP theft based on probable cause. A subsequent investigation would allow the importing company to prove that the goods did not contain or benefit from stolen IP.[101] As the Commission on the Theft of American Intellectual Property notes, "In an era in which the profitable life cycles of some goods and processes can be measured in days and weeks, the existing Section 337 process is in desperate need of overhaul."[102]

USTR needs to issue a statement every single time China fails to provide required notifications regarding subsidies it provides or measures pertaining to policies or regulations affecting trade in goods and services before they are implemented.

Create ITC Trade Enforcement Advisory Opinions

Congress should empower the U.S. International Trade Commission to investigate and issue reports on allegations of trade violations that U.S. companies claim are happening with trading partners, such as China.[103] Such ITC reports, in the form of a "Trade Advisory Opinion," would provide a valuable middle option along the spectrum—with bilateral talks at one end and WTO dispute cases at the other, thus shedding light on whether U.S. trade partners are violating trade rules and whether such a case is credible and worthy of a potential case at the WTO (e.g., for China) or under bilateral free trade agreements (for trading partners).

Congress could establish this process by expanding Section 332 of the Tariff Act of 1930, which allows Congress to ask the ITC to conduct general fact-finding investigations with respect to U.S. trade and competitiveness issues. The ITC has this responsibility, as it is an independent agency with a reputation for authoritative and objective assessments. Through this process, a U.S. company could file a detailed petition with the Senate Finance Committee and the House Ways and Means Committee requesting the ITC investigate whether a country is violating trade rules in a specific way and assess whether such violation generates a material economic effect (in terms of jobs, investment, and exports, etc.) on a company. If the committee leaders agreed, the ITC could review the claim, including by inviting the foreign government and other stakeholders (e.g., other companies in the sector) to comment. ITC would issue a determination within 120 days. The process would be transparent. The final report would only be an advisory opinion, and therefore would not obligate the administration to initiate a trade dispute case.

A Trade Advisory Opinion would prove a useful tool for several reasons. First, while USTR has consistently pressed other countries over alleged trade violations, and brought a number of cases before the WTO, the sheer number of trade agreements and alleged trade violations makes it too overwhelming for USTR to respond to each allegation. ITC has the expertise to manage such investigations, and its reports could help USTR determine which allegations to pursue at the WTO or elsewhere. Second, it would provide U.S. companies with an avenue to obtain a timely and thorough assessment of their claim. This may be particularly valuable when there is internal disagreement within a sector about whether a country is violating trade rules—those in favor would not be held back by others and could see whether they have a credible case. Third, USTR is in the awkward position of being responsible for both deciding whether a company's claim of a trade violation is credible and then prosecuting the claim. Fourth, it would provide Congress with an enhanced, but appropriately limited, role in trade enforcement. The ITC is an independent agency that would conduct its investigation in a transparent manner, thus testing whether the U.S. company was right in asking for an investigation.

Finally, an ITC review that found that there was a "reasonable basis" for a trade violation would clear a potential threshold for credibility, thus pressuring USTR to take action. Even if the ITC found that there was no reasonable basis, it would still be useful, as it would help USTR identify what information gaps it would need to fill if it did wish to initiate a case in the future. Either way, the information discovery, debate, and transparency process would be useful to politicians and policymakers in assessing whether China and others are living up to their trade commitments.

Revise and Use Discretionary Powers Under the U.S. Trade Act to Address Unfair Trade

Another approach the Trump administration could take involves using Section 301(b) of the Trade Act of 1974 (as amended) as leverage to either negotiate solutions to Chinese unfair practices that don't violate the WTO or to retaliate against China with WTO-consistent remedies, including for example to prohibit Chinese services investment in the United States not covered by U.S. WTO General Agreement on Trade in Services (GATS) commitments until China restores balance to the trade relationship. U.S. citizens can petition USTR to initiate an investigation (as United Steelworkers did in 2010 with regard to policies affecting trade and investment in green technologies in China) or it can start one itself.[104] If USTR determines that "an act, policy, or practice of a foreign country is unreasonable or discriminatory and burdens or restricts United States commerce," under 301(b) USTR can respond.[105] Subject to presidential direction and approval, the act allows USTR to "suspend, withdraw, or prevent the application of, benefits of trade agreement concessions," and "impose duties or other import restrictions on the goods of, and, notwithstanding any other provision of law, fees or restrictions on the services of, such foreign country for such time as the Trade Representative determines appropriate."[106]

As noted, many of China's actions clearly fall under the Act's consideration of what is "unreasonable." A policy is unreasonable if the act is not necessarily in violation or inconsistent with international law, but is otherwise unfair and inequitable.[107] Unreasonable acts include those which deny fair and equitable opportunities to set up an enterprise, fail to provide adequate and effective protection of intellectual property, systematically tolerate parties engaging in anticompetitive practices, or unfairly hampers trade in goods and services and cross-border data flows.[108]

The Act has a mandatory reciprocity provision whose aim is to achieve an overall balance in competitive opportunities in both markets. It does not demand strict equality in market access. As a Senate report on the Act noted: "The requirement for achieving equivalence of competitive opportunities within sectors does not require equal tariff and non-tariff barriers for each narrowly defined product within a sector, but overall equal competitive opportunities within a sector."[109] To achieve this, the Act allows USTR to enter into binding agreements with the offending country to eliminate or phase out such unfair and restrictive trade policies. If negotiations with the offending party fail to achieve an acceptable outcome, USTR may determine whether action is appropriate and if so, what action to take.[110]

U.S. antitrust policy has long been more active at defending the interests of consumers against predation by enterprises than it has been at defending U.S. companies and their workers from antitrust abuses instigated by other nations that harm the interests of those enterprises.

Measures used under Section 301(b) need to be carefully designed to minimize the possibility of a "tit-for-tat" response from China. It is U.S. practice (under the U.S. Statement of Administration Action for the Uruguay Round Agreements Act) to take any potential cases to the WTO if the policy or practice is covered by WTO rules.[111] However, the United States is free to act against policies or practices that are not covered by WTO agreements. One possible area for retaliatory measures is for services investment restrictions. But to help determine what actions would be possible (given U.S. WTO commitments), the Trump administration should require the "bill of particulars" to lay out which Chinese practices can be the subject of WTO disputes and which can be the subject of Section 301(b) actions. In the latter case, USTR, supported by the interagency process, needs to develop retaliatory actions that are WTO consistent. Many of these would lie within the purview and knowledge of other agencies, and their cooperation would be needed to develop ideas and assess them interagency.

Rethinking Key Policies Toward Contesting Chinese Innovation Mercantilism

From reconceptualizing antitrust policy to rethinking policy toward Chinese investment in the United States, several key policy reforms will be needed to better contest Chinese innovation mercantilism.

Rethink Antitrust Policy and Push Back Against China's Use of Antitrust Policies as a Tool of Industrial Policy

The United States will need a sophisticated rethink of its own antitrust policies as well as a deeper understanding of how China has abused its antitrust policies to advantage its own enterprises if America and its advanced industry enterprises are going to compete successfully with Chinese players. This is especially important given that China is creating large national champions in mostly export-based industries, meaning that competing with the Chinese in advanced industries will require even greater scale on the part of U.S. enterprises.[112]

Further, antitrust authorities will need to be careful to ensure that their actions do not inadvertently provide opportunities for Chinese firms to acquire divisions of U.S.

companies. We saw this with the U.S. Federal Trade Commission's recent requirement that semiconductor maker NXP divest its RF power business as a condition of its $11.8 billion acquisition of U.S.-based Freescale Semiconductor Ltd. This opened up the business for acquisition by the Chinese Jianguang Asset Management Co. Ltd., and just like that, U.S. technology capabilities went to China, courtesy directly of an action undertaken by the U.S. government. This was anything but pro-competition, and reflected a lack of understanding of the new nature of global competition in the technology industry.[113] Likewise, it is ironic and troubling that U.S. chipmaker AMD created a joint venture with China's Nantong Fujitsu Microelectronics when AMD owes its very existence to the requirement by U.S. antitrust officials for Intel to license its core technology to a U.S. competitor.[114]

The United States needs a sophisticated rethink of its own antitrust policies as well as a deeper understanding of how China has abused its antitrust policies to advantage its own enterprises.

These kinds of competition policy mistakes harken back to the 1950s and 1960s when U.S. antitrust authorities forced U.S. technology firms to compulsorily license between 40,000 and 50,000 patents.[115] Many of these patents ended up going to Japanese firms that were at the time significantly lagging behind their U.S. competitors, but with this technology gift from the U.S. government, they rapidly caught up to and then exceeded U.S. firms, costing the U.S. economy hundreds of thousands of middle- and high-wage jobs. We saw this again with AT&T, where transistor technology was licensed to Sony. The forced licensing of RCA's color TV patents was the single most important factor in the Japanese taking the color TV market away from its inventor, the United States.[116] Similarly, Xerox was forced to license its technologies, again handing Japanese copier companies the crown technology jewels. This aggressive competition policy enforcement blithely ignored the threat of global competition to the U.S. economy. With global competition even more intense today, and U.S. leadership much weaker, we cannot afford to copy the mistakes of the 1950s and 1960s.

Moreover, in antitrust circles, while there has long been "more agreement with regard to applying national rules to extra-territorial conduct that harms *consumers* within national markets, there is no such consensus concerning the application of national antitrust rules to extra-territorial conduct that harms the access of exporters to foreign markets."[117] Along these lines, in 1988, the Department of Justice issued guidelines indicating that it would not apply U.S. antitrust rules to overseas conduct that restrains U.S. exports, unless the conduct also harmed U.S. consumers. In other words, U.S. antitrust policy has long been more active at defending the interests of consumers against predation by enterprises than it has been at defending U.S. companies and their workers from antitrust abuses instigated by other nations that harm the interests of those enterprises. The Trump Department of Justice should take a more active interest in the latter and change these guidelines.

This is made all the worse because China's use of antitrust law as an industrial policy weapon poses a significant threat to many U.S. firms operating in China, as it provides the Chinese government with a large and flexible tool to target foreign firms for almost any reason. Indeed, China's 2007 antimonopoly law was designed to treat legitimately acquired intellectual property rights as a monopolistic abuse, with Article 55 stating, "This Law is not applicable to undertakings' conduct in exercise of intellectual property rights pursuant to provisions of laws and administrative regulations relating to intellectual property rights; but this Law is applicable to undertakings' conduct that eliminates or restricts competition by abusing their intellectual property rights."[118] And for the Chinese government, abuse means charging market-based IP licensing fees to Chinese companies. This provision has been used to take legal action against companies whose only "crime" is to be innovative and hold patents. Indeed, the Chinese law allows compulsory licensing of IP by a "dominant" company that refuses to license its IP if access to it is "essential for others to effectively compete and innovate."[119] And with Chinese courts largely rubber-stamping Communist Party dictates, foreign companies have little choice but to comply. And, all too often, complying means changing their terms of business so that they sell to the Chinese for less and/or transfer even more IP and technology to Chinese-owned companies.

Another challenge has been that China has abused the doctrine of foreign sovereign compulsion, along with principles of international comity, to justify anti-competitive behavior that has harmed U.S. interests, yet which U.S. courts have still upheld. For instance, in 2005, U.S. purchasers of vitamin C brought a case against Chinese manufacturers, alleging that the defendants conspired to fix prices and limit supplies of vitamin C sold on international markets from 2001 to 2005, allegedly resulting in tens of millions of dollars in damages to U.S. consumers. The Chinese manufacturers did not deny the allegations, but claimed the suits should be dropped because the Chinese government compelled their market-distorting conduct, citing the foreign sovereign compulsion defense: essentially the notion that U.S. courts have to acknowledge the laws of other nations. Although the vitamin C manufacturers were located in China and sold vitamin C on international markets, they were subject to liability under U.S. antitrust laws pursuant to the Foreign Trade Antitrust Improvements Act of 1982, which permits the application of U.S. antitrust laws to conduct involving foreign trade and commerce where "such conduct has a direct, substantial, and reasonably foreseeable effect" on U.S. domestic or import commerce.[120] A 2013 jury trial found the companies liable for price fixing and awarded $147 million in damages, marking the first time a Chinese manufacturer had been found liable under U.S. antitrust laws.

However, the case was appealed to the Second Court of Federal Appeals, and, as it had at the district court level, the Chinese government (specifically, the Chinese Ministry of Commerce) made an *amicus curiaie* submission, contending that the manufacturers were simply following Chinese government-mandated price fixing and that Chinese regulations required that they coordinate prices and limit supply. In September 2016, the Second Circuit threw out the jury's verdict, ruling that the Chinese vitamin C manufacturers weren't liable in U.S. courts for their anti-competitive behavior because they were acting under the direction of Chinese authorities. According to the Second Circuit, the companies:

> Were required by Chinese law to set prices and reduce quantities of vitamin C sold abroad and doing so posed a true conflict between China's regulatory

> scheme and U.S. antitrust laws such that this conflict in defendants' legal obligations, balanced with other factors, mandates dismissal of plaintiffs' suit on international comity grounds.[121]

In essence, the ruling concluded that foreign enterprises can't be found liable for their unfair trade practices if they are undertaken at the instruction of sovereign governments. Clearly there are a number of problems with this. First, the ruling potentially provides a free pass for foreign companies to violate U.S. antitrust laws, as long as they can claim their conduct is lawful in their home territory and was directed by the company's government.[122] Had the Justice Department pursued the case to begin with, or at least made an *amicus* filing in support of the U.S. plaintiffs, it is possible that they may have prevailed, because U.S. courts accord great deference to the United States. The facts were not clear that the Chinese government really mandated the price-fixing behavior (this was a key dispute in the proceedings), in which case the Chinese companies had some freedom to make their own decisions about their U.S. prices. The second is that the courts "considered and declined to credit the position expressed by the U.S. Trade Representative, which had complained to the World Trade Organization (WTO) that China has been fixing vitamin C export volumes and prices—the very position taken by the Chinese government in its submission and by the Chinese defendants."[123] The U.S. Second Court of Appeals gave more deference to a foreign government committed to mercantilism than to an agency of the American government. The courts should have given more deference to the executive branch of the U.S. government, which has traditionally administered foreign policy.

China's 2007 antimonopoly law was designed to treat legitimately acquired intellectual property rights as a monopolistic abuse.

A third problem is the Second Circuit Appeals Court's contention that "Not extending deference in these circumstances disregards and unravels the tradition of according respect to a foreign government's explication of its own laws, the same respect and treatment that we would expect our government to receive in comparable matters before a foreign court."[124] But this doctrine seems to presume that other nations' laws derive from democratically elected governments that follow open and transparent procedures for adopting the rules governments require companies to follow (akin to the U.S. Administrative Procedures Act), and so it would be useful for Congress to consider whether it's time to legislatively cabin in the ability of foreign governments to argue that ambiguous acts and policies are mandates under local law when they may well not have been at the time. Another possibility would be for the Justice Department's Antitrust Division in the Trump administration to pursue cases against Chinese defendants in which it argues that policies encouraging price fixing that affect U.S. commerce are not the same thing as requirements. Furthermore, if the vitamin C case is appealed to the U.S. Supreme Court (as appears likely), the Trump Administration may be asked for its views, and would then have first opportunity to draw the lines where they need to be, and in so doing correct this miscarriage of justice. It should also be pointed out that, while the legal principle of international comity is legitimate in so far as it goes, certainly U.S. courts should not be giving deference to anticompetitive Chinese laws if and when those very laws are in violation of the country's WTO commitments, which indeed are effectively legal commitments the government of China has made to the United States. The fourth and final problem is that American courts (like many neoclassical economists) may have a limited overall appreciation for the systemic threat of Chinese innovation mercantilism and recognize that China just might be intentionally abusing antitrust policies to serve mercantilist ends. But their job is to interpret the law, so again the burden lies with Congress and the Administration.

Another important Chinese government subsidies-related antitrust case is already on the Supreme Court's docket. On January 5, 2017, the trustee for a U.S. solar panel maker, now bankrupt, requested a writ of certiorari asking the Supreme Court to review the findings of the Sixth Circuit Court of Appeals upholding the U.S. district court which threw out the case.[125] The U.S. plaintiff, an innovative but now bankrupt solar panel manufacturer, alleged that a predatory pricing cartel operating in the United States by Chinese solar panel companies made possible by massive Chinese government subsidies was not properly considered by the court because they didn't allege "recoupment," meaning that the Chinese companies would recover their losses after driving the U.S. plaintiff out of the market. Normally cartels are per se illegal. And in this case the Chinese defendants are alleged to have been massively bank-rolled by the Chinese government, so that they could sell at a loss in the United States without ever needing to worry about recovering their losses. But the district court found, without conducting a hearing or discovery, (and the Sixth Circuit upheld), that a cartel that drops prices without intending to raise them subsequently does not cause harm that the antitrust laws were intended to address.

This case lies at the heart of how the Chinese government is able to insert itself into U.S. commerce in questionable ways. There is international agreement that government subsidies, especially those explicitly promoting exports, are especially harmful. Yet in China, due to a lack of transparency as to where government money flows, it is near impossible to trace the monies to the Chinese companies and bring subsidy cases at the WTO or countervailing duty cases before the Commerce Department and the ITC. It is possible that the Supreme Court will ask the solicitor general for the Trump administration's views about this case. If this occurs, antitrust, trade, and diplomatic agencies should provide their views to the solicitor general. In addition, the Trump administration should establish an interagency coordination process that includes all the relevant agencies in developing the administration's decisions on filing *amicus curiae* and in providing input to the solicitor general in court cases relating to trade and commerce. These matters are far too important—whether it comes to cases involving China or other countries—for there ought to be thorough reflection about what the interests of the United States are under existing law. Experts should also give consideration to domestic legislative changes that may be needed to address issues that fall in the gap between what U.S. law covers and what WTO disciplines address. Similarly, consideration is needed for how to ensure that America's FTAs and BITs, as well as WTO rules, have provisions that leave as few gaps as possible between trade, competition, investment coverage. Very recently, the

International Competition Policy Expert Group made useful recommendations along these lines.[126]

Several other actions are needed with regard to U.S. antitrust policy vis-à-vis China. First, the Trump administration's Antitrust Division should abandon its view that foreign antitrust actions deserve little scrutiny from the United States. As such, DOJ should become much more active at pushing back against Chinese antitrust policies that are used to unfairly target U.S. import and export commerce and which harm U.S. enterprises, and in bringing antitrust cases under U.S. law against Chinese defendants, including in cases in which the Chinese government may have had a role, or might appear in court. The Federal Trade Commission (FTC) should do the same. And the FTC should also leverage Section 5 of the FTC Act against Chinese defendants, including its use of unfair methods of competition and unfair practices mechanisms. In addition, DOJ and FTC should revise their merger notification rules to ensure that foreign government entities, like Chinese state-owned enterprises, must notify their acquisitions.[127]

U.S. FDI into China faces significantly different conditions than Chinese FDI faces in the United States.

Finally, Congress should pass legislation that allows firms to ask the Department of Justice for an exemption to coordinate actions regarding technology transfer and investment to other nations. This would be similar to the 1984 Cooperative R&D Act, which allowed firms to apply to form pre-competitive R&D consortia. One of the key levers China has is that it's a monopsonist: It is so large it can essentially compel foreign companies to hand over technology in order to sell their products in China. But if companies in a similar industry can agree that none of them will transfer technology to China in order to gain market access, then the Chinese government will have much less leverage over them. The same would be true if companies agreed that they would not invest in China until China improved its IP protections.

Ensure Reciprocity in Technology and Intellectual Property Licensing

Likewise, the United States needs a new regime to contest China's strict technology-licensing laws. Under Chinese contract law and technology import-export regulations (or TIER), a foreign licensor into China is obligated to offer an indemnity against third-party infringement to the Chinese licensee.[128] In other words, a foreign licensor licensing into China has to provide an insurance that practicing the licensed technology does not infringe any IP held by a third party. But, under TIER, this legal obligation only attaches to "technology import contracts." That is, this obligation only attaches to a foreigner licensing technologies into China; the Chinese licensor has no such obligation. This discriminates against foreign licensors. The foreign licensor is legally bound to offer something that the Chinese licensee is not, making it difficult for small companies, companies which may experience high litigation risks in China's litigious environment, and companies engaged in collaborative research and development (such as cross-licensing, open-source licensing, and charitable activities) to arrive at mutually beneficial licensing agreements. TIER makes it almost impossible for small companies, such as start-ups, to license their breakthrough technologies in China, because no start-ups (due to their limited resources) would be able to conduct the complex analysis required by China's high-litigation environment and industrial policies that limit the value of foreign IP in order to offer insurance against third-party infringement disputes. While large multinational companies could avoid this issue by licensing technology (e.g., through their China-based subsidiaries), start-up companies cannot do so because they typically do not have subsidiaries in China. Consequently, the impact of the mandatory indemnification requirement on small- and medium-sized companies, and especially start-ups, is particularly acute.

Another provision in TIER mandates that in technology-import contracts, improvements belong to the party making the improvements, which typically is the Chinese licensee. Thus, foreign licensors, including U.S. firms, cannot negotiate to own any improvements or share the improvements with Chinese licensees, even if both licensing parties desire for the improvements to be shared or owned by the foreign licensors. Moreover, TIER prohibits any technology-import contracts to "unreasonably restrict the export channels" of the Chinese licensee, thereby impeding the ability of the two licensing parties to allocate markets as they see mutually beneficial. Put simply, U.S. companies are obligated under TIER to let Chinese firms own the improvements and cannot freely negotiate market allocation with Chinese companies.

The United States needs a new regime to contest China's strict technology licensing laws, one that insists on reciprocity in the terms of technology and intellectual property licensing.

Overall, the relative disparity between China's production and exports of high-tech goods as well as its low level of utilization of foreign IP suggests that China is a severely under-licensed economy; addressing the inequalities of TIER could help improve this by ensuring that China deregulates contracts regarding the acquisition of U.S. technology. Conversely, the United States is the largest technology exporter in the world. This could help increase the value of these exports to China, which has substantially underperformed in its potential as a technology export market.

To address this discrimination, Congress should enact a regime whereby if Chinese entities seek licenses in the United States, then the Chinese enterprise must license on the same terms by which foreigners are required to license into China. Such legislation would specifically require the Chinese licensor to offer an indemnity against infringement by the U.S. licensee and to stipulate that the U.S. licensees are entitled to own the improvements they make and receive a reasonable market allocation under the licenses. Another possible approach would be for Congress to pass legislation requiring that the U.S. company whose original technology was improved by the Chinese entity receives an automatic exclusive license to use that improved technology [in the United States], such that the full potential of the original technology owned by the U.S. companies is not encumbered by improvements owned by the Chinese entity. Although technology-licensing law is usually a matter of state contract law, the legislation would be enacted pursuant to Congress's power to legislate international commerce. In addition, the provision should be drafted to be consistent with Article 40 of the Trade-Related Aspects of Intellectual Property (TRIPS) Agreement, as an effort to control abusive Chinese practices in licensing.

Finally, another way to protect and retain U.S. comparative advantage in advanced-technology industries would entail passing legislation requiring notification to the U.S. government on a confidential basis of technology licenses to China and of transactions in

China in which the Chinese government or Chinese government-affiliated entities are involved.

Reform FDI Review and Update CFIUS to Reflect the Nature of Chinese Government Influence

A core component of liberalized trade is liberalized foreign direct investment, yet it is clear that U.S. FDI into China faces significantly different conditions than Chinese FDI faces in the United States. As noted, in many cases, U.S. firms seeking market access in China, particularly ones with sophisticated technology, must engage in a joint venture with a Chinese firm. As one industry article advising U.S. companies wrote, "To participate in China's industry ecosystem, it is essential to establish connections with the stakeholders in China, such as government, customers, suppliers, and even competitors, and to seek opportunities in cooperation and development through mutual understanding and engagement."[129] With regard to the life-sciences market in China, an industry analyst writes that, "To enter the Chinese market, you may come in by licensing an asset, which we have done, or you can create a joint venture, which we have also done. But you cannot go in by yourself."[130] And as the U.S. Congressional Research Service reports, "The OECD's 2014 FDI Regulatory Restrictiveness Index, which measures statutory restrictions on foreign direct investment in 57 countries (including all OECD and G20 countries, and covering 22 sectors), ranked China's FDI regime as the most restrictive, based on foreign equity limitations, screening or approval mechanisms, restrictions on the employment of foreigners as key personnel, and operational restrictions (such as restrictions on branching, capital repatriation, and land ownership)."[131]

CFIUS should be used as a tool to identify and block noncommercially based foreign investments that on a case-by-case, and at an aggregate level, are acquiring control of key technologies that affect U.S. national security, including economic security.

Chinese investment in the United States faces vastly fewer restrictions. Because of this steep divergence, Congress and the Trump administration should insist on a level playing field, and mutual access should be a core principle. As a report on Chinese acquisitions of German firms noted, the "EU should emphasize … the need for mutuality: if Chinese firms are given free access to more and more 'crown 7 jewels' of German industry, China … would have to further open up their FDI regime and the possibilities for M&A in their territories."[132] In other words, as long as China restricts U.S. investment in China, largely to take technology, the federal government should feel few constraints to use stricter investment review as a tool to insist upon better behavior from the Chinese government.

Meanwhile, Chinese efforts to intentionally target U.S. advanced-industry enterprises across a range of high-value-added sectors only continues to intensify, meaning that the procedures of the Committee on Foreign Investment in the United States (CFIUS) need to be strengthened to ensure that Chinese entities, particularly those guided or backed by Chinese-government influence or funding, are not able to acquire U.S. companies or technology that could damage America's economic or national security. According to the Foreign Investment and National Security Act (FINSA) of 2007 (P.L. 110-149), CFIUS may conduct an investigation on the effect of an investment transaction on national security if the covered transaction is a foreign government-controlled transaction (in addition to if the transaction threatens to impair national security, or results in the control of a critical piece of U.S. infrastructure by a foreign person). CFIUS has worked fairly effectively in some technology areas, especially semiconductors, as attempted acquisitions of Fairchild, Micron, GCS, Lumileds, Western Digital, and Aixtron have been stopped either formally or informally.[133] However, it has not prevented all acquisitions. For example, a Chinese investor group bought Silicon Valley semiconductor firm ISSI in 2015.[134] Moreover, Chinese firms are getting more sophisticated about attempted acquisitions, including hiring the best U.S. legal, financial, and public relations talent to advocate for their U.S. technology acquisitions, and obscuring their involvement in U.S. shell companies, as they did with the attempted acquisition of Lattice Semiconductor.[135]

As such, there is a need for CFIUS reform. Congress should, at a minimum, update the charter of CFIUS to address the realities of modern-age state capitalism.[136] Other nations, and particularly China, have put in place coordinated strategies to systemically target key defense and industrial technologies resident in U.S. enterprises and attempt to acquire them by having state-owned or -financed enterprises purchase the U.S. entity, using the veneer that these are "market-based" transactions. Because the threat to both the U.S. defense industrial base and the U.S. industrial base is systemic, the charter of CFIUS needs to be updated to allow reviewers to move beyond case-by-case examinations to assess and gauge systemic threats and examine covered transactions in a broader context. They have arguably done this with semiconductors, but they should expand that scope. CFIUS also needs greater capacity to review attempted acquisitions by Chinese firms of small and young U.S. technology firms that might reflect promising future technology capabilities for the nation.

Moreover, CFIUS reviewers often do not have adequate time to complete a serious analysis, having only 30 calendar days to approve transactions or move them to a second-stage investigation (although there is an ability to extend an investigation for 45 days on top of the original 30). Therefore, Congress should increase the time period permitted for the initial CFIUS review and also better equip CFIUS with additional personnel and financial resources to support more thorough reviews. Congress should also require mandatory notification for deals involving state-owned or state-financed entities by countries of concern such as China and Russia. Attempted acquisitions made by Chinese state-owned enterprises should be blocked outright, as recommended by the U.S.-China Economic and Security Review Commission.[137] It's also important that as CFIUS committees consider whether the entity in question will come under "foreign control" that they consider "nontraditional" forms of control, such as joint ventures or novel licensing transactions that seek to achieve the same effect as the outright acquisition of a U.S. company. For instance, Chinese acquirers may be exploiting a loophole in CFIUS by designing licensing transactions that, when combined with the associated follow-on agreements that utilize U.S.–based assets to operationalize the licensed intellectual property, are substantively the same outcome as if the Chinese company had simply purchased the U.S. business that holds the intellectual property. CFIUS reform should make clear that these types of deals are "covered transactions" that could be investigated.

Finally, the CFIUS chair should be transferred from the Treasury Department to another department, perhaps the Department of Commerce. Treasury has an important role in tracking investment and other financial flows, but Treasury largely hews closely to the lines of the Washington trade consensus, seeing all or most inward FDI as an unalloyed good. Commerce is better suited to focus on the implications of a given foreign investment on the industrial economy and America's innovation system.

But while CFIUS reform is a minimum, Congress should move beyond the relatively narrow CFIUS process to create a more comprehensive foreign investment review process, as many other nations, including Australia, Canada, and the United Kingdom, have instituted. Indeed, a number of other nations have taken much more proactive measures to prevent the hollowing out of their key industries. For example, both South Korea and Taiwan have essentially banned Chinese acquisition of their domestic semiconductor firms. Under current law, CFIUS can only restrict investments that could adversely affect the United States' national security. As the civilian industrial base has become an ever-more central part of the defense industrial base, however, the current limitations on CFIUS need to be reexamined and a broader national-interest standard established. To be clear, the goal of any foreign investment review scheme should not be to give in to domestic protectionist interests, but to effectively differentiate between foreign direct investment that operates according to market-driven principles and that which operates according to state-directed, mercantilist principles. In other words, when a Chinese company, backed and directed by the Chinese government, attempts to buy an American technology company with the main goal of expropriating its intellectual property and moving it (or the company's operations) to China, that is clearly not in the interest of the United States. It would be important for any such expanded regime not to apply to investments from allies who are designated by the U.S. government as operating largely according to market principles (e.g., nations such as Canada, Germany, Mexico, etc.). Those would continue to operate under the current criteria of effect on national security. Rather, the more stringent review regime would be for nations that operate according to mercantilist principles.

A number of other nations have implemented a more comprehensive foreign investment review process to prevent the hollowing out of their key industries.

To govern such a differentiated regime, USTR could leverage a Global Mercantilist Index report (as suggested above) along the lines of ITIF's template report, which identified a number of variables (e.g., tariffs, IP protection, foreign equity restrictions) and ranked nations accordingly.[138] Not surprisingly China was one of two nations, out of 55, that ranked in the "high" category. In these cases, all inward FDI would at least be reviewed and potentially rejected if deemed harmful to U.S. innovation and competitiveness. If such a regime had been in place, for example, CFIUS would not have approved the Apex acquisition of the U.S. printer company Lexmark, given that Apex was accused of IP theft by U.S. printer companies and was backed by Chinese government money. Some will argue that instituting such a regime would just be emulating the Chinese and thereby closing our economy. On the contrary, it's doing exactly the opposite. It is about working to ensure that China rolls back its mercantilist policies. Indeed, if implemented properly, it would be a measure to improve the integrity of the global trade and investment climate.

Others might object that this will lead to overreach, perhaps blocking acquisitions of assets such as hotels because of false concerns about knowledge transfer. But clearly the current CFIUS review process has proven itself highly sophisticated and mostly capable of effectively analyzing knowledge-transfer risks. There is no reason to assume that a more encompassing review process would not also be of equal sophistication. But even if it were not, it would be better to make a few Type I errors (rejecting a hotel deal) than to make a large number of type II errors (not rejecting acquisition deals that take U.S. technology to China).

Address Chinese Currency Manipulation

The International Monetary Fund (IMF) commits member countries to "avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members."[139] Particularly notable are Articles VIII and IV of the IMF, which address members' exchange-rate obligations. Article VIII states that members shall not "impose restrictions on the making of payments and transfers for account transactions" nor engage in "any discriminatory currency arrangements or multiple currency practices." Article IV prohibits currency manipulation, which, since the 1970s, has been defined as protracted, large-scale official purchases of foreign exchange to gain an unfair competitive advantage in trade.[140]

But as the MAPI Foundation's Ernest Preeg notes, China has "heavily engaged in such prohibited manipulation" on a continued basis, making "more than $3 trillion of official purchases over the past dozen years, which is protracted and large scale by any conceivable definition of the term."[141] As Preeg notes, China "has been in gross violation of both Article VIII—through a tightly managed, undervalued peg to the dollar—and Article IV—currency manipulation through protracted large-scale official purchases of foreign exchange."[142] Similarly, The Peterson Institute for International Economics named China one of the world's 20 most egregious currency manipulators from 2001 to 2012.[143] This extent of currency manipulation can have a significant impact in bolstering a nation's exports, by helping to effectively lower their price on international markets (while making the exports of partner trade nations more expensive). It's why the IMF estimates that a 10 percent real depreciation in a country's currency is associated with a rise in real net exports of 1.5 percent of GDP.[144] There's little doubt that Chinese currency manipulation on a sustained and long-term basis has played a significant role in driving U.S.-China trade imbalances.

While China appears to have stopped keeping its currency artificially low since 2012, if China were to return to using such practices in the future the United States should consider linking full compliance with IMF Article VIII exchange-rate and Article IV currency-manipulation obligations to Chinese access U.S. markets. In such a case, the United States should be prepared to call for a WTO dispute panel under GATT Article XV, which obliges members not to use exchange-rate policy in a way that diminishes reciprocal access to markets for trade, in the process explaining how violations of IMF exchange-rate obligations simultaneously constitute an unfair import barrier and export subsidy.[145] Further, if and when the Trump administration takes up the TPP, it should ensure the agreement includes strong and enforceable prohibitions against currency manipulation.

Additional Actions to Confront Chinese Innovation Mercantilism

There are a number of additional actions various agencies of the federal government could take to better contest Chinese innovation mercantilism, including the following:

ITC Should Conduct More General Fact-Finding Investigations

The Trump administration should ask the United States International Trade Commission (under section 332 of U.S. trade law) to provide new and updated reports on major trade and economic issues that pertain to China, such as the effects of IP infringement and indigenous innovation policies, data localization, and restrictive services and investment requirements on the U.S. economy. The ITC should consider using its subpoena power as necessary to compel production of information due to fears that U.S. companies may have of retaliation if they cooperate with the ITC.

It has become too often the case that when Chinese officials speak of international cooperation to spur innovation, it is code for the transfer of U.S. scientific and engineering know-how to China at free or subsidized rates.

The Department of Commerce Should Publish Reports on Strategic Economic and Trade Issues Regarding China

The Trump administration should task the U.S. Department of Commerce with undertaking a comprehensive review of and preparing a report on China's "Made in China 2025" and Internet Plus initiatives, including their forced localization of R&D and manufacturing requirements, to determine their potential impact on domestic U.S. production and market access for U.S. firms.

Deny Use of the U.S. Banking System to Companies Benefitting From Stolen IP

As recommended by the Commission on the Theft of American Intellectual Property, the Secretary of the Treasury, upon the recommendation of the Secretary of Commerce, should deny use of the American banking system to foreign companies that repeatedly use or benefit from the theft of U.S. intellectual property.[146] Access to the American market is a principal interest of firms desiring to become global industrial leaders. Protecting American IP should be a precondition for operating in the American market. Failure to do so ought to result in sanctions on firms' ability to access U.S. financial markets.

Do Not Recognize China as a Market-Based Economy

Whether or not the United States recognizes China as a market-based economy or a nonmarket-based economy has significant implications, including in making key economic calculations of prices and costs estimated in antidumping and countervailing duty cases. The United States should continue to recognize China as a nonmarket economy. Moreover, Congress should enact legislation requiring its approval before China (either the country as a whole or individual sectors or entities) is granted status as a market economy by the United States, as recommended by the U.S.-China Economic and Security Review Commission.[147] China's continuing use of production and export subsidies, provision of below-market-cost inputs such as financing and access to land, continuing prevalence of state-owned or state-directed enterprises, and state-influenced procurement decision-making of SOEs and "private sector" firms alike (among other factors), as well as state planning around technology and intellectual property means the United States should continue to recognize China as a nonmarket economy.

The issue pertains to Article 15 of China's Protocol of Accession to the WTO, which allowed WTO members to "disregard Chinese prices and costs in antidumping cases and instead base the calculation of dumping margins using external benchmarks."[148] Specifically, Article 15(a)(ii) states, "The importing WTO member may use a methodology that is not based on a strict comparison with domestic prices or costs in China if the producers under investigation cannot clearly show that market conditions prevail."[149] Chinese officials have argued that this practice should no longer be permitted after December 2016, pursuant to Article 15(d) of the Protocol, which states, "In any event, the provisions of subparagraph (a)(ii) shall expire 15 years after the date of accession."[150] But, as Hufbauer and Cimino-Isaacs point out, Article 15(a) (which informs article 15(d)) only really disappears "once China has established, under the national law of the importing WTO Member, that it is a market economy."[151] (They also argue that there need not only be a binary choice between "market" and "nonmarket" economy.) Regardless, as this report has documented, China continues not to behave like a market-based economy, and should not be recognized as such.

Cut Off Scientific and Other Cooperation

The United States should cease scientific and other cooperation with China until its use of innovation-mercantilist practices dramatically declines. The U.S. government engages in extensive cooperation with China to help share valuable technology in areas such as energy, health, and agriculture. If the United States is serious about pressuring China to roll back its innovation mercantilism, these kinds of cooperative efforts send exactly the wrong message: You can engage in mercantilist practices with impunity, and we will still cooperate with you scientifically. At a minimum, the standard U.S. Science and Technology Agreement with China should address the problem that China's technology-import regulations mandate that the Chinese party owns improvements to the technology and that these provisions are nonnegotiable.[152] For instance, the U.S.-China Clean Energy Research Center's (CERC) Technology Management Plans state that participants shall negotiate in good faith to provide nonexclusive licenses for IP developed on joint projects with participants in the other country, as well as with third parties who are not participants. Yet, "according to agency officials, this has not been the case in previous science and technology agreements between the United States and other countries."[153]

It has become too often the case that when Chinese officials speak of international cooperation to spur innovation, it is code for the transfer of U.S. scientific and engineering know-how to China at free or subsidized rates.[154] Yet the expectation from the Chinese side is that this should happen regardless of China's ongoing innovation mercantilism and discriminatory approach to foreign technology and trade.

CONCLUSION

China's aggressive and unrelenting innovation-mercantilist policies pose a serious and growing threat to both the U.S. and global economy as well as to advanced-technology enterprises from the United States and other nations competing on rules- and market-based terms. Even if China fails to achieve its robust ambitions for significantly greater global share in advanced-technology sectors, to the extent it seeks to reach that goal through mercantilist practices, those policies inflict significant harm on the global innovation system and advanced-technology enterprises. So it's not even a question of whether China succeeds or not (although too many pundits too readily dismiss China's likelihood of doing so), it's a question of whether China is playing by the rules it has agreed to. China's continued use of these discriminatory and restrictive policies will only recede in the face of a concerted response led by America, but including its allies, insisting that this behavior is not consonant with the international commitments China made in joining the WTO and IMF. These countries should let China know it risks serious consequences by persisting down this path.

China's continued use of these discriminatory and restrictive policies will only recede in the face of a concerted response led by America, but including its allies, insisting that this behavior is not consonant with the international commitments China made in joining the WTO.

Defenders of the status quo or apologists for China will raise a host of objections to any policy regime that means getting tougher with China. One objection will be China may no longer work with us on climate change. But why should America sacrifice its economic prospects to get China to do what it should do and is also in its own interests: fighting climate change. Likewise, some will say that we don't want to start a trade war; after all, U.S. companies could be hurt. But it's clear what inaction means in the current one-sided trade war: U.S. companies and their U.S. workers will be hurt, not just now, but in a decade or more as Chinese firms dominate global markets and put U.S. companies out of business, as they did with U.S. solar-panel companies over the last decade. Moreover, as we stress, the goal should be constructive, alliance-based confrontation, not vitriolic punishment sure to produce a similar reaction from China.

A corollary to this fear is that we shouldn't fight back if it entails a risk that consumers might no longer get cheap goods from China. But this is essentially saying that there should be no near-term sacrifice by Americans to help preserve the global trading system. Yet when John F. Kennedy promised that Americans would "pay any price, bear any burden" to "assure the survival and the success of liberty," pundits didn't complain that this would mean higher taxes and less consumer spending. Today, as the United States pushes for more market-based trade from China, it's no different. Besides, if the United States does not act now, consumers will pay a price, just not now, but in a couple of decades when the U.S. dollar will have to fall dramatically in order to have any chance at being competitive with the dominant Chinese economy. A variant is that if we engage in constructive confrontation our exporters will be hurt and that U.S. firms need the Chinese export market.[155] But the reality is that we would be exporting hundreds of billions of dollars more of goods and services to China if the country rolled back its mercantilist policies.

In summary, this report has laid out a number of policy responses the Trump administration would be well advised to consider and implement. However, we recognize our recommendations are a contribution and not the last word. Accordingly, this report's most important recommendation is that the Trump administration recognize the vital importance of U.S.-China trade and economic issues and focus on the full use of existing tools and on the need to identify and develop new tools where needed. This will be necessary to ensure that U.S.-China trade is conducted on a level (and market-based) playing field that embodies core principles of national treatment, transparency, and reciprocity.

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private enterprises. Furthermore, it is difficult to apply typical differentiating labels in China, such as market vs. non-market and private-led vs. state-led. The six elements are: the state (SASAC) as a corporate holding entity; state control of financial institutions; state control over planning and inputs (NDRC); Chinese-style corporate groups and affiliated networks; Communist Party involvement and control; and the intertwined nature of private enterprises and the party-state. Although China has become more transparent and market-oriented than it was prior to WTO accession, it has not converged along the lines of either a market economy or one of the alternative structures seen elsewhere in the world, such as a command economy, a "transition" economy from command to market-based, or the conglomerate-led structure of East Asia. Hence, the China Inc. model remains a distinct form of its own.

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