

CHINA'S PREDATORY TRADE AND INVESTMENT STRATEGY

JOINT HEARING

BEFORE THE
SUBCOMMITTEE ON TERRORISM,
NONPROLIFERATION, AND TRADE
AND THE
SUBCOMMITTEE ON ASIA AND THE PACIFIC
OF THE
COMMITTEE ON FOREIGN AFFAIRS
HOUSE OF REPRESENTATIVES
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CHINA'S PREDATORY TRADE AND INVESTMENT STRATEGY

WEDNESDAY, JULY 11, 2018

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TERRORISM, NONPROLIFERATION, AND TRADE
AND
SUBCOMMITTEE ON ASIA AND THE PACIFIC,
COMMITTEE ON FOREIGN AFFAIRS,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:00 p.m., in room 2172 Rayburn House Office Building, Hon. Ted Poe (chairman of the subcommittee) presiding.

Mr. POE. The subcommittees will come to order. I want to thank everyone for their patience. As you know, we were in the middle of votes when this scheduled hearing was supposed to start. Without objection, all members may have 5 days to submit statements, questions, and extraneous materials for the record, subject to the length limitation in the rules. I now recognize myself for my opening statement.

No nation on earth has benefited more from the post-war world order than China. From freedom of the seas to free markets to free exchanges of ideas, China has harnessed the international system built by the U.S. and its allies to become a major world power.

In the last 30 years with the global economy, more than 800 million in China have come out of poverty. But despite these achievements, China does not want to play by the rules. Rather than help preserve the global system that allowed China to grow rapidly, it is exploiting its vulnerabilities to gain a strategic edge over competitors.

China has no intention of becoming an equal partner in the world community. They do this by cheating. Just as the Chinese Communist Party does not want rivals at home, it wants to fix a global system that ensures its dominance and no other country. This includes surpassing the United States as the leading economic, political, and military power.

To achieve economic dominance, China has resorted as I have said to cheating. This includes enacting policies such as stealing intellectual property from the United States and other countries, forcing transfers in exchange for market access to technology, imposing discriminatory licenses on foreign companies while subsidizing competing Chinese companies that try to operate through-

out the world, and intentionally investing in American companies to acquire sensitive U.S. technology.

Beijing is also intentionally overproducing steel and aluminum to drive down prices—we call that dumping—to make it harder for competing producers to remain profitable. Ultimately, billions of dollars and millions of jobs in the United States have been lost because China cheats. China has shown no sign of changing its course. Instead, it has launched two major schemes to strengthen its economy and expand its control of the global economy.

First, through its Made in China 2025 plan, China is attempting to become the leader in high tech industries. To do this China is subverting the free market by imposing quotas and state subsidies to prevent competition and gain self-sufficiency. It is also prioritizing the takeover of foreign tech companies through state-owned enterprises. Combined with state-sponsored cyber theft, China hopes to monopolize high tech innovation and production at the expense of the United States' national security and its allies and their national security.

Second, China has launched the ambitious Belt and Road Initiative. Chinese officials claim the project is intended to strengthen trade across Africa, Asia, and Europe to revive and modernize the ancient Silk Road. But in reality, the Belt and Road is a debt trap for—debt, D-e-b-t—for vulnerable economies that only benefit China. By providing massive loans to high-risk markets China fools developing nations desperate for investment into believing it's a win-win deal for everybody.

However, 89 percent of the construction contracts go to Chinese companies, not the company or country in which the investment is made. Chinese workers and Chinese materials are involved. Meanwhile, the host country is left paying the debt when the projects go bust. Meanwhile, Beijing bribes and coerces local governments ensuring Chinese influence. Bribery is a national policy by the Chinese. This results in countries being forced to side with Chinese interests are accepting a Chinese military presence. Additionally, this practice fuels corruption in struggling democracies.

China does not share our values. We have long since seen this in their human rights records and now it is obvious in their trade policies as well. We could spend a whole hearing talking about the abuse and human rights violations of China with its own people and different religious groups in China. In 2001 we encouraged China's inclusion in the World Trade Organization. We thought China was evolving from the backward political theories of the past and opening up a free market and rule based. We were wrong. The liberalizing economic reforms we expected never came, instead the government increased its intervention in the economy.

So it is time we adapt our trade policies while working with our allies to confront China's bad behavior. Beijing has proven it is not a responsible partner and a fair player in the global economy. It should suffer the consequences. This hearing will help us decide what those should be.

China does have enormous potential as a massive population, its history of innovation and trade dating back thousands of years. It doesn't need to cheat. And then there is the issue of the South China Sea where China is building islands to control the com-

merce. China needs to be held accountable for its behavior, not rewarded.

And I will now recognize the ranking member, Mr. Keating from Massachusetts, for his comments.

Mr. KEATING. Thank you, Mr. Chairman, for convening this hearing today. It is timely.

For months now, tensions have been escalating with China around their unfair trade practices and less than a week ago, the Trump administration triggered a trade war. China's trade and investment tactics have long been a major problem for U.S. industries and American workers, and there hasn't been a whole lot of success in reining in their multidimensional tactics for taking advantage of American businesses and those of our allies. So it is a tough problem. China has become the most important trading partner of over 100 countries and they have aggressively pursued investments around the world that will link China with these countries for decades to come.

So today I hope to focus on what our options are. What do we do to control and deal with this challenge and how can we do a better job of doing more with what we can actually control? What can we do to support our businesses that are under siege by China's unfair tactics? What can we do to expand our own economic opportunities around the world for American businesses and American workers?

How we should use our multinational institutions to curb the unfair model being applied by China around the world and instead reward rules-based economic practices that the U.S. and our own allies adhere to and which give businesses and communities greater certainty and reliability for their investments? We should take firm actions against China, but we can and should also be advancing our own interests and making the most of our own strengths.

This brings me to the role of our allies. The most recent hearing we had in the TNT Subcommittee focused on Russia and China and their nuclear arsenals. A consistent theme of that hearing was that a major advantage that we have over both countries is the strength of our alliances, an advantage they don't have. And that is true in both the economic and security arenas. We will be stronger the more we turn toward our friends around the world and offer them alternatives to Chinese investment. And the more that we foster economic ties that can support shared values like labor rights, environmental protections, and the rule of law, the better off we will be, the better off the global economy will be.

Whether it is joining with our allies and responding strategically to China's unfair practices or in being actively engaged around the world to promote good governance, rule of law, and responsible investments to spur growth in emerging economies, we are stronger when we bring our own resources together with those of our allies who are also committed to the same ideals and goals that we share.

This is just one reason why I have been discouraged by President Trump's penchant for imposing tariffs as the sole means of trying to extract what he wants from other countries. It is a blunt instrument that brings along with it a near guarantee of retaliatory tariffs that simply turn around and hurt Americans here at home. He has used them against our allies and now he is using them against

China. And, frankly, I am skeptical this strategy will yield the results that American workers and families deserve.

Americans don't deserve just any action, they deserve a comprehensively strategic action that maximizes the possible impact and brings with it the greatest possibilities of likelihood of success. Where is this coordinated strategy with our allies? What is the plan when hardworking Americans are feeling the consequences of a trade war with China? What is the plan when China is able to weather the tariffs longer than Americans can absorb in those consequences?

China put together a comprehensive plan a long time ago for how it is going to undermine U.S. business aggressively and strategically and how it is going to invest in countries around the globe including here in the U.S. And while it manipulates the rules, it does so as the game goes on. The Trump administration should not be pursuing one-dimensional trade wars with China. If we are going to protect our own economic and national security interests that are so vital to the well-being and success of American families across this country, we have to do so with a coalition.

So I look forward to hearing from the witnesses today because it is critical that we think beyond this approach to also consider the range of options the U.S. can employ to level out the playing field and better protect U.S. interests in light of China's unfair economic tactics.

And I yield back, Mr. Chairman.

Mr. POE. I thank the gentleman from Massachusetts. I recognize the chairman Ted Yoho from Florida, chairman of the Asia and Pacific Subcommittee, for his opening remarks.

Mr. Chairman?

Mr. YOHO. I would like to thank Chairman Poe, Ranking Members Sherman and Keating, and all the members of the subcommittees for coming together to hold this joint hearing. Ensuring that the United States can compete fairly with China is one of the most important tasks in our shared jurisdiction and it is good that we have come together today to give this challenge the attention it deserves.

After years of growing concerns and months of heated rhetoric, the tariffs unleashed on China on Friday marked a definitive turning point in the U.S.-China trade relationships from decades of failed attempts at constructive engagement to coercion and confrontation on both sides. While the same can't be said for other areas of the budding global fight over trade, when it comes to U.S.-China trade many agree that the status quo can no longer be held.

The problem has been diagnosed correctly. China has crafted industrial policies designed to benefit them at other countries' expense instead of providing mutual benefit. Trade is not a zero sum game, but that is the approach that China often takes. Beijing has implemented these policies through trade and investment tactics designed to leach the benefits of the global trading system without accepting its obligations.

This committee has played a role in highlighting this threat. In one of the first hearings I convened as chair of the Asia Pacific Subcommittee, Dr. Atkinson summarized the challenge before us, testifying that rather than reform China has doubled down on its

unfair mercantilist strategies and is now seeking global dominance in a wide array of advanced industries that are key to U.S. economic and national security. The threat is no longer a matter of debate but an accepted fact.

Our hearing today turns on one of the only remaining areas of disagreement, which tools should be used in response. The imbalance in U.S.-China trade is about much more than the trade deficit. The deficit was caused by a combination of market forces and unfair practices in the past and present. The United States and many other nations have been cheated for too long.

But now the biggest threat from China's predatory trade and investment policy concerns the future. China's only response to U.S. concerns has been an offer to buy more U.S. goods. We should speak plainly. This is a ploy and a trap in an attempt to trick the U.S. into claiming an easy but ultimately false victory. A brief reduction in the trade deficit will do nothing to solve the main challenges of the trade relationship. It won't reduce long-term threat to the U.S. competitiveness in advanced technologies. It won't reduce market access restrictions. And it won't stop forced technology transfer or blatant IP theft.

Xi Jinping and his cronies have made clear that they do not intend to make any good-faith efforts to address these valid concerns. Instead, they have decided to punish innocent U.S. citizens and workers. Whether or not they are the right tool for the job, U.S. tariffs are based on longstanding wrongdoing from the Chinese side. China's tariffs are pure retaliation designed to do nothing more than inflict pain.

Because Xi in China refused to do the right thing, that is, compete fairly or begin to offer real structural changes in their negotiations with the U.S., it appears that we will be forced to use coercive measures which we don't want to do. Targeted tariffs may well have a place in the suite of these coercive measures, but tariffs alone won't counter Chinese industrial policies, and untargeted arbitrary tariffs may well end up being counterproductive and harmful to Americans.

China recently placed \$34 billion worth of tariffs on U.S. ag products that will hit soybean, beef, pork, and dairy particularly hard. It is likely more will follow. A complete response will require more, probably a comprehensive combination of targeted economic sanctions on bad actors such as the export ban on ZTE and maybe Huawei that Congress is seeking to enforce through an NDAA provision, investment and export restrictions, and upgraded protections for U.S. intellectual property and innovation.

It is critical for the United States to address the full scope of China's predatory trade and investment policies and this hearing will help us make sure that the U.S. response does not leave any critical tool by the wayside. I thank the chairman for having this timely meeting and I yield back.

[The prepared statement of Mr. Yoho follows:]

China's Predatory Trade and Investment Strategy
Subcommittee on Terrorism, Nonproliferation, and Trade
Subcommittee on Asia and the Pacific
House Committee on Foreign Affairs
Wednesday July 11, 2018
Opening Statement of Chairman Ted Yoho

Good afternoon. I'd like to thank Judge Poe, Ranking Members Sherman and Keating, and all the Members of the Subcommittees for coming together to hold this joint hearing. Ensuring that the United States can compete fairly with China is one of the most important tasks in our shared jurisdiction, and it's good that we've come together today to give this challenge the attention it deserves.

After years of growing concerns and months of heated rhetoric, the tariffs unleashed on China on Friday mark a definitive turning point in the U.S.-China trade relationship – from decades of failed attempts at constructive engagement, to coercion and confrontation on both sides. While the same can't be said for other areas of the budding global fight over trade, when it comes to U.S.-China trade, many agree that the status quo could not hold.

The problem has been diagnosed correctly. China has crafted industrial policies designed to benefit at other countries' expense, instead of alongside us. Trade is not a zero-sum game, but that is the approach that China often takes. Beijing has implemented these policies through trade and investment tactics designed to leech the benefits of the global trading system without accepting its obligations. This Committee has played a role in highlighting this threat.

In one of the first hearings I convened as Chair of the Asia-Pacific Subcommittee, Dr. Atkinson summarized the challenge before us, testifying that “rather than reform, China has doubled down on its unfair, mercantilist strategies and is now seeking global dominance in a wide array of advanced industries that are key to U.S. economic and national security interests.” The threat is no longer a matter of debate, but accepted fact. Our hearing today turns on one of the only remaining areas of disagreement—which tools should be used in response.

The imbalance in U.S.-China trade is about much more than the trade deficit. The deficit was caused by a combination of market forces and unfair practices in the past and present. The United States and many other nations have been cheated for too long. But now, the biggest threat from China's predatory trade and investment policies concerns the future. China's only response to U.S. concerns has been an offer to buy more U.S. goods. We should speak plainly: this is a ploy and a trap, an attempt to trick the U.S. into claiming an easy but ultimately false victory.

A brief reduction in the trade deficit will do nothing to solve the main challenges of the trade relationship: it won't reduce the long term threat to U.S. competitiveness in advanced

technologies; it won't reduce market access restrictions; and it won't stop forced technology transfer or blatant IP theft.

Xi Jinping and his cronies have made clear that they do not intend to make any good faith efforts to address these valid concerns. Instead they have decided to punish innocent U.S. citizens and workers. Whether or not they are the right tool for the job, U.S. tariffs are based on longstanding wrongdoing from the Chinese side. China's tariffs are pure retaliation designed to do nothing more than inflict pain. Because Xi and China refuse to do the right thing, compete fairly, or begin to offer real structural changes in their negotiations with U.S. officials, it appears that we will be forced to use coercive measures.

Targeted tariffs may well have a place in the suite of these coercive measures, but tariffs alone won't counter Chinese industrial policy, and untargeted, arbitrary tariffs may well end up being counterproductive and harmful to Americans. China recently placed \$34 billion worth of tariffs on U.S. agricultural exports that will hit soybeans, beef, pork and dairy particularly hard. It's likely more will follow. A complete response will require more—probably a comprehensive combination of targeted economic sanctions on bad actors – such as the export ban on ZTE that Congress is seeking to enforce through an NDAA provision – investment and export restrictions, and upgraded protections for U.S. intellectual property and innovation.

It is critical for the United States to address the full scope of China's predatory trade and investment policy, and this hearing will help us make sure that the U.S. response doesn't leave any critical tool by the wayside. I thank the witnesses for joining us, and look forward to hearing their testimony and recommendations.

Mr. POE. I thank the gentleman from Florida. The Chair recognizes Ranking Member Brad Sherman from California for his 5-minute opening statement.

Mr. SHERMAN. Before I get tagged with being anti-China, I will remind the subcommittee that I have been the least hawkish member of the committee on issues of maritime items in the South China Sea.

Now let's look at our trade deficit with China. Some \$375 billion in goods, an 8 percent increase over what it was in 2016, a 450 percent increase over what it was 18 years ago when we unfortunately granted it most favored nation status. That is right. The trade deficit has grown \$28 billion in the first year of this administration.

Back in May 2000 when I voted against most favored nation status for China, I said that the agreement was going to have a terrible impact on American working families and on the balance of trade. It turns out, for once, I was right. I also said we needed an agreement that set targets for reducing the trade deficit. We didn't get them. We are now told that this is Trump's trade war. No, China declared war, trade war, on the United States 18 years ago.

And before Democrats get carried away with the desire to repudiate our position, remember that 65 percent of Democrats voted no on MFN for China. We should not abandon that position just because some Republicans or the White House have embraced it. And I would point out that we should withdraw MFN—that in 2010, I introduced the Emergency China Trade Act which revoked MFN for China with 6 months' lead time. It directed the President to come back to us with a new trade agreement that would reduce the trade imbalance to zero over a 4-year period.

Compared to that bill, Trump's efforts on China are timid, weak, haphazard, and unplanned. And while Wall Street pays economists to tell us that the trade deficit isn't a problem, in fact we have lost 2 million American jobs. That is opioid. That is alcohol abuse. That is suicide. That is abandoned counties and small towns. And that is the election of Donald Trump as President of the United States.

Those are the harms of our trade policy, a policy in which China is allowed to have a 25 percent tariff on American cars going into China while we have only a 2½ percent tariff on Chinese cars coming into the United States. No wonder Tesla feels that it needs to open up a factory in China.

And now, as the latest insult to the American people and attack on American workers is this new social score detailed in the Foreign Policy magazine. I would like to enter it into the record.

Mr. POE. Without objection, so ordered.

Mr. SHERMAN. China is going to give every one of its citizens a social score. Bad social score you don't get a passport. Bad social score you don't get a loan. Bad social score, a host of other things can be taken away from you. There will also be a social score for businesses, and lo to be a business with a bad social score. What does it take to get a good social score? You have to buy Chinese products.

So they are literally intimidating their citizens into increasing the trade deficit with the United States and the devastation that that causes, not to mention their theft of technology and their demand for coproduction agreements. The WTO rules are not well de-

signed to deal with a country that has a host of ways to increase the trade deficit with the United States that are outside the WTO's purview. Whether it be the social score, whether it be coproduction agreements, whether it be theft of intellectual property, whether it be the fact that the Chinese Government doesn't need to pass a regulation or law which the WTO might look at, when they actually control the boards of the major companies that might otherwise import American machinery.

So, all of the decisions, major economic decisions in China, are government decisions. The WTO doesn't deal with that and the trade deficit increases, as does the harm to America. And I haven't even had time to talk about how they repress workers' rights in order to suppress labor costs and to manipulate the currency. And I would need another 5 minutes, Mr. Chairman, to review all the ways in which we do not have a fair trading system with China. I yield back.

Mr. POE. The gentleman yields. The Chair will not grant you an extra 5 minutes to give your opinion. The Chair recognizes other members for their opening statement. Each member may have up to 1 minute.

Mr. Rohrabacher from California?

Mr. ROHRABACHER. Thank you very much, Mr. Chairman. It is a little disconcerting to hear our President be called weak and when he is trying to do something that no other President has tried to do, especially Bill Clinton who was President when you voted for WTO and I was against it. Or did you oppose your President?

Mr. SHERMAN. No, I didn't. I wish you would familiarize yourself with my record.

Mr. ROHRABACHER. Oh, I am sorry. You didn't oppose your President then, or you did?

Mr. SHERMAN. On everything affecting China trade I have opposed all administrations.

Mr. ROHRABACHER. And also let us note that was 2000. I only have 1 minute here. So that was 2000, it was Clinton who gave us that free trade. And did Obama do anything for the last 8 years? Nothing like this President is doing. This President has been getting right in their face and he is being aggressive on the issue of everything you just brought up, but the fact the guys on your party never brought it up.

So with those things said, let me note that China is——

Mr. SHERMAN. Will the gentleman yield?

Mr. ROHRABACHER. I only got one—I have less than—I am out of time right now. If you will grant me 5 more seconds because of the interruption, China is a country of 1 million oligarchs, no freedom, and they are corrupting the world. And those million oligarchs who control that country with an iron fist mean to do us harm and I am glad we have a President now who is confronting that, unlike Clinton and Obama.

Mr. POE. The gentleman's time has expired.

Mr. ROHRABACHER. Thank you.

Mr. POE. I suspect this will be a lively hearing.

Mr. KEATING. The witnesses haven't even started.

Mr. POE. Yes and you haven't got your turn yet.

Mr. Chabot recognized for 1 minute, the gentleman from Ohio.

Mr. CHABOT. Thank you. This committee, the Foreign Affairs Committee, has been very engaged in responding to China's nefarious activities and the more we examine the worse it really looks. And over in the Small Business Committee, which I happen to chair, we have examined Chinese cybersecurity threats and probed the problems created by firms like the Chinese telecom giant ZTE.

Whether we discuss intellectual property rights, the so-called Belt and Road Initiative, technology transfers, trade, or the Made in China 2025 plan, it is clear that Beijing continues to enjoy the blessings of the rules-based international order while routinely flouting its rules to gain a competitive advantage. This is deeply unfair and also a direct threat to our national security.

It has also come to my attention that Intel Corporation is in talks to transfer advanced semiconductor technology to Tsinghua Unigroup, which is a subsidiary of Tsinghua Holdings, which itself is a wholly-owned subsidiary of Tsinghua University and a public university with, oh by the way, direct ties to the Chinese Government.

I have the NDAA conference so I will be in and out here, but if the witnesses are able to address it I would love to hear what they have to say. I yield back.

Mr. POE. The gentleman yields back. The Chair recognizes the gentleman from Virginia, Mr. Garrett.

Mr. GARRETT. Thank you, Mr. Chairman. I want to associate myself with the bulk of the remarks of my colleague from California, Mr. Sherman, which I know is surprising to some people. But I have to say that candidly, while certainly the expected partisan barbs are in there and probably they would have been had the shoe been on the other foot and I was speaking to the other administration, that I think he is right on the bulk of this and I think that Brad Sherman also gave an incredibly insightful analysis of the Iran nuclear deal, the JCPOA 5, 6 years ago to a mosque or to a synagogue in California.

We need to stop with the partisan rankle for just long enough to recognize that our job is to represent our constituents in our respective districts but also the United States of America, collectively, through our responsibility as members of a Federal Government.

Now, ironically, I met with Virginia farmers before this committee hearing and the farmers are taking it on the chin as it relates to this whoever-you-want-to-blame-it-on trade war that has been going on for generations by virtue of the fact that that is one of the few areas where in fact we have a trade surplus.

But the reality as stated by Mr. Sherman and candidly echoed by the chairman and others is there is a 10 to 1 disparity as it relates to automotive tariffs, there is a 5 to 1 disparity as it relates to which direction the money is going by virtue of the trade relationship between us and China, and while I am reflexively anti-tariff when that is the tool that has been used to bludgeon our workers for years, it seems the most likely remedy might be found by virtue of having used such tools ourselves.

So let's try to work across the aisle together and find commonality and not ways to argue and get this right because it matters to the people who we represent.

Thank you Mr. Chairman.

Mr. POE. And the Chair finally recognizes the gentlelady from Missouri, Mrs. Wagner.

Mrs. WAGNER. Thank you, Chairman Poe and Chairman Yoho, for organizing this hearing. And I thank our witnesses for being here.

I am deeply concerned about the effect China's retaliatory tariffs will have on farmers and ranchers and pork producers and dairy producers and consumers all over my home state of Missouri. Missouri is a trading state. Exports support 88,000 Missouri jobs and one out of every three rows of crops is grown to export. China's 25 percent tariff on American soybeans will hit Missouri hard. Our local newspapers and press are already reporting that soybean farmers expect to sell their crops at a loss.

It is abundantly clear that these tariffs will hurt good, hard-working men and women and their families and I worry that the escalating trade war will create winners and losers in communities across Missouri. While I commend the President for standing up to China's bullying trade practices, we need to keep these things in mind as we go forward. I welcome your thoughts on these concerns and I yield back.

Mr. POE. The gentlelady yields back. I will introduce each witness and then give them time for opening statements. Each witness's written remarks will be made part of the record.

Dr. Derek Scissors is a resident scholar at the American Enterprise Institute. Previously, Dr. Scissors was a senior research fellow in the Asian Studies Center at the Heritage Foundation and adjunct professor of economics at George Washington University.

Dr. Robert Atkinson is the president of the Information Technology and Innovation Foundation. Previously he served as vice president of the Progressive Policy Institute.

And Mr. William Reinsch holds the Scholl chair in international business at the Center for Strategic and International Studies. He is a senior advisor at Kelley, Drye and Warren, LLP, and previously he served for 15 years as president of the National Foreign Trade Council.

Each of you will have 5 minutes. When you see the red light come on in front of you, remember, stop talking.

And Dr. Scissors, we will start with you.

**STATEMENT OF DEREK SCISSORS, PH.D., RESIDENT SCHOLAR,
AMERICAN ENTERPRISE INSTITUTE**

Mr. SCISSORS. Thank you, Mr. Chairman. I apologize in advance for being more boring than the committee has been to now. It is a high bar for me to try to reach.

My written testimony is about Chinese investment and construction in the U.S. and around the world. Last night we got the first set of \$200 billion 10 percent tariff list which, you know, we will be talking about for the next few months. I welcome any questions along those lines however you see fit, but my time now is going to be spent on the Chinese economic picture as it pertains to our relationship with them going forward.

The first observation I want to make is that people talk about China as still growing rapidly, basically because a dictatorship in

charge of the country says it is growing rapidly, and I would urge you to be suspicious of that. China is in fact an aging and highly indebted society at the moment. To keep people happy when they will probably never become rich, the party is cleaning up air, land, and water. They are making some progress in that effort. They will pay good money and for decades to come for environmental technology and for food imports.

So there is an opportunity and we need to remember that as the Representative from Missouri just reminded us. There is less of a problem in one sense that for about 35 years the Chinese Communist Party has emphasized jobs and it did so by subsidizing its production to draw jobs from everywhere else. It was predatory economic action for the sake of jobs in China.

Now the labor force is shrinking and aging and the Chinese will be willing to import more and export less. Unfortunately, they will only do that up to a point and the reason is they have a very serious debt problem. I would say on a bipartisan statement that our debt performance from 2009 to 2017 was bad and China's was much worse. China keeps its domestic finances, and this can be very technical and dull, but it keeps its domestic finances walled off from its international finances because if it doesn't money will pour out of the country even faster than it is now.

Getting back to my first point about people who think China is a powerhouse and is growing really rapidly, then why is money leaving the country on a net basis every year? So because of this risk the Chinese need money from a trade surplus and this is something that many of my colleagues don't recognize. Chinese say they are not trying to run a trade surplus. That is not true. They need the foreign exchange from a trade surplus to stabilize their balance of payments and without it they have a possibility of a financial crisis of a certain kind. Therefore, they are going to continue to run a trade surplus and we are going to continue to have some of the problems that we have with them now.

The worst situation with regard to China's economic future concerns innovation. Growth is not going to come from China's damaged land. It is not going to come from an aging population. It is not going to come from their debt-ridden financial system. It has to come from innovation. The party recognizes this, but the party also really doesn't like competition as several members have already stated. And in my opinion, without competition you are not going to get much innovation.

So what do we get from that? We are going to get the Chinese trying to buy technology to upgrade their innovative capabilities and steal it whenever they can't buy it. I used to think Chinese IP practices would get better over time, but their economic mismanagement means I think they have more incentive to steal technology and their practices are going to get worse.

You know, to qualify this a little bit, China is not taking over the world. The Belt and Road is something I know a fair amount about, is far smaller than its hype but it has been harming the U.S. The main harm used to be subsidies to take American jobs. I think that will lessen over time. But the coercing and stealing of American intellectual property, which is the core of our comparative advantage,

the core of what we get benefits for in trade, is going to get worse because the Chinese need that innovation quite desperately.

And I am going to make a statement which I wasn't going to bother because the U.S. responses are long overdue, it sounds very vague but here is a way to put it into context. I am pretty sure I sat in this room 6 years ago when Chairman Ros-Lehtinen held a hearing on Chinese IP practices and we all agreed in a bipartisan fashion that we needed to respond to Chinese IP practices. And here we are 6 years later and we all agree again, but we haven't done anything that has worked.

My own recommendation at the time and continues to be that we target Chinese companies specifically who have gained from coerced or stolen IP and we target them internationally. Not just banning them from U.S. business but applying global financial sanctions. My concern with tariffs is that it targets the guilty and the innocent together so you have no reason to stop stealing. Go after the people who really commit the crimes and go after them more strongly than perhaps a 10 percent tariff, which I don't think is particularly effective in light of Chinese subsidies.

There are many other possible steps we could take. I am happy to talk about them, but I am actually going to stop here and yield back my last 15 seconds.

[The prepared statement of Mr. Scissors follows:]



Key Points

- China is investing much less in the US than it did just a year ago. It has never invested much in the Belt and Road. Yet China's global investment spending remains healthy, with impressive diversification across countries and the reemergence of private firms.
- Construction and engineering is considerable but unlikely to expand much, as the projects drain China's foreign reserves. Construction in the Belt and Road alone is rising because the number of countries is rising, not because China is more active.
- The US is about to change its investment review framework with new legislation. This a step forward, but problems remain. The new framework appears complex while foreign investment thrives on certainty. The Committee on Foreign Investment in the United States must be properly resourced or reform will prove meaningless.

American headlines stress coming restrictions on Chinese activity in the US. Global headlines stress transformation wrought by the Belt and Road Initiative.¹ Actual measurement shows China has not invested heavily in the US since early 2017 and never invested heavily in the Belt and Road (BRI).

Several large transactions have driven China's 2018 outbound investment, featuring a \$9 billion transport play in Germany, plus a series of health care acquisitions. The top five investment targets in 2018 to date sit on five different continents. China's overseas spending habits are more diverse than many observers believe.

The China Global Investment Tracker (CGIT) from the American Enterprise Institute is the only fully public record of China's outbound investment and construction.² Rather than presenting only totals or a map, all 3,000 transactions are profiled in a public data set. The CGIT estimates the number of investments in the first half of 2018 dropped 15 percent from the first half of 2017. Based on the number of

transactions and total amount spent, the first half of 2018 strongly resembles the first half of 2015, before the pace of capital exit first soared and then was curbed by Beijing.

There are encouraging signs. Transport, energy, and metals investment led in the first half but, contrary to Beijing's insistence, entertainment and real estate are not dead. Perhaps the single best development is private Chinese firms are spending again this year. While the raw quantity is lower, the private share of investment is back to its 2016 level. If 2018 continues to follow the pattern of 2015, total investment volume will be in the \$115-\$130 billion range for the year. Another \$1 trillion globally could be added by the end of 2024.

Investment by the People's Republic of China (PRC) is often conflated with construction of rail lines, power plants, and so forth. Construction does not involve ownership, as investment does. Since 2005, there are more construction contracts worth \$100 million or more than investments, though the

average construction deal is smaller. In the first half of 2018, the PRC initiated at least one large construction contract in over 40 countries, chiefly in energy and transport.

Chinese engineering and construction is the core of the BRI. Using the latest, 76-member version of the BRI for the largest possible size,³ the BRI accounts for over 60 percent of Chinese overseas construction since its inauguration in the fall of 2013, with that pace holding in 2017–18. On this tally, in not quite five years, BRI construction has been worth more than \$250 billion. In contrast, the current set of BRI countries accounts for less than 25 percent of the PRC's outbound investment over the period, a bit more than \$150 billion total.

BRI investment weakness is especially troubling for Beijing because the preferred location for Chinese companies is closing off. The PRC's investment in the US exceeded \$50 billion in 2016, fell by more than half in 2017, and was only \$4.5 billion in the first half of 2018. Congress has been crafting legislation to tighten oversight of Chinese ventures since the 2016 surge,⁴ but there is less and less to oversee. Chinese enterprises exist at the sufferance of the Communist Party and must be treated accordingly. The American goal should be to do so yet still offer clear, stable policies to welcome investment when national security is not involved.

CGIT vs. MOFCOM

The CGIT contains all documented investment and construction transactions worth \$100 million (rounded) or more, starting in 2005 and updated every six months. This features 1,400 investments worth \$1.9 trillion. The construction data set includes 1,300 projects worth \$780 billion and is still incomplete. The CGIT also lists over 250 troubled transactions worth \$350 billion, in which investment or construction was impaired or failed after a commercial agreement was struck.

The CGIT does not include loans or bond purchases. It measures gross capital outlay, excluding depreciation and disinvestment. Disinvestment was trivial until 2017 but then jumped, as private firms faced financial and political pressure. Disinvestment remains well under \$100 billion in total and will likely fade by 2019, as retrenchment has already eased.

Finally, the CGIT relies on corporate sources. Companies frequently disclose a transaction and then later describe it as occurring at an earlier time. For this reason, isolating single-year results can be misleading.

China's Ministry of Commerce (MOFCOM) publishes the official data on outbound investment. There is at present a base series on "equity and other" investments, which moves in similar fashion to the CGIT and is subject to revisions MOFCOM does not explain.

Chinese enterprises exist at the sufferance of the Communist Party and must be treated accordingly.

Unfortunately, there is more. MOFCOM augments the base series with reinvested earnings. Only it does not measure this series; it just assumes a dollar value for each month. There is also a "financial investment" series, which is added after the fact but is typically not published and difficult to verify. The various moving parts mean that, when the commerce minister reported to the National People's Congress that 2017 outbound investment was \$124.6 billion, it was unclear exactly what he was referring to.⁵

After almost a decade in which the CGIT was compiled first and MOFCOM figures published later matched it well, there was a divergence in 2013 when the CGIT showed stability and each MOFCOM component rose. A one-year gap is not itself remarkable, but it did coincide with Communist Party General Secretary Xi Jinping's branding of the BRI. MOFCOM's 2014 figures built off this base. In 2015–16, China saw heavy capital outflow and eventually imposed tighter controls.⁶ Beijing was thus obliged to announce success in the form of lower 2017 spending.

Private firms indeed spent less in 2017, but MOFCOM simply excluded the vast bulk of the \$43 billion acquisition of Swiss agro-tech firm Syngenta, claiming it was financed outside China. At worst, this is deceptive. At best, it means money was either not transparent as investment or not recorded at all when originally sent out of the PRC—and definitely not recorded when it was actually spent overseas. The PRC's largest-ever acquisition was made to vanish.

If 2013 did not represent politicization of the data, 2017 certainly did.

MOFCOM indicates less than \$3 billion of the Syngenta acquisition was counted. Against that, the assumed pace of reinvested earnings and opaque financial investment, at \$87 billion and \$79 billion over 2013–17 respectively, constitute dubious spending claims. The MOFCOM column in Table 1 represents replicable figures, excluding reinvestment in 2013–17 but including Syngenta fully. The total is likely too low, perhaps by several tens of billions of dollars.

Regardless of which numbers are used, 2017 was weaker than 2016 in at least one important respect: The number of large transactions declined sharply. That decline was arrested in the first half of 2018. Because it manufactured a low base for 2017, MOFCOM is reporting investment volume as rapidly climbing this year. The CGIT shows a drop, but this may just be due to the limits of corporate disclosure. Both measurements portray 2018 as thus far similar to 2015.

Beyond annual series, the CGIT has at least two crucial advantages over MOFCOM's data. First, individual transactions are disclosed. Second, national policy requires MOFCOM to treat Hong Kong as an external customs port. It therefore is said to receive more than half of Chinese outbound spending. Funds flow through Hong Kong to final destinations, but the ministry does not follow them further. Hence its bilateral figures, such as for Brazil, can be much too low. The CGIT follows money to the true recipient, providing far more accurate bilateral figures.

China's Global Footprint

The CGIT's far superior bilateral figures make clear that neither the BRI nor Hong Kong draws the bulk of Chinese spending. The top 10 investment recipients feature only two BRI members and none in the top seven (Map 1). While the US easily leads in terms of total investment attracted, the American figure is not nearly as impressive after adjusting for population or economic size, and the trend is rapid decline.

For 2018 to date, Germany leads, but on the basis of one large transaction. The story is similar elsewhere—large transactions or their absence determining country results. This is common when considering such a small time period, and half-year numbers should not be taken too seriously. One tentative

Table 1. Two Views of Chinese Outward Investment (\$ Billion)

| | CGIT | Ministry of Commerce* |
|--------------|----------------|-----------------------|
| 2005 | 10.2 | 12.3 |
| 2006 | 19.8 | 21.2 |
| 2007 | 30.1 | 26.5 |
| 2008 | 55.7 | 55.9 |
| 2009 | 56.0 | 56.5 |
| 2010 | 65.9 | 68.8 |
| 2011 | 69.8 | 74.7 |
| 2012 | 80.3 | 87.8 |
| 2013 | 80.5 | 90.4 |
| 2014 | 103.1 | 106.3 |
| 2015 | 114.6 | 128.9 |
| 2016 | 170.3 | 178.1 |
| 2017 | 177.9 | 155.2 |
| 2018H1 | 56.4 | 61.8 |
| Total | 1,090.5 | 1,124.3 |

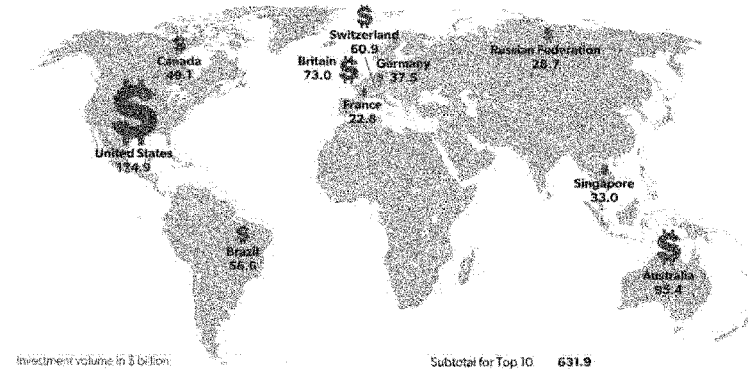
Note: Numbers may not add due to rounding. The CGIT is revised with each update. *MOFCOM figures are drawn from different series for 2005–12 than for 2013–17. The 2018 figure is extrapolated from nonfinancial (only) outward investment through May. Source: American Enterprise Institute; "China Global Investment Tracker," July 2018 update, <http://www.aei.org/china-global-investment-tracker/>; National Bureau of Statistics of the People's Republic of China, State Administration of Foreign Exchange, "2016 Statistical Bulletin of China's Outward Foreign Direct Investment," China Statistics Press, September 2017; and Xinhua, "China's OFDI Sees Strong Growth," June 14, 2018, http://www.xinhuanet.com/english/2018-06/14/c_137253982.htm.

result to watch: The Russian Federation lost a large deal and as yet has drawn nothing at all to compensate for that.

Another intriguing development is MOFCOM depicting investment in the BRI as a whole as weak. Tracking the BRI over time is difficult because the number of participants continues to rise. And the BRI would be immediately much larger if a country such as Britain joined. But MOFCOM puts the BRI investment share at less than 15 percent through May and falling, as growth lagged the rest of the world. CGIT investment numbers are currently more favorable to the BRI, perhaps because MOFCOM is using only the original set of member countries.

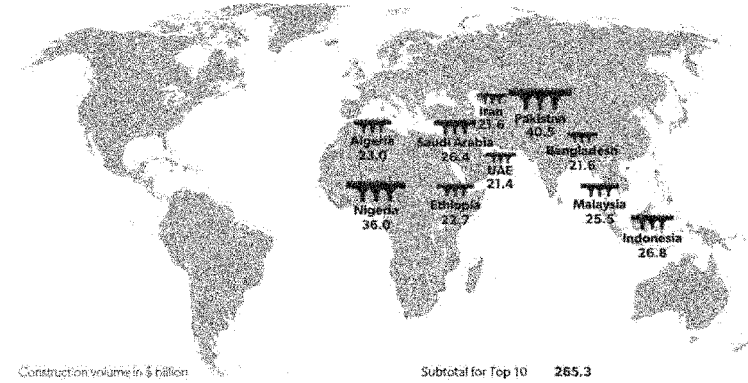
Investment involves ownership. China may own few assets in a country yet sign contracts worth billions to build dams, housing, and more. The PRC

Map 1. Top Recipients of Chinese Investment, 2005–18 (\$ Billion)



Source: American Enterprise Institute and Heritage Foundation, China Global Investment Tracker, <https://www.aei.org/china-global-investment-tracker/>.

Map 2. Top Countries for Chinese Construction Activity, 2005–18 (\$ Billion)



Source: American Enterprise Institute and Heritage Foundation, China Global Investment Tracker, <https://www.aei.org/china-global-investment-tracker/>.

has far less in the way of investment than construction in Angola, for example. Even at \$780 billion, the value of construction contracts that the CGIT captures is too low. Early years were underreported, and new projects trickle in slowly. Moreover, construction activity is concentrated in poorer countries where

information on Chinese activity may not be sufficiently documented to appear in the CGIT.

The most striking result about the construction top 10 list is how little of the total it captures, only 35 percent versus 60 percent in investment (Map 1). This is because the economies are smaller; there

are no rich countries in the top 10. Eight are BRI members. The totals differ, but MOFCOM confirms the CGIT result that the BRI construction share is far larger than its investment share.⁷ Observers of the BRI should focus on construction and engineering.

Because construction contracts appear more slowly than investments, available 2018 numbers may be missing up to \$20 billion worth of deals. Over the past 18 months, Argentina, Australia (primarily through Chinese-owned John Holland), the UAE, Egypt, and the Russian Federation saw the most PRC construction and engineering activity.

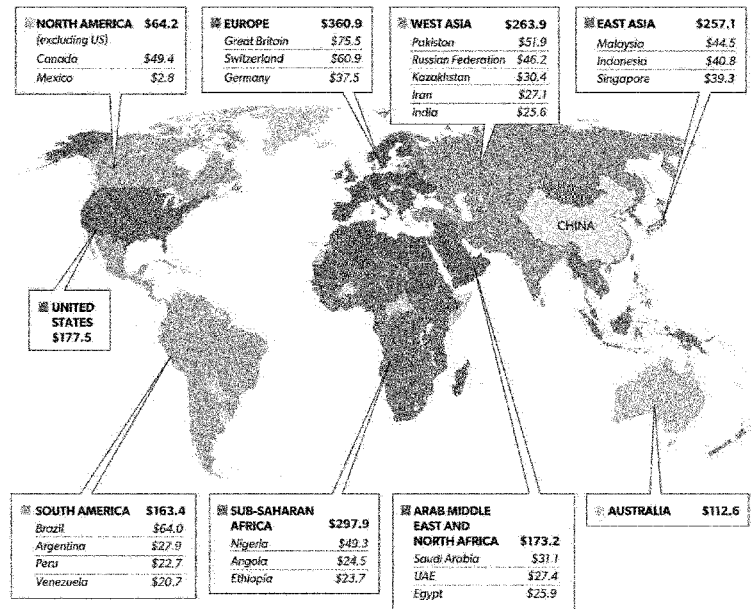
An important difference between investment and construction lies below the quantities involved: The role of private Chinese companies in investment

is now considerable, while state-owned enterprises (SOEs) such as China National Building Materials utterly dominate construction. These SOEs have a proven record in difficult settings at home and overseas and are massively aided by concessionary finance from state-controlled banks. Given the state role, it is no surprise that many Chinese projects are money losers; they are usually not initiated for the sake of profit.

A dollar invested and a dollar received for engineering and construction do not have the same value or impact. Nonetheless, investment and construction can be usefully combined simply to understand the scope of the PRC's activity (Map 3). Through one or the other, PRC enterprises have a truly global

Map 3. China's Worldwide Reach

Since 2005, the combined value of China's global investment and construction is nearly \$1.9 trillion. More developed countries draw the bulk of investment, with Europe as a whole the leading region. Developing countries such as Pakistan and Nigeria see the most construction activity.



Note: Figures are in billions of dollars.
 Source: American Enterprise Institute and Heritage Foundation, China Global Investment Tracker.
<https://www.aei.org/data/china-global-investment-tracker>.



footprint, including in countries that most multinationals shy away from. China has not only internationalized; it has successfully diversified. Investment and construction combined now exceed \$100 billion on all six populated continents. They exceed \$200 billion on all but South America and Australia.

The PRC's Priorities and Problems

While some Chinese investment and construction is aimed at winning diplomatic influence, most is not concerned with the host country but rather targeted at sectors where the PRC has either need or expertise (Table 2). It is hardly a surprise, then, that energy dominates both investment and construction (in the form of power generation). Since 2005, oil and gas plays alone are larger in size than all metals investment. Real estate just broke \$100 billion.⁸ Technology is controversial but is barely half that size. For 2018 to date, transport and metals investment are outperforming their historical trend, and finance and agriculture are underperforming.

In construction, energy and power share the spotlight with transport. Coal and hydropower plants draw the most energy contracts, each about one-quarter of the total. Notwithstanding the attention paid to the PRC's presence in global ports, rail and roads easily lead transport construction. Real estate

is large-scale low-income housing plus specialty buildings for host governments, and the pace of activity there has picked up over the past 18 months.

Many of the numbers are impressive, but the growth trajectory from here is uncertain. On the positive side for investment, the heavy capital outflow that began in late 2015 is now well in the rearview mirror. Formal controls and detention of unruly CEOs⁹ combined to basically stabilize foreign exchange outflows by the second half of 2017, and that has held since.¹⁰ However, the days of ever-rising foreign exchange reserves are even farther in the rearview mirror, and Beijing will continue to guard against a repeat of 2015-16. Annual investment volume is likely capped at \$175 billion for the next few years, less if the US remains hostile.

The determining factor for both the US and global totals may be how much private companies spend. SOEs will of course continue to make large purchases with the backing of the central government as long as host countries permit. But hostility toward SOE acquisitions is growing among rich countries since their multinationals cannot acquire the same SOEs. Large SOE investments must be spaced over time to avoid a backlash.

Private companies, especially those not relying on state bank financing, can generally acquire assets with less opposition. It is thus encouraging, if as yet

only suggestive, that the private share has rebounded in 2018 from a sharp drop in 2017 (Table 3). Private firms do not dictate the PRC's investment pattern; Beijing does. Still, they can make the difference between a series of \$130 billion years or a series of \$160 billion years.

Another positive development is more of a surprise and even more tentative: The 2018 share of greenfield spending has climbed back to 2015 levels after being minor compared to mergers and acquisitions in 2016-17.¹¹ This also serves to boost host country receptiveness. Acquisitions carry

Table 2. Sector Patterns, 2005-17 (\$ Billion)

| Sector | Investment | Construction | Troubled |
|------------------|----------------|--------------|--------------|
| Energy and Power | 357.0 | 323.2 | 130.9 |
| Transport | 110.3 | 242.4 | 46.9 |
| Metals | 130.7 | 34.1 | 76.0 |
| Real Estate | 300.5 | 80.6 | 17.8 |
| Agriculture | 80.4 | 17.3 | 11.0 |
| Finance | 76.1 | - | 42.1 |
| Technology | 52.4 | 16.0 | 28.2 |
| Entertainment | 40.7 | 2.3 | 1.6 |
| Tourism | 39.3 | 7.1 | 7.4 |
| Logistics | 32.8 | 4.5 | 1.3 |
| Medical | 15.7 | 3.4 | 0.4 |
| Other | 54.6 | 49.0 | 7.2 |
| Total | 1,090.5 | 780.2 | 370.8 |

Note: In other investment, the lead sector is consumer goods; in other construction, it is utilities. Source: American Enterprise Institute and Heritage Foundation, China Global Investment Tracker, <https://www.aei.org/china-global-investment-tracker/>.

fear of loss of competitiveness and technology and the possible relocation of jobs. Greenfield investment avoids these problems, if it can be sustained.

Construction activity averaged a hefty \$100 billion annually in 2015–17. (It is too early to assess 2018.) The trend is for stability rather than growth. The PRC no longer needs to engage in overseas projects for the sake of employing its own people, since the labor force is shrinking and aging. Moreover, because SOEs dominate construction and many projects are unprofitable, their financing constitutes another drain on foreign reserves, which Beijing will seek to contain.¹²

The BRI has a minor impact on investment. BRI construction and engineering appears to be growing, but that may just be a function of adding countries and, in any case, is not enough to raise overall activity. The BRI is in fact largely a branding of engineering and construction Chinese firms were already undertaking for years. But it was announced by and is politically tied to Xi Jinping.¹³ As a result, there is heavy pressure to hide failures, though failures are unavoidable when building highways across previously closed borders or acquiring contested land.

The PRC fails the basic reciprocity test; it wants SOEs to be able to control foreign giants yet never be acquired themselves.

When noncommercial factors impair a commercial agreement, this qualifies as a “troubled” transaction. PRC construction and engineering companies typically face \$6–\$7 billion in such impairment annually, such as several road contracts in Bangladesh. Because investment involves indefinite ownership, it faces more obstacles than construction, to the tune of \$25 billion or so in annual losses of some sort, despite the commercial partners wanting to proceed.

Beijing has belatedly unraveled deals either directly or by finding fault with Chinese enterprises involved. Domestic or international security con-

Table 3. The Private Share of Investment Since 2010 (Percentage)

| Year | Share |
|--------|-------|
| 2010 | 9.6 |
| 2011 | 11.5 |
| 2012 | 14.1 |
| 2013 | 27.4 |
| 2014 | 30.9 |
| 2015 | 31.5 |
| 2016 | 46.6 |
| 2017 | 33.2 |
| 2018H1 | 49.5 |

Note: The private share was tiny before 2010. Source: American Enterprise Institute and Heritage Foundation, China Global Investment Tracker, <https://www.aei.org/china-global-investment-tracker/>.

frontations have made continuing business impossible. Multiyear operating losses or valuation declines also qualify.

The main issue, though, is host countries inhibiting or outright barring investment. The PRC fails the basic reciprocity test; it wants SOEs to be able to control foreign giants yet never be acquired themselves. This imbalance is more stark in sectors deemed strategic, such as in the now-infamous Made in China 2025 program.¹⁴ And this current round is hardly the first set of industrial policies. Beijing likes competition everywhere except at home.

A second concern of host governments has grown in importance over the past 18 months: a large-scale PRC economic presence bringing unwanted social and political influence campaigns. Developing countries have long fretted over being overwhelmed by Chinese firms. The problem has recently expanded with accusations of extensive Chinese interference and graft in Australia and Malaysia.¹⁵ Some European Union member states fear Beijing is buying votes on certain issues, especially from east Europe.¹⁶ As with lack of reciprocity, concerns about inappropriate influence engender broad hostility in host countries, including those just watching.

The top two recipients of the PRC’s investment by volume are unsurprisingly by far the top two in terms of troubled transactions (Table 4). The US has effectively barred attempted technology investments; Australia is more cautious in rejecting China. Iran and Germany are present due to older events. The main event in troubled transactions in 2018 is

the collapse of private energy firm CEFC China Energy, which attempted to make a major purchase in Russia and could not even complete much smaller transactions in the Czech Republic and Romania. It usually takes time for a transaction to unravel completely, so there will eventually be more for 2017–18.

The US Needs to Be Clearer

Since 2011,¹⁷ the CGIT has come part and parcel with a call for reforming the Committee on Foreign Investment in the United States (CFIUS). In just the past month, reform bills have passed both House and Senate, leaving only reconciliation, and have been blessed by President Trump.¹⁸ Problem solved? Only partly.

There is little Chinese investment in the US at present, but Beijing could easily trigger another rush with supportive financing. A more legally and technically capable CFIUS is entirely justified in that sense. A controversial point is whether the unreformed CFIUS has failed to protect advanced technology until now. The CGIT does not show successful Chinese purchases of advanced technology. This fact is reflected in the House and Senate bills emphasizing transactions that are hard to monitor, such as small acquisitions of emerging technology or deals in which Chinese participation is intentionally obscured.¹⁹

Both bills also expand CFIUS's authority to new areas. They correctly identify as important the related issues of cybertheft, personal data, and rule of law. American losses from Chinese theft of intellectual property (IP), by cyber means and otherwise, run at least in the tens of billions of dollars annually.²⁰ Loss of technology through IP theft is evidently a bigger problem than loss of technology through poorly monitored transactions. Punitive tariffs were applied in July 2018, but these punish entire subsectors, with no incentive for individual firms to stop stealing.

A number of Chinese firms are interested in entities holding Americans' personal data. This can be seen in the rise of PRC health care investments. The danger lies in the party then deciding it wants these data. The absence of rule of law means previously legitimate Chinese transactions would immediately turn into security risks. In 2017, CFIUS blocked the

Table 4. Most Troublesome Countries, 2005–17 (\$ Billion)

| Country | Troubled Transactions |
|--------------------------------|-----------------------|
| United States | 71.1 |
| Australia | 59.3 |
| Iran | 25.2 |
| Germany | 15.4 |
| Russian Federation | 14.3 |
| Libya | 12.7 |
| Subtotal for Top Six | 197.9 |
| Total for All Countries | 370.8 |

Source: American Enterprise Institute and Heritage Foundation, China Global Investment Tracker, <https://www.aei.org/china-global-investment-tracker/>.

MoneyGram acquisition on these grounds, but it recently permitted Oceanwide to buy health insurer Genworth.²¹

This leaves a series of challenges still facing CFIUS and American policy generally. Sanctions for IP theft should be developed outside CFIUS. Regarding personal data, the US needs a clear and consistent position to emerge, so that firms do not need to anticipate which side of the MoneyGram/Genworth divide they fall on. The CFIUS bills themselves are lengthy, and implementation will be complex. Yet it needs to happen quickly to minimize security risks. The additional security intervention, eyeing the PRC, should not inhibit spending by thousands of companies from partner countries that have proved their value to the US for decades. CFIUS therefore needs both more and highly capable staff, which of course requires money.

The single most important question for CFIUS staff is identifying who is involved in a deal, which is no longer a simple task. If identification is not done properly, CFIUS reform goals cannot be achieved. The biggest PRC acquisition in the US in 2017 was routed through Ireland. The most controversial deal saw Lattice Semiconductor briefly pretend it was being bought by an American firm. The money was Chinese.²² Money ultimately means influence, no matter the company name or headquarters location. Shell companies mean any minimum ownership standard can be gamed, so the best way to determine control of a firm is to trace financing.

It is reassuring that the CFIUS bills sidestep several largely false concerns. Reciprocity is a long-standing sore spot. The Chinese market is certainly

less open than the American, but calls for simple reciprocity in investment are misguided. The US will not open advanced technology sectors just because the PRC supposedly does, nor would there be any value in Beijing opening industries that already see enormous overcapacity. As tempting as calls for fairness are, they would make for bad policy if applied.

Another commonly misunderstood matter is state ownership. While SOEs account for most of China's global investment, their US share is below 40 percent and falling. More important, there is little difference in Communist Party control of private firms and SOEs. The absence of rule of law means private Chinese companies have no way to appeal party orders.⁴³ When considering commercial competitiveness, private Chinese companies are subsidized less than SOEs and hence are superior investors. But they are as beholden to the party for their survival as SOEs are,⁴⁴ and there is no justification to treat them differently regarding national security.

A final issue is dormant but could reappear after the next election. CFIUS should remain focused on

national security, not be used to evaluate economic criteria. As demonstrated, protecting security is daunting enough on its own. Moreover, notions of "net economic benefit" and the like would lead immediately to domestic interests seeking to avoid competition. Foreign investment brings jobs, and competition brings innovation. Neither should be curbed, by CFIUS or another body.

In sum, PRC entities should be sanctioned for gaining from IP theft. Because there is no rule of law, Chinese firms generally cannot be trusted with personal data. As has always been true, American dual-use technology must be protected. These are the priorities, but they do not cover all Chinese ventures or close to it. Long-standing American policy is to welcome foreign investment. This policy should be extended to the PRC, subject to the needed limitations. China has shown it will invest and build globally regardless of what the US does. The best American response is clear and consistent policy that draws the Chinese spending we want.

About the Author

Derek Scissors (derek.scissors@aei.org) is a resident scholar at AEI and the immodest creator of the China Global Investment Tracker.

Notes

1. CNN, "China's New World Order," May 2017, <http://www.cnn.com/interactive/2017/05/world/chinas-new-world-order/>.
2. American Enterprise Institute and Heritage Foundation, "China Global Investment Tracker," <https://www.aei.org/china-global-investment-tracker/>.
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Mr. POE. Thank you, Dr. Scissors.
Dr. Atkinson, recognized for 5 minutes.

**STATEMENT OF ROBERT D. ATKINSON, PH.D., PRESIDENT,
INFORMATION TECHNOLOGY AND INNOVATION FOUNDATION**

Mr. ATKINSON. Thank you, Chairman Poe and Ranking Member Keating. I will take Derek's 15 seconds. I appreciate you inviting me here today.

I think it is important to recognize that the problem with China, in our view, is not so much the trade deficit, it is that they have a contra-strategy to seek and attain global technology dominance in a wide array of technology-advanced industries that the U.S. specializes in. And unchallenged this could and potentially is resulting in the loss of U.S. competitive advantage in a wide array of industries that we enjoy right now that provide high wages to American workers.

Technology acquisition is at the center of China's strategy. They lag behind us in most industries and absent cheating, as the chairman said, it is going to take them 20, 30 years to come close to catching up. They understand that and so their entire strategy, the first part of it, is premised on getting technology from foreigners by hook or by crook.

There is a recent study by the National Bureau of Economic Research looking at joint ventures in China. This is one key tactic they have. Between '98 and 2012 there were over 4,000 U.S. joint ventures in China. The study found that not only did the Chinese JV partner gain substantial technological capabilities, but so did other Chinese firms in the same industry which isn't a surprise because that is exactly what the Chinese want with joint ventures.

There has been a lot of talk about the fact that we don't have a right to force China to roll back its 2025 ambitions. I disagree with that—I agree with that. We don't have a right to ask them to not advance technologically. Every country has that right. What we do have a right to insist upon is that they do it through fair practices, and right now the bulk of their practices are unfair.

I would argue though that success is an incredibly daunting task. They have several weapons that they are able to use that we don't have. One of them is they can punish and they will punish U.S. corporations with impunity. They know how to do that. There is no rule of law. They can retaliate against U.S. firms in pretty much any way they want to do. And secondly, it has been raised before, the WTO provides little redress so much of what China is doing is in the gray area of the WTO or even in areas that the WTO protocols don't cover.

So what do we do? Number one, I agree with the Trump administration. We have to focus on results-oriented trade. This is not about winning a case or not winning a case. This is about insisting upon a wholesale set of practices that they change, which to me have to be around forced technology transfer and IP theft, and then a significant reduction of their industrial subsidy regime.

So what do we do, how do we do that? I think number one, the best way we are going to be able to do that is we need a coalition of the willing. We have to have our allies at our side because they are hurt by China as well—the Japanese, the South Koreans, the

Europeans in particular, and the Canadians. Not having those allies at our side makes this a much tougher fight.

Secondly, even if we don't win, in other words winning meaning rolling back their practices, getting the Chinese to admit and roll back their practices, even if we can't do that we need to put roadblocks in their way. One roadblock would be obviously passing FIRRMA, having the President sign it, and really taking a hard line on restricting Chinese investment in the United States particularly in areas around innovation. Second would be enacting a regime where we treat their technology licenses in the U.S. the way we treat theirs.

We should limit science and technology cooperation with China. It is not clear to me why we continue to cooperate. Dr. Scissors mentioned a few things going after specific Chinese firms that have benefited. So, for example, we should prohibit Chinese firms that have stolen intellectual property from using our banking and financial system. We should enact an antitrust regime that is much tougher on the Chinese. So, for example, U.S. DOJ does not take into account the fact that when state-owned enterprises merge that is not covered by U.S. antitrust law, whereas private sector mergers in other countries do that.

Lastly, we need on this, we need to, I would argue, set up a new regime in the antitrust bureau to focus on foreign government-led enabled antitrust violations. Subsidies, all of these other practices, these would be, if the private sector were doing them, antitrust violations. We should treat Chinese firms that benefit from these as antitrust violators.

And lastly, we shouldn't let China gain the moral high ground. That has been one of the most disconcerting things I have seen when you have President Xi claim and have the media agree that he is the defender of free trade when there is nothing more ludicrous under the sun than that statement. We need to be seen as the defenders of global free trade and we can't let China have the high ground. I am sorry I don't remember which member said this, but we didn't start the war, the Chinese started the war. Mr. Sherman said that. We are just now finally fighting back. So thank you and I look forward to your questions.

[The prepared statement of Mr. Atkinson follows:]



Testimony of

**Robert D. Atkinson
President
Information Technology and Innovation Foundation**

Before the

**House Committee on Foreign Affairs
Subcommittee on Terrorism, Nonproliferation and Trade**

Hearing on China's Predatory Trade and Investment Strategy

July 11, 2018

Washington, DC

Good afternoon Chairman Poe, Ranking Member Keating, and members of the Committee; thank you for inviting me to share the views of the Information Technology and Innovation Foundation (ITIF) on the issue of Chinese predatory trade and investment policies and what the U.S. government should do in response.

The Information Technology and Innovation Foundation is a non-partisan think tank whose mission is to formulate and promote public policies to advance technological innovation and productivity internationally, in Washington, and in the states. Recognizing the vital role of technology in ensuring prosperity, ITIF focuses on innovation, productivity, and digital economy issues. ITF has long focused on the issue of how unfair foreign policies and practices, particularly Chinese, negatively impact the U.S. economy. I very much appreciate the opportunity to comment on these issues today.

The Existential Threat of Coerced and Purloined Chinese Technology Acquisition

Ever since the first industrial revolution advanced countries have worried about technology transfer to foreign nations. For example, it was against the law to transfer technology designs outside of Britain; something that Samuel Slater did when he memorized the plans for textile machines before immigrating to the United States and establishing the first U.S. textile mill in Rhode Island.

Today the United States leads in the so-called fifth industrial revolution (information technology) and hopes to lead in the 6th (artificial intelligence, robotics, etc.), but a major threat to our leadership is technology transfer to China. China is seeking global technology dominance in an array of advanced technology industries through an unprecedented array of predatory economic and trade policies and practices, including theft of U.S. technology and coerced transfer thereof. The world has never seen a country like China before, with its organized and strategic system of authoritarian state capitalism. It is not a market economy where firms largely dictate their own strategy and behavior. It is not a country governed by the rule of law. It is not a country constrained by global norms of acceptable economic and trade behavior. It is a country where the government is concerned with one and only one economic goal: winning in advanced technology industries by any means possible.

As ITIF has documented across a series of reports—including “False Promises: The Yawning Gap Between China’s WTO Commitments and Practices,” “Enough is Enough: Confronting Chinese Innovation Mercantilism,” and “Stopping China’s Mercantilism: A Doctrine of Constructive, Alliance-Backed Confrontation”—China has deployed a vast panoply of innovation mercantilist practices that seek to unfairly advantage Chinese advanced-industry producers over foreign competitors.¹ These practices have included forced technology transfer and forced local production as a condition of market access; theft of foreign intellectual property (IP); curtailment and even outright denial of access to Chinese markets in certain sectors; manipulation of technology standards; special benefits for state-owned enterprises; capricious cases to force foreign companies to license technology at a discount; government subsidies of Chinese companies, and government-subsidized acquisitions of foreign enterprises. U.S. and foreign enterprises across virtually every advanced technology sector—from aerospace and biotechnology to information and communications technology (ICT) products, Internet, clean energy, and digital media—have been harmed by China’s aggressive use of these types of innovation mercantilist policies and will continue to be harmed if China cannot be pressured to roll back its egregious predatory practices.

In the last few years, though, the focus of China's efforts has shifted. In 2015, Chinese President Xi Jinping unabashedly trumpeted a goal of making China the "master of its own technologies."² China's arrival at that point resulted from the evolution of Chinese economic policy over the past two decades. Up to the mid-2000s, China's economic development strategy sought principally to induce foreign multinationals to shift relatively low- and moderate-value production to China.³ It used an array of unfair tactics, including currency manipulation, massive subsidies, and limits on imports. That strategy changed in 2006 as China moved to a "China Inc." development model of indigenous innovation which focused on helping Chinese firms, especially those in advanced, innovation-based industries, often at the expense of foreign firms. Marking the shift was a seminal document called the "National Medium- and Long-term Program for Science and Technology Development (2006-2020)," the so-called "MLP," which called on China to master 402 core technologies, everything from intelligent automobiles to integrated circuits and high-performance computers.

The MLP announced that modern Chinese economic strategy sought absolute advantage across virtually all advanced technology industries. It rejected the notion of comparative advantage: which holds that nations should specialize in the production of products or services at which they are the most efficient and trade for the rest. Instead, China now wishes to dominate in the production of a wide array of advanced technology products including jet airplanes, semiconductors, computers, machine tools, robots, electric vehicles, artificial intelligence software, and pharmaceuticals. Essentially, Chinese policymakers wish to autarkically supply Chinese markets for advanced technology products with their own production while still benefitting from unfettered access to global markets for their technology exports and foreign direct investment (FDI).

In recent years President Xi has doubled down on this approach, through new promulgations such as the "Made in China 2025 Strategy," the "13th Five-Year Plan for Science and Technology," the "13th Five-Year Plan for National Informatization," and "The National Cybersecurity Strategy," among other policies. The "Made in China 2025 Strategy," for instance, calls for 70 percent local content in manufacturing components in China, while policies enumerated in documents such as the "13th Five-Year Plan for National Informatization" and "The National Cybersecurity Strategy" effectively deny access to U.S. enterprises seeking to compete in emerging ICT industries such as cloud computing in China. The "National Cybersecurity Strategy" further outlines a goal for China to become a strong cyber power by 2020, and that includes mastering core technologies, many of which the United States is currently the international leader in, such as operating systems, integrated circuits, big data, cloud computing, large-scale software services, the Internet of Things, 5G wireless systems, etc., as the country increasingly pursues a strategy of shutting out foreign competitors in the interest of advantaging domestic enterprises and industries. As the Mercator Institute for China Studies in Germany writes, "Made in China 2025 in its current form [means that] China's leadership systematically intervenes in domestic markets so as to benefit and facilitate the economic dominance of Chinese enterprises and to disadvantage foreign competitors."⁴ For instance, with regard to ICT-enabled manufacturing (i.e., "smart manufacturing") the strategy calls for 80 percent domestic market share of high-end computer numeric controlled machines by 2025; 70 percent for robots and robot core components; 60 percent for big data; 60 percent for IT for smart manufacturing; and 50 percent for industrial software.⁵

China's economic strategy can be summarized as follows: China seeks global competitive advantage in virtually all advanced industries. However, attaining that requires significant "learning" as the production "recipes" to make a jet aircraft, a computer chip, a genomics sequencer, a robot, or a biotech drug are incredibly complex and can't be obtained from scholarly journal articles or other widely available sources of scientific knowledge. The United States has gained competencies and leadership in these and a host of other industries the hard way: trillions of dollars of investment in R&D, production testing, workforce training, and other areas in order to master incredibly complex products and production systems. The Chinese government knows that if it proceeds the fair and "natural" way that it will take it many decades for Chinese firms to close the gap with global leaders. Most of their firms are too far behind to be able to catch up any time soon through organic and fair means. Hence, it has embraced a multifaceted set of policies and programs to obtain the knowledge and capabilities it needs from foreign producers; including through theft of intellectual property, forced joint ventures and technology transfer as a condition of market access; and state-subsidized purchases of or investments in foreign advanced industry firms. And once it obtains that know-how, it then proceeds to lavish subsidies and other benefits on its Chinese business champions so they can advance and scale up, while at the same time limiting foreign company market access in China. Once the Chinese champions have the protected "aircraft carrier" of a domestic market they provide subsidies and other incentives to enable their companies to launch attacks ("going out") to take market share from global leaders in non-Chinese markets.

Foreign Technology Acquisition Underpins "Made in China 2025"

At the heart of China's strategy is foreign technology acquisition. The Chinese leadership knows that if it just relies on market forces few if any foreign technology leaders will provide them with the technology Chinese firms need. Fewer would even establish factories in China, preferring instead to simply export products to China. As a result, China has deployed a panoply of tools to obtain needed foreign technology.

Intellectual property theft is one important tool in the Chinese arsenal. China has deployed industrial spies to obtain foreign secrets. As the *New York Times* documented, a leading Chinese computer chip maker allegedly paid employees of a Taiwanese chip company working with the U.S. company Micron to steal valuable chip designs.⁶ Another vector is cyber theft. Seven percent of U.S. firms operating in China listed cyber theft as a problem, a number that presumably would be higher if every firm that had faced an intrusion was aware of it.⁷ The *IP Commission Report on the Theft of U.S. Intellectual Property* found that China accounted for nearly 80 percent of all IP thefts from U.S.-headquartered organizations in 2013, amounting to an estimated \$300 billion in lost business annually.⁸ An updated 2017 Commission report put the figure at \$600 billion.⁹ Then NSA Director Keith Alexander has called Chinese IP theft, "the greatest transfer of wealth in history."¹⁰

Weak enforcement of IP law is another vector. Chinese firms can often copy and reengineer foreign technologies with impunity (what they call introducing, digesting, absorbing and re-innovating), even those technologies protected by patents. As a *MIT Sloan Management Review* article, "Protecting Intellectual Property in China," noted, "Intellectual property protection is the No. 1 challenge for multinational corporations operating in China."¹¹ According to the U.S. International Trade Commission, in 2009, U.S. IP-intensive enterprises conducting business in China reported losses of approximately \$48.2 billion in sales, royalties, or license fees due to Chinese IPR infringement.¹² In 2018, according to the American Chamber of

Commerce in China, one-quarter of surveyed U.S. companies cited “Insufficient protection offered by text of IP-related laws and regulations,” while 24 percent cited, “Difficulty prosecuting IP infringements in court or via administrative measures” as significant challenges.¹³

Another vector is to trick companies in the United States into thinking that a Chinese firm wants to invest in them. A seemingly independent Chinese investment fund will approach a small to mid-sized U.S. technology company and indicate a willingness to invest needed capital in the company. But before the Chinese company can do this, they must do due diligence and they send in employees, who turn out to work for a state-owned Chinese company) to obtain key information about the company, including trade secrets. The firm never hears back from the investment company again.

An increasingly important way for Chinese firms to gain access to needed technology is to simply buy up U.S. technology companies or invest in high-tech startups. Indeed, until recently, a not-insignificant share of Chinese foreign direct investment into the United States was in technology industries. According to Select USA, the top four industrial categories in terms of numbers of Chinese FDI projects from 2003 to 2015 were electronics, industrial machinery, software and information technology services, and communications.¹⁴ The Rhodium Group reports that over the last 16 years there has been roughly \$18 billion of Chinese FDI into ICT and electronics industries deals, with most of that in just the last few years. Of the \$4.9 billion invested in electronics, \$4.2 billion was invested in 2016, with 99.99 percent of that going to buy U.S. firms.¹⁵ Of the \$14.2 billion invested in ICT, 74 percent was made from 2014 to 2016, with more than 95 percent going to acquisitions.¹⁶ These numbers would have been considerably larger if the federal government had not informally or formally blocked some deals through the Committee on Foreign Investment in the United States (CFIUS).

The main purpose of most Chinese technology companies buying U.S. technology companies is not to make a profit, but to take U.S. technology to upgrade their own technology capabilities. The Rhodium Group notes that in the aviation sector, “The dominant player is aviation conglomerate AVIC, which is looking to the US market to upgrade its technology and other capabilities.”¹⁷ Likewise, in the electronics and electrical equipment sector, “Chinese investors are drawn to the US electronics and electrical equipment sector for building their brands, expanding their sales and distribution channels, and upgrading their innovative capacity and technology portfolios.”¹⁸ Investments in pharmaceuticals and biotechnology are “often driven by upgrading technology (such as Wuxi’s acquisition of AppTec, a laboratory services firm).”¹⁹ As one study of Chinese FDI estimated, 30 percent of the private firm deals and 46 percent of the SOE deals are motivated by technology acquisition.²⁰ The authors go on to state that Chinese acquisition of overseas firms “has become the most widely used methods [of investing overseas] for Chinese firms, largely because it provides rapid access to proprietary technology.”²¹

China has also ramped up its efforts to buy into early-stage U.S. technology start-ups. A recent report from DOD’s Defense Innovation Unit Experimental (DIUx) finds that “Chinese participation in venture-backed startups is at a record level of 10-16% of all [U.S.] venture deals (2015-2017) and has grown quite rapidly in the past seven years.”²² And some of this investment comes from venture firms that are backed by Chinese governments (federal or provincial). For example, the Zhongguancun Development Group, a state-owned

enterprise headquartered in Beijing has set up “Danhua capital” to promote the strategy of “Zhongguancun capital going global and bringing in overseas advanced technology and talents.”²³ Likewise, Shenzen Capital Group, a purportedly private venture capital firm that has invested in at least one advanced U.S. technology company,²⁴ has actually received about 80 percent of its invested capital from the Chinese government,²⁵ and its investments are focused, not surprisingly, to match the central government’s key targeted industries. The firm even boasts a chart that compares the technology allocation of its investments and how it compares to the government’s priorities.²⁶

Forced Technology Transfer as a Key Weapon in the Chinese Arsenal

Dwarfing these tools is forced technology transfer. Although China’s World Trade Organization (WTO) accession agreement contains rules constraining it from tying foreign direct investment or market access requirements to transfer technology to the country,²⁷ China routinely requires firms to transfer technology in exchange for being granted the ability to invest, operate, or sell in China.²⁸ As Harvard Business School professors Thomas Hout and Pankaj Ghemawat document in “China vs the World: Whose Technology Is It?,” Chinese technology transfer requirements as a condition of market access have affected scores of companies in industries as diverse as aviation, automotive, chemicals, renewable energy, and high-speed rail.²⁹ To be sure, because such conditions usually contravene China’s WTO commitments, officials are careful not to put such requirements in writing, usually resorting to oral communications to pressure foreign firms to transfer technology.³⁰ In 2011, then-U.S. Treasury Secretary Timothy Geithner laid such concerns about China’s technology transfer requirements, stating that “we’re seeing China continue to be very, very aggressive in a strategy they started several decades ago, which goes like this: you want to sell to our country, we want you to come produce here. If you want to come produce here, you need to transfer your technology to us.”³¹ In 2012, 23 percent of the value of all foreign direct investment projects were joint ventures.³² And the U.S.-China Business Council’s “2014 China Business Environment Survey” reports that 62 percent of companies had concerns about transferring technology to China, while 20 percent reported that they had been requested to transfer technology to China within the past three years.³³

Forced technology transfer is not new. A 1987 Congressional Office of Technology Assessment report states, “Although most U.S. firms approach the China market with the intent to sell products, many find they must include technology transfer if they wish to gain access to the China market.”³⁴ But what is new are two things. First, there are more foreign companies seeking to get in the Chinese market, such that the scale of forced technology transfer is much larger than it was two decades ago. In 2015 for example, 6,000 new international joint ventures, amounting to \$27.8 billion of FDI inflows, were established in China.³⁵

Second, the sophistication and value of the technology the Chinese government is now demanding is significantly higher than in decades past when U.S. companies could afford to give their Chinese “partners” older generations of technology, confident that the U.S. firms could innovate faster. Now for many foreign advanced industry companies, doing business in China requires transferring ever-more valuable technology to Chinese joint venture partners. In 2013, 35 percent of U.S. business respondents in China said that tech transfer requirements were a concern, and 42 percent in advanced technology industries voiced this concern.³⁶ Fifty-six percent of survey respondents who gave a response thought that tech transfer requirements were

increasing.³⁷ And as USTR points out in its 301 report on China, it is likely that these numbers are under-reported.³⁸

For example, the CEO of a large multinational telecommunications equipment company recently shared with ITIF that he opened up a large R&D facility in Beijing that employs over 500 scientists and engineers. When asked if he did this to access Chinese engineering talent, he responded bluntly: "Unless I promised the Chinese Government that I would open up an advanced technology lab there, I was told that I would not be able to sell to the Chinese telecommunications providers," (most of which are de facto controlled by the Chinese government).

The Chinese government has employed the weapon of forced technology transfer to gain technological know-how in a variety of industries. A well-known case in point concerns high-speed rail. Over the past 15 years China built the largest high-speed rail network in the world. That massive purchase of rolling stock, signal systems, and related equipment was something no foreign rail producer could afford to ignore. As such, the Chinese government had enormous leverage to pressure foreign producers to give the Chinese state-owned enterprise competitors key technology and IP. The Chinese term for this is "exchanging market for technology."³⁹ As Chen and Haynes document, in 2004 the State Council of China adopted a new railway development strategy that shifted from just subsidizing domestic producers in order to help them improve their technology to one where they "introduce advanced technology through joint design and manufacturing, [with an ultimate objective to] to build a Chinese brand."⁴⁰ After that the state Ministry of Railways (MOR) launched three tenders for foreign high-speed electric trains and in each one MOR stipulated that foreign companies had to collaborate with domestic partners in the competition and had to transfer key technologies to achieve localization.⁴¹ The tender included two key conditions: to win, the bidder had to transfer technology to China and the final products had to be marketed under the Chinese state-owned enterprise rail car brand. This was all in support of the government's "Action Plan for the Independent Innovation of Chinese High-Speed Trains." As a result, multiple foreign train companies were pressured to transfer valuable technology to the Chinese companies (now principally one company due to the central government forcing the two main companies to merge into a powerful national champion, Chinese Railway Construction Corporation, now the largest rail producer in the world.) As Chen and Haynes write, "The result is a new HSR [high speed rail] industry in China has emerged which now serves the new vast HSR network and looks externally to export its new skill in HSR production and its new cutting-edge activity in HSR innovations." Not only are CRCC and related Chinese companies virtually guaranteed all Chinese rail projects, but CRCC is now aggressively exporting trains and train systems containing advanced foreign technology to other nations, backed with generous export subsidies from the central government. For example, the China Export-Import Bank (a state agency) announced in 2017 the equivalent of \$30 billion in financing assistance for CRCC exports.⁴² (Surprisingly, the U.S. Department of Commerce International Trade Administration, in its document promoting U.S. rail export opportunities to China, makes no mention of the fact that the lion's share of these opportunities come with forced technology transfer requirements.⁴³)

The Chinese have employed different tactics to the same end in the biopharmaceutical industry, where various policies enable Chinese firms to get access to U.S. technology. For example, the relatively short six-year term for data exclusivity, coupled with the lack of a formal definition of a "new chemical entity," means

the Chinese government can pressure U.S. firms to turn over important data to Chinese generic drug firms. Similarly, the Chinese government requires that any drugs sold in China must go through Chinese clinical trials, even if they are approved in the United States. This extends the time for sales before a company can sell a drug by as much as 8 years, meaning that the company has only 12 years left of patent-protected sales in China before a Chinese generic company can copy the drug. Moreover, in China, unlike the United States and Europe, there is no extension of marketing exclusivity at the back end to take into account long clinical trial delays. Moreover, China also issues compulsory licenses for the intellectual property for particular drugs.⁴³ Finally, it presses foreign biopharmaceutical companies to form joint ventures if they want their drugs more easily put on the government list of drugs to qualify for reimbursement.⁴⁴

We also see this in cloud computing. China requires companies running cloud-computing operations to be locally controlled. This means that if a company like Amazon Web Services or Microsoft wants to serve the rapidly growing Chinese market it must partner with a Chinese company and sell their services under the Chinese company brand. And as part of this partnership the expectation is that the foreign cloud provider will provide the Chinese firm with technology and know-how.⁴⁵ Chinese cloud providers, like Aliyun, the cloud services unit of Alibaba, is able to establish its own data centers in the United States without any similar requirements.

The Chinese have long had policies in place requiring joint ventures with local firms in order for foreign companies to produce automobiles in China.⁴⁶ And many of those production JV requirements also include joint R&D facility requirements. The government is now doubling down on this approach in order to be the global leader in electric vehicles. For example, Renault-Nissan and Ford Motor have established joint electric-car ventures in China.⁴⁷ Indeed, the New Energy Vehicles program under Made in China 2025 strategy requires foreign companies wishing to sell in China to disclose and share valuable technology with their local joint venture partner.⁴⁸ We see this pattern in many other advanced technology industries, including wind turbines.⁴⁹

Tools to Force Technology Transfer

The Chinese have a host of tactics with which they use to pressure foreign companies to transfer technology. All involve “making them an offer they can’t refuse.” The first and most important is to set up industries that are off-limits to fully-owned foreign direct investment. China’s “Catalogue of Industries for Foreign Direct Investment” classifies industries based on categories: “encouraged,” “restricted,” “prohibited.” Other industries are considered to be “permitted.” It is in the restricted category, (which includes 35 sectors, such as automobiles, commercial aircraft, and high-value added telecommunications services) that foreign firms are legally required to partner with a domestic firm in a joint venture.

China wields a host of other weapons to help foreign firms understand that it is in their interest to share their technology. One is to bring bogus anti-trust charges against foreign advanced industry companies and then as part of the settlement make it clear that they must transfer technology to local Chinese partners.⁵⁰ And with Chinese courts largely rubber-stamping the government’s dictates, foreign companies have little choice but to comply. And, all too often, complying means changing their terms of business so that they sell to the Chinese

for less and/or transfer even more IP and technology to Chinese-owned companies, often after paying substantial fines to the government.⁵¹

Another tool is to force foreign companies operating in China to store data about Chinese users in China and turn over encryption keys and source code for inspection. Likewise, in some industries companies must disclose trade secrets as a precondition for receiving regulatory approvals for investments. Still another is to tie regulatory and licensing approvals needed for operation in China to technology transfer. Still another is to tie purchases by the state, including state-owned enterprises, to technology transfer. For example, the Commercial Aircraft Corporation of China (COMAC) requires foreign suppliers to enter into JVs with Chinese suppliers if they want to sell to COMAC.⁵²

Forced Technology Transfer is Effective

Some apologists for Chinese coercion argue that China is shooting itself in the foot with these practices and that if we are just patient the Chinese government will see the error of its ways. Their argument is that by making it so painful for foreign firms to do business in China, the foreign firms will decide to participate less in China and not transfer any technology. Clearly this is naïve at best. The Chinese government is masterful at understanding the maximum amount of pain they can impose without the foreign firm balking.

Moreover, forced technology transfer has been an extremely successful strategy for helping China catch up technologically. One recent study published by the National Bureau of Economic Research examined all international joint ventures (JV) in China from 1998 to 2007. Between 1998 and 2012, they counted 4,057 U.S. JVs in China. First, they found that the Chinese firms the government chose to be partners of foreign investors were on average the best Chinese firms in the particular industry; they were larger, more productive, and more subsidized than other Chinese firms. Second, the Chinese JV partner firm gained substantial technological capabilities from its participation in the JV, even though foreign partners usually took steps to limit the transfer of technology to the partner. Third, it was not just the joint venture firm that benefited; so did many other Chinese firms in the same industry. As the authors write, there is a high level of “technology leakage” to other Chinese firms. This should not be a surprise because the Chinese government sees JVs a tool to upgrade entire Chinese industries, not just the designated champions. Fourth, the tech transfer effect is larger if the foreign firm is a U.S. firm compared to a Japanese or Taiwanese firm. This should not be surprising as in general U.S. firms are more focused on short-term returns (something they can get if they are more accommodating to the Chinese government and Chinese industrial partners) and also because there is more domestic government pressure of firms in Japan and Taiwan to not transfer valuable technology to China.⁵³ Finally, in contrast to what promoters of China’s accession to the WTO might have hoped for, the amount of technology spillovers to other Chinese firms was actually higher after the Chinese joined the WTO than before.⁵⁴

Other Steps to Gain Dominance

Once Chinese firms gain access to needed foreign technology, the next step of the Chinese strategy is to ensure that they have the capital needed to scale up. This involves direct and indirect subsidies and also designing markets protected from foreign competition, so the Chinese firms can accumulate capital. Once firms have the technology, competencies and scale to go global, the government often subsidizes global

market expansion, such as through the China Export-Import Bank (an entity the World Bank has funded) and China's Export and Credit Insurance Corporation (Sinosure).⁵⁵ Moreover, by leading to global overcapacity and selling below cost, China uses that overcapacity as a cudgel to disrupt the economics of innovation-based industries (i.e., subsidized competition prevents foreign competitors from earning reasonable profits from one generation of innovation to reinvest in future generations of innovation) and thus weaken foreign competitors, enabling Chinese firms to gain even more global market share.

The Chinese government also works to limit foreign competition for its budding national champions. For example, in the high-end equipment manufacturing sector, China maintains a program that conditions the receipt of a subsidy on an enterprise's use of at least 60 percent Chinese-made components when producing intelligent manufacturing equipment.⁵⁶ And despite the fact that China "clarified and underscored ... that it agreed that enterprises are free to base technology transfer decisions on business and market considerations" at a December 2014 meeting of the United States-China Joint Commission on Commerce and Trade (JCCT), USTR notes that China has "announced two measures relating to [local procurement of] information technology equipment used in the banking services sector and in providing Internet- or telecommunications-based services more generally."⁵⁷

China also lavishes Chinese firms that have obtained foreign technology with massive subsidies. As George and Usha Haley document in their book, *Subsidies to Chinese Industry: State Capitalism, Business Strategy, and Trade Policy*, China's game plan has long been to "aggressively subsidize targeted industries to dominate global markets." As they document, in the 2000s, China provided almost \$100 billion in subsidies to just three industries alone: \$33 billion for paper, \$28 billion for auto parts, and \$27 billion for steel.⁵⁸ China's share of global solar panel exports grew from just 5 percent in the mid-2000s to 67 percent today, with Chinese solar output turbocharged by at least \$42 billion of subsidies from 2010 to 2012 alone.⁵⁹ China now wants to replicate this strategy in other advanced-technology industries, such as semiconductors and electric batteries.⁶⁰ For instance, China's National Integrated Circuit (IC) Strategy calls for at least \$160 billion in subsidies to create a completely closed-loop semiconductor industry in China, including explicit plans to halve Chinese imports of U.S.-manufactured semiconductors by 2025 and eliminate them entirely by 2035. The "Made in China 2025 Strategy" is supported by some 800 state-guided funds to the tune of more than \$350 billion, including advanced-battery manufacturing, wide-body aircraft, and robotics.

China is Unique in Global Economic History

It is important understand how China differs from past Asian mercantilist nations. Japan and the four "Asian Tigers" (Hong Kong, Singapore, South Korea and Taiwan) all implemented mercantilist practices to leapfrog their industrialization process, including state subsidies, protected home markets, and other policies. But China is different in three fundamental ways.

First, these nations, especially Korea, Japan and Taiwan, largely closed their markets to U.S. firms, preferring to develop their own domestic champions. This reduced the leverage they had over U.S. firms to transfer their technology as a condition of market access. Moreover, it led U.S. companies to protest much more against these unfair practices since the competition was between "our companies" and "their companies." This explains why there was strong bipartisan support in Congress and the executive branch in the 1980s and early

1990s for tough action against these practices and for robust domestic competitiveness policies. U.S. businesses strongly pushed for these policies.

In contrast, China took a different tact, welcoming in (some might say seducing) U.S. companies, but holding out access to the largest market in the world in exchange for what China wanted: advanced technology. Moreover, because so many U.S. firms are now ensconced in China and would be significantly hurt if they walked away, or if the Chinese government retaliated against them for U.S. government enforcement action, most have been less than full-throated supporters of tougher enforcement action against China.

Second, Japan and the tigers were largely “rule of law” nations. While the Japanese government, for example, could exercise considerable discretion through so-called “administrative guidance,” it did have a Constitution, a legislature (the Diet), and laws that courts would enforce. This meant that not only were more of their mercantilist actions WTO-actionable, but there was a limit on how capricious and unfair the government could be. China knows no such bounds. For example, the Chinese government is too savvy and understanding of WTO legal arcana to ever put its rules on forced technology transfer in writing. It knows that if it did, this would be actionable under WTO rules. Rather, its rules are informal—known to all, but “hidden” behind face-to-face meetings and vague but ultimately clear informal messages. Moreover, when the Chinese government wants to send a message to a U.S. firm doing business in China—either to retaliate for some legitimate action the U.S. government has taken vis-à-vis China or simply to require a U.S. firm to toe the party line—it can pretty much do whatever it wants, including generating a trumped up anti-trust charge, denying permits and approvals, or otherwise making life difficult for a U.S. company.

Finally, Japan and the Tigers were not only allies of the United States, they benefited from and required the U.S. security umbrella. Without U.S. protection, these nations would have to cope with military and other security challenges from China, North Korea, and Russia on their own. As such, that gave the U.S. government some leverage to challenge their more egregious policies and practices. Moreover, the technological rise of these nations never posed a military and national security threat to the United States. In fact, an increase in their economic and technological strength benefited U.S. national security. The exact opposite is the case with China, which is working vigorously to upgrade its military capabilities to be on par, if not ahead, of the United States.

What is at Stake?

Given China’s Made in China 2025 plan, it is no exaggeration to suggest that, without aggressive action, the United States may face a world within two decades where U.S. jobs in industries as diverse as semiconductors, computers, biopharmaceuticals, aerospace, Internet, digital media, and automobiles are significantly reduced due to Chinese policies unabashedly targeting domestic and global market share in those industries.

It is important to understand that the challenge to America’s leadership in technology-based industries is much different than the process of losing more commodity-based, low-skilled industries to China in the 2000s. If, for example, the value of the dollar was to fall significantly relative to the yuan (and other currencies), it is possible that America could regain at least some of the production lost to China in industries

like textiles and apparel, furniture, metal parts, and other similar low- and medium-value added products. Companies could simply buy machines, set up factories, and restart production domestically in a cost-effective way. But if America's technology companies were severely weakened or even put out business, no currency decline could bring them back because competitiveness in technology industries is based less on cost and more on a complex array of competencies at the firm- and ecosystem-level. For example, a firm cannot simply buy some semiconductor equipment and start producing chips. To do that would require not just machines but deep and complex tacit knowledge embedded in the firm in workers (from the shop floor to scientists to managers) coupled with an innovation ecosystem (universities training the right talent, a network of suppliers, etc.). Once those capabilities are lost, they are essentially gone, and are very difficult to resurrect absent massive government intervention.

There is an additional reason why losing advanced technology industries is problematic. Most technology-based industries have high barriers to entry. In contrast to the t-shirt industry where entry largely requires just capital to buy sewing machines, entry into innovation-based industries requires both physical and intellectual capital. In an industry like semiconductors, for example, firms spend hundreds of millions, if not billions, of dollars developing technical capabilities to enable production. Producing the first chip of a particular generation is incredibly expensive because of the amount of R&D involved. Producing the second chip is much cheaper because only the material and labor costs are involved. In this sense, fixed costs are extremely high, but marginal costs are low. In these innovation-based industries losing market share to unfairly competing firms supported by their innovation mercantilist governments means two things. First, sales fall. This is true because global sales are largely fixed (there is only so much demand for semiconductors, jet airplanes, and other similar advanced products), and if a mercantilist-supported competitor gains market share, the market-based competitor loses share. Second, because profits decline more than sales, it is now more difficult for the market-based innovator to reinvest revenues in the next generation of products or services, meaning that the mercantilist-supported entrant has an advantage in the next generation of products. This can lead to a death spiral whereby the market-based leader can lose complete market share.

A loss of advanced technology industries has two major negative impacts on the U.S. economy. The first is on prosperity, as the average wage in these industries is approximately 75 percent higher than average U.S. wages.⁶¹ The second is on national security and the defense industrial base. U.S. defense superiority is based in large part on technological superiority. Our service men and women go into any conflict with the advantage of fielding technologically superior weapons systems. But maintaining that advantage depends on the U.S. economy maintaining global technological superiority, not just in defense-specific technologies but in a wide array of dual-use technologies. To the extent the United States continues to lose technological capabilities to China, U.S. technological advantage in defense over China will diminish, if not evaporate, as U.S. capabilities whither and Chinese ones strengthen. It is certainly a highly risky proposition to assume that the United States can continue its weapons systems superiority over the Chinese if: 1) the Chinese continue to advance, largely through unfair, predatory practices at the pace they are; and 2) the United States loses a moderate to significant share of its advanced technology innovation and production capabilities. As ITIF wrote in 2014, "The United States defense system is still the most innovative in the world, but that leadership is not assured and is in danger of failing. This decline is not only impacting defense innovation and capabilities, but also overall commercial innovation and U.S. competitiveness."⁶²

Why Action is Needed

Some have invoked the “willing-buyer, willing-seller” defense to describe the relationship between U.S. companies and their Chinese company partners, especially with regard to joint ventures and technology transfer. For example, in interview in China’s *People’s Daily*, Liu Chuntian, Professor of Law School of Renmin University of China, argues, “the transfer of technology from American companies to China is a normal business practice. It is the result of two-way choice and independent decision-making by enterprises. It cannot be regarded as a mandatory behavior of government procurement.”⁶³

There are indeed some cases where the U.S. company is willing and engages in partnerships under no duress. But in most cases, foreign companies have little real choice between doing at least some of what the Chinese government wants and leaving the market. A survey of companies conducted by the EU found that only 12 percent of respondents would have chosen their current JV structure in the absence of JV requirements.⁶⁴ As Prud’homme writes, “Foreign firms are allowed some flexibility to decide whether or not they want to comply with China’s FTT [forced technology transfer] policies. Yet all are accompanied by consequences for non-compliance.”⁶⁵ And as Hout and Ghemawat note, “Executives working for multinational companies in China privately acknowledge that making official complaints or filing lawsuits usually does little good.”⁶⁶

There is another challenge that relates to market failures. One challenge is that for many U.S. firms the negative consequences from sharing technology won’t accrue to the firm for five or ten years, while the negative consequences of not sharing technology are immediate. Given that the median tenure for a CEO at a U.S. large cap company is just five years, the rational decision for a typical CEO is to avoid the short-term pain, even if it means longer-term damage to the company.⁶⁷ The CEO will likely be gone by the time the damage is done. In the short run they get to continue to participate in the Chinese market with minimal hassle from the government. They effectively get co-opted.

A second market failure relates to spillovers. Sometimes U.S. firms share technology with Chinese firms that is not very important to them but is important to its other U.S. competitors. If a U.S. company has only a small share of the U.S. market in a particular technology, it is often willing to share that technology with its Chinese partner, knowing that this will do little to hurt its core business, but might hurt its other U.S. competitors, all the while buying goodwill with the Chinese government. Often China is able to succeed at this by focusing on second-tier players in any particular industry segment which, as McKinsey notes, “have less to lose than global giants—and everything to gain.”⁶⁸ The problem, of course, is that the U.S. company’s actions harm other U.S. companies that are still competitive in that particular technology.

Why the U.S. Government Is Justified in Pushing Back Against Chinese Innovation Mercantilism Broadly, and Forced Technology Transfer Specifically

The Chinese government defends these predatory practices on the grounds that as a sovereign nation it has the right to build its own advanced industries. The state-run *Global Times* newspaper wrote that it’s “our sovereign right to develop high-tech industry and it is connected to the quality of rejuvenation of the Chinese nation. It will not be abandoned due to external pressure.”⁶⁹

It is China's sovereign right to do so the way they are doing it: as long as they are not members of the World Trade Organization. But when China joined the WTO it made a binding set of commitments to live by that at least in the spirit, if not the letter, of the law made these practices a violation of that commitment.⁷⁰ So if China insists on its right to practice predatory practices with impunity, it should withdraw from the WTO.

Others argue that China is justified in its practices because it faces pressures to modernize. As an article from Australia's Lowy Institute writes, "what is not negotiable for China is relinquishing the ambition of becoming a global leader in advanced technology industries. That is central to its economic progress as Chinese wages rise, the workforce begins to contract, and its labour-intensive manufacturing moves to other countries."⁷¹ Likewise, a Council on Foreign Relations blog states that China's "ambition makes sense within the context of China's development trajectory: countries typically aim to transition away from labor-intensive industries and climb the value-added chain as wages rise, lest they fall into the so-called 'middle-income trap.'⁷²

But these views are wrong on two grounds. First, as the McKinsey Global Institute report *How to Compete and Grow: A Sector Guide to Policy* shows, per-capita income growth is overwhelmingly related to the ability to raise productivity in all industries, and not from changing an economy's industrial mix toward higher value-added industries.⁷³ Moreover, the so-called middle income trap is largely a myth.⁷⁴ Developing nations are not consigned to this trap; they can get out of it by raising productivity across the board in all industries.

Second, even if China wants to grow its technology economy, the key problem is the way in which they are going about it. The major problem with Made in China 2025 is the vast panoply of illegal, unethical, and unfair means China employs to reach its goals, which damage not only U.S. firms and workers, but the global innovation economy.

Limits of the WTO

One major barrier to getting China to roll back its predatory practices is that the World Trade Organization is not designed to deal with nations like China. The entire WTO framework, including its dispute settlement process, is premised on governments abiding by the rule of law and there being a fundamental separation between the state and the private sector. Neither is true in China. If something is in a law that is problematic, the WTO can rule against it. But that is not how China works and the Chinese are extremely canny on designing measures that can avoid triggering successful WTO challenges. As Harvard Law Professor Mark Wu notes, the lines between what is public and private in China blur, at least from a WTO perspective. He goes on to ask, "These scenarios remain complicated. Would SASAC's ability to remove the firm's top management or the NDRC's coordination on sector-specific policy suffice to render the firm a "public body?" For example, in China private banks often provide subsidies to an exporter because of informal demands from the government. As Wu writes, "At the heart of this challenge is the fact that China's economic structure is sui generis, having evolved in a manner largely unforeseen by those negotiating WTO treaty law."⁷⁵

Second, also another problem is that given the WTO's limited capacity, it can realistically handle only about two-dozen major trade dispute cases annually, meaning China can flood the zone with a gauntlet of unfair practices that could simply never get adequately adjudicated under WTO auspices.

Finally, the U.S. government relies on firms to provide specific evidence of the unfair policies and harms. But U.S. firms know that if they cooperate with the USTR in a case against China they will face retaliation. As one corporate counsel related to me, representatives from their company met with the minister of a Chinese agency to complain about an egregious and predatory action from the Chinese government and warned that if this did not stop that the firm would go to USTR to imitate a WTO case. The minister told the company representatives that they certainly had every right to do that, but that if they did that they would never sell another product in China again. Needless to say, the U.S. company “turned the other cheek” and did not initiate the case.

This is not to say that more cases could not be effectively brought before the WTO, but there should be no illusion that as an institution that WTO can do more than push back at the margin. As such USTR should develop WTO “non-violation nullification and impairment” claims that would assert the United States is being denied the benefits of reasonably expected market access. The claims can contend that China’s manifold mercantilist policies undercut and undermine the benefits and rights the United States thought it was getting when it assented to China joining the WTO. If that fails to produce satisfactory results, ultimately, the United States with its allies should consider establishing an alternative organization that can and will do the job. Nations that are governed by the rule of law and which do not put predatory practices at the center of their economic strategies would be welcomed to join. Others would be excluded, at least until they reformed enough to comply.

What the U.S. Federal Government Should Do

The main approach now being tried is tariffs under Section 301 authority. The Trump administration has announced placed tariffs on Chinese exports (including products ranging from aircraft to chicken incubators) and has announced his intention to add to that. But it is not clear what the administration’s strategic goal is. Is it to reduce the trade deficit with China? Is it to restore production in traditional sectors, such as steel and autos? Or is it to pressure China to roll back egregious “2025” practices that threaten America’s advanced industries? In our view, the goal should be the latter.

Regardless, any effective campaign to roll back Chinese innovation mercantilism will require a concerted joint campaign with our allies. The United States should be doing much more to develop such a coordinated agenda with like-minded allies.

In any case, the U.S. government can and should take a number of steps on its own. And there are steps Congress could take to help roll back Chinese innovation mercantilism. The first relates to boosting the institutional capacity of the federal government to understand and address these issues. The House should introduce and pass a companion to the National Economic Security Strategy Act of 2018 (S 2757). By requiring the administration to develop a national economic strategy to support the national security strategy, the legislation will not only help the administration make stronger connections between economic security and national security, it will help identify challenges and policy needs. By focusing attention not only on the strengths and weaknesses within American industry related to national security broadly defined, but also on the threats from other nations, policymakers will be better prepared to take the decisive steps that are required. ITIF has also published a list of proposals for legislative and administrative actions that would help

with trade enforcement.⁷⁶ Congress should also pass the Foreign Investment Risk Review Modernization Act (FIRRMA), to modernize CFIUS. It should instruct USTR to bring a WTO case against China over its ongoing failure to publish thousands of trade-related final measures, including subsidies, in a single official journal as it's required to do under WTO rules. One reason it's been difficult to bring subsidy cases against China at the WTO is that China fails to properly publish its subsidies. Getting the WTO to enforce China's publication requirements would make it possible to bring additional WTO cases for subsidy or other violations, such as forced IP or technology transfer.

The United States also needs a new regime to contest China's strict technology-licensing laws. Under Chinese contract law and technology import-export regulations (or TIER), a foreign licensor into China is obligated to offer an indemnity against third-party infringement to the Chinese licensee.⁷⁷ In other words, a foreign licensor licensing into China has to provide insurance that practicing the licensed technology does not infringe any IP held by a third party. But, under TIER, this legal obligation only attaches to "technology import contracts." That is, this obligation only attaches to a foreigner licensing technologies into China; the Chinese licensor has no such obligation. This discriminates against foreign licensors. The foreign licensor is legally bound to offer something that the Chinese licensee is not, making it difficult for small companies, companies which may experience high litigation risks in China's litigious environment, and companies engaged in collaborative research and development (such as cross-licensing, open-source licensing, and charitable activities) to arrive at mutually beneficial licensing agreements. TIER makes it almost impossible for small companies, such as start-ups, to license their breakthrough technologies in China, because no start-ups (due to their limited resources) would be able to conduct the complex analysis required by China's high-litigation environment and industrial policies that limit the value of foreign IP in order to offer insurance against third-party infringement disputes. While large multinational companies could avoid this issue by licensing technology (e.g., through their China-based subsidiaries), start-up companies cannot do so because they typically do not have subsidiaries in China. Consequently, the impact of the mandatory indemnification requirement on small- and medium-sized companies, and especially start-ups, is particularly acute.

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

To address this discrimination, Congress should enact a regime whereby if Chinese entities seek licenses in the United States, then the Chinese enterprise must license on the same terms by which foreigners are required to license into China. Such legislation would specifically require the Chinese licensor to offer an indemnity against infringement by the U.S. licensee and to stipulate that the U.S. licensees are entitled to own the improvements they make and receive a reasonable market allocation under the licenses. Another possible approach would be for Congress to pass legislation requiring that the U.S. company whose original

technology was improved by the Chinese entity receives an automatic exclusive license to use that improved technology [in the United States], such that the full potential of the original technology owned by the U.S. companies is not encumbered by improvements owned by the Chinese entity. Although technology-licensing law is usually a matter of state contract law, the legislation would be enacted pursuant to Congress's power to legislate international commerce.

There are other ideas that are at least worth considering and developing further. The United States could limit Chinese student visas to the United States. It could limit ongoing science and technology cooperation with China. The administration could take a hard line on limiting most Chinese investment in the United States, including in Chinese-backed tech accelerators.⁷⁸ It could prohibit Chinese firms that are stealing IP from accessing the U.S. banking and financial system. It could deny Chinese-headquartered enterprises access to listing on U.S. stock exchanges if they fail to provide financial statements in line with generally accepted accounting principles. It could build an "inspection wall" against counterfeit and pirated Chinese goods, with the goal of stopping them all. China accounts for 87 percent of counterfeit goods seized each year, with costs estimated to be between \$30 and \$40 billion.⁷⁹ These kinds of steps could be employed to gain more leverage in negotiations to roll back some of China's most egregious innovation mercantilist actions, including forced technology transfer and massive subsidies.

The federal government should also work to establish a deeper North American supply chain, as at least somewhat of an alternative to the Chinese supply chain. This would entail maintaining (if not improving) NAFTA and expanding it to other Latin American nations.

It should also consider ramping up the use of anti-trust policies to discipline Chinese actions. Unfortunately, our antitrust regime is like the WTO: it is premised on the view that it is private companies that are in the driver's seat and call the shots, not sovereign nations. For example, China has abused the doctrine of "foreign sovereign compulsion" to justify anticompetitive behavior that has harmed U.S. interests, even though it initially passed muster in U.S. courts. In 2016 the U.S. Second Court of Federal Appeals threw out a case against Chinese vitamin C makers alleged to have conspired to fix prices and limit supplies in international markets, including in the United States, on grounds that the behavior was directed by the Chinese government and thus wasn't actionable under U.S. antitrust law because deference must be given to the official policies of foreign governments (i.e., the foreign sovereign compulsion defense). While this verdict was recently reversed by the U.S. Supreme Court, Congress should curb foreign governments' ability to abuse the foreign sovereign compulsion defense for these kinds of mercantilist ends.⁸⁰ One way to do so would be to require courts to give consideration to the implications for U.S. industries' global competitiveness in cases involving the foreign sovereign compulsion defense.⁸¹ Congress should also call on the administration to eliminate a regulation that exempts mergers involving Chinese state-owned enterprises from having to be announced in accordance with U.S. antitrust law.⁸²

Congress should also pass legislation that would allow firms to ask the Department of Justice for an exemption to coordinate actions regarding technology transfer and investment to other nations. One of the key levers China has is that it's a monopsonist: its market is so large it can pressure foreign companies to hand over technology in order to sell their products in China. But if companies in similar industries can jointly

agree that none of them will transfer technology to China to gain market access, then the Chinese government will have less leverage over them. The same would be true if companies agreed that they would not invest in China until China improved its IP protections. Such an amendment to antitrust law would be similar to the 1984 Cooperative R&D Act, which allowed firms to apply to form pre-competitive R&D consortia.

Congress should consider going even further to stand up a new arm of DOJ's antitrust division focused on foreign government-enabled and led antitrust violations. Currently, DOJ can bring actions against foreign firms if they are found to be acting in an anticompetitive manner. DOJ needs to not only be able to but be willing to bring actions against foreign firms if their actions are helped by their state in a way that leads to anticompetitive results. In the case of China, its subsidies, forced technology transfer, IP theft, and other unfair actions give Chinese firms unfair advantages that distort markets in an anticompetitive manner. DOJ should be able to investigate cases and if they found a violation, bring those to an administrative law judge who would adjudicate the case and the damages the U.S. government could impose on the Chinese companies that benefited from the anti-competitive Chinese government policies or practices. The challenge will be that not all Chinese companies likely to have cases brought against them are involved in the U.S. market. But some are, and for the ones that aren't such a ruling would effectively preclude them from entering the U.S. market.

In summary, taking firm and strategic action against Chinese predatory, mercantilist practices is long overdue. Whether such action can be successful is an open question, given the limits of the WTO, the unwillingness of the administration to engage our allies in the fight (and often their reluctance to be in the fight), and the fact that our leverage over China is much less than it was a decade ago. But one thing is clear: not taking action will make it much easier for the Chinese government to achieve their goal of dominating globally advanced technology industries.

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Mr. POE. Thank you, Dr. Atkinson.
Mr. Reinsch?

**STATEMENT OF MR. WILLIAM ALAN REINSCH, SCHOLL CHAIR
IN INTERNATIONAL BUSINESS, CENTER FOR STRATEGIC
AND INTERNATIONAL STUDIES**

Mr. REINSCH. Thank you very much. It is a pleasure to be here. China's economic strategy is well known. It has been discussed here at length. Rather than repeat that I want to spend my time discussing what the United States might do about it.

Mr. POE. Could you pull the mike a little closer there?

Mr. REINSCH. Sure. How is that? Better?

And I begin with a fundamental principle. If a country has an adversary and wants to stay ahead of them there are only two ways—hold him back or run faster. Both strategies have their limitations which is why the best approach is to pursue both. Let me take them one at a time.

Holding the adversary back means denying him the means of gaining advantage, if possible, while trying to leverage better behavior. This has been the focus of the administration's efforts thus far. We are attempting to deny China advantage through investment controls and export controls, both designed to impede the flow of critical technology beyond our borders. Congress has recognized that the current CFIUS process does not subject enough transactions to review and has moved to expand its reach. Both versions now in conference are thoughtful and carefully drafted. The administration has expressed its support and I think its enactment would be a positive step.

Similarly, your committee has reported and the House has passed legislation to reauthorize the Export Administration Act. This is long overdue as you know and its enactment would also be useful step. I caution the committee, however, against a too broad expansion of controls. Maintaining control over the crown jewels of our economy is important. Attempting to re-control technologies that have already been released are not critical and are available from multiple sources would accomplish nothing and would do serious harm to our exporters.

In addition to investment review and export licensing, devoting more resources to compliance and enforcement is critical. The problem is not with large established companies which know the rules. I am worried about the small start-up, the proverbial two guys in the garage with a brilliant idea. When a savvy Chinese investor offers them \$100 million for their company they may not know or care that such a transaction would require CFIUS review or that any technology transfer pursuant to it could require an export license. The government does not currently do an adequate job of finding and monitoring those situations and making sure innovators know what their responsibilities are and that is something I think the committee could constructively work on.

Leveraging better behavior is more complicated. As the President has said, the Chinese are doing what is good for them. Persuading them to do what is not good for them is a heavy lift. I think there are some areas where agreement ought to be possible and my statement cites a couple of them as an example.

The most difficult problem to address is Made In China 2025. Here, we are asking China to restructure its economy into a market-based system and effectively abandon its technology competitiveness goals. Doing that would reduce the Party's control of the economy and the society, which is the last thing they will be willing to do. Many of the technologies at issue involve aspects of the digital economy. For China these are not trade issues. They are national security and public control issues and they are not susceptible to resolution in a trade negotiation.

The President is attempting to force changes through tariffs. That is not likely to succeed for the reason I have indicated. We are demanding that the Chinese do something that will imperil the Party's control and it will certainly produce a great deal of collateral damage in its wake. The better approach is through building coalitions and I endorse what Rob said, I won't repeat that ground.

I would also suggest that a more productive course would also be to recognize the long-term battleground with China is not in China but is in the United States and in third countries where the playing field is level. We can deny them advantages here and in the process give a boost to our own manufacturers and innovators.

In third countries we cannot only compete with the Chinese on more equal terms, we can also develop networks of rules and standards that work to the advantage of Western economies. That is what TPP was about. That is what TTIP is about, building trading structures based on Western rule of law principles and standards to which the Chinese will ultimately have to conform if they want to access the very large market structures and global supply chains that we are creating through those agreements.

Beyond trade agreements there are some time-tested things the United States can do: Let the Export-Import Bank function as it was intended; use trade missions to promote American products; aggressively defend American commercial interests in third countries. If there is one data point I hope you remember it is that 95 percent of the world's consumers are outside the United States. Maintaining a competitive advantage over China inevitably means beating them in third countries. If we cannot do that we marginalize ourselves and yield leadership to China.

Finally, a few words about running faster. It is not my primary topic but it is more important. The reality is that holding the other guy back doesn't work all that well and I speak from somebody who spent the Clinton administration trying to do that. There are simply too many ways to get around the steps we take. There are inevitable limitations also on what we can do to control somebody else's economic policy.

What we can control is our own economic policy and if we do it well we can surmount the Chinese challenge. In today's totally globally-integrated economy that means more than pro-growth macro policies and more than job creation. I have suggested three things in the past which I will just list: Training our workforce to meet the demands of the 21st century economy; giving our companies incentives to stay here; and promoting innovation. We are very good at promoting innovation. We have a demonstrated record since the Lincoln administration of targeting government resources in sectors that will define global leadership in the future. That is

what the Chinese intend to do. We should remember that we thought of it first, we can do it better, and we can do it without the massive subsidies, the WTO-illegal subsidies that they plan to do, but with expanded support for basic research, encouragement for our private innovators, and immigration policies that encourage smart people to study and stay here. Those are debatable.

Rob has made some other suggestions which I endorse also. But the principle of running faster remains fundamental. Thank you.

[The prepared statement of Mr. Reinsch follows:]



Statement Before the
House Committee on Foreign Affairs
Subcommittees on Asia and the Pacific
and Terrorism, Nonproliferation and Trade

***“China’s Predatory Trade and
Investment Strategy”***

Testimony:

William Alan Reinsch

Senior Adviser and Scholl Chair in International Business, Center
for Strategic and International Studies

July 11, 2018

2172 Rayburn House Office Building

Thank you for the opportunity to appear before you today. I want to begin by making clear the views I am presenting are my own and not those of either CSIS or Kelley, Drye & Warren. China's economic strategy is well-known. The Foreign Affairs Committee has discussed it in previous hearings, and the administration has documented it in its Section 301 report. Rather than repeat that material, I will spend my time discussing what the United States might do about it. I begin with a fundamental principle: if a country has an adversary and wants to stay ahead of him, there are only two ways: hold him back or run faster. Both strategies have their limitations, which is why the best approach is to pursue both. Let me take them one at a time.

Holding him back means denying him the means of gaining advantage, if possible, while trying to leverage better behavior. This has been the focus of the administration's efforts thus far, and it remains to be seen how successful it will be. We are attempting to deny China advantage through investment controls and export controls, both designed to impede the flow of critical technology beyond our borders. Congress has recognized that the current CFIUS process does not subject enough transactions to review and has moved to expand its reach. Both versions now in conference are thoughtful and carefully drafted. The administration has expressed its support for the legislation, and I agree that its enactment would be a positive step.

Similarly, your committee has reported and the House has passed legislation to reauthorize the Export Administration Act. That is long overdue, as you know, and its enactment would also be a useful step. I would, however, caution the committee against a too-broad expansion of controls. Maintaining control over the crown jewels of our economy is important. Attempting to re-control technologies that have already been released, are not critical, and are available from multiple sources would accomplish nothing and would do serious harm to our exporters. In addition to investment review and export licensing, devoting more resources to compliance and enforcement is critical. The problem is not with large, established companies which know the rules and devote considerable resources to comply with them. Rather I worry about the small start up -- the proverbial two guys in a garage with a brilliant idea. When a savvy Chinese investor offers them \$100 million for their company, they may not know -- or care -- that such a transaction would require CFIUS review or that any technology transfer pursuant to it could require an export license. The government does not currently do an adequate job of finding and monitoring those situations and making sure innovators know what their responsibilities are.

Leveraging better behavior is more complicated. As the president has said, the Chinese are doing what is good for them. Persuading them to do what is not good for them is a heavy lift. Nevertheless, there are some areas where agreement ought to be possible. The Chinese have in the past promised to end commercial IP theft, and there is no reason they couldn't do that again -- and actually mean it. It is a serious domestic problem in China -- most of the current IP litigation is between Chinese companies -- and very much in the government's interest to crack down on it if it wants to keep its own innovators from leaving. Similarly, discrimination against foreign companies in China based on corruption -- for example, the Chinese competing company gets favorable treatment because it is owned by the provincial Party secretary's nephew -- is something the government is already trying to stop.

The most difficult problem to address is *Made in China 2025*. Here we are asking China to restructure its economy into a market-based system and effectively abandon its technology

competitiveness goals. Doing that would reduce the Party's control of the economy and the society, which is the last thing they will be willing to do. Many of the technologies at issue involve aspects of the digital economy. For China these are not trade issues; they are national security and public control issues, and they are not susceptible to resolution in a trade negotiation. The president is attempting to force changes through tariffs. That is not likely to succeed for the reason I have indicated -- we are demanding that the Chinese do something that will imperil the Party's control -- and it will certainly produce a great deal of collateral damage in its wake.

A better approach is through building coalitions. We have learned over the years that the Chinese do not like to be outliers. They do not like to be singled out as rules violators. When we have been able to get other major nations -- the Europeans, Japanese, Koreans, Indians, Australians and so on all conveying the same message at the same time at a high level we have had some success. So far, the administration has not shown much interest in this approach. I would also suggest that a more productive course would be to recognize that the long-term battleground is not in China but in the United States and in third countries where the playing field is level. We can deny them advantages here and in the process give a boost to our own manufacturers and innovators. In third countries we can not only compete with the Chinese on more equal terms, we can also develop networks of rules and standards that work to the advantage of Western economies. That is what TPP was really about, and it is what TTIP is about -- building trading structures based on Western rule of law principles and standards to which the Chinese will ultimately have to conform if they want to access the very large market structures and global supply chains we have created.

Beyond trade negotiations our government can also help Americans compete more effectively through more aggressive use of time-tested tactics: letting the Export-Import Bank function as intended, using trade missions to promote American products, and aggressively defending American commercial interests in third countries. The single data point I hope you will remember is that 95% of the world's consumers are outside the United States. Maintaining a competitive advantage over China inevitably means beating them in third countries. If we cannot do that, we ultimately marginalize ourselves and yield leadership to China.

Finally, let me say a few words about running faster. Although it is not my primary topic today, it is more important. The reality is that holding the other guy back doesn't work all that well. There are simply too many ways to get around the steps we take. Plus, there are inevitable limitations on what we can do to control someone else's economic policy. The one thing we can control is our own economic policy, and if we do it well, we can surmount the Chinese challenge. In today's globally integrated economy, that means more than pro-growth macroeconomic policies and more than job creation. In the past I have suggested a competitiveness tripod:

1) Train our workforce for the demands of the 21st century economy through more effective adjustment assistance programs and education policies that help future workers be more agile and acquire the skills necessary in a digital economy.

2) Give our companies incentives to stay here. In my fifteen years representing large companies at the National Foreign Trade Council I learned you can't bludgeon them into submission but you can incentivize them into better behavior.

3) Promote innovation. This is something we have always been good at. Beginning in the Lincoln Administration, the United States has a long history of successfully mobilizing public support and resources to meet national priorities. World-class agriculture, wireless communications, aerospace and the Internet are good examples. Over the years we have shown ourselves to be very good at targeting government resources on innovation in the sectors that will define global leadership in the future. This is what the Chinese intend to do, and we should remember that we thought of it first and can do it better -- not with the massive WTO-illegal subsidies they plan to use, but with expanded support for basic research, encouragement for our private innovators, and immigration policies that encourage smart people to study -- and stay -- here.

These can be debated, and I know my colleague Rob Atkinson has a more detailed plan, but the principle of running faster remains fundamental. A strategy based solely on trying to hold China back will not succeed.

Mr. POE. I thank the gentleman. The Chair will recognize the gentleman from Florida, Mr. Yoho, for his opening statements in the—started to say court. But the Chair will reserve its 5 minutes.

Mr. YOHO. I don't want to see you in court.

Mr. POE. Nobody did.

Mr. Yoho.

Mr. YOHO. Thank you, sir. China prefers to play a one-sided trade agreement and the U.S. has been tolerant or worse, negligent, as the trade inequity has built up to \$350 billion to \$400 billion, somewhere in there. But China wants a zero sum game in their favor and it is time for that adjustment. And this is not a trade war recently started by President Trump. This has been going on. President Trump has been bold enough to say enough is enough.

The past seven Presidents have ignored the situation of trade with China and that is how you accumulate a trade deficit that large, and that is not talking about the intellectual property theft. China cries foul when we go to intervene, well too bad. That is welcome to capitalism. They want to maintain their Communist form of government with its historically terrible outcome, but realize, they realize they could not compete in the world economy.

So they coyishly disguise a market economy, capitalism tied with socialism with Chinese characteristics that still is nothing more than a Communist pig painted with lipstick. They want the benefits of capitalism, which incidentally is the antithesis of Communism, because they like the money, but they want to hide behind it—and I think this is just mind-boggling.

They want to hide behind a developing country status. They want developing market status yet have a space program; nuclear weapons; invested between \$4 billion to \$10 billion in their One Belt One Road Initiative around the globe yet they claim they are just getting by and need to maintain developing country status. Sorry, President or Emperor Xi, you can't have it both ways.

President Trump is the first American President to call the trade deficit out not with rhetoric but with action and it is time we adjust the trade imbalance and it is high time China acts like a responsible trading partner. Stop cheating-stealing-lying and start honoring the contract, the rule of law, and how about acting honorably?

So with that rant I want to ask and I read all of your testimonies ahead, how should we consider restricting access to sensitive U.S. technology in these different scenarios? Dr. Atkinson, you were talking about this. And I want to talk, Mr. Reinsch, talk to you about the garage, you know, because what do you do to prevent people from letting that go through if we can't go through CFIUS, if it gets bypassed? So how do we prevent the technological transfers?

Mr. ATKINSON. Number one, there is a wide variety of actors that use that. One of them is cybersecurity. So, you know, doing a better job of making sure that American companies have better cybersecurity is one way to do that. We testified in the Senate recently on how, frankly, poorly we do with small business cybersecurity. You look at what the SBA is doing in that space, it is not very good, frankly.

Secondly, with the passage of FIRREA we would hope that there would be a big ramp-up on enforcement. One of the ways, for example, right now the Chinese have set up a system of technology accelerators so they have what is called an accelerator or incubator high tech little platform in Silicon Valley and it is funded essentially by the Beijing provincial government. They have located it in Silicon Valley and my belief is it is a vector of which they can take knowledge, particularly these young entrepreneurs who need a little bit of capital. We should just not allow that. There is a whole set of things we could do around venture capital, around small-scale investments, and I think FIRREA is the vehicle by which we could do that.

Mr. YOHO. So you think the CFIUS review is strong enough for that?

Mr. ATKINSON. I do think it is strong enough for that.

Mr. YOHO. All right. What about when we get into biomedical research and the ag products? I have seen university professors from the university I graduated from talking about doing a sabbatical in China and they are going to pay them four to five times what they are making here. And I asked them what they are working on, and they said we are going to take our research and go over there, and I said I don't think that is a good idea.

And so how do we block that? Because I brought that up in an export control hearing that we had and they said, you know, CFIUS doesn't really address that. Do any of you want to comment how we can protect that intellectual property?

Mr. REINSCH. I can talk about that, Mr. Yoho. CFIUS does not, the export control system does at least in theory. If they want to do that they need an export license for the technology they are going to transfer if that technology is controlled.

Mr. YOHO. Does that apply to our universities?

Mr. REINSCH. Yes. Yes. Although I will tell you and I don't know if it is in my bio, I was the undersecretary that ran this particular function in the '90s. Universities are the worst, frankly. First of all, every professor is his own empire and trying to create a central administration—we impose some discipline it is like herding cats. It is very difficult. And second, there is an attitudinal issue, frankly. For them this is not technology transfer, this is research.

Mr. YOHO. Research.

Mr. REINSCH. And you need to get them to think about it differently. They are getting better. I visited with some universities. I will tell you, nothing—

Mr. YOHO. I am going to have to cut you off because I am out of time.

Mr. REINSCH. Well, I will just say nothing gets them more focused on this faster than the Commerce Department paying them a visit.

Mr. YOHO. Thank you.

Mr. POE. The Chair recognizes the gentleman from Massachusetts, Mr. Keating.

Mr. KEATING. Thank you, Mr. Chairman. Today's actions by the President at NATO certainly don't make the prospects of this look great, but our job here in Congress and this committee is to look at directions that we should take on our own. That being said, I

am a believer that one of the greatest things we can do, and I think it falls into the testimony we heard from our witnesses, is to really keep moving ahead, albeit against some tough odds now, on a TTIP type of agreement.

I think an alliance and a free trade agreement with the European Union would be our strongest move. It would help us here at home. It would help our hand globally and it would particularly help our hand with China. I can't think of many other things that could have a greater effect.

So could any of our witnesses comment on that? Mr. Reinsch?

Mr. REINSCH. I would like to. I couldn't agree with you more. I mentioned this. The point of doing that is to create basically the largest middle class consumer market in the world that would set up a system of health, safety, environmental inspections and rules. If you want to access that market you have to adhere to those. That will force the outliers which begins with China, although India would be probably another one to conform to those rules, procedures, and practices.

And that was the point of doing it in the first place. If we can get all of us working together we achieve exactly the result you are talking about, I think.

Mr. SCISSORS. We are not going to get a TTIP in this.

Mr. KEATING. That is not what I asked you.

Mr. SCISSORS. I know. But I have a way to get closer, which is feasible, which is a U.S.-U.K. FTA. That is something that the administration does want to do. It is not difficult to write.

Mr. KEATING. If I could, because my time is precious.

Mr. SCISSORS. Sure.

Mr. KEATING. But 80 percent of our trade partners is the rest of the EU.

Mr. SCISSORS. No, I understand, but.

Mr. KEATING. We can't ignore that. And the damage we would do with what you are proposing to the rest of our allies would make things worse, I think, frankly.

Mr. SCISSORS. Well, a U.S.-U.K. FTA allows us to put down text which can serve as the basis for an agreement.

Mr. KEATING. We have to wait—again I am going to interrupt.

Mr. SCISSORS. Sure.

Mr. KEATING. Because it is not the question I asked. But thank you for your response.

Dr. Atkinson, did you go on this?

Mr. ATKINSON. I fully agree with that. I think we should have had a TTIP. I think we should do a TTIP. I think we should have had a TTP, although I would have made it, frankly, stronger. I would have maybe kept out a couple of countries and made it stronger. But I fully agree that we need those sorts of trade agreements if we are going to move forward.

And the broader point is we have to get our allies engaged here. I have spoken with officials from Europe, the European Commission, from METI in Japan, and Korea. They are as concerned as we are about what is going on in China.

Mr. KEATING. Yes. And I must say this for what it is worth, things might have changed in the last few months but I was quite

optimistic about the prospects of support in Congress for TTIP at that particular time moving forward much more than TTP.

Here is a question I just have pondered. The effect of artificial intelligence moving forward is going to be quite dramatic on all our lives. It is going to result in increasing dependence on that and the increasing technological advancements. It is going to result in great job displacement. It is going to change the nature of competition in the workforce.

Can you speculate on how China and the U.S. might react given the fact that this is just going to be, I think, exponentially advancing?

Mr. ATKINSON. This is an area we have studied quite extensively. I think I would be a little more skeptical, I think, of the big job displacements. We have done a lot of work on that. I did a report for the G7 Ministerial recently. I agree it will have job displacement, but I think overall it is going to be a very positive thing for the U.S. economy particularly as we need productivity going forward.

At least when you look at the studies right now it appears that China is behind the U.S. in terms of AI. They invest less in R&D and their science and coding ability, if you will, computer science, is not as advanced as ours. But their rate of catch-up is faster than ours and they are putting an enormous amount of money in there from government. And so it is conceivable that the Chinese could match us in AI in 5 to 10 years, I would argue.

Mr. KEATING. And you think that might level the playing field more?

Mr. ATKINSON. I do. Well, one other advantage the Chinese have by the way is AI, it helps if you have bigger data sets. A lot of machine learning is around data pools. They have unlimited data as a number of people mentioned. So they are able to use all that data and mine it very well so it is an advantage that they have.

Mr. KEATING. Quickly, I have little time. One other avenue the Chinese are moving into to capture our intellectual property is their joint activities with our academic institutions here too. I have a few seconds, but do you see that as a concern?

Mr. ATKINSON. I do. And I would add to what Bill said, I think we could, for example, have requirements within our science funding agencies like NSF and NIH and DOE that number one you have to report any joint projects with a country like China, and number two, put some limits on that.

Mr. KEATING. Thank you. I yield back.

Mr. POE. I thank the gentleman. The Chair recognizes itself for 5 minutes.

The issue regarding China is a national security issue and it is also an economic issue, economic security, in my opinion. And I would like to focus on China as opposed to other countries in the world for trade because China cheats. They cheat a lot and it works. They steal everything they can from us.

I would like to ask all three of you this question. So right now what should the United States do regarding holding back as the phrase was used, and what should we do—one thing to run faster, right now?

And thank you, Dr. Scissors, because I remember that 6 years ago that you were before us. I will start with you, Dr. Scissors, and go right down the row.

Mr. SCISSORS. It was a great hearing. I almost wish I could just take what I said back then and repeat it. In terms of holding them back I am going to stick with what I said earlier. We have seen in the example of ZTE, which of course was done for security reasons, that we can hurt the Communist Party by targeting large state-owned enterprises. And I am not saying that IP is as important as North Korea or Iran sanctions. I am saying that we have a method now that works which is there are large Chinese state-owned enterprises, which matter to the Party, which have benefited from stolen IP and we know how to hurt them. We know how to hurt the Party and that is where I would go first. Obviously we want them to be guilty of something. We don't want to target companies that haven't done anything because that doesn't change their incentives.

I would not—actually I disagree with pretty much everyone in the room on ally coordination. It is definitely a global problem but I want us to get our policy first. We need to lead on this. We could spend a lot of time talking with the Europeans and never get anywhere because that is pretty much usually what happens when you talk to the Europeans. I absolutely agree that it is a global problem, but first we have to decide what we are going to do.

With regard to running faster, you know that I am not a U.S. economic expert. I would say that in the longer term and now too because our economy is doing very well, we can't keep borrowing money. That is not going to help U.S. economic security. I know it is the easy thing to do in the short term, but I brought up Chinese debt. Chinese debt is going to kill China. It is going to kill China's rise. We can stand it for longer because we are richer and because the dollar is the global reserve currency, but eventually it is going to get us too.

Mr. POE. Dr. Atkinson?

Mr. ATKINSON. ITIF issued a report recently, something in the title of an agenda for alliance-based confrontation. And in that report we listed 25 things, though I can only give you one of them and that would be an earlier comment about really using the Justice Department around tying what the Chinese are doing as anti-trust violations and going after specific companies for doing that.

Domestically, I would argue that—take this the right way. I would argue we need our own invented and made in America 2028 and certainly not using heavy-handed things, but we need our own strategy and one of those would be a better research and development tax credit. We are now 27th least generous R&D tax credits in the world. We could beef that up and get more innovation in the U.S.

Mr. POE. Mr. Reinsch?

Mr. REINSCH. On holding back, two things. I think you have an acceptable framework now via CFIUS/FIRRMA and the export control structure. If you enact bills that the House has passed, if you enact the FIRMMA bill I think you have done an important step forward that will address—I mean a lot of these horses are out of

the barn. That will prevent more horses from getting out of the barn and I think it is an effective step forward.

The other thing in that in the holding them back field is don't forget what I said about third markets. Our ZTE competitors, our companies that make the same stuff that is critical to our leadership in the telecommunications sector, they are going to live and die by what they do in third countries. They are not going to live or die by what they do in China or what they do in the United States. They are going to live and die by what they do in India, what they do in Europe, what they do in Brazil, what they do in the rest of the world. Helping them, listening to them and figuring out what they need and helping them, I think, in other situations is extraordinarily important.

Running faster, I agree with Rob, it is a question of how do we help our people innovate. And as I, I didn't read this part of the statement but, you know, we have done this before. When I refer to the Lincoln administration, land grant colleges, the Homestead Act, we created the most effective, efficient world-class agriculture industry in the world and that was government devotion of resources and focusing of attention on it.

We did the same thing with wireless communication. We did the same thing with aerospace. We did the same thing with the internet. There is no reason why we can't do that going forward with the next generation of technologies and stay ahead of the Chinese that way.

Mr. POE. And I thank all three of you. My time has expired. I recognize the gentleman from California, Mr. Sherman.

Mr. SHERMAN. A few comments as to an R&D tax credit, that increases our deficit. I don't know any economists that are in favor of that. It will lead to innovation which then will be transferred to China if it is profitable for the company to do so. And we live in a world where we are so weak that we allow China to say you don't get access to our market unless you transfer the technology to us.

So we are in a trade war with China. For 18 years we have ignored it. I give the President credit for not ignoring it. We are probably going to lose because all of China is on China's side and Wall Street is mostly on China's side as well. Because you can make profits by manufacturing something for 50 cents or even \$1 an hour in China and sell it in the United States. That is a proven profit method.

Paying American wages to create a product that you are going to sell in China is economically difficult. It is not a get-rich-quick scheme. And that assumes China would let you sell it in China, which they won't until you have a coproduction agreement which means you are not making it the United States anymore. Hence, even the innovation of Tesla, paid for in part by the U.S. R&D tax credit, will lead to a factory in China—because the weak United States bullied by a powerful Wall Street continues to this day to have a 2.5 percent tax on Chinese cars coming here while they have a 25 percent tax on our cars going there.

So the one thing I disagree with in the President's policy is simultaneously trying to deal with the trade deficits we have with our allies. We should pick one at a time and China is the worst and most egregious. But aside from that one element, it is time for

us to be bipartisan. Sixty-five percent of Democrats voted against MFN for China and now we have a Republican President with substantial support in the Republican Party saying that it was a mistake and also saying that when the United States makes a mistake and enters into a bad deal we should tear up the deal.

So we should be, I think, revoking MFN for China, 6-month lead time, and have a chance for them to come to the table. But before we do that, we have to specify that if they retaliate against us for this bill we have to double tariffs on them. And if they seize American assets we have to seize Chinese assets here in the United States—including and especially their ownership of our intangible assets and bonds. So we could get tough. Wall Street won't let us and so we won't. And the balance of trade is worse today than it was even when Trump took office.

But I want to talk about this social score. What is the appropriate American action for Chinese consumers and businesses being told that if they don't buy Chinese goods they could lose their passports and their credit? Should we impose an additional, in addition to everything else, 25 percent tariff on everything made in China, should we ignore it, or should we issue a press release and then ignore it?

Dr. Atkinson?

Mr. ATKINSON. Well, first, a couple of things. The R&D credit actually does pay for itself after 15 years if CBO had a 15-year budget window. And secondly, I was asked for one thing so I completely agree with you.

Mr. SHERMAN. Well, you didn't disagree the technology's going to get transferred to China, but go ahead.

Mr. ATKINSON. Since I was only able to list one of those as opposed to the 40 that we have in our reports on what we—

Mr. SHERMAN. I do have limited time. I asked you a question about the social score in China. Do you choose to answer that question or should I move on to another witness?

Mr. ATKINSON. I don't think the point, frankly, is the social score. I think the point is there is a set of Chinese behavior.

Mr. SHERMAN. Okay, you don't want to answer the question. Does anyone else want to answer the question?

Dr. Scissors?

Mr. SCISSORS. The social score is another way of China subsidizing production at home, right, that is what it is. There are a lot of them.

Mr. SHERMAN. And is it a violation of the WTO?

Mr. SCISSORS. This is—I don't know—

Mr. SHERMAN. Is it a violation of any provision that is proposed for TPP or TTIP, or is it a perfect way for China to claim that they are not cheating at all, because we don't bother to write rules that they even need to cheat?

Mr. SCISSORS. I do not believe—I am not a lawyer. I do not believe it is a violation of the WTO or any plank of the TTP. So yes, it is a way for the Chinese to encourage domestic consumption that doesn't break existing rules.

Mr. SHERMAN. And other than imposing a 25 percent additional tariff on everything made in China, can you think of another way for the United States to respond?

Mr. SCISSORS. I think we should put it in our—it should be counted as a subsidy as part of our current subsidies approach which should be broader than it is and applied to China. I don't know about a 25 percent tariff but we should be responding to Chinese subsidies including that.

Mr. SHERMAN. And this—I yield back.

Mr. POE. The Chair recognizes the other gentleman from California, Mr. Rohrabacher.

Mr. ROHRABACHER. Thank you, Mr. Chairman. And let me just note that our friend from, Mr. Garrett from Virginia was correct in that the two Californians here today agree on most things and most of what Brad was suggesting and is suggesting is something I agree with. I don't agree with his political attributes on those things and, however, the specific points, policy points, he is right on target.

The bottom line is we don't have all the Americans fighting for when they go overseas, our elites go overseas and are not looking out for the United States of America. The Chinese elites are looking out for what is good for China. Our elites are what is going to make a good deal for them.

And I remember the good deals. I remember under Bill Clinton when we transferred our utmost, our most important rocket technology to the Chinese. The Chinese now have a very competitive space system because they got all their R&D from us. They don't look at us as being benevolent. They look at us as suckers and that is what we are when we permit our R&D to go and serve as the basis for producing wealth and competition on their side.

Now the WTO—well, I voted against WTO. I didn't think it would work. Can any of you tell me if WTO has the answer to the challenge that we are talking about today and that is making sure that China is not able to amass wealth in an unfair way which it then uses to dominate not only their own people, the oligarchs in China dominating China, but also now the Third World through bribery, can the WTO handle it and, if so, what is that solution?

Mr. REINSCH. Well, it is my turn to walk the plank so I will attempt an answer. I think it has some of the answers, not all of them. I am more positive about it, I think, than Rob is. I think in particular an area that is relevant to Made In China 2025, which is one of the subjects of this hearing, is their rules about subsidies. And we have, you know, most countries have a domestic law that is designed to implement WTO rules against subsidies.

We have one, actually the Chinese have one, the Europeans have one. Those rules I would argue have been fairly effective as far as they go. We use them very effectively on steel. We have essentially knocked Chinese steel out of our market directly through the use of subsidies complaints and—

Mr. ROHRABACHER. Okay. But we have seen some—you have seen some successes.

Mr. REINSCH. It works. And when we litigate in the WTO 85 percent of the cases we have brought we have won which is the best record in the world on that so yes. Does it solve all problems, no, because it doesn't have rules that cover all things.

Mr. ROHRABACHER. Okay. Do our other witnesses have something to say on that? Yes, sir?

Mr. ATKINSON. I think the biggest—there are a number of challenges with the WTO. Bill is right, it will solve some problems. I particularly agree on subsidies. We should do more there. There is a subsidy regime we should take a lot more action under. The biggest problem we have with the WTO though is it is very difficult to win a case unless you have U.S. companies being willing to come forward with evidence and stand up. American companies know that if they do that they will be punished in China quite severely. And that is not going away and you cannot blame American companies for that position, in my view. They are acting on the behalf of their companies and their workers.

I think ultimately what we need to be thinking about is some longer term alternative to the WTO that is really designed around liberal market democracies that are committed to free trade and have a club there. And that is why I thought TPP and TTIP would be at the beginnings of beginning to assemble that.

Mr. ROHRABACHER. Well, our President today seems to think that unilaterally we can have something accomplished. I agree with him there. We should be courageous and that is what he is. Would you have an answer to that question?

Mr. SCISSORS. Yes, I agree. I think I more agree with starting with the unilateral action. I would say that there is nothing about the WTO that should prevent us from taking the actions we need to take. We don't need to withdraw from the WTO because China is a bad WTO actor. I would say that is a mistake. I think Rob's suggestion on changing our antitrust laws to recognize the way China handles its state sector is long overdue. That would give us another set of tools that are WTO-compatible.

I think a smaller thing is properly resourcing CFIUS. I agree with my colleagues we have good revisions to CFIUS pending in both Houses, but if they don't have the resources they can't do what is necessary. WTO doesn't stop us from doing that obviously.

Mr. ROHRABACHER. One last thought, and that is when we were sold the bill of goods and I voted against it, but when those people in Congress voted for WTO and voted for most favored nation status for China we were told that more trade and more economic activity going back and forth and building them into a modern society would create a more peaceful world and democratize China. It has been just the opposite. China has no more democracy than they had and now they are a greater threat to everyone. We have created a Frankenstein monster trying to look at that WTO as the possible solution to all these challenges.

Mr. POE. The gentleman's time has expired. The Chair recognizes another member from California, Mr. Issa, for 5 minutes.

Mr. ISSA. Thank you, Mr. Chairman. As I have been going in and out and watching a lot of this, I wonder if there aren't two Chinas. And I would like to ask my questions about the two Chinas for a moment.

For two decades I was an electronics manufacturer, operated in South Korea, Hong Kong, Taiwan, and then the company over the years has moved, after I left has moved into mainland China. Would one of you like to take on the question of is there a free enterprise China starving, dying to actually compete against their own state-owned enterprises?

And if we, in fact, using WTO and any other resources, begin to target the state-controlled, those entities which have the capital behind them to fund losses in order to gain market share, aren't we also enabling, if you will, if you believe there is the free enterprise portion or semi-free enterprise portion that does exist in China and certainly existed in Hong Kong for decades. Anyone want to take that?

Mr. SCISSORS. I will give a short, a partial agreement. I certainly agree there is a free enterprise China. Chinese private entrepreneurs complain bitterly about state repression. They take money out of the country legally and illegally because they don't feel like it is safe in China for them to be operating there.

Mr. ISSA. Fortunately it is safe in Vancouver.

Mr. SCISSORS. Yes, right, because there are a lot of cities where you see free China, they are just not in China. So I agree with that completely and I agree that the U.S. should try to encourage it.

I do think, Bill said this earlier and I am with him 100 percent. Unfortunately he is right, the Party is just not going to tolerate that up to a point. We don't have that much ability to change the state-private balance in China because the Party under Xi Jinping thinks state control of the economy is absolutely vital. We should do it but it is not going to work that well unfortunately.

Mr. ISSA. Well, let's follow up though. They think it is absolutely vital because it works. What if we make a decision as a country—and by the way Mr. Rohrabacher and I, when I came into Congress he was already a pro-free China, a Taiwan advocate, if you will. Free trade for free people.

One of the questions I have is, isn't that one of the fundamental decisions that we have the power to make to treat state monopolies and state-backed entities, entities that are able to compete because in fact the government has made decisions and is funding them, isn't that a strategy that at least we should explore? Because here is my question: We can't not trade with those 1 billion-plus people. We cannot ignore the market. But what we do seem to be able to do is to make a decision about do we allow ZTE back to buying our goods and, if so, under what conditions? Do we, in fact, have the ability to insist that there be a price to pay for stealing our intellectual property? You know, those are questions I think that this side of the dais certainly can begin looking at and that is why I asked it.

Would anyone else like to comment on techniques that might allow us to change the government's behavior in a way in which, if you will, the real Chinese people could benefit? Because you know, this is certainly an area in which the President is trying to look at being pro billion-plus Chinese and anti bad behavior of the Chinese Government and its state-owned enterprises.

Mr. ATKINSON. I was in China several years ago meeting with a fairly large, but privately owned, company and I was sitting down with the CEO and one of his biggest complaints was about an unfair competitor from a Chinese SOE. He felt it was completely unfair. Now he can't say that outside the room when he was meeting with me, but he feels it.

So I 100 percent agree with you that that is something we should be focusing on which is partly why I brought up the point about

anti-trust, going after firms whether they are SOEs or firms that are just so tied-in with the government that we target them for unfair anti-competitive behavior. Also to Dr. Scissors' point about denying them access to our financial system, companies that have stolen IP or the like, so I agree that that is an important step.

Mr. ISSA. Well, let me ask one closing question in my few minutes and then you can take whatever time the chairman will give you on all the subjects.

Should we—on the Judiciary Committee just on the other side, which I also serve on, should we, in fact, begin to look at the question posed this way: Inherently, isn't a government-owned, -run, or, in fact, -subsidized enterprise automatically, essentially, a monopoly in the sense that it has powers that an ordinary company no matter what their market share would not have and wouldn't that be the first step to look at state-owned enterprises domestically, to be fair, and internationally, as in fact by definition, failing the first checkmark of an antitrust question about a monopoly?

Mr. SCISSORS. I would just say, I have said for years that if you can't go out of business for commercial reasons that is the biggest subsidy of all. Loans are secondary to that even as big as they are and there are a whole set of Chinese state-owned enterprises we can identify as they will never go out of business for commercial reasons.

And to get to Congressman Sherman's point of view, that should also be part of our subsidies regime. If they cannot fail they are—they may not be monopolized but they are very heavily subsidized and we should treat them accordingly.

Mr. ISSA. Yes, Bill.

Mr. REINSCH. I don't want to intrude on the chairman's rules. Can I respond to the question or do you want to go on?

Mr. POE. Okay.

Mr. REINSCH. Thank you, Mr. Chairman. I appreciate it. I served on the U.S.-China Economic and Security Review Commission for 15 years and I had a colleague there who told me seriously that there are only two kinds of Chinese companies, those that are owned by the government and those that shut up and do what the government tells them. And I think there is a lot of truth to that and the problem with what you are suggesting is telling the difference.

In some cases it is obvious because there is a very clear line of control that comes down from the government. In some cases it is not so clear. And it is an intriguing idea to, you know, adjust our economic policy based on, you know, their lines of control and lines of authority. It raises a host of sort of definitional and complicated questions that it would take awhile to sort out.

Mr. ISSA. Thank you.

Thank you for your indulgence, Mr. Chairman.

Mr. POE. The Chair recognizes the gentelady, patient gentelady from Missouri.

Mrs. WAGNER. Oh, she is not so patient. Thank you, Mr. Chairman.

Earlier this year I joined a pretty large number of my colleagues in urging the President to rethink the imposition of tariffs on steel, aluminum, and other goods. We, as I said, commend the President

for standing up to China's bullying trade practices, but urge him to remember that our constituents depend upon free, fair, and healthy trade relations. And we must address China's predatory practices but prevent the axe from falling on American families.

Dr. Scissors, how will China's retaliatory tariffs on soybeans affect Midwest economies?

Mr. SCISSORS. I can't speak to how they will affect the whole economy, but I will say soybeans are probably the toughest case because there is no substitute for the Chinese market. For most American goods that might face Chinese retaliation there is some substitute. We are not a huge beef exporter or corn exporter, you know, go down the range of products. Soybeans we simply are, and of course the Chinese are going to go after where we are most vulnerable.

So if we get into a tariff fight we either have to, we simply have to accept that soybean farmers are going to get hurt and we cannot provide them with another market. And I know you know very well they don't want government subsidies, they want to be able to compete and sell their product.

Mrs. WAGNER. That is correct. How can state governments reduce the effect of constricted access to Chinese markets?

Mr. SCISSORS. I think the best thing, I am in favor of confronting the Chinese and it is easy for me to say because I am not a soybean farmer and I don't represent soybeans farmers and others who would be hurt by that. I think the best way to help Americans who are harmed by a trade interruption with China is to make sure that we have a stable policy. In other words, we are not saying tariffs are on, tariffs are off, tariffs are on, tariffs are off, you don't know how to run your business, you don't know how to run your farm.

If we could get some consensus, which has been referred to in this room, among parties and between Congress and the administration and tell people this is going to be the trade situation with China for 7 or 8 years, they have a chance to make better decisions. If we yank them around, you know, not only do they lose their market, they have no ability to plan for an alternative.

Mrs. WAGNER. Mr. Reinsch, in the interest of running faster, if trade relations with China remain strained, commodity producers in Missouri will need to find new markets for their goods. ASEAN countries seem to be a natural trade partner. Over half of the United States' congressional districts export more than \$100 million in goods to ASEAN every year. ASEAN countries themselves wish to see stronger trade relations with the United States. Can we pressure China to institute fairer trade practices through improving U.S.-ASEAN trade relations?

Mr. REINSCH. Well, we could try. It is a noble effort. I can't resist saying that the best way to have done that was through TPP.

Mrs. WAGNER. I concur.

Mr. REINSCH. Because that would have set up a framework in which they would, China would have to basically conform to the rules in order to expand. Instead what we have done is created a vacuum in that region that has allowed them to step in and we are playing defense. How we recapture it—and the administration has proposed bilaterals. I think that has potential but they have yet to

propose any. If they were to pursue that line, and I was talking the other day to representatives of one of the governments, ASEAN governments, and they are actually, they are interested in it.

Mrs. WAGNER. I know they are.

Mr. REINSCH. But it has been slow moving and our administration seems so far to have taken the attitude that they don't want to begin having a discussion unless the other government makes some concessions up front. And I think the other government's view is usually you make concessions as part of the negotiation, you don't make them in advance. So I am not sure that these things are going to move very fast, but that is the alternative the administration has put forward.

Mrs. WAGNER. Anyone else? China's ascension to the World Trade Organization has done little to change its predatory trade policies as we have discussed. Dr. Atkinson, how can the World Trade Organization be restructured to better restrain China's behavior?

Mr. ATKINSON. Well, there are several ways, one is just pressure. There is a Professor Mark Wu from Harvard, used to be at USTR as a lawyer. He has talked about how the practices of the WTO have frankly been biased sometimes. So I think just having pressure. I think Dennis Shea, now who is our Ambassador to the WTO, is trying to do that. Telling WTO in very clear and on certain terms that they have to be thinking much more about not sort of letting China win one and us win another. That is number one.

Number two, we can bring more cases. There are some cases we can bring where the USTR decides to bring them on their own unilateral basis. We could do that. I think ultimately though having the WTO fix this problem is going to be hard unless we can have a more important restructuring of the WTO that doesn't require things being on paper to prosecute them. That is the big advantage the Chinese have. They can do things that—they come to the—show us the law. Well, we can't show them the law because there is no law. It is up here in their brain and they—

Mr. POE. The gentlelady's time has expired.

Mr. ATKINSON. Sorry.

Mr. POE. Thank you, Dr. Atkinson.

Mrs. WAGNER. Yes.

Mr. POE. The Chair recognizes the gentleman from Florida, Mr. Garrett—or Virginia.

Mr. GARRETT. I haven't moved to Florida yet. Thank you, Mr. Chairman. Thank you, gentlemen, for being here today.

It is interesting that we should have started with some tangential discussion of CFIUS. And I think, I hope, and I have a finite amount of time, that we made some progress in the arena of protecting American intellectual property and technology, but there is an 800-pound proverbial gorilla in the room that I have discussed that I have never heard anyone else discuss. And I say this as much for the benefit of the other members of the subcommittee as for you gentlemen.

I would ask you, is it possible and indeed probable that we bleed technology and innovation, that we bleed intellectual property by virtue of exploitation of the U.S. EB-5 visa program, Dr. Atkinson?

Mr. ATKINSON. I am just afraid I can't answer that. I don't know enough to answer that.

Mr. GARRETT. Dr. Scissors, are you familiar with EB-5 visas?

Mr. SCISSORS. I am. I am familiar with them as a conduit for Chinese investment in the U.S. I don't think—I think there are problems with the EB-5 program. I don't think that that is—I would say as we have discussed that the academic visits to China are a bigger source of technology loss than EB-5.

Mr. GARRETT. Well, let me—I am going to split hairs for a second. Bigger implies that both of them might be sources. One might be more prevalent than the other. I would point out the data as it relates to EB-5 visas, which are essentially visas purchased by “foreign investors”—air quotes intended—in order to come to the United States to start business and create jobs ostensibly.

However, comma, in one particular prominent example: GreenTech Automotive, partly found by former Virginia governor Terry McAuliffe, built a facility in Mississippi which is now defunct owing tens of thousands of back taxes, wherein they brought in “Chinese investors.” Now the Chinese have monopolized rare earth minerals like cobalt as it relates to battery technology, et cetera, these were used in these GreenTech Automotive cars.

And once these investors bought EB-5 visas they had unfettered access to U.S. cutting-edge technology by virtue of their legal residency here—does that not sound about right?—or they wouldn't have the same hoops to jump through to garner U.S. technology as visa residents of the United States “job creators” once they were here as they would if they were trying to export it through something like CFIUS, correct?

Mr. SCISSORS. I am not saying there isn't a problem. As I understand the export control law it doesn't matter if you are Chinese or a resident or a citizen, if you are transferring controlled technology you are breaking the law. So export control should be able to handle that regardless of EB-5.

Mr. GARRETT. Having spent 10 years as a prosecutor wherein I would have been unemployed if people didn't break the law, I would posit that perhaps people break the law. So what I am driving at is that if you have access to the technology in a world where a thumb drive can contain any innumerable amount of technological secrets whether they are allowed to do it and whether they are doing it might be two entirely different things.

So I would hope that we would take a long hard look at EB-5 visas when quite literally if you combined every nation in the world's EB-5 visa recipients over a period of 5 years you would equal the number of Chinese EB-5 visa recipients in the United States in one. That is real and it is true. And so whether or not—and I have the utmost respect for the members of this panel. I mean you guys are awesome, but this might be one where I am a little bit more well studied perhaps, for a remarkable change, than some of the fine individuals before us today. And it is something we haven't looked at that we ought to be looking at because once you get the technology whether you are allowed to steal it or not doesn't mean you won't.

The next thing is technological proliferation by virtue of the fact that the Chinese are smart enough to go where the technology and

innovation is, which is in many cases our university and college campuses and the Confucius Institute, et cetera. What, if anything, should we be doing as it relates to reciprocity with these breeding grounds for “Chinese values,” cultures, and ideas at 524, I believe, locations in the United States when there is nothing similar advancing U.S. culture and ideas in China?

Anybody? Yes, sir, Mr. Reinsch.

Mr. REINSCH. Just on the Confucius Institute I would just comment when I served on the China Commission we did a study and report on exactly that subject and analyzed them and I would commend that to you. It basically—

Mr. GARRETT. I think I have looked at it. I think it says no smoking gun but cause for concern; is that right?

Mr. REINSCH. Yes. That is exactly right.

Mr. GARRETT. See, I am all read, imagine that.

Mr. REINSCH. You have a good memory, better than mine. I think that is probably still true, although that was a few years ago worth a second look—

Mr. GARRETT. Yes, sir.

Mr. REINSCH [continuing]. Because it needs to be monitored.

Mr. GARRETT. Thank you, anything else?

Mr. ATKINSON. If I could just quickly comment on EB-5. One of the problems with EB-5 is most of those EB-5 applicants don't really create any jobs that wouldn't have been created anywhere, somebody else would have created them. So we have argued and we filed on—narrow it down significantly and if you do that you might address that and then perhaps more limitations on the Chinese EB-5.

Mr. GARRETT. Thank you so much. And I want to say this. I am about to mutter a word I don't often mutter, but quotas, for example. If we want to encourage development in the United States and other regions of the world, why are 80 percent of EB-5 visas year-in and year-out going to China when they could go to places like Nigeria or Brazil or Italy, et cetera?

I don't normally champion such a thing but this EB-5 thing has manifested itself almost solely to the benefit of our chief rival economically and perhaps strategically. And so again I just wanted to shine some light on that.

Thank you, gentlemen. I yield back my negative 19 seconds.

Mr. POE. I thank the gentleman from Virginia. The Chair recognizes the gentleman from Utah, Mr. Curtis.

Mr. CURTIS. Thank you, Mr. Chairman. And to our guests here, thank you for being here today and enduring these many questions.

We are reading in the press today that the U.S. is readying another \$200 billion of sanctions. It is seeming very predictable, right, they are calling this a trade war. And I guess my question for you today, I am going to leave this hearing and the press in Utah is going to ask me a very predictable question which is, where does this end? And if you could please tell me that I would be happy to report that to the press.

Mr. SCISSORS. Well, I can tell you where it is going to have to end one way or another, how long it takes us to get there is a different story. The President is committed to reducing the trade def-

icit with China. We had a quote from Congressman Sherman saying it rose last year which it did.

Now I am not going to defend the President's view of the trade deficit. I am simply saying he has had this position for a long time. He has been very clear about it. He has not been inconsistent. So we have a situation right now where our trade deficit with China is rising. You can make an argument our economy is growing faster than theirs even though they don't report that. We are richer than them. It is going to take some work to get the trade deficit under control which means we may get a series of 10 percent tariffs applied to all Chinese goods for awhile.

But that is where it is going to end. It is going to end because that is the President's goal with the U.S. bilateral trade deficit with China at least stabilizing.

Mr. REINSCH. You want to know where it is going to end. I have to say this reminds me of, you know, two 8-year-olds having a staring contest waiting to see who is going to blink first. And the President has only one tactic which is to escalate, up the ante. He has allowed time with the 200. He has allowed time for more negotiations. There may be some, there may not be.

If you go back to my statement, I am skeptical for reasons I indicated that that will accomplish much but there is a possibility there. I think if they don't accomplish anything he will move to round 2 and impose those tariffs. The Chinese have been very clear that they will respond in like amount in kind. It is already more trade than we have with them but they will do other things.

Read today's clips, you will see a lot of speculation about what those other things might be. And then he will probably respond with a third tranche and I am very gloomy where this goes because in the end all trade is subject to punishing tariffs and there is going to be a lot of collateral damage on both sides.

Mr. CURTIS. So I feel that that is true and the worry in Utah is the path is littered with dead companies. And right along the way that, Dr. Scissors, you referred to the unpredictability and that has hit Utah in a really hard way is assuming that these tariffs are coming in already, how you place orders, how do you plan for the future and all of those things.

I am curious to know if any of you are aware of a different ending that still gets us the same results using different tools. So is the only tool available to us to fix this imbalance a tariff or are there other tools that we could be using?

Mr. ATKINSON. So we had an op-ed, I believe, in The Hill or Politico recently, 10 non-tariff alternatives the Trump administration could use as weapons or tools or tactics. There are a number of them we could use. And I have talked about some them, others have talked here. What I find striking with what the Trump administration is doing is they are pretty much using only one tool. They have a WTO case but they are pretty much only using one tool.

I would disagree a little bit with maybe Bill in saying that I don't think the Chinese are as fundamentally committed to this as—I don't think forcing them to stop intellectual property theft or forced tech transfer or massive subsidies are a threat to the Party. I think there is more leeway that the Chinese could give without giving up

Party control of China or even giving up the goal of growing their tech economy.

So I could see one outcome of this is the Chinese essentially decide they don't want to have that much pain and make some modest concessions. I don't think we can rule that out. I don't know what the odds of it are. I don't know that anybody knows that but that is one outcome.

Mr. CURTIS. Do modest concessions get us to where we need to go or do we look at it more dramatically?

Mr. SCISSORS. I think Rob is being realistic, but I don't think modest concessions get us where we need to go and this is one of the reasons why I think there is going to be pain. And when I was in the White House meeting that kicked off the 301 tariffs that led to this point I said, if you are not willing to stick to this for 3 years and suffer some pain don't bother, because that is what it is going to take to get the Chinese to change. I don't think tariffs are the best weapon. I don't think they are the only weapon. But I do think that if you don't have tariffs in your pocket and you aren't willing to use them you get less attention from China and it takes longer.

So, you know, do I think we should only be using tariffs, no. Do I wish we were using something else first, yes. But I don't think we are going to be able to get to where we want to go without tariffs and without pain.

Mr. CURTIS. Unfortunately I am out of time. Mr. Chairman, I yield.

Mr. POE. I thank the gentleman. It seems to me that maybe all is not gloom, doom, and despair. That the information you have given us of holding China back and running faster is something that Congress, specifically these two committees, need to move forward on right now. That is our responsibility.

We are not going to be here in 6 years debating this, Dr. Scissors. There are several of us who won't be here next year. But it is absolutely necessary that Congress assumes its role and to lead on this issue of dealing with the cheaters in China. But more than just bemoan the fact, we need to be proactive on doing what is best for the United States. Your information has been of great resource and we probably will have you back again at a later time to see if some of the changes that we are going to make hopefully through legislation are effective or not. I do not want to be a victim of what my grandfather always would say: When all is said and done, more is said than done. And so it is time to get something done.

Thank you very much for your participation and thank all the people that are in the audience as well for being here, and the members. These two subcommittees are adjourned.

[Whereupon, at 4:20 p.m., the subcommittees were adjourned.]

A P P E N D I X



MATERIAL SUBMITTED FOR THE RECORD

JOINT SUBCOMMITTEE HEARING NOTICE
COMMITTEE ON FOREIGN AFFAIRS
U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, DC 20515-6128

Subcommittee on Terrorism, Nonproliferation, and Trade
Ted Poe (R-TX), Chairman

Subcommittee on Asia and the Pacific
Ted Yoho (R-FL), Chairman

TO: MEMBERS OF THE COMMITTEE ON FOREIGN AFFAIRS

You are respectfully requested to attend an OPEN hearing of the Committee on Foreign Affairs, to be held jointly by the Subcommittee on Terrorism, Nonproliferation, and Trade and the Subcommittee on Asia and the Pacific in Room 2172 of the Rayburn House Office Building (and available live on the Committee website at <http://www.ForeignAffairs.house.gov>):

DATE: Wednesday, July 11, 2018

TIME: 2:00 p.m.

SUBJECT: China's Predatory Trade and Investment Strategy

WITNESSES: Derek Scissors, Ph.D.
Resident Scholar
American Enterprise Institute

Robert D. Atkinson, Ph.D.
President
Information Technology and Innovation Foundation

Mr. William Alan Reinsch
Scholl Chair in International Business
Center for Strategic and International Studies

By Direction of the Chairman

The Committee on Foreign Affairs seeks to make its facilities accessible to persons with disabilities. If you are in need of special accommodations, please call 202/225-5021 at least four business days in advance of the event, whenever practicable. Questions with regard to special accommodations in general (including availability of Committee materials in alternative formats and assistive listening devices) may be directed to the Committee.

COMMITTEE ON FOREIGN AFFAIRS

MINUTES OF SUBCOMMITTEE ON Terrorism, Nonproliferation, and Trade & Asia and the Pacific HEARING

Day Wednesday Date 07/11/18 Room 2172

Starting Time 2:45pm Ending Time 4:20pm

Recesses (to) (to) (to) (to) (to) (to)

Presiding Member(s)

Representative Poe

Check all of the following that apply:

Open Session

Executive (closed) Session

Televised

Electronically Recorded (taped)

Stenographic Record

TITLE OF HEARING:

"China's Predatory Trade and Investment Strategy"

SUBCOMMITTEE MEMBERS PRESENT:

Reps. Poe, Keating, Yoho, Sherman, Rohrabacher, Schneider, Chabot, Issa, Brooks, Zeldin, Wagner, Garrett

NON-SUBCOMMITTEE MEMBERS PRESENT: (Mark with an * if they are not members of full committee.)

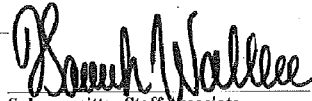
Rep. Curtis

HEARING WITNESSES: Same as meeting notice attached? Yes No
(If "no", please list below and include title, agency, department, or organization.)

STATEMENTS FOR THE RECORD: (List any statements submitted for the record.)

*IFR submitted by Rep. Sherman
QFR submitted by Rep. Yoho*

TIME SCHEDULED TO RECONVENE _____
or
TIME ADJOURNED 4:20pm


Subcommittee Staff Associate

MATERIAL SUBMITTED FOR THE RECORD BY THE HONORABLE BRAD SHERMAN, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Life Inside China's Social Credit Laboratory

The party's massive experiment in ranking and monitoring Chinese citizens has already started.

BY SIMINA MISTREANU
FOREIGN POLICY

APRIL 3, 2018

RONGCHENG, CHINA — Rongcheng was built for the future. Its broad streets and suburban communities were constructed with an eye to future expansion, as the city sprawls on the eastern tip of China's Shandong province overlooking the Yellow Sea. Colorful billboards depicting swans bank on the birds — one of the city's tourist attractions — returning there every winter to escape the Siberian cold.

In an attempt to ease bureaucracy, the city hall, a glass building that resembles a flying saucer, has been fashioned as a one-stop shop for most permits. Instead of driving from one office to another to get their paperwork in order, residents simply cross the gleaming corridors to talk to officials seated at desks in the open-space area.

At one of these stations, Rongcheng residents can pick up their social credit score.

In what it calls an attempt to promote "trustworthiness" in its economy and society, China is experimenting with a social credit system that mixes familiar Western-style credit scores with more expansive — and intrusive — measures. It includes everything from rankings calculated by online payment providers to scores doled out by neighborhoods or companies. High-flyers receive perks such as discounts on heating bills and favorable bank loans, while bad debtors cannot buy high-speed train or plane tickets.

By 2020, the government has promised to roll out a national social credit system. According to the system's founding document, released by the State Council in 2014, the scheme should "allow the trustworthy to roam everywhere under heaven while making it hard for the discredited to take a

single step.” But at a time when the Chinese Communist Party is aggressively advancing its presence across town hall offices and company boardrooms, this move has sparked fears that it is another step in the tightening of China’s already scant freedoms.

But it has been hard to distinguish future promises — or threats — from the realities of how social credit is being implemented. Rongcheng is one place where that future is visible. Three dozen pilot systems have been rolled out in cities across the country, and Rongcheng is one of them. According to Chinese officials and researchers, it’s the best example of the system working as intended. But it also illustrates those intentions may not be as straightforward as they like to claim.

The system is the brainchild of city hall staff, says He Junning, the deputy director of the Rongcheng Social Credit Management Office.

The bureaucrat, wearing square glasses and a black checkered sweater, shares the social credit department with seven other employees on the second floor of the city hall. The system they have devised assigns 1,000 points at the beginning to each of Rongcheng’s 740,000 adult residents. From there, the math begins.

Get a traffic ticket; you lose five points. Earn a city-level award, such as for committing a heroic act, doing exemplary business, or helping your family in unusual tough circumstances, and your score gets boosted by 30 points. For a department-level award, you earn five points. You can also earn credit by donating to charity or volunteering in the city’s program.

He stresses that “anything that influences your points needs to be backed by official facts with official documents.” That reduces subjectivity and limits penalties to mainly breaking laws and regulations.

Depending on their score bracket, residents hold a grade ranging from A+++ to D. Some offenses can hurt the score pretty badly. For drunk driving, for example, one’s score plummets straight to a C. On the other hand, triple As are rewarded with perks such as being able to rent public bikes without paying a deposit (and riding them for free for an hour and a half), receiving a \$50 heating discount every winter, and obtaining more advantageous terms on bank loans.

Companies are also included in the gauntlet of social credit. They can remain in good standing if they pay taxes on time and avoid fines for things such as substandard or unsanitary products — a sore point for Chinese people, who

tend to mistrust firms and service providers due to frequent scams and food safety scandals. High-scoring businesses pass through fewer hoops in public tenders and get better loan conditions.

But even though the system, established in late 2013, theoretically extends to every part of people's lives, many of the city's residents don't even know it exists yet. Sometimes people only realize it when their big life plans — buying a home, applying for a government position or an academic title — take them to the bright hallways of the city hall.

Yu Guanqing sports black Nike sneakers as he rushes from one counter to another, his wife by his side. The 30-year-old company employee needs his social credit score among other documents to apply for a house loan.

"This is making me do extra work! It's too troublesome," Yu says while walking, his documents in hand. He hasn't given the social credit too much thought but says it might help improve people's behavior. When asked, he checks his score. "I'm an A," he says — just like 90 percent of Rongcheng's population.

Oversized pictures depicting the heroes of this brave new world are displayed outside the city hall. They include Bi Haoran, a 24-year-old policeman, who saved some students one evening by pushing them out of the way of a car that crashed into the crowd. Yuan Suoping, a 55-year-old villager, is also there. After her husband's death, she took care of her bedbound mother-in-law, and when she remarried years later, her only condition for her new husband was that the old woman come live with them.

High-scoring residents are shown outside the public library and in residential communities and villages, which are already operating their own trial social credit systems. Boards explaining how you can win or lose points and showing pictures of the best scorers are a common sight in Rongcheng; passersby talk about them with pride.

But the most startling thing is that cars yield to pedestrians at the crosswalk — a sight I've never seen in another Chinese city.

"I feel like in the past six months, people's behavior has gotten better and better," says Chen, a 32-year-old entrepreneur who only wanted to give his last name. "For example, when we drive, now we always stop in front of crosswalks. If you don't stop, you will lose your points. At first, we just worried about losing points, but now we got used to it."

Rongcheng is a microcosm of what is to come. The national credit system planned for 2020 will be an “ecosystem” made up of schemes of various sizes and reaches, run by cities, government ministries, online payment providers, down to neighborhoods, libraries, and businesses, say Chinese researchers who are designing the national scheme. It will all be interconnected by an invisible web of information.

But contrary to some Western press accounts, which often confuse existing private credit systems with the future schemes, it will not be a unified platform where one can type in his or her ID and get a single three-digit score that will decide their lives. This caricature of a system that doles out unique scores to 1.4 billion people could not work technically nor politically, says Rogier Creemers, a scholar of Chinese law at the Leiden University Institute for Area Studies in the Netherlands. The system would instead expand and automatize existing forms of bureaucratic control, formalizing the existing controls and monitoring of Chinese citizens.

“The social credit system is just really adding technology and adding a formality to the way the party already operates,” says Samantha Hoffman, a consultant at the International Institute for Strategic Studies (IISS) who researches Chinese social management.

The Communist Party has experimented with forms of social control ever since it came to power in 1949, though China’s self-policing tradition stretches back to the Song dynasty. An 11th-century emperor instituted a grid system where groups of five to 25 households kept tabs on each other and were empowered to arrest delinquents.

But previous efforts largely focused on groups, not individuals. As early as the 1950s, during Mao Zedong’s rule, rural Chinese were forced into communes that farmed collectively — to disastrous effect — and had their status measured as a group. Similarly, *danwei* were work units whose members were apportioned public goods and were ranked based on their “good” or “bad” political standing. Such groups were supposed to police their own members — efforts inevitably tied to the violent political struggles of the Maoist era.

Post-1980s, the state relied on *hukou*, or housing registration, to keep tabs on where people lived, worked, and sent their children to school. But the hukou system often broke down when confronted with China’s mass urbanization in recent decades, which saw hundreds of millions of migrant workers move into metropolises despite poor access to housing and social services.

Along with society at large, the Communist Party has always monitored its own members for both ideological and personal loyalties. E-government projects that started in the 1990s, such as the Golden Shield, which connected public security bureaus across the country through an online network, have been aimed at both efficiency and control.

Former President Jiang Zemin in 1995 called for “the informatization, automation, and intelligentization of economic and social management.” In the early 2000s, his successor, Hu Jintao, attempted to automate social surveillance through modern grid policing projects in cities such as Shanghai. Hu, with his minister of public security, Zhou Yongkang, dreamed up a monitoring system capable of functioning automatically, with the end goal being to keep the Communist Party in power.

The result of decades of control, however, is that Chinese society suffers from a lack of trust, says veteran sociologist Zhang Lifan. People often expect to be cheated or to get in trouble without having done anything. This anxiety, Zhang says, stems from the Cultural Revolution (1966-1976), when friends and family members were pitted against one another and millions of Chinese were killed in political struggles.

“It’s a problem the ruling party itself has created,” Zhang says, “and now it wants to solve it.”

But around Rongcheng, nobody wants to talk to foreign journalists about the difficult times. “Life in our village has always been good,” says Mu Linming, a 62-year-old resident of Daxunjiangjia Village. “After introducing the system, it’s gotten even better.”

The retiree and his wife treat visitors the way people used to in the old days: They invite us into their home, insist that we have some noodles, and practically force bags of apples and nuts into our hands before we depart. The orderly village, where some rooftops are covered with seaweed, has its own social credit system that’s separate from Rongcheng’s. Here, the criteria boil down to whether you take care of your parents and treat your neighbors nicely.

Most people’s scores are middle of the road, Mu says, though the top rankers are displayed on a board near the village center.

“We are all good, and we can all encourage bad people to be good,” he says.

In Beijing, Zhang Lili is one of the researchers designing the national social credit system. She works at Peking University's China Credit Research Center, which was established more than 15 years ago for this purpose.

Zhang, wearing her hair in a ponytail, talks about how the idea for the system originated in China's rapid economic expansion. It's a narrative commonly put forward in China: Because the Chinese market economy didn't take centuries to expand like in the West, people need the government to keep companies and businesspeople in check, as well as to ensure a smooth urbanization.

The Peking University credit center started in the early 2000s with social credit projects for tourism agencies, the Ministry of Commerce, and academic researchers. The rankings were based on criteria such as permits and professional qualifications.

"But now with the inclusion of personal information, because there's more debate about it, [the government] is more cautious," Zhang says.

The experience of an early citywide experiment might explain why. In 2010, authorities in Suining, a county in Jiangsu province near Shanghai, launched a pilot project that included criteria such as residents' education level, online behavior, and compliance with traffic laws. Locals would earn points for looking after elderly family members or helping the poor and lose them for minor traffic offenses or if they illegally petitioned higher authorities for help. High scorers were fast-tracked for job promotions and gained access to top schools, while those at the bottom were restricted from some permits and social services.

The scheme was a disaster. Both residents and state media blasted it for its seemingly unfair and arbitrary criteria, with one state-run newspaper comparing the system to the "good citizen" certificates issued by Japan during its wartime occupation of China. The Suining pilot was canceled but not before teaching the government some lessons about what is palatable to the public.

The reason why Rongcheng has the most successful social credit system so far is that the community has embraced it, Zhang says. And that has happened because the scheme basically only deducts points for breaking the law. It is precise in its punishment and generous in its rewards.

As a result, schools, hospitals, and neighborhoods are independently running versions of it. “It’s not because the government has asked them to do it,” Zhang says. “It’s because they feel it’s better for their own administration.”

One such microsystem has been built by residents of First Morning Light, a neighborhood of 5,100 families a stone’s throw from Rongcheng city hall. The spacious, modern-looking community has been divided into grids of 300 families, each grid overseen by a management team. Residents have even taken the official Rongcheng credit system a few steps further by adding penalties for illegally spreading religion — echoing recent countrywide crackdowns on religious practice — abusing or abandoning family members, and defaming others online.

The effects have been positive, says Yang Lihong, a resident in her 30s who uses a pseudonym. Quality of life in First Morning Light has shot up — along with property prices. Yang, who asked that her real name not be used, says she sees no downsides to the social credit system and has no privacy-related concerns.

“I trust the government,” she says. “Who else can you trust if not them?”

China needs a “very delicate” type of administration, Zhang adds.

As Rongcheng shows, enforcing the law is a priority of the social credit system. Chinese courts struggle to enforce their judgments, especially civil ones. They’re hampered by their relatively low status in the political system, the country’s sheer size and scale, and the varied and often contentious levels of law enforcement.

On the one hand, the scheme wants to address real problems that Chinese society is confronting, such as financial scams, counterfeit products, and unsanitary restaurants, which amount to a “lack of trust in the market,” says Creemers of the Leiden Institute.

“Yes, the social credit system is connected with maintaining the integrity and stability of the political regime,” he says. “It is also the case that it tries to do so by addressing legitimate concerns. And that complicates the criticism.”

Perhaps the most controversial initiative so far is a supreme court [blacklist](#) of 170,000 defaulters who are barred from buying high-speed train or airplane tickets or staying at luxury hotels as a means to pressure them to repay their debt.

The public blacklist has been incorporated by another incarnation of the social credit system — Zhima Credit, a service of the mobile payment provider Alipay. China has a huge mobile payment market, with transactions totaling \$5.5 trillion in 2016, compared with \$112 billion in the United States. Alipay, owned by Ant Financial, and WeChat Pay dominate the still-growing Chinese market.

Zhima Credit is an optional service embedded in Alipay that calculates users' personal credit based on data such as spending history, friends on Alipay's social network, and other types of consumer behavior. Zhima Credit's technology director controversially told the Chinese magazine *Caixin* in 2015 that buying diapers, for example, would be considered "responsible" behavior, while playing video games for hours could be counted against you.

Hu Tao, Zhima Credit's general manager, paints a different picture now. She says the app doesn't monitor social media posts "nor does it attempt to measure qualitative characteristics like character, honesty, or moral value." Zhima Credit is not a pilot for the social credit system and doesn't share data with the government without users' consent, she says.

However, the company is blending into the invisible web of China's upcoming social credit system. Ant Financial has already signed a memorandum of understanding with Rongcheng, whose residents will be able to pay their utility bills using Alipay and show their Zhima Credit score — if high enough — to obtain better health insurance and borrow library books and rent public bikes without a deposit.

There's no single institution in command of the social credit system. Instead, the web made of various schemes stretches and blends, inching from the more popular restrictions for breaking laws to new, grayer areas. The National Development and Reform Commission, a powerful central body, said in March that it would extend train and flight travel restrictions for actions such as spreading false information about terrorism and using expired tickets.

The government will in the end have inordinate amounts of data at its disposal to control and intervene in society, politics, and the economy. This strategy is deliberate and well thought out, argues Sebastian Heilmann of the Mercator Institute for China Studies in Berlin. "With the help of Big Data, China's leadership strives to eliminate the flaws of Communist systems," he wrote in a *Financial Times* op-ed. China's troves of data will help the government allocate resources, solve problems, and squelch dissent — or so, at least, the government hopes. Some people already feel trapped in China's

NOTE: The preceding document has not been printed here in full but may be found at <https://docs.house.gov/Committee/Calendar/ByEvent.aspx?EventID=108531>

QUESTIONS FOR THE RECORD OF THE HONORABLE TED YOHO

COMMITTEE ON FOREIGN AFFAIRS, U.S. HOUSE OF REPRESENTATIVES

“CHINA’S PREDATORY TRADE AND INVESTMENT STRATEGY”

July 11, 2018

These questions are directed to all witnesses.

Intel is reportedly planning to partner with and provide memory chips to Tsinghua Unigroup, a subsidiary of Tsinghua Holdings, which itself is a wholly owned subsidiary of Tsinghua University, a public university in China with direct ties to the state. Another subsidiary of Tsinghua Holdings, Unigroup’s parent company, is Tsinghua Tongfang, which supplies military equipment to the People’s Liberation Army (PLA).

In short, Intel, dominant in processor chips, is partnering with a Chinese domestic champion to boost its memory chip business. The deal could help the Chinese partner to destroy American memory chip companies.

1. Should the U.S. government be concerned about Intel’s deal with Tsinghua Unigroup to provide NAND memory chips?

Dr. Atkinson: My understanding is that Intel completed a supply agreement with Tsinghua Unigroup in 2017, which is an advance payment for “locking in” future shipments on memory chips. This gives Intel an advance payment they can use, in part for R&D and capital investment. Again, to my understanding this is not a transaction that is governed by U.S. export control policy in part because it involves a “commodity” technology that the Chinese can purchase from a wide variety of sources (such as Samsung and SK-Hynix), if not make themselves. If Intel is simply supplying memory product to Tsinghua, even in high volumes, there would be no national security issue as there is no transfer of design or manufacturing know-how and large memory facilities in China already are supplying that market.

Mr. Reinsch: I am not familiar with either Tsinghua Unigroup or its various parents and other relatives, and in cases like this I generally trust Commerce’s Bureau of Industry and Security to investigate and come to the correct conclusion about whether the entity poses a security risk. They are in a much better position than a private party to examine the company’s history and practices and decide whether the proposed transaction poses a risk to our security.

2. Since this would be the first time Intel is providing flash memory chips to a foreign partner, does the deal raise tech transfer concerns?

Dr. Scissors: I am far from a computer engineer and the first question is about how advanced such chips are. China can get less advanced chips from many sources but *Intel (and others)*

should not be upgrading Chinese dual-use technological capabilities. Further, the US should block other countries from providing China with the most advanced technology available. This means constant diplomatic activity and lost business for American firms, but all parties must accept this.

Dr. Atkinson: I do not believe that this is the first time Intel is selling flash memory to a foreign company. Intel was once in memory chips but stopped producing them. They reentered the market in 2010 and as part of that seek to sell memory chips around the world. Also my understanding is this is not a tech-transfer agreement and instead is a sales of off-the-shelf memory chips to the Chinese company that Intel sells to companies around the world. To the extent that is the case, there should not be any concerns with it as it involves U.S. sales which are good for the U.S. economy. My understanding is that the chips are designed in the United States and produced in China.

Mr. Reinsch: I have not studied the capabilities of this particular chip, but, in general, the US government has always controlled semiconductor design and manufacturing equipment more tightly than the end products – the chips themselves. Semiconductors are somewhere between difficult and impossible to reverse engineer, so the more important question is keeping the ability to design and make them out of the hands of our adversaries. An obvious exception would be a case where the semiconductor itself provides a capability with military applications that we wish to deny. As with question #1, I don't want to second-guess BIS' judgment on that.

3. What other options should Congress and the U.S. government consider in cases like this one? What is the appropriate role of government, when one U.S. company willingly aids a predatory Chinese entity that threatens overall U.S. competitiveness?

Dr. Scissors: One temptation for the Congress and the rest of the USG is take a strong public stand on one case while not pursuing a broad, steady policy. Regardless of the preferred approach, it would do no good at all just to loudly block one high-profile transaction and then stop paying attention. In my view, it isn't the government's job to decide which American firms should be saved from competition. It is the government's job to protect national security. The US should assume that any technology transferred to a Chinese firm is immediately available to the Chinese military, and American firms should not be permitted to improve the Chinese military. This is the proper role of export controls. If necessary, a multilateral system similar to COCOM should be created.

Dr. Atkinson: As I wrote in my testimony, pressured tech transfer by the Chinese government is a serious problem. But it is important to differentiate between legal sales to Chinese companies and pressured tech transfer. The former is clearly in the U.S. national interest because it allows U.S. firms to gain greater global market share, expand their U.S. workforces and become more competitive, including against Chinese firms. The U.S. government should not be setting up roadblocks to such sales. And some of these sales will be intermediary goods to Chinese companies (e.g., flash memory, software systems, etc.); while some will be final goods (e.g., a smart phone). Treating the former as somehow problematic because Chinese companies can use these inputs input to compete with U.S. companies in final goods products would be "cutting

off our nose to spite our face.” We see this, for example, in the calls to cut off ZTE from U.S. exports of technology inputs (software, chips, etc.). Bans on intermediate technology product sales are usually not effective not only because the Chinese company can obtain the products from companies headquartered in other nations, but also because it provides an incentive for the Chinese company and the Chinese government to develop their own domestic capabilities to produce the product. In short, limiting sales of intermediate technology products would do little to keep Chinese firms from accessing technology like flash memory, but would hurt U.S. firms selling them.

In contrast, when it comes to forced technology transfer where companies are willing to share technology with the Chinese in exchange for market access, the best path to take is to work with our allies to put sustained pressure on the Chinese government to roll back such practices.

Mr. Reinsch: I believe the US government’s existing export licensing system is adequate to the task. Critical dual-use products or technology cannot be transferred without a license, either as a straightforward export or as part of a joint venture or other financial arrangement, and I am confident in BIS’ ability, along with the other agencies with which it coordinates, to determine in this case the sensitivity of the technology and the legitimacy of the end user and decide whether or not to issue a license. In addition, my experience with Intel, both in the government and subsequently, leaves me confident that it is both committed to compliance with US law and providing sufficient resources to ensure compliance.

