

Why and How to Mount a Strong, Trilateral Response to China's Innovation Mercantilism

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The United States, the European Union, and Japan must band together in stronger trilateral partnership to pressure China into rolling back the mercantilist trade practices it uses to grow advanced, innovation-driven industries.

KEY TAKEAWAYS

- China first used mercantilist policies to gain advantage in low-cost, labor-intensive manufacturing. Now it's doubling down with a formula of "innovation mercantilism 2.0" to dominate a wide array of advanced industries.
- Without aggressive action to stop China's innovation mercantilism, leading economies in Europe, Asia, and North America will face a crushing wave of unfair competition—and have fewer jobs as a result—in everything from aerospace to AI.
- China has progressed economically and technologically such that it no longer fears bilateral pressure. But it sees collective action as a real deterrent. So the United States, the EU, and Japan mush band together in stronger trilateral partnership.
- The existing framework for U.S.-EU-Japanese cooperation—the Trilateral Meeting of Trade Ministers—has shown early progress and can serve as a foundation for the parties to embark on a stronger, broader, more proactive agenda.
- The goal in pushing back against China is not to punish or isolate it economically, but to compel it to more faithfully abide by the global, rules-based trading system.

OVERVIEW

China's systematic "innovation mercantilism" is a threat not only to the world's major economies—particularly to the European Union, Japan, and the United States—but also to the very soul of the global trading system. Yet while China has imposed its corrosive and harmful economic and trade policies on the world unilaterally, it would be impossible for any other nation, acting on its own, to mount an effective response. China has proved that it is undeterred by the threat of economic nationalism, even on the part of the United States, just as it is unphased by transactional deals and ad hoc trade disputes with the European Union and Japan at the World Trade Organization (WTO). In fact, the last few years have seen China doubling down rather than reforming as it continues its quest for global dominance across a wide array of advanced industries that, once lost in an affected nation or region, are virtually impossible to resurrect. The impact of this "innovation mercantilism 2.0" phase will be more profound compared with China's earlier focus on low-cost, labor-intensive, manufactured goods. As such, it is time for the European Union, Japan, and the United States to band together in a stronger trilateral framework to address the various ways China rigs, manipulates, and distorts markets.

INTRODUCTION

The last few years have seen a seismic shift in views toward China's mercantilism in the United States, the European Union, and Japan. This is most clear in issues around nonreciprocal market access, predatory state-funded and state-directed foreign investment, forced technology transfers, and theft of trade secrets. To its credit, the Trump administration has taken the lead in highlighting China's harmful policies, and tried to use mainly bilateral leverage in getting China to change its approach. While the European Union and Japan may not like the rhetoric or the tools it is using, both agree with the Trump administration's central point: China has not been living up to the rules it agreed to when it joined the World Trade Organization (WTO)—and in fact, has been moving away from becoming a more market-based economy—and that this has to change. The three parties need to recognize they must work together via a stronger, more comprehensive, and more proactive trilateral framework, as this is the best way to address the full spectrum of issues raised by Chinese innovation mercantilism. While China has progressed enough economically and technologically that it no longer fears bilateral points of pressure, it still sees collective action via a stronger trilateral framework as a real threat to its mercantilist strategy.

Stronger trilateral cooperation is needed today more than ever as the challenge regarding Chinese mercantilism going forward is different than it was over the last 15-plus years. That challenge was largely to low- and mid-tech manufacturing, wherein Chinese policies weakened traditional manufacturing in developed countries.² Given China's "Made in China 2025" industrial development strategy and panoply of other mercantilist trade and economic policies, it is no exaggeration to suggest that without aggressive, coordinated action, leading economies in Europe, Asia, and North America will, within two decades, likely face a world wherein their advanced-industry firms face much stiffer competition and have fewer jobs in industries as diverse as aerospace, automobiles, biopharmaceuticals, chemicals, electronics, digital media, Internet services, machine tools, semiconductors, and others.³ Policymakers in all three regions need to realize that the potential for China to fulfil its innovation mercantilist goals—and thus undermine their own advanced technology firms and sectors—is real and growing.⁴ If EU

member states, the United States, and Japan, as well as all other countries, want the opportunity to benefit from their own efforts to support the development of advanced industries in their home countries, then they need to be paying much more attention now.

While China has progressed enough economically and technologically that it no longer fears bilateral points of pressure, it still sees collective action via a stronger trilateral framework as a real threat to its mercantilist strategy.

To be clear, the objective of a stronger trilateral strategy is not to punish China. Nor does this strategy seek to hold back its economic development, despite the fact the Chinese leadership will spin it that way. Indeed, it is in the United States', Japan's, and Europe's own interests to have China increase its citizens' per-capita incomes. However, how China goes about achieving this goal is a legitimate concern for other nations given China agreed to shared principles, and a broad set of rules, in joining WTO. Therefore, the goal is to use a collective, rules-based response to address the many modern trade issues raised by China's mercantilist practices, which would form the basis for a revitalized global trading framework. This will involve using and enforcing existing WTO rules and processes in parallel with the development of new rules, processes, pressures, and norms (taking into account what gaps the former shows for the latter). The success of trilateral deliberations will be central to the three parties' shared goal of restoring a genuinely open, innovative, and market- and rules-based global trading system.

Established in December 2017, the current framework—the Trilateral Meeting of Trade Ministers—has shown early progress following its initial five meetings. Without explicitly naming China, trade officials have discussed some core issues raised by Chinese innovation mercantilism, and made progress toward developing tangible outcomes on some of them. This potential early harvest points toward the utility of a broader, formal, and proactive agenda and set of engagements—in addition to those already underway with respective trade agencies. China has followed the trilateral discussions closely as it rightly realizes the potential implications.

It is by no means assured that an effective trilateral framework will lead to a rolling back of China's mercantilist model. China may well only change strategic direction in response to domestic concerns, and therefore be impervious to external pressure. However, the three parties can certainly limit China's policy options (and their effectiveness) by targeting those that have negative trade and economic consequences for the global trading system. This is where the three parties have the ability to shape and control the agenda. If new rules, norms, and mechanisms are agreed to and enacted by the three parties and their likeminded partners, the onus shifts to China and whether it wants to be a more responsible, rule-abiding, and constructive member of a modernized global trading system. If China continues to flout the rules, and refuses to respond to shared concerns about improving the global trading system, the case for more systemic changes to that system will at least be clear.

In this contest, China has several key advantages: its massive market size, state control of virtually all aspects of the economy and society, and an incredible "bank roll" to use to play nations off against each other. Nations know that if they "cut a deal" with China they can benefit—at least for a while until China no longer needs them—and avoid retribution that can come from challenging Chinese mercantilism. This "prisoners' dilemma" is real and by no means

easy to solve. It will require political courage and leadership, as well as keeping the focus on China instead of fighting battles between trilateral partners—such as unilateral, extra-WTO threats of tariffs on automobiles and steel. But if the three nations/regions can remain strong in their resolve to craft a lasting partnership, it will be easier for other nations, such as Australia, Canada, India, South Korea, and the United Kingdom, to join.

This report is not about Chinese innovation mercantilism tactics per se, which the Information Technology and Innovation Foundation (ITIF) has long reported extensively on in past reports and submissions. Rather, this report starts by arguing the case that addressing China's mercantilist policies should be a strategic imperative for the United States, Japan, and the European Union—and a stronger trilateral framework is the most effective way to address these policies. This report highlights some issues already being discussed under the official-led trilateral trade framework, while suggesting other issues worthy of trilateral cooperation and coordination. It then analyzes three core challenges to effective trilateral cooperation—letting bilateral issues undermine or overshadow the need for trilateral cooperation, the likelihood of a punitive response from China, and the need to differentiate between protectionism and prosecution—and how the three parties should address and mitigate these concerns.

Addressing China's mercantilist policies should be a strategic imperative for the United States, Japan, and the European Union—and a stronger trilateral framework is the most effective way.

In summary, we advocate that the governments of the European Commission (and EU member states), Japan, and the United States take the following steps:

- Recognize the strategic imperative that is addressing Chinese innovation mercantilism, and that a stronger trilateral framework is the best vehicle for these three major economies to try to affect change in China's policy. This is especially vital as the next phase of Chinese innovation mercantilism will have a much larger impact on advanced technology sectors in these economies. These sectors are key sources of global innovation and productivity (and as part of the defense industrial base), and once lost, are much harder, if not impossible, to rebuild (as compared with low-cost manufacturers affected by the first phase of Chinese mercantilism). These parties should put aside most of their long-running bilateral trade disputes—to be sure, many of them instigated by the Trump administration—and remove recent unilateral, non-WTO-sanctioned trade actions against each other, so the parties can focus on the larger systemic risk posed by Chinese mercantilism.
- Recognize that a rules-based framework has to be at the heart of these nations' response to Chinese innovation mercantilism. Doing so would reiterate their commitment to central principles of WTO, such as nondiscrimination and comparative advantage, China has disregarded. These would form the foundations for deep reforms that aim to build a transparent, innovative, enforceable, and market-driven global trading system that reflects the modern nature of trade.
- Use WTO—to the fullest extent possible—to combat Chinese innovation mercantilism.
 The three parties should first coordinate a collective "bill of particulars" to use as part of challenges to both specific measures and systemic matters, especially on the case of the

non-violation impairment of benefits. The three parties should continue joint efforts to improve transparency requirements, and remedies against member countries that fail to live up to them. Despite its flaws, and the fact that success is not guaranteed, it's worth the three parties giving a good-faith, collective, and sustained effort to pursue countermeasures to China's innovation mercantilism within WTO. At the same time, these countries should engage in a transparent and high-level dialogue to acknowledge that, as currently structured, WTO is not designed to be fully effective in disciplining state-capitalist economies that operate without the rule of law.

- Establish formal meetings between relevant agencies to exchange information and discuss cooperation on defensive mechanisms to address predatory, nonmarket-driven Chinese trade and economic activity, including foreign investment screening, export controls, intellectual property (IP) theft, counterfeit goods, and access to financial markets. Each member has made legal reforms and pursued certain cases in recent years that highlight potential areas for greater cooperation and policy alignment. Formal cooperation in these areas will be key to limiting China's ability to "divide and conquer."
- More consistently and forcibly respond to cases wherein China enacts new barriers to trade, especially those related to advanced technology sectors. This should be done through respective embassies in China as well as officials in respective capitals.
- Negotiate common rules and principles around data flows, privacy, and digital trade. This process should run in parallel to ecommerce negotiations at WTO, as the issue and its outcome are too important—and fraught with potential failure—to leave to the combative give and take of plurilateral negotiations. Also, given China's intransigence on these issues, it is simply not realistic to see how China can be a part of negotiations for a truly ambitious agreement. However, working out a reasonable compromise in which the three parties can create a thriving digital trading system is critical.
- Finalize and enact new, stronger trade rules for each party to enact in their own trade agreements (with the goal of building toward new multilateral rules) in order to prohibit forced technology transfers and market-distorting subsidies, including for research and development (R&D).8 The trilateral parties are reportedly close to ratifying a set of rules and norms about relevant investment and services-market regulations, good regulatory practices, and text for each party to use in new or revised trade agreements, bilateral investment treaties, and other legal agreements with trading partners.
- Work together to ensure international technical standards for artificial intelligence (AI), robotics, self-driving vehicles, the Internet of Things, and other new and emerging technologies reflect WTO rules and continue to be set in open, industry-led, consensus-based standards-setting bodies. The goal should be to ensure international standards are not country or region specific. The European Union must mirror these guidelines to ensure its regional approach to standards reflects the rules and principles it wants to see in China. The three parties should also push back against China's use of unique domestic standards as a barrier to trade, and monitor how China tries to export these standards as part of commercial transactions and government engagement.

• Work together to adjust, curtail, and cut off scientific cooperation related to Chinese innovation mercantilism and military objectives. 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 foreign scientific and engineering know-how to China for free or at subsidized rates. In the defense space, China's military is taking advantage of the collaborative and open nature of scientific research at Western universities, with its personnel gaining specific skills and knowledge in strategic and emerging technology sectors such as quantum physics, signal processing, cryptography, navigation technology, and autonomous vehicles.

THE CASE FOR A STRONGER TRILATERAL FRAMEWORK TO CONFRONT CHINESE INNOVATION MERCANTILISM

A comprehensive and active trilateral framework between the European Union, Japan, and the United States represents China's greatest fear, as any outcomes would essentially represent new global norms, rules, and actions on issues that target its mercantilist economic model and trade practices. For Chinese officials, bilateral trade disputes (between the United States and China, the EU and China, etc.) do not pose a significant challenge to its economic model and trade policies, as within this bilateral context, China can more easily avoid, deflect, deceive, delay, and dilute its responses and commitments.

This is why this fight cannot be about individual tactics, for the Chinese government has shown itself to be adept at abandoning certain tactics when they become discredited globally, then becoming hydra-headed-like, adopting multiple new tactics in service of its overall mercantilist strategy. A trilateral framework is needed to focus not just on tactical wins, but more broadly on rolling back the entire Chinese innovation mercantilist system and getting China to finally become a responsible player in the rules-based global trading system. This does not, as some have claimed, mean the demands are for China to abandon its state-owned enterprises and industrial policies. In part because of its current phase of development, and because it is ruled by the Chinese Communist Party (CCP), China clearly will not transform into some free-market paradise. However, it is realistic and reasonable to demand that China play by the same general rules as every other WTO member and their firms. And if China is unwilling to do this, then it needs to leave WTO.

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There has been a fundamental shift in views toward China's mercantilism in the European Union, Japan, and the United States in the last few years, which provides the context for a stronger trilateral framework. To its credit, the Trump administration has led the charge in recognizing the threat of Chinese mercantilism, and that a new U.S. strategy is needed. Japan is very much aligned with the administration's views on Chinese mercantilism, especially as it relates to advanced technology sectors, because they see the threat directly.

Europe has taken longer to recognize and react to Chinese innovation mercantilism, but a growing number of policymakers and business representatives at the EU and member-state level

are now much more aligned, not with the Trump administration's tactics, but with its core view. This is not withstanding the fact that some nations (such as Germany) are still committed to setpiece, issue-by-issue bilateral engagements, while some others (such as Italy) have appeared to take the position of capitulation. The EU communication "EU-China – A strategic outlook" reflects this, stating that "there is a growing appreciation in Europe that the balance of challenges and opportunities presented by China has shifted," and among many things, China is "an economic competitor in pursuit of technological leadership, and a systemic rival promoting alternative models of governance." Building on this paper by outgoing European Commission president Jean-Claude Juncker, incoming EU president Ursula von der Leyen made clear she wants to "define" the bloc's future relationship with a "more self-assertive" China and that the she will lead a "geopolitical commission" to address this challenge. The European Commission is developing proposals to submit to the EU on how Europe can better compete with China's national economy. Again, it bears repeating, the complaint is not that China is becoming a more-robust competitor that will give foreign firms a run for their money, but rather how China is going about doing this.

A stronger trilateral framework can play a crucial long-term role in revising and reshaping the rules-based global trading system such that it is better able to respond to innovation mercantilism and protectionism. This will be needed even if, by some chance, there is a reasonably strong bilateral agreement between the United States and China, because many of the underlying structural issues that underpin China's innovation mercantilism—especially toward nations other than the United States—will remain and need to be addressed. The time when the United States or the European Union alone could expect to bring enough pressure to bear to get China to make substantive changes to its economic and trade policies has passed.

Past experience shows that any commitments China makes as part of new bilateral or multilateral deals are more often than not undermined through nominal measures, plays for time, and/or obfuscation. (In this regard, it is noteworthy that in response to complaints about the mercantilist nature of much of the "Made in China 2025" program, the government's response was not to roll it back, but rather to direct officials to stop talking about the program and relabel parts of it.)¹³ More broadly, sustained pressure is necessary to ensure full and ongoing implementation of past and future commitments. For example, even if China does make commitments on legal, regulatory, and market access changes as part of a deal with the United States the trilateral parties will all have a vested interest in ensuring China actually fully implements them (given their firms all stand to benefit from any rule changes). In this way, the trilateral parties can more effectively push to ensure China fulfils at least a larger share of the commitments it has already made in joining WTO (as well as other agreements and bilateral engagements) in addition to commitments it makes as part of future agreements.

To be clear, the goal of a stronger trilateral framework is not to punish or hold China back, but rather to ensure it plays by the rules and principles that underpin the global trading system. China's goal of making high-value-added industries a larger part of its industrial structure is legitimate—and one many countries aspire to—but again, the problem is it goes about this in ways that breach both the spirit and the letter of the global trade system; and China's size, impact, and government power are beyond that of any other country that has used part of its mercantilist playbook.

The Chinese government knows it will take many decades or more to seriously close the gap with global leaders if it improves its ability to innovate and compete in a fair and "natural" way. Most of China's firms and universities are just too far behind to seriously catch up any time soon through organic and fair means. For China to attain global competitive advantage in virtually all advanced industries requires significant "learning," as the production "recipes" to make, for example, a widebody jet, computer chip, genomics sequencer, robot, or biotech drug are incredibly complex and cannot be obtained from scholarly journal articles or other widely available sources of technical knowledge. Firms from the European Union, Japan, and the United States gained competencies and leadership in these and a host of other industries the hard way: trillions of dollars of investment in R&D, production investment and testing, workforce training, and other areas in order to master incredibly complex products and production systems.

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The key to understanding China's economic and trade policy is to realize it wants to speed up or skip this transformation process through unfair and market-distorting economic, trade, and financial means. China is able to do this at such a rapid speed because all related activities are supported by state backing in the form of protected markets and government subsidies—which are critical, as both enable Chinese firms to absorb large early losses before their product quality and process efficiency achieve something close to global parity, thereby allowing Chinese enterprises to gain market share in the protected Chinese market initially, and ultimately in global markets. Furthermore, China has embraced a multifaceted set of policies and programs to obtain the knowledge it needs from foreign producers, including theft of IP, forced joint ventures and technology transfer as a condition of market access (even if such requirements are never put down on paper), and state-subsidized purchases of investments in foreign advanced industry firms. 14 Once Chinese firms obtain the necessary technology, the government proceeds to lavish subsidies and other benefits on these firms—especially China's national champions—so they can improve competitiveness and achieve scale. 15 These firms then abuse trade-rule loopholes (or just ignore them). Ultimately, they enjoy massive subsidies that help them compete in open foreign markets, while the Chinese government restricts foreign firms from entering and competing in China's market.

Moreover, it's not simply that China wants to support higher-value-added activity in advanced tech sectors, but that the goal is to be achieved principally by Chinese firms. In contrast to certain 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 as a means to an end—transferring technology and know-how to Chinese firms. Indeed, China's growth strategy is predicated on indigenous innovation mercantilism and having Chinese firms dominate global markets. It's this mercantilist strategy, and its various components, the trilateral parties need to focus on addressing when working together to update domestic and international rules.

This Phase of China's Mercantilism Is Different: Losing Advanced Tech Industries Is Much Worse

The trilateral parties need to step up efforts to roll back Chinese innovation mercantilism, as the next phase of China's economic strategy—to capture ever-growing global market share in high-value-added, advanced technology sectors—will be (even) more destructive, as it involves competencies and ecosystem structures that are extraordinarily difficult to resurrect once lost. There is no reason to believe, as many in the West do, that China will not be able to effectively challenge advanced technology nations. Most of the rationales proffered—China is not creative, China is a copier, the state can never succeed in driving innovation—fall by the wayside with even the most cursory analysis. Moreover, if this is true, how did the "Asian tigers" rapidly evolve from copiers to innovators, as they exhibited many of the same characteristics as China. But there are critical differences between the "tigers" and China, including China's lack of transparency and rule of law make it much harder for its trading partners to discipline (through WTO) its rise; its massive size gives it enormous leverage over foreign enterprises; and the depth and breadth of its innovation mercantilist arsenal is vastly larger than anything nations such as Singapore, South Korea, or Taiwan ever amassed. 16

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Policymakers need to realize the impact of China's success in moving up the value chain (in large part due to unfair means) is markedly different from the process of losing more commodity-based, low-skilled industries to China in the 2000s. The basis for competition in many of these sectors is the cost of production, which is affected by the cost of key inputs (such as labor and land) and related factors (such as currency valuations, tax breaks, and other subsidies). However, the competitiveness of advanced technology sectors in the European Union, Japan, the United States, and many other economies is based less on cost and more on a complex array of hard-to-recreate knowledge-based competencies at both the firm and ecosystem level. Indicative of this impact, figure 1 (from the Mercator Institute for China Studies) shows the countries likely to be most affected by China's "Made in China 2025" strategy.

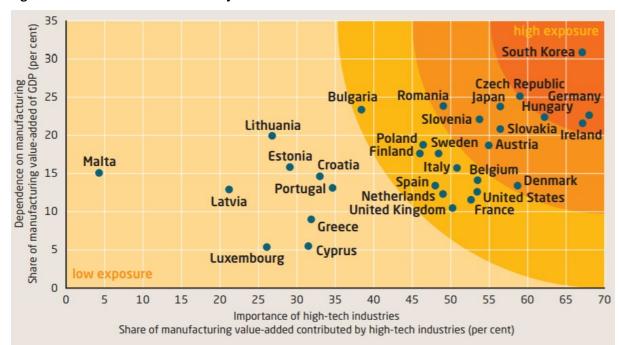


Figure 1: The countries most affected by "Made in China 2025"17

If Chinese innovation mercantilism puts advanced technology firms in the United States, Japan, or Europe out of business or significantly reduces their market share, then neither lower input costs nor higher subsidies, nor a currency depreciation would bring them back. For example, a firm could not simply buy semiconductor equipment and start producing chips (if they could, China would be much further ahead in this industry). Similar to other high-tech sectors, one reason is the process of semiconductor production is incredibly complicated: There are over 1,000 steps involved in making a dynamic random-access memory (DRAM) chip, for example. Gaining market share requires not just machines, but deep and complex tacit knowledge embedded in a firm's workers (from the shop floor to scientists to managers), which is coupled with an innovation ecosystem (universities training the right talent, a network of suppliers, etc.) This holds true for virtually every advanced technology industry that lies at the heart of European, Japanese, and American industrial competitiveness.

Beyond R&D and production issues, success for many new advanced industry firms depends on their ability to produce at a loss for many years, or even decades, until they gain the competencies and scale to effectively compete in the global marketplace—a process most governments in advanced economies (besides China, through its use of subsidies) are largely incapable of supporting, or, if they do, become subject to WTO rulings. As such, once these firms and their advanced capabilities are lost or significantly diminished, they are essentially gone for good and are almost impossible to resurrect without massive government intervention. The risk, in the words of 18th-century U.S. Treasury Secretary Alexander Hamilton, is the three regions could evolve in the direction of being "hewers of wood and drawers of water." The loss of advanced tech industries has two major negative impacts on the economies of the trilateral partners and other advanced economies. The first is in regard to prosperity. For example, in the United States, average wages in these industries are approximately 75 percent higher than average U.S. wages. ¹⁸ Moreover, losing share in these globally traded industries means

national/regional currency levels will have to fall in order to enable balanced trade, thereby significantly reducing both the terms of trade and the purchasing power of citizens. The second factor relates to national security and the defense industrial base—a critical issue for all trilateral partners, but especially the United States, as U.S. defense superiority is based, in large part, on technological superiority. Sustaining this advantage depends on the United States and its allies maintaining global technological superiority, not just in defense-specific technologies, but in a wide array of dual-use technologies.

Looking to the recent past, the experience of high-speed rail illustrates the conundrum confronted by advanced technology firms competing in China. European and Japanese rail companies—including Alstom, Kawasaki, and Siemens—were required to set up joint ventures and share technology with their Chinese partners. Chinese competitors subsequently mastered the technology, took command of their home market, and then were required by the Chinese government to merge into a powerful national, state-owned champion: the Chinese Railway Construction Corporation (CRCC). Not only is CRCC now virtually guaranteed all new Chinese rail projects, it is aggressively exporting trains, backed by massive government export subsidies. As of 2016, CRCC had over two-thirds of global deliveries, taking significant market share away from companies such as Alstom, Kawasaki, and Siemens.¹⁹

Meanwhile, Al software, batteries, electric vehicles, jet aircraft, semiconductors, and biopharmaceuticals are just a few of the areas China has targeted, and which are now at an earlier stage in China's game plan to unfairly seize innovation advantage. With regard to biopharmaceuticals, if China succeeds, it will undermine a key driver of competitiveness and good jobs in Europe, Japan, and the United States. For example, since 2001, while U.S. manufacturing jobs have fallen, the number of biopharmaceutical jobs has increased over 20 percent. Partly because 19 percent of its domestic employment was involved in research, the pharmaceutical industry accounted for 20.4 percent of all domestic R&D in the United States. He United States, EU's, and Japanese competitive positions are being challenged by China, which has targeted the biopharma industry for development, in part through its "Made in China 2025" plan. The core component of its strategy involves copying—in this case copying foreign drugs so it can develop and export generics. While China has some positive and fair biopharma policies, its strategy is mostly premised on innovation mercantilism, including weak IP protection, biased drug approvals, subsidies, import restrictions, substandard exports, and severe price controls to limit foreign sales.

The fundamental issue is that, especially in advanced-technology industries, Chinese policymakers reject the principle of "comparative advantage"—the classic trade notion that countries specialize in the production of goods or services at which they are the most efficient and then trade for the rest. China even appears to reject, or at least not fully embrace, the principle of "competitive advantage"—the notion that countries consciously work to become good at some sectors (e.g., Europe is strong in autos, chemicals and machine tools, while Japan is strong in consumer electronics and autos). Rather, China appears to be seeking "absolute advantage": autarky and global dominance in virtually all advanced technology sectors (as demonstrated by market share goals defined in "Made in China 2025.") Essentially, China desires to become autarkic, or self-sufficient, in the production of advanced technology goods, while still enjoying unfettered access to global markets for its exports of these products. Thus, without a proactive and concerted strategy, the trilateral parties will within 20 years likely face a

world wherein output and jobs in advanced industries are significantly reduced due to Chinese policies unabashedly targeting domestic and global market share in those industries.

A BROAD TRILATERAL AGENDA TO ADDRESS CHINESE INNOVATION MERCANTILISM

The trilateral agenda should reflect the full range of challenges Chinese innovation mercantilism poses to the overriding goal of an open, rules-based, and market-driven trading system. Its current focus on trade issues would obviously remain central to the framework but would be built out to include the issues enumerated below (and potentially others). Participation should be expanded beyond respective trade agencies to include agencies central to each issue, such as respective commerce/economy/industry, justice, defense, competition, and other agencies. In this way, it should represent the result of each party's internal interagency discussions around each of these issues.

The fundamental issue is that, especially in advanced-technology industries, Chinese policymakers reject the principle of "comparative advantage." China even appears to reject, or at least not fully embrace, the principle of "competitive advantage." Rather, China appears to be seeking "absolute advantage": autarky and global dominance in virtually all advanced technology sectors.

This agenda reflects the fact that China's innovation mercantilism has highlighted—in stark contrast—many of the shortfalls in the international trading system. In many ways, the trilateral agenda represents the culmination of the three parties' collective experiences (and frustrations), such as with nonexistent or increasingly outdated and ineffective rules on IP, investment, subsidies, technical barriers to trade, digital trade, privacy, and cybersecurity. While China is not the sole offender, the scope and scale of its misuse set it apart.²⁶ This broader agenda can act as a catalyst for broader reform efforts. But the litmus test for this broader ambition should be whether the three parties can set and execute a holistic agenda to address Chinese innovation mercantilism.

Some of the issues below are already being addressed under the existing trilateral framework and are included here to show both progress thus far and what similar outcomes may be possible elsewhere. Other issues are trade-related but would be new to the agenda, as they involve other agencies and interests. This list is not exhaustive of the issues the three parties could work together on. The problems are indicative of the central issues that are worthy of careful consideration by the three major trading partners, which—if they overcome bilateral differences and recognize the strategic imperative for collective action with regard to China—can use the framework to revitalize the global trading system.

Use WTO Tools to the Fullest Extent (Where Possible)

Addressing the issues created by China's state-managed, mercantilist economic and trade model will take more than WTO challenges; however, the trilateral parties should use WTO mechanisms and processes to the fullest possible extent to combat Chinese innovation mercantilism.²⁷ Despite some understandable misgivings the U.S. administration has about WTO, such an effort is necessary to highlight that the end objective for all major trading parties is to be part of an open, transparent, market-driven, enforceable, and rules-based trading system.

The trilateral parties should use WTO mechanisms and processes to the fullest possible extent to combat Chinese innovation mercantilism.

As a first step, this would require the United States to compromise with other WTO members in resolving its concerns regarding the WTO dispute settlement body (DSB), given it would play a central role in truly testing WTO's utility in confronting China. With a functional DSB, the trilateral parties would be able to fully test the utility and limits of WTO. In his Senate confirmation hearing, United States Trade Representative (USTR) Robert Lighthizer rightly pointed out, "I don't believe that the WTO was set up to deal effectively for a country like China and their industrial policy." The fact that modern trade policy is not dependent on WTO, but based on the variable geometry of other bilateral, regional, and plurilateral deals, reflects the lamentable state of affairs at WTO. It also reflects the fact that the United States and many free-trading countries are already moving on from WTO. An ultimately unsuccessful effort to pursue a comprehensive, concerted, and coordinated effort to use all available WTO tools would at least highlight both the shortfalls of the current system and where additional tools, agreements, or a completely new organization are needed.

There are a number of other WTO tools the three parties should use. They are in addition to the parties continuing to recognize China as a nonmarket economy.²⁹

A Collective, Full Accounting of China's Mercantilist Practices to Use as the Basis for More Dispute Cases and a Nullification Case

The three parties should first coordinate a collective "bill of particulars" that enumerates the vast extent of Chinese innovation-mercantilist policies—in great detail. This should not be about recycling USTR's annual report to Congress on China's WTO compliance, the China chapter from the annual USTR National Trade Estimate report, or the submissions countries make during China's trade policy review at WTO.³⁰ It should be about the three parties, working together, sharing information, to detail the array of unfair, mercantilist practices China engages in—even if some don't technically violate narrow and circumscribed WTO rules—and concretely demonstrating how those practices harm both other trading parties and the global economy, and thus certainly breach at least the spirit of the WTO agreement, if not WTO trade rules specifically.

This would be a useful exercise to conduct together, as past experience—and current Chinese practices—creates a difficult evidentiary hurdle to clear for a WTO dispute case, as much of the information and evidence needed to support a claim, particularly one based on unwritten rules or practices (which is common in China), can be difficult to obtain. Moreover, companies know from bitter experience that if they cooperate with their national trade ministries regarding a case in China, they will likely face retaliation from the Chinese government. An executive from a Fortune 100 company told us that when his company informed a top Chinese official about a blatantly WTO-illegal practice China was practicing, and that unless the government ceased the practice it would have no other choice but to bring a case before WTO, the Chinese official replied, "That is certainly your right, but if you bring a case you will never sell another product in China again." Needless to say, a case was never brought.

Given the United States and others have each conducted some degree of research into these issues, the three parties should be able to expand on this to explore, consider, and identify the instances and cases that stand the best chance of success as part of a coordinated litigation strategy at WTO. This will not be easy, as only a handful of the 500-plus WTO complaints have been brought by a coalition of countries. But given what is at stake and the need to maximize the chances of success, it is necessary.

This full accounting should then be used as part of cases that challenge both specific measures and systemic matters, such as the non-violation impairment of benefits.

This full accounting should then be used as part of cases that challenge both specific measures and systemic matters, such as the non-violation impairment of benefits. There is no guarantee of success, however, as a number of the most likely applicable provisions have not yet been tested, be it against China or any other country. 32 Challenges to specific measures, such as subsidies for aluminum and certain IP violations, have thus far only recently happened, on a limited basis.³³ For example, in 2018, the United States filed a narrowly targeted case against China regarding some specific IP practices, but then withdrew it after China amended them (while the European Union's broader case against Chinese IP practices continues).³⁴ Coincidentally, this case concerns China's discriminatory technology licensing regime—the Technology Import/Export Regulations—which Japan actually raised concerns about at WTO in 2002 (as China enacted this regulation a day before it acceded to WTO). 35 This means the United States and the European Union waited 17 years to bring the case regarding this issue at WTO. Other potential WTO cases could include state sponsorship of infringement by state-owned enterprises (SOEs) or the Chinese government itself, misuse of antitrust law (in a manner inconsistent with the Trade-Related Aspects of Intellectual Property agreement), other instances of discriminatory treatment (e.g., tax preferences, standardization, procurement, local protectionism, etc.) based on preferences for Chinese ownership of IP rights, and discriminatory IP protection and enforcement practices.³⁶ This highlights the need for all three parties to prioritize broad and collective action against China.37

The most important case for trilateral cooperation would be a broad case based on a non-violation claim under Article XXIII of the General Agreement on Tariffs and Trade (GATT), and focused on the myriad ways China's economy fails to meet the Marrakesh Declaration, which states WTO was designed as a world trading system "based upon open, market oriented policies." It provides a legal cause of action against measures that do not violate the treaty but nevertheless upset the reasonable expectations of the parties, and can be aimed at policies that might otherwise be beyond the reach of the GATT/WTO agreements. Again, there is no guarantee of success, in part, because non-violation cases have been rare.

Push for Improved Transparency and Surveillance at WTO

The lack of transparency in Chinese trade-related policymaking acts as a considerable, and growing, nontariff barrier to trade. Aside from CCP's central role in governing the economy, including many parts of the private sector, its lack of transparency is one of the factors that makes China unique. China's governance system is notoriously opaque, complex, and multilayered, with overlapping and often inconsistent national, provincial, and municipal

government policies. For any potential future commitments by China to be worth anything, there needs to be a corresponding improvement in transparency.

All three parties recognize the rules-based multilateral trading system was founded on transparency and predictability—and strong and enforceable compliance and notification obligations should be part of a reformed WTO. This is why improved transparency measures, and their enforcement, are already part of both the trilateral agenda and joint efforts at WTO.⁴¹ The United States has long complained about this issue, especially with regard to China's WTO-contravening industrial policies (such as subsidies).⁴² The United States has coordinated and presented, together with the EU and Japan, a joint set of proposals—the first in November 2018, and the second in June 2019.⁴³ The proposal includes some basic steps that should already be in place: to "name and shame" those members not complying with WTO transparency and reporting requirements, administrative penalties for members failing to meet transparency obligations, and for WTO's trade policy review to include a specific, standardized focus on members' compliance with transparency requirements in their reviews. The proposals do not change the notification obligations required of WTO members, but seek to encourage, through various incentives and administrative measures, better compliance.⁴⁴ This is a welcome first set of steps that need to be carried through to conclusion.

Transparency needs to be a priority issue for the trilateral parties, as China has failed to live up to its WTO commitments. It has consistently failed to provide WTO and its trading partners with required information—translated into English (or another official WTO language)—regarding policies related to trade in goods, services, IP, subsidies, and foreign investment. These transparency concerns extend to the provincial and municipal governments that also regularly fail to publish their regulatory measures. 45 Chinese agencies frequently adopt measures that take effect immediately, despite WTO obligations requiring China to provide sufficient time for others to comment, and also to translate the measures into a WTO official language and officially publish them before implementation, except in certain cases (such as emergencies). A specific example is China's extensive use of subsidies and blatant disregard for WTO rules requiring transparency regarding such measures, as well as its failure to release detailed information on the government's state capital operating budget. Despite WTO commitments to submit regular notifications on what subsidies it provides, China did not file its first notification after its 2001 WTO accession until 2006. China also failed to change its practices despite agreeing to provide at least a 30-day period for public comment on drafts of trade- and economic-related regulations and rules as part of the U.S.-China Strategic and Economic Dialogue in 2008 and 2011.

The trilateral parties need to lead this reform effort, as transparency is both a critical input into WTO processes and an important (but lacking) output of the organization. This function will only become more consequential as trade becomes increasingly digital and services-based—which makes it more susceptible to trade-restrictive, behind-the-border policies. ⁴⁶ The generation of information is supposed to be the goal of many WTO processes and requirements—for example, there are over 200 notification requirements embodied in the various WTO agreements, or mandated by ministerial and general council decisions. ⁴⁷

However, transparency and surveillance—and corresponding enforcement when members fall short on these issues—are sorely lacking at WTO. A 2010 review showed WTO's trade policy reviews do not generate peer pressure and are often silent on important matters, as reflected in a

limited correlation between disputes initiated against a country and whether they were identified in a trade policy review report. Even in the area where information is the best—barriers to trade in goods—the focus of data collection and analysis is mostly on tariffs. Meanwhile, WTO does not collect or analyze on a consistent or comprehensive basis the types of nontariff policies that are increasingly among the most popular and extensive in China (and other countries), such as subsidies, country-specific technical standards, and data-related barriers to data flows and digital services trade. A byproduct of this is the lack of detailed and critical analysis of China's broad array of behind-the-border regulations that amount to digital protectionism—in which China is a world leader—as noted, for instance, in WTO's 2018 World Trade Report, which focused on digital technologies. 49

Improve Information Sharing, Coordination, and Alignment of Defensive Measures

The trilateral parties should establish formal meetings between relevant agencies to discuss and exchange information related to the respective defensive mechanisms they've implemented to address predatory, nonmarket-driven, Chinese trade and economic activity, mainly with regard to investment screening, export controls, countering IP theft, and controlling access to financial markets. Recent trilateral discussions have covered investment screening and export controls, but the agenda and goal for these issues appear limited in scope. They should be broader given the changing nature of China's pursuit of advanced technology, its ability to shift targets based on perceived ease of access, the lack of clarity around the ownership and intent of Chinese firms and their activities, and the persistent threat of state-backed (or even state-authorized) cyber operations targeting IP as part of efforts to improve commercial and economic competitiveness, as well as military capabilities.

The three parties need to work together to ensure they're on the same page and that their relevant counter measures are working as necessary to prevent Chinese state-directed, predatory economic activity. A formal meeting would provide a platform for discussions and cooperation, given there may already be linkages between agencies and ad hoc, case-by-case cooperation. For example, the conviction in the United States of the Chinese Sinovel Wind Group Company for the theft of trade secrets from AMSC, a U.S.-based company, highlights the type of cases authorities should discuss and learn from.⁵¹ This case was significant, as it was the first federal criminal trial in the United States involving a Chinese corporate defendant, and in which the defendant was also a Chinese state-owned enterprise.⁵² As part of this case, the U.S. Department of Justice's Office of International Affairs in the Criminal Division and the Federal Bureau of Investigation worked with counterparts in Austria.⁵³

The trilateral parties should establish formal meetings between relevant agencies to discuss and exchange information related to the respective defensive mechanisms they've implemented.

This sort of engagement should continue, and be strengthened, at the case level, and extend to the strategic level as part of the trilateral framework to ensure cooperation leads to a better collective response. For Japan and the United States, this would also require engagement with individual EU member states on export control and investment screening frameworks (given these frameworks are mainly a member state responsibility) as part of efforts to bolster the EU's overall ability to develop an aligned and effective framework.

These meetings would report to respective leaders and ministers/senior officials on:

- Cooperation and information exchanges on foreign investment screening frameworks and cases, including Chinese venture-capital-backed investment;
- Cooperation and information exchanges on export control frameworks and cases; and
- Cooperation on developing domestic measures to identify and prevent the cyber-theft of commercial trade secrets and measures to target and respond to Chinese firms that benefit from stolen IP.

The sections below detail issues around some of these new trilateral agenda items.

Aligned and Complementary Frameworks for Foreign Direct Investment Screening

All three parties recognize the threat posed by Chinese state-backed and state-directed foreign investment from supposedly private Chinese firms, and the need to revise their investment screening frameworks to give respective governments the ability to stop these investments, but each in their own ways, even if they do not directly threaten national security. Foreign government-subsidized acquisitions of local firms, regardless of the sector, should be banned because they are distortionary and unfair. It's worth highlighting the cumulative change to foreign investment screening laws in Japan, the United States, and the European Union (and elsewhere) over the last few years amount to a significant example of the collective concern about—and indictment of—China's predatory economic policies.

Japan has made several amendments to its investment screening framework—the Foreign Exchange and Foreign Trade Act—in recent years. For example, after August 31, 2019, Japan added certain ICT-related businesses to its list of businesses subject to special rules limiting foreign direct investment (FDI).⁵⁴ In August 2018, the United States enacted the Foreign Investment Risk Review Modernization Act, which, among other things, expanded the scope of "covered transactions" and the factors the U.S. Committee on Foreign Investment in the United States (CFIUS) may consider when assessing security risks.⁵⁵ In September 2019, CFIUS released new implementing guidelines, one of which focuses on expanding its jurisdiction to certain noncontrolling foreign investments in U.S. businesses involving critical technology, critical infrastructure, and sensitive personal data.⁵⁶

The EU was initially slow to realize its high-tech firms were being picked off by nonmarket-based, Chinese government-supported investment acquisitions (the European Parliament first inquired about it in 2012, while Germany, France, and Italy presented a common position in February 2017). They were spurred into action as China's acquisitions of European high-tech firms increased in 2016 and 2017, in part, as Europe presented an easier target after the United States had increased scrutiny of foreign investment. In 2018, there were 14 cancelled deals in North America worth \$4 billion (up 17 percent in volume, but down 65 percent in value). The first half of 2018 saw a surge in regulatory interventions in the United States, which slowed in the second half of the year as Chinese companies increasingly stayed away from potentially problematic deals. Meanwhile in 2018, in Europe, there were at least 7 cancelled investment deals worth \$1.5 billion. This was the same number as in 2017, but up 200 percent in value, in part as China shifted its FDI acquisitions from the United States to Europe.

In April 2019, the European Union's new framework for the screening of FDI went into force (due to be fully applied in November 2020). It will provide a better instrument to detect and raise awareness of foreign investment in critical assets, technologies, and infrastructure in the EU. The central feature of the EU framework is it sets minimum requirements for national screening mechanisms, and aims to enhance cooperation and information sharing between the commission and member states on specific foreign investments likely to affect security and public order in member states and in the whole EU. However, it neither harmonizes investment screening mechanisms that are currently in place in member states, nor replaces them with an EU-level mechanism.⁶² Under this broader EU effort, France, Germany, Hungary, Italy, Latvia, Lithuania, and the United Kingdom have all strengthened or are in the process of strengthening their investment screening regimes, while Belgium, the Netherlands, the Czech Republic, Greece, Slovakia, and Sweden are considering setting up or strengthening investment review mechanisms.⁶³

The EU framework highlights issues the trilateral parties should be discussing and sharing information about in order to assist each other, as the collective problem faced by the EU and its individual member states at the regional level is not unlike that of the challenge facing the three parties at the global level.

For example, in the EU framework:

- Part of each country's individual investment review framework should be the requirement to consider the possibility of foreign entities obtaining the technology through third countries, and conducting outreach to those countries;
- Providing information regarding the investor's and target entity's ownership structures in order to determine whether a foreign investor is directly or indirectly controlled by the government of a third country, including through ownership structure or significant funding. From this, seeing whether the foreign investor has already been involved in activities affecting security or public order;
- The value and actual source of the investment funding;
- The nature of the products, services, and business operations of the foreign investor and the target companies; and
- The countries in which the foreign investor and the target company operate.⁶⁴

Trilateral members should use a formal meeting and cooperation arrangement to help each other build a more comprehensive picture of foreign investors of concern, their intentions, their products, and the potential impact on the host or a third-party country and sector. This is critical because the Chinese government, often through SOEs operating under CCP dictates, funnels money in nontransparent ways to obfuscate the fact that the real investor is the Chinese government. Each of the trilateral parties should also provide semiannual and annual reports covering relevant FDI and transactions to help them identify trends and changes. The parties should be able to provide feedback (on a confidential basis) as to whether they think a particular transaction in a given country would affect their own economic or military security or public order, and why. In a way, this would formalize the connection between respective agencies involved in a shared case of concern. For example, when the CFIUS review rejected China's

Fujian Grand Chip Investment Fund's attempted acquisition of the semiconductor equipment supplier Aixtron (headquartered in Germany, with assets in the United States) in December 2016, German regulators withdrew their approval because of security concerns. ⁶⁵ This would also be somewhat similar to the role the EU has built for itself in issuing nonbinding opinions on certain foreign investments that may affect security or public order in one or more member states, or where a proposed foreign investment may undermine a project or program of interest to the whole EU.

Aligned and Complementary Frameworks for Export Control Rules

Just as with investment screening, the three parties should ensure their export control regimes are comparably defined and applied so as to be compatible. They should also be updated on a regular basis, and allow the parties to share information relevant to cases of shared concern. While not always explicitly identified in relevant policies and debates, China is the main country of concern given the extent of its trade in high-tech goods. However, updated export-control regimes are going to be especially challenging given the task of managing emerging technologies (such as AI) that may have some specific defense-related dual uses. This is critical because, unless all three parties can come up with fairly aligned export control regimes of the kind designed to limit technology access to, say, the former Soviet Union, China will simply play off companies and countries against each other, few of which can resist the lure of sales in the Chinese market.

All three parties have modernized—or are currently modernizing—their export control regimes. Besides recent changes concerning South Korea, Japan has also updated its export control regime in recent years. ⁶⁶ The European Commission submitted a proposal to modernize the EU's export control regime, which included cybersecurity and surveillance technology. ⁶⁷ In June 2019, the president of the European Council was given a mandate to negotiate with the European Parliament on a new export control regime. ⁶⁸ Earlier, on August 18, 2018, the Export Control Reform Act was signed into law in the United States. A critical part of this was the requirement for the U.S. Commerce Department's Bureau of Industry and Security to develop rulemaking regarding extending export controls to an enlarged set of emerging and foundational technologies (EFTs): new or foundational technologies that in some narrow cases are essential to national security and are not currently covered by existing export control rules. ⁶⁹

Trilateral export control cooperation could include:

- The three parties setting up periodic meetings between agencies involved in their respective export control regimes, including defense, law enforcement, commerce, and trade agencies.
- Whether part of this or separate (given sensitivities), the three parties should ensure their respective intelligence and related agencies are able to discuss and share intelligence related to export control issues.
- The three parties should discuss efforts to identify a narrow and specific set of EFTs that would be subject to export controls, specifically, those products that provide a unique, identifiable, and qualitative military advantage. This could involve efforts to ensure similar definitions/terminology. As ITIF has argued, how export control regimes cover new EFTs will remain a challenging task given the potential dual use of many new

technologies; and in many sectors, what constitutes "state of the art" changes too rapidly for export rules to reliably and readily adapt. This is important to ensure export controls only target very specific EFTs (such as preventing the spread of Al-enabled advanced weapons systems), but are not overly broad in how they define and restrict other emerging technologies.

- Ideally, the three parties would develop a joint regime to sanction Chinese firms where there is clear, compelling, and agreed upon evidence of IP theft from any of the three parties' economies and their firms. In these cases, the three parties should implement a coordinated export control regime applied to the firm committing the violation. In line with this, the Trump administration is looking into ways to blacklist Chinese companies that steal American IP from doing business in the United States.⁷²
- The three parties should exchange information to help identify the actual end user of a potentially concerning transaction (as this is the most important question in export control). Where cases or questions arise, respective agencies from the three parties should have a mechanism in place that allows them to query their counterparts on certain potential buyers in order to, given China's extensive use of opaque ownership structures and vehicles, gain a better idea of whom is involved.
- Each party should talk not just about product exports but also about technology transfer (such as technical know-how in joint ventures, technology licensing, etc.) to organizations (e.g., private companies, state-owned enterprises, and government organizations) from nations such as China that continue to make coerced technology transfer a central component of their economic development strategies.⁷³
- Export controls are most successful when they are coordinated internationally, so the three parties should engage (either collectively or separately) with other key countries on this issue, and encourage convergence toward a similar export control model and item coverage. Related to this outreach is the scenario whereby each party's respective export control authority assesses where else foreign entities could obtain particularly sensitive technology, and engage their export control counterparts in these third countries.

Collective, aligned, and proactive efforts to prevent the export of defense-related products and technical knowledge are necessary to protect national security. In addition, a joint export-control regime can be an effective tool to punish Chinese firms that engage in serious IP theft. Joint efforts are critical, as export controls need regular updating in order to reflect the global state of play in advanced technology industries (and hence, require greater international cooperation) as well as the changing ways in which countries and their firms are trying to acquire access to prohibited defense-related products. A coordinated approach is also necessary to avoid firms from one party being put at a competitive disadvantage to their competitors in the EU, Japan, or the United States, as in the case whereby one party blocks the export of a particular technology, but the others don't.

Coordinating Responses to Recent and New Problematic Trade and Economic Policies

The trilateral parties should more consistently and forcibly respond to cases wherein China enacts new barriers to trade. This would require their respective embassies and trade officials to share information to coordinate their responses to new policy announcements. Within China, the embassies of the trilateral parties could act as the core conveners of broader coalitions of like-

minded countries that want to publicly respond to new policy announcements that are likely to affect trade.

The past (generalized) trend for policymakers in China was to propose new rules/laws that were deliberately provocative in terms of being restrictive or discriminatory; wait for a reaction from trading partners, trade associations, or individual firms; and then consider making adjustments only when there was significant, high-level, and sustained opposition. In such cases, China might also have simply paused the problematic policy and waited for another opportunity to reintroduce it under a different name or through a different law or agency. The multiple levels of policymaking in China (whether national or subnational) and confusing array of overlapping and unclear sets of laws, regulations, and other official statements made this easier for China, as it was able to use them to obfuscate its actual intentions in enacting problematic trade and economic policies.

Thus, trilateral partners need to do more to monitor each and every policy development, share translated documents, and respond collectively whenever Chinese policy represented another (new) trade barrier. A coordinated response is needed as many countries are afraid to raise their concerns individually given China's propensity for seeking retribution against those that criticize its economic and trade policies. Governments need to take the lead in opposing new problematic policies, as individual firms and trade associations often want to avoid retribution, and China will not likely revise or avoid potentially problematic trade and economic policies without a clear, coordinated response from its major trading partners. The policy track record in China shows that neither ad hoc, minor, nor individual responses in China or at WTO affect China's behavior.

A classic case to consider in this context involves China's efforts in 2015 to adopt new, farreaching, and restrictive cybersecurity, counterterrorism, and banking regulations. The banking regulations required banks to use "secure and controllable" (which is essentially code for locally designed or manufactured) equipment to effectively exclude foreign technology companies from the banking sector. 74 China set annual targets for Chinese banks, which were to have culminated in 2019 when China wanted three-quarters of all bank ICT systems to meet this requirement.⁷⁵ In terms of the banking law, China suspended this rule only after intense criticism and pushback from its trading partners. Yet, in classic Chinese fashion, it has continued to pursue this rule (and its desired outcome of excluding foreign ICT products) through other policies since then, such as via its restrictive cybersecurity law. 76 The banking law was also mentioned by former U.S. president Barack Obama in the broader context of his criticism of China's draft cybersecurity and counterterrorism laws, which contained data localization and other restrictive and discriminatory measures. Besides Obama's public comments, it also involved him raising the issue directly with Chinese President Xi Jinping. Four U.S. cabinet secretaries sent letters to their Chinese counterparts outlining their concerns. 77 This type of direct, high-level, and broad pushback from all three trilateral parties, and their like-minded partners, needs to be a regular part of efforts to get China to become a responsible player in the global trading system.

Setting New Rules and Principles for E-Commerce and Digital Trade

Digital trade—the cross-border transfer of data, products, and services by electronic means, usually the Internet—is changing global commerce. The data that underpins this trade is critical to the modern global economy. Conceptually, data and digital goods and services should be able to flow (nearly) seamlessly across borders. However, China provides a masterclass

in how to enact behind-the-border barriers to digital trade in order to give local firms and products an unfair advantage, especially as it relates to digital products, cross-border data flows, and the IP closely associated with digital trade (such as protections for source code and algorithms). 80 If the three parties were truly committed to countering China's tech protectionism, they would find a way to overcome entrenched differences around how to govern cross-border data flows, data privacy, and digital trade. Japan, the EU, and the United States negotiating and enacting common rules and principles would go a long way toward setting a new global norm for this critically important issue. Such a framework for digital free trade would stand in stark contrast to China's long history, and ever-expanding range, of digital protectionism.

If the three parties were truly committed to countering China's tech protectionism, they would find a way to overcome entrenched differences around how to govern cross-border data flows, data privacy, and digital trade.

For the United States and Japan, the free flow of data is the norm, and barriers to them are the rare exception. China's base policymaking position is the opposite, treating local data storage as the norm and data flows as the exception, as China's policymakers prioritize mercantilism alongside social and political goals.81 The EU is somewhere in the middle, as its approach to data governance enacts artificial differences between the flow of personal and nonpersonal data and between data flows within the region, and between the region and the rest of the world.82 The European Commission has been unable to reconcile the stark divide between its privacy officials (some of whom see data flows and privacy as being incompatible) and everyone else, including those working on trade and innovation. Thus far, the EU has been unable to table language, within the text of trade agreements, that sets reasonable parameters for what determines legitimate data privacy and protection policies, including data localization.83 The EU's inability to deal with these issues within trade agreements means it is not playing the leading role it should be in advocating both for digital free trade and against data localization in China.⁸⁴ If the three parties were truly committed to countering China's tech protectionism, they would find a way to overcome entrenched differences around how to govern cross-border data flows, data privacy, and digital trade.

The three parties have discussed digital trade issues and pointed to e-commerce plurilateral negotiations at WTO as their vehicle for cooperation. This is a sensible focal point given these talks are both fairly new and in the process of exchanging information/proposals before moving to text-based negotiations. However, the issue and the outcome are too important—and fraught with potential failure—to leave to the combative give-and-take of plurilateral negotiations. Furthermore, we've already seen this process play out, when EU intransigence to table language on data flows within the context of the Trade in Services Agreement negotiations played a key role in dooming the talks to failure at the end of 2016.

This is why the three parties should set up a framework for parallel discussions to work through the issues around data flows, data privacy, and digital trade, and how to set parameters for legitimate public policies (such that they are nonrestrictive or least-trade restrictive). This also should reiterate and reinforce the point that U.S. firms are able to transfer and use EU personal data at home under the EU's General Data Protection Regulation and the EU-U.S. Privacy Shield. Dealing with these issues in parallel to WTO negotiations would also allow broader and

deeper discussions around both the issues and possible supporting actions that may not be possible within the context of WTO negotiations (such as setting up formal mechanisms between data privacy regulators). Doing so would show that each side recognizes there is a much bigger strategic imperative to finding an acceptable solution, and that they share much more in common than not, especially when compared with China and its digital protectionism.

New, Stronger Rules Prohibiting Forced Technology Transfers and Market-Distorting Subsidies to State-Owned Enterprises

Forced technology transfers and massive, market-distorting, state-directed subsidies are two of China's leading innovation mercantilism tools. Both policies contravene the normative principles and actual legal rules China agreed to when joining WTO.⁸⁵ Both issues exert a tremendous negative impact on global innovation and trade, so it's good to see these two issues are already on the trade-focused trilateral agenda.⁸⁶ This section analyzes these two ongoing areas of work in the trilateral framework in order to highlight the ways the three parties can work together inside and outside WTO.

Forced technology transfers and massive, market-distorting, state-directed subsidies are two of China's leading innovation mercantilism tools.

The trilateral parties continue to negotiate new rules and policies to target China's extensive use of market-distorting industrial subsidies for its private firms and state-owned enterprises, particularly those that lead to overcapacity. The types of practices they're trying to target are bank lending incompatible with a company's creditworthiness; government or government-controlled funds making equity investment on noncommercial terms; subsidies to insolvent companies; and noncommercial debt-to-equity swaps. The three parties are also working on new rules to enhance transparency in subsidies and the operations of SOEs, including new remedies to increase the costs of transparency and notification failures. This builds on new tools some countries want to enact at home, such as a recent Dutch proposal for the European Commission to be given new competition policy powers to stop state-backed foreign takeovers that are likely to distort markets.

As part of text-based negotiations, experts have also reportedly been negotiating language around the critical issue of how to define a "public body," which is a critical part of this issue, as ownership and control of banks and other entities in China is not clear, and China has used this lack of clarity in WTO trade law to provide massive amounts of capital to firms in select high-tech industries. For example, it is common in China for a bank (notionally private, but partly government owned) to provide (rather than receive) a subsidy (e.g., a loan on a preferential basis) to another Chinese entity in a particular industry. ⁹⁰ Likewise, China's investment fund to subsidize Chinese semiconductor companies was designed to skirt WTO subsidy rules by appearing to be a private investment enterprise. In fact, it was organized by China's Ministry of Industry and Information Technology (MIIT) and staffed by former MIIT employees. And it was funded in large part by SOEs that were presumably told by the state-owned Assets Supervision and Administration Commission of the State Council they had to "invest" in the fund. This is for all intents and purposes money laundering to minimize the risk of WTO action.

For the United States, as with other members, trilateral cooperation represents one part of a broader response at WTO, the Organization for Economic Cooperation and Development, and elsewhere to combat China's extensive use of market-distorting industrial subsidies. 91 Given the near impossibility of reopening and renegotiating the WTO Agreement on Subsidies and Countervailing Measures, trilateral parties are reportedly working toward commonly agreed upon text as part of a plurilateral agreement they would then encourage other like-minded countries to join. Each party would also look to embed this text in their future trade agreements. This is consistent with recent cases whereby countries have agreed on stronger SOE rules in their respective free trade agreements, including signatories to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, the United States-Mexico-Canada Agreement, and the Japan-EU Economic Partnership Agreement. The trilateral effort, and these related trade provisions, would indirectly address China's egregious use of subsidies as part of its innovation mercantilism by improving global rules and norms around subsidies. Obviously, these agreements only indirectly address China's use of subsidies. But this cooperation provides a stronger basis for applying pressure on China to act like other major, responsible stakeholders in the global economy.

The trilateral parties continue to negotiate new rules and policies to target China's extensive use.

On top of this, the three parties should discuss and develop some new legislative and policy tools. One should be to create a way for joint antitrust exemptions for companies to cooperate against forced tech transfers and investment in China. 92 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. Another should be for the three parties to ensure their own government procurement processes don't inadvertently buy from—and thereby support—these subsidized Chinese firms. This is evident in the case of the Chinese light rail cars many U.S. municipalities are purchasing because their price point is so low (to the result of subsidies). The point of this effort is to create financial consequences. Chinese firms should know that if they are to receive such large subsidies, they will have limited market access, at least for purchases by governments. On a related point, Europe is seeking to develop an International Procurement Instrument, which would seek to assure reciprocity in government procurement internationally.93 Countries that do not make their markets open to European competitors in government procurement would see their companies blocked from enjoying access to the European market for government procurement. While Europe having to resort to developing such an instrument is not ideal, it does send an important signal that countries should no longer expect to get away with their companies having open access to international markets while they deny the same privilege to foreign competitors. It's also important to note that this is not about the separate issue of state aid, as all three parties support their enterprises—albeit usually for activities such as precompetitive R&D and workforce training, and at levels that are usually quite modest.

On IP, the trilateral parties have made progress developing new ways to address China's extensive use of forced technology transfers. However, the three parties still need to work together on them, as prior bilateral efforts have failed. This could change if China makes commitments as part of negotiations with the United States—although past experience suggests such commitments would be difficult to enforce. Even if this ends up being the case, the three

parties should not expect China to follow through without consistent pressure from them all. 96 This is a priority, as the shared concern among the three parties is these routinely violated (and hard to enforce) WTO IP rules have ceased being rules at all. 97

Forced technology transfers represent both a key focal point for trilateral discussions and, likely, an early deliverable from the process. The three parties released a joint statement on technology transfer policies and practices, stating, "The Ministers discussed the need to establish and share best practices, coordinating where useful, on mechanisms to stop the practices by governments that direct and unfairly facilitate the systematic investment in, and acquisition of, foreign companies and assets to obtain technologies and intellectual property and generate the transfer of technology to domestic companies.... The Ministers further agreed to work together, including with other like-minded partners, to find effective means to stop harmful forced technology transfer policies and practices, including, where appropriate, dispute settlement proceedings at the WTO."

In an effort to build new global norms, the trilateral parties are focusing on indirectly addressing China's use of forced technology transfers by developing and then embedding new rules on both issues in their future trade agreements. A likely outcome on forced technology transfers is a new set of rules and norms about relevant investment and services market regulations, good regulatory practices, and text for each party to use in new or revised trade agreements, bilateral investment treaties, and other legal agreements with trading partners. Unfortunately, it's unrealistic to expect the parties would be able to negotiate some new multilateral agreement at WTO or the World Intellectual Property Organization given the entrenched ideological opposition to IP and new IP agreements by many developing countries (which have effectively frozen global rules on IP since the 1990s). The case with China and forced technology transfers is just one of many examples of how the gap between technological innovation and the international baseline for IP rules grows larger and larger. It's therefore up to the three parties to come up with new rules and norms they can individually and collectively advocate for in the future as part of broader efforts to improve the protection of IP in the global economy.

Engagement, Coordination, and Cooperation on Setting Standards for Emerging Technologies

International technical standards for AI, robotics, self-driving vehicles, the Internet of Things, and other new technologies should also be on the agenda as China continues to enact domestic standards that act as a barrier to trade. More importantly, China is increasingly trying to export its own restrictive standards as part of an effort to unfairly influence international standards-setting organizations, potentially giving its firms an advantage in gaining global market share and influence. Standards are one part of Chinese President Xi Jinping's plans for China to become a "cyber superpower." The European Union has already identified standards as an area for transatlantic cooperation. Vera Jourova, the European Commissioner for Justice, Consumers and Gender Equality, has also said EU-U.S. cooperation would mean "our voice would be heard around the world....But, if we will become rivals and promote conflicting models, none of us will win." The three parties have a shared interest in working together to ensure standards for new and emerging technologies are open and not exclusionary (i.e., not based on country- or region-specific standards and standards-setting bodies).

Standards are an important (but often overlooked) component of global trade, as they foster economies of scale by making it relatively easy for firms to produce a good or service to a mutually accepted standard across markets. Standards also (ideally) provide regulators with a flexible tool for addressing emerging regulatory challenges. A "standard" is a document, established by consensus, that provides rules, guidelines, or characteristics for activities or their results. Standards are created by technical experts. At their most basic, standards establish the size, shape, or capacity of a product, process, or system. They can specify performance levels for products, and define key terms so there is no misunderstanding among those using the standard. They reduce uncertainty by creating a common technological platform upon which any actor can develop new applications, and enable modularity and specialization through common interfaces. Standards-development processes and systems to ensure conformity to standards—including testing, certification, and laboratory accreditation—are therefore an important part of modern production and trade. 106

There are three areas wherein the European Union, Japan, and the United States can work together on standards: in China, the rest of the world (outside the three parties), and at the multilateral level, where international standards are set. This section details issues for cooperation (also listed on a sliding scale from easiest to hardest, given the latter involves reforms the EU has long resisted):

- Greater awareness, cooperation, and coordinated pushback on cases in which China considers or enacts discriminatory domestic standards that act as barriers to trade;
- Greater awareness and discussions of cases wherein China tries to export its
 discriminatory standards internationally to third countries and as part of efforts to unfairly
 influence international standards-setting bodies; and
- The European Union ensuring its standards-setting processes reflect WTO rules and best practices it wants to see in China, in that they do not lead to country- or regionspecific standards.

China has a long track record of enacting discriminatory and restrictive domestic standards, which act as a barrier to trade for high-tech goods and services. ¹⁰⁷ As ITIF's report "The Middle Kingdom Galapagos Island Syndrome: The Cul-De-Sac of Chinese Technology Standards" argues, China has made the development of indigenous technology standards, particularly for ICT products, a core component of its industrial development strategy. ¹⁰⁸ Most recently, in 2018, China introduced a new standardization law that will likely favor local firms and goods and services, as it references "indigenous innovation" while failing to reference either its WTO commitments (therefore raising questions about WTO compliance) or its acceptance of existing international standards (approved by the various standards-development organizations (SDOs)). ¹⁰⁹ It also adds further uncertainty for foreign firms as it creates unique levels of standards (e.g., social and enterprise) and is unclear about actual implementation and enforcement (e.g., whether voluntary standards are truly mandatory).

In its new standardization law, China could have made clear it is committed to global rules and best practices on technical standards by explicitly acknowledging its WTO technical barriers to trade (TBT) commitments and core principles—but it chose not to do so. 110 Early evidence shows China is continuing this trade-restrictive approach for new and emerging technologies. A report by the German think tank Mercator Institute for China Studies (MERICS) shows Chinese

standards for basic smart manufacturing correlate with about 70 percent of relevant international standards—which falls to around 53 percent for key smart manufacturing technology standards, and to 0 percent for standards relating to cloud computing, industrial software, and big data.¹¹¹

China pursues indigenous (i.e., China-specific) technology standards because it believes it will advantage China's domestic producers while blocking foreign competitors and reducing the royalties Chinese firms pay for foreign technologies. Standards unique to China make it more difficult and costlier for foreign firms and their products to be sold in China, as they need to reconfigure preexisting design and production processes to Chinese standards, and pay royalty fees for providing products using the Chinese standards. This disrupts the global, generally standardized production processes on which many foreign companies rely in order to compete. Ultimately, it could cut foreign firms and technology out of the Chinese market in strategically important technologies.

The starting point for the three parties should therefore be improving their collective surveillance, engagement, and responses to both China's domestic standards-setting process and the standards that act as a barrier to trade in high-tech goods. There needs to be a stronger, collective response, as China's new standardization law is simply one part of a broader wave of new standards laws, regulations, and implementing guidelines China has recently released—which, together, create significant uncertainty and barriers to trade. For example, following the passage of China's new cybersecurity law, China's information technology standards body (known as TC 260) released 110 standards for comment between November 2016 and September 2017, accounting for nearly half of all standards it has ever released for comment. Political and bureaucratic pressure in China to produce standards rapidly has also led regulators to offer comment periods that often fall far short of China's WTO commitments under the TBT agreement—which calls for 60-day comment periods and a mandatory reply to all comments received from stakeholders. The trilateral parties should be far more vigilant and responsive regarding this issue.

Second, the parties should focus on China exporting its restrictive domestic standards as part of efforts to influence international standards-setting organizations. As MERICS explained, "The ongoing reform of [China's] standardization system and the revision of the standardization law point to a liberalization and internationalization." This transition, from inward-looking protectionism to outward-facing ambition, represents both an opportunity and a threat. There is an opportunity to better integrate the Chinese market with the rest of the world through unified, globally standardized technologies and equipment. However, there is also evidence China has and will attempt to unfairly influence international standards-setting bodies to ensure Chinese technology is at the heart of (i.e. considered essential to) the international standard.

The three members should support private-sector engagement in SDOs and efforts to host SDO discussions, and highlight the importance of good governance principles (e.g., transparency and openness to industry participation, consensus-based, and fair voting processes). The nature of private-sector-led SDOs makes it hard for any one country to get its way, as the process for approving international standards is based on private-sector representatives (technical experts) who manage a transparent and consensus-based reviewing process. As private-sector experts are central to ensuring standards address technical needs and are neutral (in terms of being non-country specific), it's important for the European Union, Japan, and the United States to

consider providing resources to help host SDO meetings in order to make it easier to facilitate local participation. China's government and participants have done likewise.

In addition, the parties should watch for where China's government and its firms use their own restrictive domestic standards as the basis for efforts to influence standards in third countries via government-to-government engagement, foreign investment projects, and commercial contracts (such as those associated with its "Belt and Road Initiative" (BRI)). One of the three main motivations of the "Digital Silk Road" (the digital component of BRI) is to leverage the strength of China's information technology (IT) sector to spread its domestic standards. 115 Whether as part of state-supported or private-sector-led foreign investment projects, China could potentially use commercial contracts and operations as part of a "bottom-up" strategy to build acceptance and use of Chinese standards in markets around the world. China's government and firms follow provisions that stipulate projects must use Chinese standards and equipment, thereby "socializing" them in foreign markets and standards agencies. China has used this approach most extensively for projects involving heavy industry (e.g., oil, gas, and infrastructure), but is expected to take a similar approach with ICT-related projects. China complements this with topdown efforts by the government as part of engagements with specific countries and regions on digital-economy issues. For example, in 2017, standards were part of China's Digital Economy International Cooperation Initiative, which it launched as part of its BRI engagement with Egypt, Laos, Saudi Arabia, Serbia, Thailand, Turkey, and the United Arab Emirates. 116

The last (and hardest) standards-agenda item for the trilateral framework would involve the European Union addressing some central, long-running concerns about its own approach to standards, and how it sets and accepts international standards, to reflect the best practices and WTO principles Europe wants to see in China's approach to standards. The European Union should consider this to ensure its approach doesn't (even inadvertently) support the use of country- or region-specific standards (which is what all parties oppose in China). While the European Union's differential approach to standards is a long-running issue, China's growing role in international standards setting makes a revised approach more important than ever.

There is growing concern in Europe, and also among some in the United States, that there is a state-directed push by China's government and its leading tech firms to develop international standards for new and emerging technologies that would be advantageous to China. This concern is understandable given China's domestic approach. The concern is mainly based on the large number of standards proposals Chinese firms are putting forward in international standards bodies and the fact Chinese representatives are taking more leadership positions at these bodies, especially the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC). At the moment, the EU holds more leadership positions (in terms of secretariat positions) in ISO and IEC technical committees—which draft standards than any other major economic power, such as the United States or China. 117 However, China has increased its share of ISO technical committee secretariats to a level comparable to France and the United Kingdom, and a level beyond that of other emerging economies. 118 The last ISO president was Chinese, and the IEC's president-elect is a Chinese representative. Chinese representatives have taken the lead role in the 5G standards working group, known as the Third Generation Partnership Project (3GPP), by submitting 40 percent of the standards and 32 percent of the documents. 119 China's growing engagement in these bodies is to be expected given its increasing technological sophistication in certain areas (such as 5G), and in many

regards should be welcomed, as it may reduce some of the incentive for China to enact unique domestic standards that conflict with international standards. 120

In addition to China's large number of 3GPP submissions, its actors also appear to be coordinating votes to support favored companies, rather than supporting the best technological solution. The three parties should remain wary of attempts by the Chinese government to direct Chinese firms to support a particular proposal for key technologies. The Chinese state media report "Lenovo 5G incident shows need for Chinese companies to cease mindless competition" is indicative of this scenario, wherein Lenovo was forced to make a public apology after supporting U.S. firm Qualcomm's proposal rather than Huawei's for a key coding method for 5G data transmissions. ¹²¹ In other words, Lenovo decided it was in its interest to support the Qualcomm standard, but the Chinese government overruled it.

Ideally, if proper governance and fair voting rules the day at SDOs, then they cannot be easily influenced by one government's concerted approach, or by a specific country's tech sector inundating the process with draft proposals and meeting participants. International standards are developed in open, technically focused, and consensus-based SDOs that adhere to WTO rules and best practices around technical barriers to trade. 122 Firm representatives from China would ideally be in competition with each other as well as with other international participants. This dynamic plays out across the world's many different standards-development organizations. Furthermore, the standards-setting process is based on consensus to ensure the most-appropriate proposals (those that address current technology trends and global market requirements) are adopted (after review and modifications based on feedback from technical experts). There are also periodic reviews of specifications. So, while firms that develop a technology first are in a better position (given their technical understanding of the product) to contribute to the development of a standard, no one firm can set an international standard. Firms should be free to vote for whatever standards they think best serve their product, regardless of the country of origin. This points to the value of a rules-based, open standards-setting process to international trade, whereby it enables the development of standards without prejudice or favoritism to any stakeholder or nation in order to facilitate trade.

China's approach to international standards—focusing on a large number of submissions, often of relatively poor quality—thus far has not been overly successful, indicating SDOs are largely working as intended. Indicative of this, submissions from Chinese firms are sometimes unable to even outline the problem it is supposed to be tackling with a proposed new standard. Part of the reason multinational firms, especially those from the United States, are influential in these processes is their many years of developing cutting-edge technologies, their deep understanding of the (highly technical) standards process and rules, and their consistent participation in standards discussions. This intangible knowledge and expertise lead to a form of procedural power European firms (and policymakers)—let alone China—have struggled to develop and deploy. A key question is whether Chinese firms become more adept at this over time and play a larger role in standards-setting dialogues. But even if China does, it should do so as part of a process that limits its ability to enact trade-distorting international standards. This is why efforts to support good governance at SDOs is important.

Besides supporting good governance at SDOs, if the European Union wants to demonstrate how eager it is for China to play by the rules and not enact region-specific standards, it should

reconsider its own approach. The European Union abides by the key WTO document on international standards—the TBT Committee Decision on International Standards—but in a way, that indirectly leads to a preference for region-specific standards (from Europe). 124 While participation in the EU standardization ecosystem (which has a much greater role for government involvement) is much more open than China's (as foreign firms can engage via each member state's national standardization body), it's still relatively closed. Within this process, Europe's governments give preferential treatment to standards developed from European SDOs (which may be based on ISO or IEC standards, but not always), while only recognizing a standard as being an international standard if it is from an explicit list of bodies (such as ISO and IEC). Together, these factors lead to a more limited range of accepted international standards, especially from Europe, which is exactly the type of outcome the EU is concerned about with China.

In contrast, the U.S. standards-setting process is competitive and private-sector led, with the government playing an indirect, supporting role. The differential approach is on clear display in U.S. and European Union trade agreements. For example, the United States-Mexico-Canada trade agreement references TBT committee decisions and stipulates that each party shall not apply additional principles or criteria when recognizing a standard as an international standard, including where the standard body is based and whether it is nongovernment or intergovernmental. This contrasts with the European Union approach, which was most recently demonstrated in its trade agreement with Japan.

So, if policymakers from the European Union really want to send the message to China that it shouldn't enact country- and region-specific standards, they should reconsider their own approach to ensure their regulators can accept a broader range of standards as international standards and SDOs (as long as they each fulfil relevant WTO requirements). From a historical perspective, Europe's government-directed approach to standards is understandable, as it needed to build a single market in the EU for standards. However, this narrow government-directed approach now presents a strategic hurdle for the European Union to ensure an emerging tech leader (China) doesn't unduly influence a key market criterion that would disadvantage its own tech firms.

In conclusion, China's increasing role and engagement in international standards can prove beneficial so long as it is constructive—based on Chinese firms independently supporting what they see as the best technological solution—and aligned with WTO provisions and global best practices. However, all three parties need to be attuned to the potential—indeed the likelihood—China's engagement and approach won't be. The trilateral parties need to realize the strategic importance of technical standards, and develop a joint plan. This is not to say this should lead to greater government involvement in the setting of actual standards—it is not. That should remain with the technical experts. It is about ensuring each respective government is aware of developments, and ensuring their respective private-sector representatives are engaged in good-faith, independent efforts to develop the best applicable technical standards. The overarching objective for the three parties should be ensuring China plays by the rules in order to provide firms from every country a level playing field in terms of standards.

Adjust, Curtail, or Cut Off Scientific Cooperation Tied to Chinese Mercantilism and Defense Research

The three parties should work together to adjust, curtail, or cut off government-to-government scientific cooperation directly related to Chinese mercantilism and other Chinese-government goals, such as military research. The U.S. government (like others) has engaged in extensive cooperation with China to help share valuable technology in areas such as energy, health, and agriculture. Yet the expectation from the Chinese side is this should happen regardless of China's ongoing innovation mercantilism and discriminatory approach to foreign technology and trade.

For example, the U.S.-China Clean Energy Research Center's Technology Management Plans state 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 that are not participants. Yet, "[a]ccording to agency officials, this has not been the case in previous science and technology agreements between the United States and other countries." 128

It has too often become the case that when Chinese officials speak of international cooperation to spur innovation, it is code for the transfer of foreign scientific and engineering know-how to China for free or at subsidized rates. ¹²⁹ If the three parties are serious about pressuring China to roll back its innovation mercantilism, these kinds of cooperative efforts send exactly the wrong message: China may engage in mercantilist practices with impunity, and the three parties will still cooperate with them scientifically.

Similarly, the three parties should discuss how they can work together with their respective universities to advance scientific progress and foster cooperation, while ensuring any research collaboration is in their national interests and not supporting Chinese military research efforts. It's a related example of China's government using the open, collaborative, and good-faith basis of Western academic research institutions for self-interested ends. To be clear, this collaborative and open spirit, including collaboration with Chinese scientists, has led to some significant scientific achievements in modern times, and when done so in the spirit of genuine scientific discovery, should be supported. The United States is a world leader in innovation in no small part due to the collaborative nature of its universities, which benefit from the work of researchers from around the world.

However, the parties need to be aware of the extensive number of cases wherein Chinese entities—from China's military to its companies, research institutions, and universities—abuse the open basis of Western academic research institutions in such a duplicitous and self-interested manner. For instance, the Australian Strategic Policy Institute's report "Picking flowers, making honey" details how China's People's Liberation Army (PLA) has sponsored more than 2,500 military scientists and engineers to study abroad and develop relationships with researchers and institutions around the globe. ¹³¹ Dozens of these PLA scientists have obscured their military affiliations to travel to the United States, the European Union, and elsewhere to specifically work in areas with military applications, such as hypersonic missiles. ¹³²

As much as the three parties should not be helping China's self-interested pursuit of innovation mercantilism, they should also not be helping rivals leverage open, good-faith academic research programs in order to develop military expertise and technology. Both are clearly not in their

respective national interests, yet it remains unclear whether Western universities and governments are fully aware of this phenomenon. The three parties should talk about the issue and policy guidance for universities. Given the technologies involved, this issue should also be discussed in the context of cooperation on improved export control regimes. Put simply, until China significantly amends its rampant innovation mercantilist practices, scientific entities in the three trilateral partners—from the National Science Foundation and Department of Energy in the United States to the European Science Foundation and European Research Council in Europe (and member-country science funding agencies)—should suspend or dramatically curtail scientific collaboration with Chinese partners. Maintaining this collaboration is important because China's government has shown it will punish nations that stand up to them, in part by cutting off the flow of foreign students.

CORE CHALLENGES TO EFFECTIVE TRILATERAL COOPERATION

A stronger trilateral agenda to address Chinese innovation mercantilism will depend in part on the three parties' ability to overcome some major political and economic hurdles. This report has highlighted issue-specific differences between the United States and Europe that need to be overcome within the contexts of those specific issues. However, there are much broader, strategic challenges the three parties need to recognize and overcome in order to work toward the shared goal of addressing Chinese innovation mercantilism.

Partners Let Bilateral Issues Undermine/Overshadow the Need for Trilateral Cooperation

Every bilateral relationship (U.S.-EU, EU-Japan, Japan-U.S.) features trade, economic, and political disputes. The Trump administration has certainly elevated the profile of many of these disputes as it has applied heightened scrutiny of foreign trade practices (not just in China). However, it can only be hoped that after a few years of largely bilateral-focused engagement between themselves and China, and a trilateral framework that has shown some early promise, the three parties can re-prioritize their focus. The three parties share much more in common than they do not: in regards to their commitment to fair, open, rules-based trade (especially in contrast to China); that the strategic imperative should be China's innovation mercantilism (and not the trade issues with each other); and that they stand the best chance of addressing China's trade and economic issues (and the risk they pose to the global trading system) if the countries work together.

A clear step in this direction would be for the United States to remove the tariffs it has enacted and stop trade-dispute cases against its like-minded trading partners as they relate to steel, automotive, and other issues, especially with regard to ongoing efforts to link these sectors to national security concerns. Likewise, the EU should commit to dropping retaliatory tariffs and associated trade disputes if the United States indicates it will reverse course. An early decision to collectively disarm themselves on recent bilateral, extra-WTO trade measures would send a clear and powerful message to China the partners are able to set aside extra-WTO bilateral disputes in pursuit of their strategic goal of getting China to play by the rules.

Obviously, this does not mean legitimate bilateral trade concerns will disappear, but that they should not be the defining issues of the three parties' bilateral relationships—and they should be firmly adjudicated through WTO. Or, where relevant, these issues should be pursued through the

trilateral framework and other international forums, as they're often linked to global issues (for example, steel subsidies, overproduction, and tariffs) anyhow. These bilateral issues should be compartmentalized in order to ensure each party is best placed to focus on the common strategic objective. The fact that the three parties have been able to make substantive progress on some issues in the trilateral framework, while dealing with major bilateral trade disputes, shows they can do this. The size and importance of the sectors at stake in the high-tech confrontation with China—never mind China's impact on the broader trading system—far outweigh narrow and limited bilateral concerns in these sectors.

The Likelihood of a Punitive Response From China

Rolling back China's mercantilist economic and trade policies that threaten the global trading system means each member must be prepared for fierce resistance and formidable countermeasures. China has repeatedly shown it treats its trade relationships in an "all business" fashion, and is happy to dole out retribution when necessary, especially for nations and their firms that dare to challenge Chinese interests. However, not only does a stronger trilateral framework provide a better vehicle for the three parties to push back against Chinese innovation mercantilism, but it also reduces China's ability to seek punitive retribution and 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) for access to Chinese markets that should already be open anyway.

The Need to Differentiate Between Protectionism and Prosecution

Trade enforcement and other tools should be used to fight protectionism in China, and not be a tool to reduce competitive pressures on firms in the United States, Japan, and the European Union. The goal of the three parties should not be to withdraw from the global trading system and emulate the mercantilists, thereby defending their companies from uncomfortable foreign competition. In other words, enforcement should be used to contest Chinese protectionism that is damaging the global trade system, not simply as a tool to make any or all of the three parties more competitive—or to provide shelter to certain sectors 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.

It can only be hoped that after a few years of largely bilateral-focused engagement between themselves and China, and a trilateral framework that has shown some early promise, the three parties can re-prioritize their focus.

The goal here is not permanent "protectionist" policies against China, but rather an array of policies to be used as tools to pressure China into at least significantly reducing its use of mercantilist policies. Should China do that, the three parties should remain open to China's enterprises, and trade and investment between them and China. Indeed, the three parties should pursue a "selective" prosecution whereby China should be rewarded when it plays by the rules and progress is clearly visible, but be met with resolute action when it does not play by the rules. Blanket, punitive trade taxes against China will likely not prove productive in getting China to change; a trilateral strategy in response to China's mercantilism will have to be more nuanced.

Winning the Hearts and Minds of Nonaligned Nations

In the Cold War, the West worked hard to help developing countries understand that market-based, liberal democracies represent a superior model for development compared with the old Soviet system. Today, the three parties need to pursue the same economic statecraft, particularly as China uses an attractive combination of low-cost loans, a relatively easy project-approval process, and heavily discounted (due to subsidies) goods and services from Chinese tech firms to seize market share around the world, such as through the BRI. It's easy to see why China's low-cost loans and ICT projects are attractive to developing countries given their resource constraints and the fact that traditional funding processes, such as through USAID and the World Bank, can be time consuming and complicated.

To counter this, the three parties will need to provide significant additional funds and alternative arrangements to beat out the Chinese government and its tech firms, especially in regions such as Africa, where China has been particularly active and the three parties have not. It should also include broader engagement concerning the "strings" that are often attached to Chinese investment alongside technical assistance in order to help their officials better manage their government procurement processes and project-management operations.

The United States should remove the tariffs it has enacted and stop trade-dispute cases against its like-minded trading partners as they relate to steel, automotive, and other issues, especially with regard to ongoing efforts to link these sectors to national security concerns.

On an individual basis, the three parties are already taking steps in the right direction. The United States is allocating \$60 billion for the U.S. International Development Finance Corporation to provide an alternative to low-cost loans and products from the Chinese government and firms, such as Huawei. ¹³⁴ Japan is already doing much, and starting to do more, providing more infrastructure financing than China to countries in South East Asia. ¹³⁵ Further, Japan has committed to invest \$20 billion over 3 years in Africa. This is a welcome increase, as Japan's External Trade Organization reports Japan's FDI in Africa in 2017 was \$9 billion, only a fraction of China's \$43 billion invested in the continent that same year. ¹³⁶

The three parties are actually well placed to work together, as they already do much to provide financing for projects in developing countries through existing development bank programs. For example, the Asian Infrastructure Investment Bank—China's competitor to the Asian Development Bank (ADB), wherein Japan and the United States are the largest players—had provided only \$6.4 billion in loans by September 2018. Meanwhile, ADB provided \$35.8 billion in loans in 2018 alone, up 40 percent over the previous 2 years. 137

Fortuitously, new connections and forms of cooperation between the three parties are already emerging. In October 2019, Japan and the EU signed an agreement to support "quality infrastructure." While the agreement doesn't mention China or the BRI, the provisions of the agreement counter many criticisms of China's approach in the BRI. Similarly, in November 2019, the U.S. Overseas Private Investment Corporation, Australia's Department of Foreign Affairs and Trade, and the Japan Bank for International Cooperation unveiled the Blue Dot Network—a multi-stakeholder initiative that brings together governments, the private sector, and civil society to promote high-quality, trusted standards for global infrastructure development.

The challenge for the three parties will be to add new resources and attention—and sustain them—and bring all their individual efforts together in a coordinated and cooperative manner in order to provide an attractive alternative to China. Doing so would deny the Chinese government the opportunity to use these projects to help its firms unfairly (given domestic subsidies) seize market share that would otherwise support firms that compete on fair, market-driven terms.

CONCLUSION

The desire to return to a simpler relationship, and a longing for a positive agenda with China, no doubt burn bright among policymakers in many economies. This sentiment to "sue for peace" will be especially strong if there is some short-term bilateral deal between the United States and China. However, key decision-makers in Europe, Japan, and the United States need to recognize that without systemic changes to China's economic and trade policies, they're delaying an even-greater economic reckoning. A range of advanced technology sectors, and a large and growing share of high-value economic activity, are directly in the sights of Chinese industrial and trade policy. Achieving long-term, sustained progress in China and its approach to global trade will require a corresponding effort among the three parties.

Unfortunately, the alternative to a stronger trilateral approach is already evident. The three parties and other like-minded trading countries are dealing with the consequences of China's undermining of various trade rules, norms, and processes in the decade after its WTO accession. The last few years point to a similarly dismal future if the three parties continue to prioritize engagement at the bilateral level while letting disputes between themselves and with China fester into escalating tit-for-tat measures, all the while China's innovation mercantilism continues—largely unchecked—to undermine the multilateral trading system.

A range of advanced technology sectors, and a large and growing share of high-value economic activity, are directly in the sights of Chinese industrial and trade policy.

But this does not need to be the case. A strong and effective trilateral framework could act as a catalyst for major improvements to the global trading system. In tackling China, the parties may develop an approach that could ultimately lead to the revitalization of WTO. Addressing the trade and economic issues most closely associated with China may well be the litmus test for whether WTO in its current form can be saved, or countries need to work on a new multilateral trade initiative designed for rule-of-law, market-based economies. However, it's first worth fully testing whether this is necessary in giving a good-faith, collective, and sustained effort to pursue countermeasures to China's innovation mercantilism at WTO.

It's difficult to see any other set of countries better positioned to provide the leadership to defend the open, rules-based trading system, obtain commitments to collective action against Chinese mercantilist practices, and build new rules that not only add additional layers of protection, but also address the trade and investment issues related to modern trade. Ultimately, the goal should be for a United States/European Union/Japan and China economic and trade relationship that evolves according to equitable, rules- and market-based trade, with all nations competing by implementing constructive innovation- and productivity-enhancing policies, which will produce benefits, not just for all parties involved, but for the entire world.

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The Information Technology and Innovation Foundation (ITIF) is a nonprofit, nonpartisan research and educational institute focusing on the intersection of technological innovation and public policy. Recognized as the world's leading science and technology think tank, ITIF's mission is to formulate and promote policy solutions that accelerate innovation and boost productivity to spur growth, opportunity, and progress.

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ENDNOTES

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