

**HEARING ON RISKS, REWARDS, AND RESULTS: U.S. COMPANIES IN
CHINA AND CHINESE COMPANIES IN THE UNITED STATES**

HEARING
BEFORE THE
U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

ONE HUNDRED SIXTEENTH CONGRESS
FIRST SESSION

THURSDAY, FEBRUARY 28, 2019

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**UNITED STATES-CHINA ECONOMIC AND SECURITY REVIEW
COMMISSION**

WASHINGTON: 2019

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

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The Commission was created on October 30, 2000 by the Floyd D. Spence National Defense Authorization Act for 2001 § 1238, Public Law No. 106-398, 114 STAT. 1654A-334 (2000) (codified at 22 U.S.C. § 7002 (2001), as amended by the Treasury and General Government Appropriations Act for 2002 § 645 (regarding employment status of staff) & § 648 (regarding changing annual report due date from March to June), Public Law No. 107-67, 115 STAT. 514 (Nov. 12, 2001); as amended by Division P of the “Consolidated Appropriations Resolution, 2003,” Pub L. No. 108-7 (Feb. 20, 2003) (regarding Commission name change, terms of Commissioners, and responsibilities of the Commission); as amended by Public Law No. 109-108 (H.R. 2862) (Nov. 22, 2005) (regarding responsibilities of Commission and applicability of FACA); as amended by Division J of the “Consolidated Appropriations Act, 2008,” Public Law No. 110-161 (December 26, 2007) (regarding responsibilities of the Commission, and changing the Annual Report due date from June to December); as amended by the Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015, P.L. 113-291 (December 19, 2014) (regarding responsibilities of the Commission).

The Commission’s full charter is available at www.uscc.gov.

March 26, 2019

The Honorable Chuck Grassley
President Pro Tempore of the Senate, Washington, DC 20510
The Honorable Nancy Pelosi
Speaker of the House of Representatives, Washington, DC 20515

Dear Senator Grassley and Speaker Pelosi:

We are writing to notify you of the Commission's February 28, 2019 public hearing on "Risks, Rewards, and Results: U.S. Companies in China and Chinese Companies in the United States." The Floyd D. Spence National Defense Authorization Act for 2001 § 1238, Pub. L. No. 106-398 (as amended by the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 § 1259b, Pub. L. No. 113-291) provides the basis for this hearing.

At the hearing, the Commissioners received testimony from the following witnesses: Elizabeth Drake, Partner, Schagrin Associates; Paul Gillis, Ph. D., Professor of Practice, Peking University Guanghua School of Management; William Kirby, Ph. D., Spangler Family Professor of Business Administration, Harvard Business School; Scott Kennedy, Ph. D., Director, Project on Chinese Business and Political Economy, Center for Strategic and International Studies; Mary Lovely, Ph. D., Professor of Economics, Syracuse University Maxwell School of Public Policy; and Mark Wu, Henry L. Stimson Professor of Law, Harvard Law School. This hearing evaluated two sets of relationships. In the first panel, hearing witnesses reviewed Chinese companies' participation in the U.S. economy, and in the second panel, hearing witnesses reviewed U.S. companies' participation in the Chinese economy. Both panels assessed implications of this participation for U.S. businesses, workers, consumers, and investors.

The full transcript of the hearing, prepared statements, and supporting documents are posted to the Commission's website, www.uscc.gov. Members and the staff of the Commission are available to provide more detailed briefings. We hope these materials will be helpful to the Congress as it continues its assessment of U.S.-China relations and their impact on U.S. security.

The Commission will examine in greater depth these issues and the others in our statutory mandate this year. Our 2019 Annual Report will be submitted to Congress in November 2019. Should you have any questions, please do not hesitate to have your staff contact one of us or our Congressional Liaison, Leslie Tisdale Reagan, at 202-624-1496 or lreagan@uscc.gov.

Sincerely yours,


Carolyn Bartholomew
Chairman


Robin Cleveland
Vice Chairman

cc: Members of Congress and Congressional Staff

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RISKS, REWARDS, AND RESULTS: U.S. COMPANIES IN CHINA AND CHINESE COMPANIES IN THE UNITED STATES

THURSDAY, FEBRUARY 28, 2019

U.S.-CHINA ECONOMIC AND SECURITY REVIEW COMMISSION

Washington, DC

The Commission met in Room 216 of Hart Senate Office Building, Washington, DC at 9:30 a.m., Vice Chairman Robin Cleveland and Commissioner Michael Wessel (Hearing Co-Chairs) presiding.

OPENING STATEMENT OF COMMISSIONER WESSEL HEARING CO-CHAIR

COMMISSIONER WESSEL: Good morning and welcome to the second hearing of the U.S.-China Commission's 2019 Report Cycle. And thank you all for joining us today.

Today's hearing seeks to dive deeper into what are the challenges and opportunities for the U.S. vis-a-vis our companies operating in China and, conversely, from Chinese companies operating here. These might sound like easy questions to answer, but the reality is very different.

Over the years that this commission has been in existence, the ability to really find out what is happening to our companies operating in China in a specific and granular basis has been difficult, if not impossible, to ascertain. The issue of what is happening to and what the activities of U.S. companies operating in China are is of paramount interest, especially as negotiations between our two countries on trade issues appear to be near an end.

Focus has been on intellectual property theft and the coercive activities of the Chinese government and its companies to force technology transfer as a condition of doing business there. But there is also attention to gaining greater access for U.S. investments into the Chinese market. That has been identified as a priority. But a deeper examination of the desirability of focusing on that is, in my view, merited.

Is greater investment by our companies in China in our companies' interests and is it in the interests of our domestic producers and employees?

Is it in the interests of our nation, as China has sought to advance its own interests by any means possible, legal and illegal?

Do we really want our companies to move more of their operations to China? With 46 percent of China's exports emanating from foreign-invested enterprises, U.S. and otherwise, and 60 percent of the exports targeted at the U.S. market emanating from those enterprises, will more of our investments there simply fuel more outsourcing of production and offshoring of jobs and more imports here?

What has been the track record of U.S. companies operating in China? Are they profitable? What are their sourcing patterns? Have they simply replaced their use of U.S.-produced inputs for Chinese inputs? Are their operations enhancing or undermining U.S. interests? In short, who wins?

Similarly, there is very little work that has been done regarding the activities and operations of Chinese companies operating in our market. While there has been a recent dip, the investment by Chinese companies in our market is extensive.

Investments are still occurring. Indeed, investments in biotech by Chinese firms were significant last year. As well, Chinese companies are using U.S. markets to raise significant capital. Our staff prepared an inventory of listings by Chinese firms on our three major exchanges, which now total more than \$1.2 trillion in capital raised.

From the latest publicly-available tax information, there were 7,360 Chinese foreign-controlled companies filing tax returns here. For that tax year, 2015, that was more returns than Germany; only 111 fewer than Japan; only 163 fewer than the United Kingdom; and significantly more than most other nations, yet there has been little focus on these companies or an appreciation for the scope of Chinese operations already in the U.S.

Investments by Chinese companies in the U.S. market, the capital they raise, and the operations they maintain need greater scrutiny. The commission hopes that today's hearing will shed greater light on what Chinese companies are actually doing here.

Do they operate based on market principles? What are their key objectives? What are their employment practices? Are they profitable? These and other issues are of critical interest.

These are not easy questions to answer, and from our prior work and the work done in preparing for this hearing it is clear to me that there are many gaps in our knowledge. I hope today we can identify what we do know, what we don't know, what information is obtainable, what tools are available to assist us in gathering the data to make appropriate policy assessments, and where do we have adequate information to act, and what policies should be considered.

To our distinguished witnesses, thank you for joining us to discuss these questions. I look forward to hearing from each of you. In addition, I would like to thank the Committee on Rules and Administration for securing this room for our use today. I now turn the floor over to my colleague and co-chair for this hearing, Vice Chairman Robin Cleveland. Thank you.

PREPARED STATEMENT OF COMMISSIONER WESSEL HEARING CO-CHAIR

Good morning, and welcome to the second hearing of the U.S.-China Commission's 2019 report cycle. Thank you for joining us today.

Today's hearing seeks to dive deeper into what are the challenges and opportunities for the U.S. vis-à-vis our U.S. companies operating in China and, conversely, from Chinese companies operating here. These may sound like easy questions to answer but the reality is very different: Over the years that this Commission has been in existence, the ability to really find out what is happening to our companies operating in China – in a specific and granular basis – has been difficult, if not impossible to ascertain.

The issue of what is happening to, and what the activities of U.S. companies operating in China are, is of paramount interest, especially as negotiations between our two countries on trade issues appear to be near an end. Focus has been on intellectual property theft and the coercive activities of the Chinese government and its companies to force technology transfer as a condition of doing business there. But there is also attention to gaining greater access for U.S. investments into the Chinese market. That has been identified as a priority but a deeper examination of the desirability of focusing on that, in my view, is merited.

Is greater investment by our companies in China in our company's interests and is it in the interest of our domestic producers and employees? Is it in the interests of our nation, as China has sought to advance its own interests by any means possible – legal and illegal? Do we really want our companies to move more of their operations there? With 46% of China's exports emanating from foreign-invested-enterprises – U.S. and otherwise – will more of our investments there simply fuel more outsourcing of production and offshoring of jobs and more imports here?

What has been the track record of U.S. companies operating in China? Are they profitable? What are their sourcing patterns – have they simply replaced their use of U.S.-produced inputs for Chinese inputs? Are their operations enhancing or undermining U.S. interests?

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Investments by Chinese companies in the U.S. market, the capital they raise, and the operations they maintain, need greater scrutiny. The Commission hopes that today's hearing will shed greater light on what Chinese companies are actually doing here. Do they operate based on market principles? What are their key objectives? What are their employment practices? Are they profitable? These and other issues are of critical interest.

These are not easy questions to answer. And, from our prior work and the work done in preparing for this hearing it's clear to me that there are many gaps in our knowledge. I hope today we can identify what we do know, what we don't know, what information is obtainable, what tools are available to assist us in gathering the data to make appropriate policy assessments. And, where we do have adequate information to act, what policies should be considered.

To our distinguished witnesses, thank you for joining us to discuss these questions. I look forward to hearing from each of you. In addition, I would like to thank the Committee on Rules and Administration for securing this room for our use today. I now turn the floor over to my colleague and co-chair for this hearing, Vice Chair Robin Cleveland.

OPENING STATEMENT OF VICE CHAIRMAN CLEVELAND HEARING CO-CHAIR

VICE CHAIRMAN CLEVELAND: Thank you. I sort of feel like we're in Kim Dae Jung Hall here always. It's a little grandiose.

Thank you, Commissioner Wessel, and good morning to everybody. I want to thank our witnesses for joining us today and for the thoughtful testimony that they have developed.

When China joined the WTO it was the sixth largest economy in terms of nominal GDP. American companies were attracted to the large and rapidly-growing market, in spite of concerns at the time about restrictions on investment opportunities, a lack of regulatory transparency, and inconsistent enforcement of rules and law.

Today China is the world's second largest economy, the world's leading exporter, yet perceptions of risk and reward for the global private sector remain largely unchanged. The Australian Chamber of Commerce reported last year that more than two-thirds of their companies find it difficult to do business in China, yet remain committed because of the rise of the middle class.

Similarly, the American Chamber notes that 75 percent of their members feel unwelcome and believe foreign-invested companies are not treated fairly. Yet, their annual report notes revenues are up across all sectors. And it concludes that China's growth will continue to provide opportunities for expansion. It is this dichotomy that our hearing today will address.

On the one hand, Chinese consumers in the broader market represent obvious opportunity. On the other, evidence suggests the Chinese Communist Party has skillfully and consistently protected their interests, particularly in state-owned enterprises.

Evidence of this protectionism is the exhaustive government lists which explicitly restrict or ban American investment in Chinese companies. And I think, Ms. Drake, you're going to address some of that today.

I am interested in how this list has evolved over the years.

But it's not the exclusive means of protecting Chinese interests. The subtler version of this game seems to play out in the party's approach to negotiations over market access for non-Chinese companies. While innovative, competitive firms engage in endless negotiations over the terms of entry, Chinese companies and, indeed, entire industries are protected and given room to grow a customer base. By the time foreign companies finally are provided access, market loyalty and shares have been locked up. Ask MasterCard.

These constraints on direct foreign investment in China have contributed to the surge in reverse mergers and initial public offerings, allowing Chinese companies to raise capital in the U.S. As Commissioner Wessel noted, we're releasing a summary today reporting on the \$1.2 trillion that American households and investors have committed to capitalize Chinese companies.

American retirement accounts and mutual funds have invested in virtually every sector, from transportation and biogenetics, to energy and consumer goods. In reading the annual reports for many of these enterprises, I was struck by the unvarnished praise heaped upon the Communist Party for commercial achievements.

In return for providing 41 percent of global market capitalization in 2017, U.S. exchanges and investors assume U.S. rules, standards, and regulatory oversight protect their investment. Companies raising capital in the U.S. markets are required by law to submit to the SEC financial statements prepared by registered firms. In turn, the auditors agree to inspections by the PCAOB.

Together, the SEC and PCAOB identify, monitor and risk -- identify and monitor risks, prevent fraud, and protect investors. And access to timely information is essential to that protection. China is a large, notable, and longstanding exception to this cooperation.

In a recent very strongly worded and unusual statement, the chairmen of the SEC and PCAOB described the limits imposed by the Chinese government on regulators' access to business books, records, audit work papers of U.S. listed companies.

In other words, the data we are releasing today on the risk to American households of the \$1.2 trillion in capital market investments has been made into a black box.

I supported China's accession to the WTO and for many years expected free market fundamentals to take root in the Chinese economy. Regrettably, more recent evidence suggests that that has not happened. While the CCP restricts ownership or operation of gas stations in China, China Petroleum and Chemical can raise \$3.5 billion from U.S. households.

MasterCard, PayPal, and Amazon can't gain access to Chinese consumers, yet Alibaba and its subsidiaries have raised \$21 billion through a Cayman holding company pumping up their market valuation to \$433 billion.

I'd like to believe these investments are sound. But without credible financial statements and audit inspections it's impossible to say.

I look forward to this hearing and hearing from our panelists on their understanding of how level, accountable, and fair the field is for both Chinese companies here and American companies in China.

So, I'd like to remind our audience that testimonies and transcripts are available on our website. And now we will turn to introducing the panelists.

PREPARED STATEMENT OF VICE CHAIRMAN CLEVELAND HEARING CO-CHAIR

Thank you, Commissioner Wessel, and good morning everyone. I want to thank our witnesses for joining us today and for the thought and consideration they have given their testimonies.

When China joined the WTO, it was the sixth largest economy in terms of nominal GDP. American companies were attracted to the large and rapidly growing market in spite of concerns about restrictions on investment opportunities, a lack of regulatory transparency and inconsistent enforcement of rules and law. Today China is the world's second largest economy and the world's leading exporter yet perceptions of both risk and reward for the global private sector remain largely unchanged. The Australian Chamber of Commerce reported last year that more than two thirds of their companies find it difficult to do business in China yet remain committed because of the "rise of the middle class." Similarly, the American Chamber notes that 75% of their members feel unwelcome and believe foreign invested companies are not treated fairly yet their annual report notes revenues are up across sectors and it concludes that China's growth rate will continue to provide opportunities for expansion.

It is this dichotomy that our hearing today will address. On the one hand, Chinese consumers and the broader market represent obvious opportunity. On the other hand, evidence suggests the Chinese Communist Party has skillfully and consistently protected their interests, particularly in state-owned enterprises. Evidence of this protectionism is the exhaustive government lists which explicitly restrict or ban American investments in Chinese companies. I am interested in how this list has evolved over the years but it is not the exclusive means of protecting Chinese interests. The subtler version of this game seems to play out in the Party's approach to negotiations over market access for non-Chinese companies. While these innovative, competitive firms engage in endless negotiations over the terms of entry, Chinese companies and, indeed, entire industries are protected and given room to grow a customer base. By the time foreign companies finally are provided access, market loyalty and share have been locked up.

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China is a large, notable, and longstanding exception to this cooperation. In a recent statement, the Chairmen of the SEC and PCAOB described the limits imposed by the Chinese government on U.S. regulators' access to business books, records and audit work papers of U.S.-listed Chinese companies. PCAOB further faces restrictions on attempts to inspect audit work and accounting practices of PCAOB-registered firms. The data we are releasing today indicates how large a risk this is to financial markets and, thus, American households. \$1.2 trillion in American capital market investments have been made into a black box.

I supported China's accession to the WTO, and for many years expected free market fundamentals to take root in China's economy. Regrettably, more recent evidence suggests that has not happened. While the CCP restricts ownership or operation of gas stations, China Petroleum and Chemical Corporation can raise \$3.5 billion from U.S. households. MasterCard, PayPal and Amazon cannot gain access to Chinese consumers, yet Alibaba and its subsidiaries have raised \$21 billion through a Cayman island holding company pumping up their market valuation to \$433 billion.

I would like to believe these are sound investments for American households, but without credible financial statements and audit inspections, it is impossible to say. I look forward to hearing from our panelists today on their understanding of how level, accountable and fair the field is for both Chinese companies here and American companies in China.

As we begin, I would like to remind our audience that the testimonies and transcript from today's hearing will be posted on our website, www.uscc.gov. Finally, I will take the opportunity to advertise the Commission's upcoming hearing on March 21, "An Emerging China Russia Axis? Implications for the United States in an Era of Strategic Competition."

PANEL I INTRODUCTION BY VICE CHAIRMAN CLEVELAND

Our first panel is focused this morning on assessing Chinese companies' operations and investments in the U.S. We will hear from an excellent set of experts.

We will begin with Ms. Elizabeth Drake, an international trade attorney and partner at the law firm of Schagrin Associates. Did I get that name right?

Ms. Drake has experience in a broad array of international trade matters, including antidumping and countervailing duty proceedings, Section 301 petitions, and international and bilateral trade agreements. She has represented clients before the Department of Commerce, ITC, U.S. Trade Rep, and the Court of Appeals for the Federal Circuit.

Her testimony will focus on how Chinese investment in companies' U.S. operations may affect the U.S. competitive environment.

Then we will hear from Dr. Gillis, professor of practice at -- I'm not going to say that -- School of Management in Beijing. Dr. Gillis is a leading expert on accounting and auditing issues in China and runs the widely-read China Accounting Blog.

I encourage anybody who hasn't looked at that to read it. Although I'd like you to index it better; it's very hard to find what you're looking for. But it is a superb resource. It covers financial and accounting issues between China and the U.S. He is frequently called upon to discuss Chinese companies listed on the exchanges in media, such as the Wall Street Journal, Nikkei, and the New York Times.

His testimony will focus on why and how Chinese firms list on the U.S. Stock Exchange, and oversight challenges Chinese firms present to the SEC and PCAOB.

Then we will hear from Dr. Kirby, professor of business administration at Harvard Business School. Dr. Kirby's work is centered on the development of modern companies in China, Chinese corporate law, and Chinese company structure. And he has authored or co-authored more than 40 Harvard Business School cases on Chinese companies.

At Harvard, Dr. Kirby has held the position of director of the Harvard University Asia Center, the director of the Fairbank Center for Chinese Studies, and the dean of the Faculty of Arts and Sciences, a thankless task no doubt. Being a professor is much easier.

His testimony will focus on Chinese businesses that have established themselves in the U.S., using the case study of the Wanxiang Group.

Thank you very much for your testimony. I will remind you to keep your remarks to seven minutes so that we can ask questions.

OPENING STATEMENT OF ELIZABETH DRAKE, PARTNER, SCHAGRIN ASSOCIATES

VICE CHAIRMAN CLEVELAND: Ms. Drake, we will begin with you.

MS. DRAKE: Chairman Bartholomew, Vice Chair Cleveland, Commissioner Wessel and all commissioners, good morning. Thank you for the opportunity to testify before you today.

My name is Elizabeth Drake and I am a partner at Schagrin Associates here in Washington, D.C. Our firm represents domestic industries and workers that have been harmed by unfairly traded imports, and many of our cases involve imports from China.

I would like to focus my remarks today on investments by Chinese firms that enjoy support from the government of China, or that are otherwise pursuing the policy goals of the Chinese government.

These firms are not necessarily operating on commercial market principles. Many of our existing policy tools are based on the assumption that firms operate as rational, profit-maximizing actors. These tools may be inadequate to address the challenges that some Chinese investments may create for domestic producers and workers in the U.S. market.

In recent years, massive Chinese overcapacity in a broad array of sectors has resulted in surges of exports to the United States. In many cases, domestic industries and workers have joined together to petition for relief from these unfairly traded imports, resulting in the imposition of antidumping and countervailing duty orders. Since 2008, the United States has imposed such orders on nearly 70 different products from China.

Sectors that have been harmed by dumped and subsidized imports from China include steel, aluminum, wood and paper products, chemicals, rubber products, green energy goods, and a broad array of other manufactured items. There are a number of Chinese investments in the United States that appear designed to allow Chinese firms whose products have been dumped into the U.S. market and subsidized by the government of China to nonetheless access the U.S. market for these products.

By producing or at least finishing those products in the United States through a corporate presence here, those products are no longer subject to duties to offset the dumping and subsidization that has been found and that may continue. The result may be continued injury to competing domestic producers and workers, with no effective means of address.

My written testimony identifies investments in the United States by Tianjin Pipe Corporation, a state-owned company and the largest pipe producer in China; Giti Tire Group; Triangle Tyre Company; and the Sun Paper Company. These companies' exports of pipe, tires, and paper from China to the United States were all found to be dumped and subsidized, some at very high margins. And they were all found to injure the domestic industry and U.S. workers.

If these companies simply continued to export from China to the United States, duties would offset these unfair trade practices and allow domestic producers to compete on a level playing field. However, if these companies' U.S. operations sell product made or finished in the United States into the market below the cost of production, there is no remedy.

In addition, if these companies' U.S. operations benefit from Chinese government subsidies that put U.S. producers at an unfair disadvantage, there may also be no remedy for those domestic producers.

For example, under existing antitrust rules selling goods below cost in an effort to gain market share at the expense of competitors is not necessarily actionable as predatory pricing. A Chinese firm supported by the government of China could endure losses for years pursuing such

a strategy, with no effective redress for domestic producers. In addition, with Chinese government support such firms could access low-cost financing, debt relief, and equity infusions on terms not available to their U.S. competitors.

In 2017, the government of China issued a policy that seems to support such investments. The State Council's guiding opinions on further guiding and regulating overseas investment identifies certain categories of outbound investment that are encouraged and, therefore, eligible for government support regarding currency conversion, debt financing from state-owned banks, and other items.

Among the encouraged categories are investments to promote the export of China's excess production capacity, high-end equipment, and technology standards, as well as investments that facilitate collaboration to develop pioneer technology and advanced manufacturing. This policy led one U.S.-based law firm to advise U.S. entities seeking Chinese investment to consider, among other factors, whether the Chinese investors' local home government supports the project, and whether the project will benefit the industry in China.

The policy raises a number of concerns. It encourages Chinese investors to pursue the larger policy goals of the Chinese government and not just a commercial return. This could lead Chinese firms to engage in anti-competitive practices in order to gain market access, but also encourage Chinese firms investing in the United States to discriminate against domestic suppliers or technology standards in favor of Chinese goods and technology.

The policy also directs Chinese investments towards the acquisition of new technology and the pursuit of advanced manufacturing, all with Chinese government support.

There are a number of steps policy makers should consider to address the challenges posed by such investments.

First, greater transparency regarding the scale and character of Chinese investment in the United States is required. The SEC, for example, could require that any firm listed in the United States report as material information any forms of foreign government support received, and on what terms.

Second, tools may be needed to prevent Chinese producers from distorting the domestic market. This could include, for example, a private right of action for domestic industries and workers that are harmed by anti-competitive practices that may not be actionable under existing antitrust laws. The tool could address price undercutting or market share expansion facilitated by foreign government subsidies, as well as unjustifiable discrimination against domestic goods and technology.

Thank you for the opportunity to testify today. And I look forward to your questions.

**PREPARED STATEMENT OF ELIZABETH DRAKE, PARTNER, SCHAGRIN
ASSOCIATES**

Risks, Rewards, and Results: U.S. Companies in China and Chinese Companies in the United States

Testimony before the U.S.-China Economic and Security Review Commission
February 28, 2019

Elizabeth J. Drake
Partner, Schagrin Associates¹

Introduction

This testimony addresses an important question posed by the Commission: Are Chinese companies in the United States reshaping the U.S. competitive landscape? This testimony focuses on two ways in which Chinese companies investing in the United States are reshaping the competitive landscape or threaten to do so if policy action is not taken.

First, there are a number of Chinese investments in the United States that appear designed to allow Chinese firms whose products have been dumped into the U.S. market and subsidized by the Government of China to nonetheless access the U.S. market for those products. By producing, or at least finishing, those products in the United States through a corporate presence here, those products are no longer subject to duties to offset the dumping and subsidization that has been found. The result may be continued injury to competing domestic producers and workers, with no effective means of redress.

Second, Chinese firms – whether majority owned by the Government of China or otherwise influenced by Chinese Government policies – may operate in the United States for strategic purposes rather than on purely commercial terms. These firms may engage in anticompetitive conduct, such as predatory pricing, discriminatory sourcing arrangements, or seeking control over access to resources and technology, in furtherance of their strategic goals. However, because U.S. antitrust law operates on the assumption that firms are rational, profit-maximizing actors, it may be insufficient to counteract such behavior. In addition, while recent reforms to the investment screening process used by the Committee on Foreign Investment in the United States (“CFIUS”) are aimed at strengthening oversight of such investments, it remains to be seen how effectively those reforms will be implemented. Additional reforms may be required to ensure the United States does not lose its competitive edge in important technologies.

This testimony concludes with preliminary policy recommendations to address these challenges.

Investments by Firms found to Export Dumped or Subsidized Goods to the United States

In recent years, massive Chinese overcapacity in a broad array of sectors has resulted in surging exports to the United States. In many cases, domestic industries and workers have joined

¹ This testimony reflects the personal views of the author and not necessarily the views of her firm or the firm’s clients.

together to petition for relief from these unfairly traded imports. Petitioners must demonstrate not only that such imports are being dumped below normal value and/or subsidized by the Government of China, but also that such imports have caused, or threaten to cause, material injury to the domestic industry producing the domestic like product in the United States.²

Petitioning for relief is no small matter. Industries must gather the information to demonstrate dumping, subsidization, and injury, and the resulting parallel investigations by the U.S. Department of Commerce (“Commerce”) and U.S. International Trade Commission (“Commission”) generally take about thirteen months to conclude. If Commerce finds dumping and/or subsidization, and if the Commission also finds material injury or threat thereof, antidumping and/or countervailing duty orders are imposed on imports of the product concerned. The duties are designed to offset the dumping and/or subsidization that is found in order to restore conditions of fair trade to the market and allow domestic producers and workers to compete.

In the past ten years, orders have been imposed on nearly 70 separate products from China, in industries ranging from iron and steel to wood and paper products, chemicals, rubber products, green energy goods, and a broad array of other manufactured items.

U.S. Antidumping and Countervailing Duty Orders Issued on Goods from China, 2008 – 2018³

Product	AD	CVD	Order Date
1,1,1,2 Tetrafluoroethane (R-134a)	X		04/19/2017
1-Hydroxyethylidene-1, 1-Diphosphonic Acid (HEDP)	X	X	05/18/2017
Aluminum Extrusions	X	X	05/26/2011
Aluminum Foil	X	X	04/19/2018
Ammonium Sulfate	X	X	03/09/2017
Amorphous Silica Fabric	X	X	03/17/2017
Biaxial Integral Geogrid Products	X	X	03/03/2017
Boltless Steel Shelving Units Prepackaged for Sale	X	X	10/21/2015
Calcium Hypochlorite	X	X	01/30/2015
Carbon and Alloy Steel Cut-to-Length Plate	X	X	03/20/2017
Carbon and Certain Alloy Steel Wire	X	X	1/8/2015
Carton-Closing Staples	X		05/08/2018
Cast Iron Soil Pipe Fittings	X	X	08/31/2018
Chlorinated Isocyanurates	X		11/13/2014
Circular welded austenitic stainless pressure pipe	X	X	3/19/2009

² See 19 U.S.C. §§ 1671(a) and 1673(a).

³ In some cases the CVD order on a certain product was issued earlier than the AD order. In such cases, the later date of the AD order is listed.

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Product	AD	CVD	Order Date
Circular welded carbon quality steel line pipe	X	X	5/13/2009
Circular welded carbon quality steel pipe	X	X	07/22/2008
Citric acid and certain citrate	X	X	5/29/2009
Coated Paper Suitable for High-Quality Print Graphics Using Sheet-Fed Presses	X	X	11/17/2010
Cold-Drawn Mechanical Tubing of Carbon and Alloy Steel	X	X	06/11/2018
Cold-Rolled Steel Flat Products	X	X	07/14/2016
Corrosion-Resistant Steel Products	X	X	07/25/2016
Crystalline Silicon Photovoltaic Cells	X	X	12/07/2012
Crystalline Silicon Photovoltaic Products	X	X	02/18/2015
Drawn Stainless Steel Sinks	X	X	4/11/2013
Electrolytic manganese dioxide	X		10/07/2008
Fine Denier Polyester Staple Fiber	X	X	07/20/2018
Forged Steel Fittings	X	X	11/26/2018
Hardwood Plywood Products	X	X	01/04/2018
High Pressure Steel Cylinders	X	X	06/21/2012
Hydrofluorocarbon Blends	X		08/19/2016
Kitchen Appliance Shelving and Racks	X	X	9/14/2009
Laminated woven sacks	X	X	08/07/2008
Large Residential Washers	X		02/06/2017
Light-walled rectangular pipe and tube	X	X	08/05/2008
Lightweight thermal paper	X	X	11/24/2008
Magnesia Carbon Bricks	X	X	9/21/2010
Melamine	X	X	12/28/2015
Monosodium Glutamate	X		11/26/2014
Multilayered Wood Flooring	X	X	12/08/2011
Narrow Woven Ribbons With Woven Selvedge	X	X	9/1/2010
New Pneumatic Off-the-Road Tires	X	X	09/04/2008
Non-Oriented Electrical Steel	X	X	12/03/2014
Oil Country Tubular Goods	X	X	5/21/2010
Passenger Vehicle and Light Truck Tires	X	X	08/10/2015
Polyethylene terephthalate film, sheet, and strip	X		11/10/2008
Polyethylene Terephthalate Resin	X	X	05/06/2016
Potassium Phosphate Salts	X	X	7/22/2010
Prestressed Concrete Steel Rail Tie Wire	X		06/24/2014
Prestressed Concrete Steel Wire Strand	X	X	7/7/2010
Raw flexible magnets	X	X	09/17/2008

Product	AD	CVD	Order Date
Seamless Carbon and Alloy Steel Standard, Line, and Pressure Pipe	X	X	11/10/2010
Seamless Refined Copper Pipe and Tube	X		11/22/2010
Small diameter graphite electrodes	X		02/26/2009
Sodium Hexametaphosphate	X		03/19/2008
Sodium nitrite	X	X	08/27/2008
Stainless Steel Flanges	X	X	08/01/2018
Stainless Steel Sheet and Strip	X	X	04/03/2017
Steel Grating	X	X	7/23/2010
Steel nails	X		08/01/2008
Steel threaded rod	X		4/14/2009
Steel wire garment hangers	X		10/06/2008
Stilbenic Optical Brightening Agent	X		05/10/2012
Tool Chests and Cabinets	X	X	06/04/2018
Tow Behind Lawn Groomer	X		8/3/2009
Uncoated Paper	X	X	03/05/2016
Uncovered innerspring units	X		02/19/2009
Utility Scale Wind Towers	X	X	02/15/2013
Xanthan Gum	X		07/19/2013

In many cases the rates of dumping and subsidization that are found are very high, with duties on some Chinese producers and exporters reaching triple digits. When Chinese producers are no longer allowed to export products to the United States at prices that reflect un-remedied dumping and subsidization, many find they can no longer compete in the U.S. market. In some cases, Chinese producers have opted to invest in the United States to produce the product that was found to be unfairly traded in order to continue accessing the U.S. market.

In 2007, for example, Tianjin Pipe Corporation (“TPCO”), a state-owned company and the largest pipe producer in China, commissioned a feasibility study on building a seamless pipe mill in the United States, fearing that its exports may soon be the target of antidumping and countervailing duty investigations.⁴

- In 2009, the domestic industry and workers producing oil country tubular goods (“OCTG”) filed petitions alleging that pipe from China was being dumped and subsidized and injuring the U.S. industry. In late 2009 and early 2010, antidumping and countervailing duties were imposed. Commerce found that TPCO benefited from

⁴ Paulson Institute, “Pipe Dreams: How a Chinese State Company Sought to Ride the U.S. Energy Boom,” Paulson Papers on Investment (Nov. 2014).

countervailable subsidies at a rate of 10.36 percent and was dumping OCTG into the U.S. market at a dumping margin of 29.94 percent.⁵

- In 2009, the domestic industry and workers also filed petitions on seamless line pipe from China. In 2010, antidumping and countervailing duty orders were imposed. Commerce found that TPCO benefited from countervailable subsidies at a rate of 13.66 percent and was dumping seamless pipe into the U.S. market at a dumping margin of 48.99 percent.⁶

TPCO announced it would build a \$1 billion-plus, 1.6 million square foot pipe plant in Texas in 2009, and phase one of its construction was completed in 2014.⁷ In the first phase, TPCO took plain-end pipe (so-called “green pipe”) and merely turned it into finished casing pipe at its end finishing facility.⁸ Phase two of its investment is the construction of a rolling mill that will use raw steel billets to produce the plain-end pipe being fed into its end finishing facility, but that phase is not expected to be operational until this year.⁹

The investment poses several potential competitive challenges to domestic steel pipe producers and their workers.

First, to the extent that TPCO is importing partially finished pipe that is not subject to antidumping and countervailing duties and finishing that product in the United States into product that would otherwise be covered, it may continue to be distorting the U.S. market with dumped and subsidized goods and injuring U.S. producers with no effective remedy.

U.S. law does contain a provision designed to prevent such circumvention, but it only applies in limited circumstances.¹⁰ The provision only applies if the process of assembly or completion in

⁵ *Certain Oil Country Tubular Goods From the People’s Republic of China: Final Affirmative Countervailing Duty Determination, Final Negative Critical Circumstances Determination*, 74 Fed. Reg. 64,045 (Dep’t Commerce Dec. 7, 2009); *Certain Oil Country Tubular Goods from the People’s Republic of China: Final Determination of Sales at Less Than Fair Value, Affirmative Final Determination of Critical Circumstances and Final Determination of Targeted Dumping*, 75 Fed. Reg. 20,335 (Dep’t Commerce April 19, 2010).

⁶ *Certain Seamless Carbon and Alloy Steel Standard, Line, and Pressure Pipe from the People’s Republic of China: Final Affirmative Countervailing Duty Determination, Final Affirmative Critical Circumstances Determination*, 75 Fed. Reg. 57,444 (Dep’t Commerce Sept. 21, 2010); *Certain Seamless Carbon and Alloy Steel Standard, Line, and Pressure Pipe from the People’s Republic of China: Final Determination of Sales at Less Than Fair Value and Critical Circumstances, in Part*, 75 Fed. Reg. 57,449 (Dep’t Commerce Sept. 21, 2010).

⁷ Paulson Institute, “Pipe Dreams: How a Chinese State Company Sought to Ride the U.S. Energy Boom,” Paulson Papers on Investment (Nov. 2014).

⁸ TEDA TPCO America Corporation, “Project Introduction,” available on- line at: <http://tpcoamerica.com/about-us/project-introduction/>.

⁹ *Id.*

¹⁰ 19 U.S.C. § 1677j(a).

the United States is “minor or insignificant” and the value of the imported parts or components is a “significant” portion of the total value of the finished merchandise. To determine whether the process is minor or insignificant, Commerce is directed to consider the level of investment and research and development in the United States, the nature of the production process, the extent of domestic production facilities, and whether the value of domestic processing represents a small portion of the value of the finished merchandise. In addition, Commerce is directed to consider sourcing patterns, whether the finisher in the United States is affiliated with the foreign part or component producer, and whether imports of the parts or components have increased after the initiation of the investigation on the finished merchandise.

The relative value of the parts or components and the finished product may be distorted by unfair trade practices, falsely inflating the significance of the domestic processing and preventing a finding for circumvention. For example, it is likely that the government subsidies the benefitted finished products also apply to components produced in China, and dumping may occur as well. In such a case, the value of the parts or components would be artificially reduced, making the domestic processing appear more significant as a portion of total finished product value than it actually is. Reforms to the statute or clarification of Commerce practice in this regard could help better prevent such circumvention.

A second, separate concern is that Chinese producers that have already been found to engage in unfair trade practices with regard to their exports to the United States may engage in similar market-distorting practices as investors in the United States. This concern is particularly acute with regard to state-owned and invested enterprises, which are fully backed by the Government of China and have the resources and support to pursue unprofitable business plans in the service of the government’s policy goals. But the concern is not limited to state-owned enterprises. Many Chinese enterprises, whether formally state-owned or not, have strong links to the government, including current or former party officials who sit on the board or in other governing positions and party committees within the corporate structure. In addition, many enterprises enjoy financing from China’s state-owned banks, which dominate the financial sector in China. These banks are required to implement the government’s policy goals, and they use their financing to do so.

Thus, a Chinese competitor investing in the United States may continue to price its products below cost in order to take market share from domestic producers. As explained in more detail in the next section, while such action would be remedied by the antidumping law in the case of imports, it may not qualify as predatory pricing under U.S. antitrust law. In addition, the Chinese investor may continue to enjoy significant subsidies from the Government of China, including through grants, loans, equity infusions, debt forgiveness, and other forms of financing. These subsidies would enable the investor to produce with much lower equity and financing costs than its American competitors, with no recourse for those competitors.

TPCO is not the only Chinese company that has been subject to antidumping or countervailing duty investigations and invested in producing that same product in the United States. In 2014, the United Steelworkers filed antidumping and countervailing duty petitions on passenger vehicle and light truck tires from China, and orders were imposed in 2015. In 2014, Chinese producer

Giti Tire Group announced plans to invest in a tire plant in the United States, and in 2017 it initiated production at its \$560 million tire plant Richburg, South Carolina.¹¹ Also in 2017, the Chinese company Triangle Tyre Co. announced it would invest \$580 million to build its first U.S. manufacturing plant, in Tarboro, N.C.¹²

The U.S. imposed orders on coated paper from China in 2010 and uncoated paper in 2016. In 2015, China's Sun Paper Company announced it would spend about \$1.36 billion to build a pulp mill in Arkansas in its first investment outside the country.¹³ The plant is currently limited to making fluff pulp, which is not subject to any antidumping or countervailing duty orders. Sun Paper, however, was assigned a countervailing duty rate of 178.03 percent in the investigation on coated paper and 176.75 percent in the investigation on uncoated paper.¹⁴

Chinese Investments for Strategic or Policy Goals

On August 4, 2017, China's State Council promulgated the Guiding Opinions on Further Guiding and Regulating Overseas Investment ("Guiding Opinions").¹⁵ The Guiding Opinions classify outbound investments into three categories: encouraged, restricted, and prohibited. Among the encouraged categories are: (1) investments to promote export of China's excess production capacity, high-end equipment, and technology standards; and (2) investments that facilitate collaboration with foreign companies engaged in the development of high and new technology and advanced manufacturing.¹⁶ Among the restricted categories are: (1) investment platforms without tangible industrial projects; and (2) investments involving outdated manufacturing equipment or technology.¹⁷ Investments in the encouraged category enjoy government support regarding currency conversion, debt financing from state-owned banks, and other items.¹⁸

The policy led one law firm advising U.S. companies seeking Chinese investment to consider, among other factors, whether the Chinese investor's local government supports the project and

¹¹ Bruce Davis, "Giti's U.S. plant begins production in S.C.," *Rubber & Plastics News* (Oct. 23, 2017).

¹² Stephanie Hernandez McGavin, "China's Triangle plans first manufacturing plant in U.S.," *Automotive News* (Nov. 5, 2018).

¹³ "China's Sun Paper to build \$1.36 billion facility in U.S.," Reuters (Nov. 23, 2015).

¹⁴ *Certain Coated Paper Suitable for High-Quality Print Graphics Using Sheet-Fed Presses From the People's Republic of China: Final Affirmative Countervailing Duty Determination*, 75 Fed. Reg. 59,212 (Dep't Commerce Sept. 27, 2010); *Certain Uncoated Paper From the People's Republic of China: Final Affirmative Countervailing Duty Determination*, 81 Fed. Reg. 3110 (Dep't Commerce Jan. 20, 2016).

¹⁵ See, e.g., "New Policies on China's Overseas Investments," WilmerHale (Sept. 1, 2017).

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

whether the project will benefit domestic Chinese industry by moving manufacturing and technology to China.¹⁹

Investments made pursuant to these government policies, and with Chinese government support, raise a number of policy concerns.

First, firms that are investing in order to export China's production and technology – whether state-owned or otherwise supported by the Government of China – may have the ability and incentive to sell their products, including those made in the United States, below the cost of production. Under current U.S. antitrust law, such practices are not necessarily considered prohibited predatory pricing. Pursuant to the recoupment test, pricing is only deemed anti-competitive if the predator is likely to eventually collect enough profits to make up for the losses caused by the predatory behavior.²⁰ The test is based on the theory that a predator who could not recoup its losses would either not engage in the predatory practices to begin with or will eventually exit the market, causing no long-term damage to competitors or consumers.

A Chinese state-owned enterprise or other enterprise investing pursuant to the Chinese government's policy goals, by contrast, may be able to rely on state support to maintain losses that may never be recouped, and engage in predatory pricing in order to gain U.S. market share in the furtherance of those political or industrial policy goals. Such a firm could engage in predatory pricing behavior that causes severe damage to its U.S. competitors, but, under current law, such behavior would not be considered anticompetitive as long as the Chinese firm was not expected to recoup its losses.

Second, Chinese firms and state-owned firms in particular are known to discriminate against foreign goods and technology in strategic sectors. The Guiding Opinions appear to encourage investments that export Chinese technology standards. This is consistent with China's Indigenous Innovation and other policies that seek to promote China's own technology standards at the expense of those established in other countries. While international trade rules prohibit such discrimination in the Chinese market in many cases, there are no rules that prohibit a particular Chinese entity from discriminating against U.S. goods or technology when it invests in the United States.

Third, as noted above, another goal of the Guiding Opinions is for Chinese firms to "collaborate" with overseas companies that develop high or new technology or are engaged in advance manufacturing. Chinese investments in U.S. start-ups that produce critical and sensitive technology have reportedly risen to such a degree that they are the subject of a report by the U.S. Department of Defense.²¹ One Silicon Valley financier reported being approached by three

¹⁹ *Id.*

²⁰ Antonio Capobianco and Hans Christiansen, "Competitive Neutrality and State-Owned Enterprises: Challenges and Policy Options," OECD Corporate Governance Working Papers No. 1 (2011) at 21.

²¹ Paul Mozur and Jane Perlez, "China Bets on Sensitive U.S. Start-Ups, Worrying the Pentagon," *The New York Times* (March 22, 2017).

Chinese state-owned enterprises to help them invest in U.S. companies over a six-month period, remarking: “‘In all three cases, they said they had a mandate from Beijing, and they had no idea what they wanted to buy,’ he said. ‘It was just any and all tech.’”²² While recent reforms to the CFIUS process increase the ability to screen Chinese investments that target critical technology, the law remains focused on national security concerns and not broader economic competitiveness concerns.

Policy Recommendations

There are a number of steps policymakers should consider to ensure that Chinese investments in the United States do not undermine the economic and security goals of the country.

First, greater transparency regarding the scale and character of Chinese investment in the United States is required. This includes greater transparency about Chinese government support for overseas investment in the United States, including direct support of such investments by state-owned and invested enterprises as well as other forms of support such as grants and financing. CFIUS, for example, could expand its portfolio to cover Greenfield investments as well as joint ventures, mergers, and acquisitions. In addition, the SEC could require that any firm listed in the United States report as material information any shares held by a Chinese government entity, any current or former party officials on the firm’s board or in management positions, and any forms of government support received and on what terms, including financing from China’s state-owned policy banks.

Second, policymakers should investigate whether Chinese producers that have been found to export dumped and subsidized product in the United States are investing in the United States in a manner that continues to distort the domestic market and harm domestic producers and workers. Responses could include strengthening the antidumping and countervailing duty anti-circumvention provisions that apply to merchandise further manufactured in the United States, either through statute or practice. Policymakers should also consider whether a private right of action or other petition process may be warranted for domestic industries and workers that are harmed by anticompetitive practices that may not be actionable under existing antitrust laws. This could include a revised predatory pricing test based on cost of production elements rather than just recoupment. The tool could also address price undercutting or market share expansion facilitated by foreign government subsidies, as well as discrimination against domestic goods and technology.

Finally, policymakers should consider whether more robust monitoring and screening is needed to prevent Chinese firms from appropriating critical U.S. technologies and know-how. While the improved CFIUS process is an important first step, it could be further expanded to apply to considerations of economic security and well as national security, as is the case with investment screening mechanisms in some other countries.

²² *Id.*

OPENING STATEMENT OF PAUL GILLIS, PH. D., PROFESSOR OF PRACTICE, PEKING UNIVERSITY GUANGHUA SCHOOL OF MANAGEMENT

VICE CHAIRMAN CLEVELAND: Dr. Gillis.

DR. GILLIS: I would like to thank the Commission for the opportunity to speak with you today. I am a professor at Peking University in Beijing. I have lived in China for the last 21 years, although I am an American.

I am going to talk today about China's use of U.S. capital markets and which is quite extensive. There are three types of companies in China that have used U.S. capital markets. The SOEs have come in. And they came in heavily right around the time that China entered WTO as an attempt to raise capital to make these companies more competitive following China's entry to WTO, and to import corporate governance principles that would make them behave more like for-profit companies and less like branches of the government.

Also, there was a big trend of reverse mergers. Over 500 Chinese companies entered the U.S. market through reverse mergers. That technique, which was basically to merge a Chinese company into an already-listed shell in the U.S. required very little oversight. There was no advance oversight by the SEC or by auditors or by investment bankers.

Most of those turned into frauds. They are mostly gone. The exchanges regulated the, basically the advantage of reverse mergers out of existence, and there haven't been any that I'm aware of in the last five years or so. So that is gone.

More significant is the use of U.S. markets by private companies. There are 167 Chinese companies that have listed in the United States on major stock exchanges in the United States.

Now, why did they come to the United States? Well, they came to the U.S. because the U.S. had when they initially came, starting in around 2000, they were mostly new economy companies, and they remain new economy companies, often very internet-based companies like Alibaba. They came to the U.S. because the U.S. had expertise in technology, considered better than other alternative exchanges like Hong Kong. And there was, the U.S. had the kind of liquidity in its markets that would allow these stocks to be properly valued.

One of the other and less talked about reasons why Chinese companies list in the United States is because the U.S. actually has weaker corporate governance than China or Hong Kong, which are the two other places where Chinese companies would obviously list. And that goes to the roots of the American system, which is a disclosure-based system.

The role of U.S. regulators is to determine whether a company has disclosed all of its risks, not to rule on the merits of an investment. And whereas Hong Kong regulators and Chinese regulators focus more on the appropriateness of the investment: is this a good investment? So it's a completely different approach.

Now, what we have seen is a trend towards China and Hong Kong, because they have lost so many of these key companies to the U.S., have begun to compete more effectively for those kinds of listings. Part of it was those exchanges became bigger. But there are some reasons.

China and Hong Kong do not allow companies, have not historically allowed companies that are loss-making to list, where the U.S. does allow a loss-making company to list. And many of these new economy companies had wanted to do their IPO long before they would reach profitability. When they had a good story to tell and they had a good revenue base was a good time to do an IPO.

Also, the U.S. allows control structures which are the situation where the founders can

stay in control of a company even though they no longer own the majority of shares. The U.S. allows that and has allowed it for a long time. And it's very popular in the technology sector. It came about after Steve Jobs got fired from Apple.

And so now, if you look at Facebook or Google, they have these structures in place, as do almost all Chinese companies that want this because Chinese founders want to stay in control of their company and not get voted out by a board of directors or by the shareholders.

China does not allow foreign companies to list. And all of the U.S.-listed Chinese companies, all of the Chinese companies that have listed overseas are foreign companies. They all use Cayman Islands holding companies which basically is a way to get out from under Chinese regulations because Chinese can't regulate a Cayman Islands company, so they use a Cayman Islands company.

Because they are a foreign company and they have foreign investors they are restricted from participating in certain industries. But they found a work-around for that, the variable interest entity, which was a concept invented by Enron and is used by most Chinese companies to allow them to operate in sectors that are banned from foreign participation. And China has tended to look the other way with respect to that.

China does not allow the use of variable interest entities, whereas Hong Kong does allow those particular things.

Now, China and Hong Kong have been changing their corporate governance rules to compete better with the U.S. And, in effect, we have a race to the bottom right now in terms of corporate governance. Hong Kong after it lost Alibaba, Hong Kong lost the Alibaba listing, the world's largest IPO, they lost it to New York for one reason, and that is that Hong Kong does not allow control structures. And Jack Ma, the chairman of Alibaba, was not about to run the risk of turning into the next Steve Jobs. So he insisted on a control structure.

Hong Kong proposed to change its rules. It was resoundingly voted down by investors and regulators in Hong Kong. However, once they lost Alibaba they recognized that they were never going to get another listing out of China if they didn't relax their rules. So they have relaxed their rules. And they now allow unicorns, large companies, basically billion dollar valuation companies that have enlisted to do IPOs in Hong Kong using control structures, using VIEs, and being loss-making, which they didn't allow before, in order to attract those kinds of listings.

China has been less flexible at it, even though they would like to have these companies return to China. They, the Chinese regulators are very careful about making sure that the market is stable, so they don't allow -- they are very, they are not very transparent about the process of listing companies in China. And so we don't see large IPOs of private companies in China listing in China because of that restriction.

Plus, foreigners cannot easily buy shares on the Hong -- on the Chinese stock exchanges. There are mechanisms that do allow that sort of thing. And so China has, though China has loosened their requirements.

There was after Hong Kong relaxed its requirements they, Xiaomi, a large Chinese company, did an IPO. They did it in Hong Kong. The first of the large technology companies to list in Hong Kong. The offering didn't go particularly well. And it's hard to say what will happen in the next round of IPOs that we see coming in the next year, whether we will see those companies going to Hong Kong or to the United States.

China has had another problem and it's that Chinese citizens are not able to buy shares in some of China's most successful companies, companies like Alibaba and Baidu. And that's

because you need foreign currency to buy shares in Alibaba or any share on the New York Stock Exchange or the Hong Kong Stock Exchange. And for a Chinese individual the access to foreign exchange is severely limited. You can get \$50,000 a year basically, which is not enough to make significant investments in these kinds of stocks.

So China has proposed another alternative which they just recently proposed to allow Chinese drawing rights, which will operate very similar to American drawing rights. So you will be able to buy shares in companies, probably companies like Alibaba will issue shares on the Chinese stock exchange, the Shanghai Stock Exchange, which will be denominated in renminbi. And when they sell the shares they'll get back renminbi. So it will work very much like U.S. ADRs. There are a lot of challenges in terms of how do you make this kind of thing work, but it's a step forward in terms of doing that.

China has 131 unicorns. Those are, that's companies that are valued at over a billion dollars based on the investment that's been going into them, that have yet to do an IPO. So that's kind of the pipeline that the investment bankers would be looking at.

The U.S. has only 85. So China has 131, U.S. has 85. So it shows you that the trends towards innovation and start-up companies has definitely moved towards China. The only other company in double digits is India with 20 unicorns. There is another 20 countries that have less than 10 each, most of them are -- have one unicorn of all.

Now, the largest unicorn in the world is Ant Financial, a Chinese company affiliated with Alibaba that has disrupted the finance industry in China. And the finance industry was dominated by four big banks, state-owned banks. They were slow to innovate, and the government tolerated Ant, formerly known as Alipay, to disrupt that market. And they have disrupted it mightily, and valued at \$150 billion.

At the other end of the stream, the smallest of the unicorns, valued at just over one billion, is TuSimple, which is a California-based company that is actually Chinese, run by Chinese, managed, owned by Chinese. The founder is a Chinese national who got a Ph.D. from Cal Tech and has started a company in San Diego to basically do self-driving trucks. And they are testing these trucks in Arizona and in Shanghai. And that is likely to become a huge market, but a trend I think we are likely to see more of basically.

And it's invested, the funds that have been invested in TuSimple are largely coming from China, including from Chinese companies, Sina, a Chinese -- one of the first Chinese companies to list in the United States, a privately-owned company is a major shareholder in TuSimple. And a lot of the funds for them have come from, from that.

These companies are going to be likely doing an IPO sometime in the next year or two. Companies have delayed their IPOs to get their valuations up. And there's some speculation as to how many of these unicorns will actually be able to achieve the values that they're claiming based on their fundraising in terms of that, which may also be delaying the IPO.

In order to do an IPO what these companies will do is select an underwriter. Typically the underwriter will be a U.S. investment bank. Although we're increasingly seeing Chinese investment banks starting to move into this, into this space. And they'll have to make a decision on whether they're going to list in the U.S. or Hong Kong.

These companies are too big generally to list on the mainland at present. What we are seeing now is IPOs in the mainland are from smaller companies that because the Chinese markets, even though they are quite sizeable now, are really not big enough to handle a major IPO such as some of these that are being proposed.

Now, the underwriters, the investment banks that will underwrite these things --

COMMISSIONER WESSEL: Dr. Gillis, if you could summarize, we want to get to Dr. Kirby and a good round of questioning. And appreciate all that you're doing.

DR. GILLIS: Okay.

COMMISSIONER WESSEL: Thank you.

DR. GILLIS: Okay. I guess this clock's not right on here. Okay.

COMMISSIONER WESSEL: It's over, so.

DR. GILLIS: Oh, I'm overtime already. Okay.

VICE CHAIRMAN CLEVELAND: Yes.

DR. GILLIS: So let me just summarize two of the problems right now that as I see it with U.S.-listed companies. First is that the PCAOB, as was mentioned by Vice Chairman Cleveland, has been banned from doing inspections in China.

And the PCAOB examines auditors to make sure that they're auditing these companies in accordance with U.S. auditing standards. That's been blocked since Sarbanes-Oxley came about. China has viewed it as infringement on their national sovereignty and has a risk of disclosing state secrets. It's been an ongoing battle for more than a decade now.

There's been very little progress made. Now, there was the letter from the SEC and the PCAOB which outlined the problems, which was an excellent letter. And then a few days later Mike Conaway, a representative from Texas, introduced legislation to basically ban any Chinese company that had three years it was unable to be inspected. If its audit was unable to be inspected it would not be able to list in the United States.

I think that is excellent legislation and should move forward. The other big problem is that the SEC has relaxed rules for Chinese companies that list in the United States. They're not subject to the same disclosure rules as American companies. And that came about because when foreign companies first listed in the United States they wanted to encourage them to list. So, basically the rules say that you're not subject to all of the same disclosure rules.

The quarterly -- American companies are required to report quarterly to the SEC on their results. Chinese companies are not required to do that. And the reason was that the view was when companies like Daimler were listing from Germany, this was a secondary listing for them. And so they were already subject to regulation by their home country, so the U.S. didn't want to add on more regulation.

The problem is most of these Chinese companies are listed only in the United States. They're not listed anywhere else. And as a consequence, those rules don't make sense.

What I think, the rules should be changed to say that that lower standard of disclosure is available only when a Chinese company is dual-listed, it's listed in some country and subject to home country registration.

So, thank you very much.

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February 28, 2019

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Testimony before the U.S.-China Security and Economic Commission

Co-chairpersons Bartholomew and Cleveland, and members of the Commission, I thank you for the opportunity to appear before you today. My name is Paul Gillis and I am a professor at Peking University in Beijing. I am an American who was formerly a partner with PricewaterhouseCoopers and have lived in China for over 21 years.

China's Capital Markets

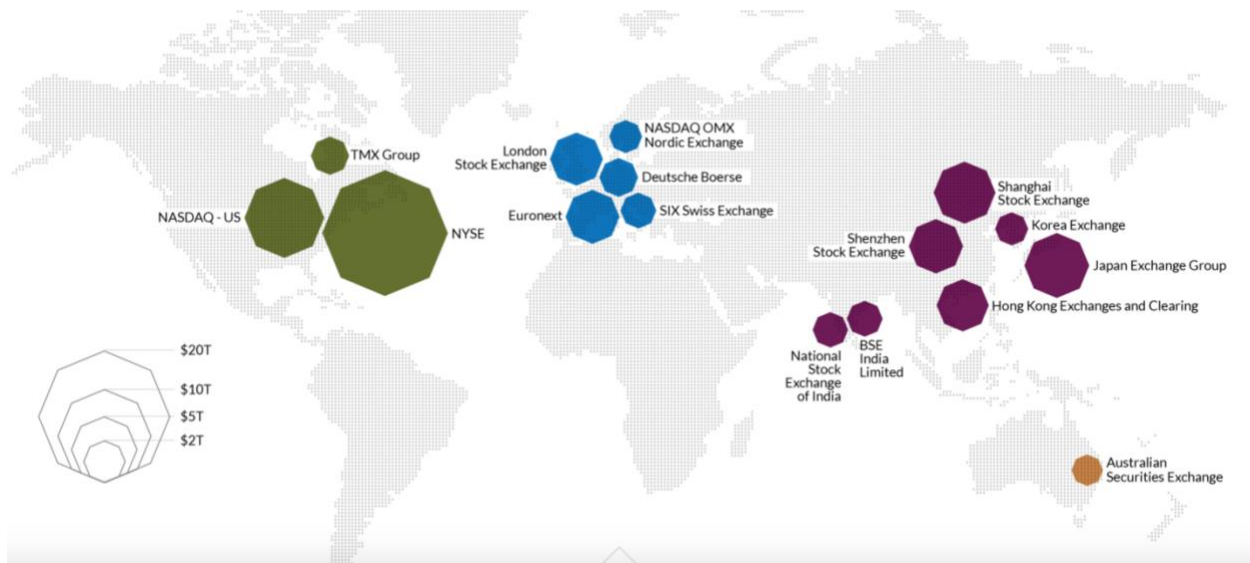
China is a socialist market economy. Ideologically, China is argued to be in the primary stage of socialism, and at that early stage certain capitalistic techniques must be deployed. China's capital markets are perhaps the most powerful of capitalistic techniques. While the Chinese conception of a socialist market economy is based on the primacy of a large, state-owned sector, the private sector now accounts for three-fifths of China's GDP and four-fifths of its workforce.

China's stock markets closed after the 1949 revolution and were not reopened until 1990. Initially, the reopened markets were used primarily to corporatize and raise capital for state owned enterprises.

At first, China's own stock exchanges were not friendly to privately held enterprises, with private companies raising only 8% of the capital that was raised on Chinese stock exchanges in 2000. Chinese stock markets opened more widely to private investment with the opening of an SME board in Shenzhen in 2005 and more significantly with the opening of ChiNext, China's version of NASDAQ in 2009. By 2009, private companies raised 67% of the capital raised on Chinese stock exchanges¹.

China's stock markets have grown significantly as its economy expanded. At present the Shanghai and Shenzhen stock exchanges list 1,460 and 2,141 companies respectively, while the NYSE lists 2,800 and NASDAQ lists 3,426 companies². China has also opened a "third board" – the National Equities Exchange and Quotation (NEEQ), which has listed over 10,500 smaller companies which trade over the counter to accredited investors. A new technology bourse has been proposed for Shanghai.

While China and Hong Kong's stock markets remain smaller than leading US exchanges, they have grown to be among the world's largest markets.



Source: <http://money.visualcapitalist.com/all-of-the-worlds-stock-exchanges-by-size/>

Foreign investment through China's stock exchanges

Foreigners are generally not permitted to purchase shares of Chinese companies through China's stock exchanges. Until China removes foreign exchange restrictions it is unlikely that these restrictions can be removed. China has tried several approaches to allowing foreigners to trade stocks listed on Chinese exchanges.

For a time, some Chinese companies issued B shares, which were denominated in dollars and available only to foreign investors through the Shanghai Stock Exchange. B shares tended to trade at a significant discount to the A shares sold to Chinese. There are approximately 200 Chinese companies that have issued B shares. Chinese citizens are now permitted to purchase B shares, but they have largely fallen out of favor.

Since 2003 China has had a scheme under which foreign institutional investors are permitted to trade in Chinese securities. China's stock markets are dominated by individual investors and encouraging foreign investment brings more sophisticated investors to the market. The Qualified Foreign Investor program (QFII) was established in 2003 and was replaced by the RMB Qualified Foreign Investor Program (RQFII) in 2011. The program establishes quotas for each institutional investor.

The Shanghai-Hong Kong stock connect opened in 2014 to allow foreign investors to purchase shares of Chinese companies listed on the Shanghai Stock Exchange and to allow Chinese citizens to purchase shares listed on the Hong Kong Stock Exchange. The connect was extended to the Shenzhen Stock Exchange in 2016. Other "connects" have been suggested for London and Singapore. The connects represent an opening up of China's markets without relaxing currency controls.

Morgan Stanley Capital International (MSCI)³ publishes an index used to measure equity market performance in global emerging markets. The index is important because many institutional investors measure their performance against the index, so they often own the same shares as

are included in the index in order to perform similarly to the index. On May 31, 2018 MCSI included 226 large cap A shares in its emerging markets index at a weighting of 5% (half on May 31, 2018, the other half in August). The inclusion was forecast to lead to approximately \$22 billion of capital inflows into these stocks. The initial inclusion of A shares boosted China's proportion of the index by .8% to 31.3%. Full inclusion of A shares would result in China's weighting rising to 40% of the emerging markets index.

US listing of Chinese companies

China has made extensive use of U.S. capital markets in its process of opening up. That is mainly because China's own stock markets were inadequate to meet the needs of China's companies. By listing companies overseas China was able to import foreign corporate governance processes that might have proved difficult to directly impose on local companies. The first Chinese company to list in the U.S. was Brilliance China Automotive Holdings which listed on the New York Stock Exchange on October 8, 1992 and was delisted in 2007.

There were three groups of Chinese companies that chose to list in the United States.

1) Large State-Owned Enterprises (SOEs)

In preparation for China entering the World Trade Organization in 2001, several large SOEs did initial public offerings in the United States both to raise capital for modernization as well as to import foreign corporate governance practices. There are presently 12 large SOEs that trade so-called N shares on the New York Stock Exchange (NYSE). The companies include several whose IPO made a list of the largest IPOs in history and several are among the largest companies in the world. Most of these companies are cross-listed in Hong Kong and Shanghai. The last NYSE IPO of a major SOE was the December 17, 2003 IPO of China Life.

One reason the large SOEs listed in the United States was that the Hong Kong Stock Exchange was not sufficiently developed to provide liquidity for the publicly held shares of these companies. After 2003, most SOEs listed either on mainland exchanges or in Hong Kong, which had developed sufficiently to handle large companies

Another reason why large SOEs stopped listing in New York may be because of the difficulties faced by China Life following its IPO. Shortly after the IPO there was an SEC investigation and class action law suit concerning potential accounting irregularities. Some have argued that the difficulties faced by China Life soured Chinese bureaucrats on US listings. Yet, China has not withdrawn the existing listings of SOEs in the US.

2) Private company IPOs

The United States became the primary destination for IPOs of privately held Chinese companies. Although the private sector has had increasing significance to China's economy, it found access to credit and capital in China to be difficult. 98% of China's 40+ million small and medium sized enterprises could not obtain bank loans in China in 2006⁴.

The first meaningful wave of US listings of Chinese companies came during the dotcom boom and bubble of 1995-2001. Most of the first listings were internet companies that were essentially clones of US internet pioneers. These companies chose to list in the U.S. for several reasons, discussed further below.

At present, there are 167 Chinese companies listed on major US stock exchanges⁵

Listings of Chinese Companies on U.S. exchanges (February 2019)

NASDAQ	124
NYSE	38
AMEX	<u>5</u>
Total	<u>167</u>

While far more companies have listed on Chinese stock exchanges the largest and best-known companies have tended to list in the US. Alibaba is listed on the New York Stock Exchange and has a market capitalization of \$431 billion. By contrast, the market capitalization of the entire ChiNext is \$692 billion, evidencing that the Chinese stock markets may not yet be sufficiently large to handle some of China's largest private companies.

Listings on major Chinese stock exchanges	
<u>Exchange</u>	<u>Companies listed</u>
Shenzhen ChiNext	743
SME Shenzhen	926
Main Board Shenzhen	473
Shanghai	<u>1,505</u>
Total	<u>3,647</u>

Source: Exchange websites

IPOs of private Chinese companies in the U.S. have slowed in recent years. Many companies are unicorns, pre-IPO companies valued at over \$1 billion that have deferred their IPOs to a later stage than was done in the past. There are presently more unicorns in China (181) than in the United States (138). Six of the ten largest unicorns globally are in China.

There have also been more attractive valuations available on Chinese exchanges, particularly for smaller companies, although the Chinese market tends to be highly volatile. The listing process for Chinese exchanges is opaque, foreigners are restricted in participating in Chinese IPOs, and the popular control structures and VIEs have not been permitted. Consequentially, I expect we will continue to see some private Chinese companies continuing to use the U.S. for IPOs, but I expect these numbers to further decline as China's stock markets develop.

3) Reverse mergers

A reverse merger is a merger of a larger company into a smaller company, with the shareholders of the larger company controlling the merged entity. Because of relaxed U.S. regulatory requirements for reverse mergers, the technique became a popular way to "backdoor" list private Chinese companies. Over 500 Chinese companies are said to have sought US listings through reverse mergers. Most planned to raise additional capital following the reverse merger and then to seek a listing on NASDAQ or the NYSE.

Most reverse mergers involved the merger of a private Chinese company into a shell company that was already registered with the SEC. Many of these shell companies had gone bankrupt but the SEC registered shell company remained alive. The transactions were typically promoted

by small U.S. investment banking firms many of which have fallen into regulatory difficulty with the SEC.

The primary advantage of a reverse merger is that it was a cheap and fast way to list a company in the U.S. Unlike an IPO, there was no SEC review prior to the transaction and auditors, investment bankers and securities lawyers were often uninvolved.

Unsurprisingly, the lack of regulation and oversight led many of these reverse mergers to collapse under fraud allegations. Both the NYSE and NASDAQ implemented rules in 2011 to require ‘seasoning periods’ for reverse mergers, and these rules removed the advantage of reverse mergers and they have substantially disappeared from the market.

Some reverse merger companies were successful at obtaining a listing on a major exchange. Others are traded, if at all, on over-the counter markets such as OTCBB and the Pink Sheets. Many have gone dark, where they stop communicating with shareholders and stop filing with the SEC. The failure to file ultimately leads the SEC to revoke the company’s registration and the shareholder’s investment is typically lost.

The reverse merger problem was caused by weak regulation but has been largely cured through regulatory action by the stock exchanges.

Why do Chinese companies list in the United States?

The size and liquidity of U.S. markets initially attracted the large SOE listings as well as early private companies. In the past 20 years both China and Hong Kong stock exchanges have grown significantly, and this is no longer a compelling reason.

Private companies began to list in the U.S. in significant numbers beginning with the IPOs of Sina.com and Sohu.com in 2000. Alibaba became the largest IPO in history when it listed in New York in 2014. There are several reasons why this is the case.

The U.S. permits owners to use control structures that keep voting power in the hands of founders. Most markets (including China and Hong Kong) have not allowed these structures (however, competition from the U.S. has led both China and Hong Kong to liberalize their rules. Ever since Steve Jobs was forced from Apple by its board, technology entrepreneurs have often used two classes of stock to keep control in the hands of founders. Chinese companies have tended to follow this practice, giving voting shares to founders and non-voting shares to investors. The Hong Kong Stock Exchange rejected a request from Jack Ma to modify its rules to allow a control structure for Alibaba, and consequently lost the listing to the New York Stock Exchange.

Overseas listings may provide opportunities for Chinese owners to obtain access to foreign currency. Concerns over capital flight have led to a crackdown on practices designed to circumvent China’s currency controls.

The process of doing an IPO in the U.S. involves companies first selecting advisors – typically led by a U.S. investment bank as underwriter, although Chinese investment banks have entered this space. Auditors and several sets of law firms (local and US counsel, as well as separate counsel for the underwriter. The company faces a decision of whether to list in the U.S. or Hong

Kong. The decision may be guided by investment bankers, who usually obtain a higher fee through a U.S. listing.

Chinese buying shares of overseas listed companies

Many of China's most successful companies are not listed in China and only trade on international exchanges, primarily in the United States and Hong Kong. This has created a significant issue because China severely restricts the ability of its nationals to obtain foreign currency. Consequentially, most Chinese are unable to purchase shares of China's most successful companies. Rather than relax exchange controls, China has created a way for Chinese investors to buy stock in overseas listed Chinese companies.

The primary method at present are the Connects between the Shanghai and Shenzhen exchanges and the Hong Kong Stock Exchange. Under the Connects, Chinese nationals can buy Hong Kong stocks paying in local currency and receiving local currency upon sale. Similarly, foreigners can buy Chinese stocks in Hong Kong using Hong Kong dollars and receiving Hong Kong dollars upon sale.

There is currently discussion about extending the Connects to London and Singapore. It is theoretically possible to extend the Connects to U.S. exchanges, but to do so would require significant regulatory changes in the U.S.

In November 2018, Chinese president Xi Jinping announced plans to open a technology-oriented bourse in Shanghai to create more alternatives for Chinese companies to raise capital. Proposed rules for this bourse indicate significant regulatory changes in an attempt to encourage companies to list at home. The new bourse proposes to follow the U.S. approach to IPOs, adopting a disclosure-based system similar to the SEC and allowing companies rather than regulators to decide on the timing of an IPO.

Perhaps more significant for the new bourse is to allow offshore companies (most US listings of Chinese companies are incorporated in the Cayman Islands) and to follow the US in allowing loss making companies and those using control structures and VIEs to list. This would be done through China Depositary Receipts (CDRs) which would allow a company like Alibaba to list shares in China that would be denominated in local currency. There was a push to have Xiaomi use the CDR structure for its listing in Hong Kong in 2018, but there ended up being too many unanswered questions at the time of its offering. I expect most of the major U.S. listed Chinese companies to come under considerable pressure to issue CDRs. The CDR mechanism may be the way for some U.S. listed Chinese companies to move their listing to China. If they are able to sell sufficient shares to Chinese, they can buy back shares from U.S. investors. Because the value of these companies is often very high, this is not a process that will likely play out in the short term.

While it may be technically possible for the CDR approach to allow U.S. multinationals to sell shares in China, I do not see this as likely in the near term. CDRs will be used primarily to provide a secondary listing for overseas listed Chinese companies.

Foreigners acquiring Chinese shares

The primary means for foreigners to purchase shares of Chinese companies has been to purchase shares on foreign exchanges. Starting in 1992 China allowed certain State-owned enterprises (SOEs) to sell shares in Hong Kong as “H” shares. There are presently 241 H shares traded in Hong Kong. There are also 153 red chips listed in Hong Kong. Red Chips are offshore companies that are incorporated internationally but hold primarily mainland assets. In addition to Hong Kong, Chinese companies have listed on most of the world’s stock exchanges, although Shanghai, Shenzhen, Hong Kong and the United States remain the primary destinations.

Problems with U.S. listed Chinese Companies

Some analysts have argued that U.S. listed companies are valued lower than their American peers, while the fundamentals of the Chinese market suggest these companies should be valued higher because of greater market potential. The reason for the lower valuation appears rooted in several risk factors that are present with these securities.

Accounting fraud

Starting in 2009, activist short sellers began to target overseas listed Chinese companies. Short sellers borrow and sell shares in target companies, publish negative research, and then hope to repurchase and return borrowed shares at lower prices. There have been over 200 short campaigns against overseas listed Chinese companies since 2009, with activity peaking in 2011 with 65 campaigns returning 36.24% to the short sellers. Short selling activities against U.S. listed Chinese companies have declined since 2011, likely because of two reasons. Short selling is challenging in a rising market, and the low hanging fruit of easily identified frauds has been picked. Since 2011, more short sellers appear to have focused on Hong Kong listed Chinese companies, where low levels of regulatory oversight may have created ideal conditions for short sellers.

Short sellers found a target rich environment among U.S. listed Chinese companies. While some of the companies were clearly fraudsters preying on investors, others appear to have been unprepared for the challenges of reporting as a public company.

Privatization

High levels of fraud among U.S. listed Chinese companies led to a significant decline in market values for these companies, with many trading below the price of the initial public offering. At the same time, values of shares traded on the Chinese stock exchanges rose to extremely high values.

Over 50 U.S. listed Chinese companies have announced or completed plans to delist from U.S. stock exchanges by repurchasing outstanding shares. These companies intend to restructure and relist on Chinese stock exchanges, often through a reverse merger transaction. Only a few transactions have been completed all the way through relisting. A good example is Focus Media, which delisted from NASDAQ in 2013 at a value of \$3.7 billion and then relisted in Shenzhen in 2015 at a value of \$7.2 billion.

Curiously, before U.S. listed companies can relist in China, Chinese regulators require that the company eliminate three of the issues that have led to many problems for U.S. shareholders -

offshore holding companies, variable interest entity structures, and control structures that keep insiders in control. These features are all permitted in the U.S. but not in China.

U.S. shareholders in companies facing a privatization offer are often disadvantaged. Although companies typically obtain fairness opinions on the transactions, shareholders are often concerned that the privatization offers are underpriced. Most U.S. listed Chinese companies are listed in Cayman Islands and there is significantly less investor protection available in Cayman Islands compared to typical U.S. state laws. There have been concerns that some companies may be adjusting earnings downward to justify lower going-private prices.

Variable Interest Entities

Somewhat unique to China is the extensive use of a corporate structure known as the variable interest entity (VIE)⁶. A VIE is an arrangement where a company is controlled through contracts instead of through ownership. Contracts are an inferior form of ownership compared to direct ownership of shares.

VIE structures take advantage of U.S. accounting rules that were designed to stop the abuses of Enron by requiring companies to put off balance sheet debt back on the balance sheet. Chinese companies have cleverly used these rules in a new way – to put assets that are not actually owned by the company on the balance sheet.

China restricts foreign investment in many sectors, including the internet sector that is the most popular among U.S. listed Chinese companies. The VIE structure provides a work around for these restrictions. Activities that cannot be owned by foreigners are put in a domestic company that is owned by a Chinese individual, typically the CEO of the company. This company is then put under the contractual control of the offshore public company. This allows the company to tell its story in two ways: to domestic regulators it claims to be locally owned and not subject to foreign investment restrictions, while foreign investors are led to believe that they own the entire business.

Investors have lost significant sums when VIE arrangements have failed. There have been instances where the VIE shareholder simply absconds with the VIE. Attempts to enforce the contractual arrangements have generally failed since China's Supreme Court and arbitrators have held that the VIE contracts are not enforceable under Chinese law because they attempt an illegal work around the foreign investment restrictions.

Chinese regulators are aware of the use of variable interest entities, and proposed legislation in 2015 that would make clear that VIE arrangements were not acceptable yet provide an exception for those VIE arrangements where a Chinese national was effectively in control of the company (such as through use of control structures that give Chinese founders control of voting). The legislation was not enacted, and recently reintroduced legislation does not include this provision.

The extensive use of VIEs by U.S. listed Chinese companies is a major source of risk for investors. The SEC has done a good job requiring companies to significantly expand disclosures. "While companies already disclose those material risks in technical compliance with relevant SEC rules, the disclosure is often lengthy, difficult to understand, and effectively buried under

pages of dense, boilerplate language”⁷. While disclosures identify the risks, it is unclear whether investors fully understand them. Analysts say that U.S. listed Chinese stocks usually trade at a discount when compared to peer companies in the U.S. That discount is likely because of the risks of the VIE structure and the higher incidence of accounting fraud among U.S. listed Chinese companies. Reforms that reduced these risks should lead to higher valuations in these stocks, benefiting American investors.

PCAOB Inspections

The Public Company Accounting Oversight Board (PCAOB) was established by the Sarbanes Oxley act. The PCAOB has three primary functions. 1) The PCAOB sets the rules for auditing U.S. listed companies, a task formerly done by the American Institute of CPAs; 2) The PCAOB inspects accounting firms that audit U.S. listed companies to determine whether they are complying with the rules; and 3) The PCAOB investigates and disciplines auditors who do not follow the rules. Arguably the most important function of the PCAOB is inspections.

Every accounting firm registered with the PCAOB is to be inspected at least every three years (annually for those firms auditing over 100 issuers). There are currently 38 Chinese CPA firms and 32 Hong Kong CPA firms⁸ (including affiliates of global CPA firms) that have registered with the PCAOB. When the PCAOB attempted to inspect Chinese and Hong Kong CPA firms that had registered with the PCAOB, they were blocked by Chinese regulators who argued that these inspections would impinge on China’s national sovereignty and risk disclosure of state secrets.

Negotiations between Chinese regulators and the PCAOB have continued for over ten years. In 2013 the PCAOB reached agreement with Chinese regulators with respect to cooperation on investigative activities of the PCAOB. No agreement has been reached with respect to the more important inspections. Recent negotiations on a potential pilot program for inspections appear to have stalled over disputes over which companies can be inspected.

The PCAOB has reached agreements with 22 countries and territories that establish a protocol for PCAOB activities in those countries and territories. China has insisted that the PCAOB follow the lead of the European Union, which granted regulatory equivalency to China with respect to audit regulation. Regulatory equivalency allows European regulators to rely on the work of Chinese regulators as if it were their own. The PCAOB has not accepted the concept of regulatory equivalency, insisting instead on at least joint inspections. There is valid concern that foreign regulators may not have the expertise or interest in reviewing the audits of U.S. listed companies.

Inspections are the primary protection for investors from shoddy audits. Research indicates that investors are unable to distinguish between good Chinese firms and bad Chinese firms based on traditional signals of firm quality including a firm’s stock returns, earnings performance, accounting quality, and external monitoring mechanisms such as auditor and underwriter quality⁹. Certainly, the information about auditor quality that would be available from PCAOB inspections would help investors to identify risk and to differentiate between good and bad Chinese firms.

Research suggests it is in China’s interest to allow PCAOB inspections. Professor Shroff of MIT examined the clients of non-U.S. auditors that were inspected by the PCAOB and found that

audit quality on all of their clients improved, not just those listed in the U.S. and subject to PCAOB and SEC jurisdiction¹⁰. In other words, there is a spillover effect. PCAOB inspections improve all audits done by a firm in a country, not just U.S. audits that are subject to PCAOB inspection.

On December 7, 2018 the SEC and the PCAOB issued a rare joint statement bemoaning the fact that the PCAOB is banned from inspecting Chinese accounting firms.¹¹ Negotiations with China to allow PCAOB inspectors to inspect the audit work of Chinese firms (mostly Chinese affiliates of the Big Four) have been underway for over a decade, and are ongoing, but little progress has been made. China objects to the inspections as an impingement on its national sovereignty, and as a risk that national secrets might be disclosed.

The PCAOB has so far been unwilling to take unilateral action by deregistering Chinese auditors it cannot inspect. This alternative has been called the nuclear option, since it would effectively revoke the listing of Chinese companies in the US, with potentially adverse impact on the Big Four, investors, and the US stock exchanges.

On December 10, 2018 Representative K. Michael Conaway (R-Texas) introduced HR 7234¹², Holding Foreign Companies Accountable Act, which proposed to amend the Sarbanes-Oxley Act of 2002 to require issuers audited by uninspected accounting firms to disclose this fact to the SEC annually. This disclosure would not change the current situation, since the inspection issues are already reported by these companies as a risk factor. The bill, however, requires the delisting from national stock exchanges for companies that disclose their auditor is not inspected for three consecutive years. Effectively, the legislation would start a three-year transition period for negotiations with China to bear fruit, or for the companies involved to work out how to move their listings from New York to Hong Kong, Shanghai, or Shenzhen.

One of the concerns about the nuclear option was that it might have an adverse effect on US companies with significant operations in China. A Wall Street Journal article¹³ on July 21, 2018 reported a number of US multinationals where China based auditors perform a significant amount of work for their U.S. affiliate who audits those companies. Under PCAOB rules, only auditors who perform a substantial role in the audit are required to register¹⁴. “Substantial role” is generally defined as a situation where the foreign auditor audits at least 20% of assets or revenue or has fees or hours of at least 20% of the total fee or hours. I believe such situations are rare, applying only to a handful of companies where substantially all operations are in China (such as Yum China Holdings, Inc. (YUMC – NYSE). The SEC/PCAOB statement claims that 207 multinational companies have reported that Chinese (or Belgium, which also bans inspections) auditors have done more than 5% of the audit work that is reported on by other auditors. But the actual threshold for material participation is much higher than 5%.

HR 7234 appears to have avoided this issue by only banning those companies who use the Chinese affiliate of the Big Four (or another Chinese CPA firm) to issue their audit report, but not those whose Chinese affiliate performs a substantial role in the audit. This would appear to limit the issue to Chinese auditors, which will reduce the impact on American investors and American multinationals with significant Chinese operations.

HR 7234 was not enacted before the end of the 115th Congress and has yet to be reintroduced. Senator Marco Rubio has indicated an interest in introducing legislation concerning China and specifically this issue¹⁵.

SEC Regulation

The SEC has brought several actions related to Chinese stocks listed in the U.S., including suits against gatekeepers like investment bankers. The SEC's Cross-Border Working Group targets companies with substantial foreign operations that are publicly traded in the U.S. Since its inception, the Working Group has been behind the SEC's filing of fraud cases against more than 65 foreign issuers or executives and deregistration of the securities of more than 50 companies¹⁶. The biggest case brought by the SEC was against the Chinese member firms of the Big Four accounting firms and BDO. The case charged the firms with failing to comply with a Sarbanes Oxley provision that requires the firms to provide working papers to the SEC. The firms argued that to do so would violate Chinese laws related to state secrets. An administrative trial judge banned the firms from practice for six months. That judgment was later settled with a fine of \$500,000 per firm.

The SEC has had a formal information sharing agreement with China since 1994. Both China and the United States have signed the International Organization of Securities Commissions' (IOSCO) Multilateral Memorandum of Understanding Concerning Consultation and Exchange of Information. It is not clear how well these agreements are functioning to allow the SEC access to people and documents inside China. The testimony at the Big Four administrative trial judge proceeding documented a sorry tale of China promising but not delivering documents to the SEC. SEC criminal prosecutions have been successful only against individuals present in the United States. I am unaware of any situation where China has commenced criminal prosecution for crimes committed related to overseas listed Chinese companies, even where the alleged crime is clearly a crime under China's statutes. China's securities regulators have indicated that Public Security officials have exercised their prosecutorial discretion to not focus on those crimes.

The regulation of the U.S. securities market is heavily based on disclosure of risks by issuers. The SEC has done a commendable job improving risk disclosures on U.S. listed Chinese companies, particularly the risks associated with variable interest entities. The risk disclosures have become so extensive and so boilerplate in nature that many investors overlook them. That said, analysts argue there is awareness of the risks in these stocks, evidenced by the lower values these stocks obtain in the market compared to U.S. based peers.

Inadequate disclosure

Most U.S. listed Chinese companies are classified as foreign private issuers (FPIs) by the SEC. FPIs are companies that meet specific rules limiting the extent of U.S. management and shareholding. FPI's are subject to lower disclosure rules, likely because the SEC wished to encourage foreign companies to list on U.S. exchanges and most FPIs have historically been subject to regulation by a home country exchange. None of the U.S. listed Chinese companies (other than some state-controlled entities) are subject to regulation by Chinese exchanges.

One of the best rules that the SEC ever put in place was Regulation Fair Disclosure, or Reg FD, which was promulgated in 2000. Reg FD mandates that public companies must disclose material information to all investors at the same time.

Prior to Reg FD, companies would often disclose market-moving information to certain investors before others, allowing them to profit by placing trades before the information became widely known. Reg FD does not apply to FPIs, and I believe this leads to pervasive insider trading in the shares of U.S. listed Chinese companies.

FPIs are also exempted from certain other corporate governance practices that most listed companies must observe. FPIs are not required to file quarterly reports on Form 10Q together with auditor reviews. Most FPIs voluntarily disclose quarterly information, but it is not reviewed by auditors.

FPIs are not required to hold annual shareholder meetings unless required by local law where they are incorporated. The Cayman Islands, where most U.S. listed Chinese companies are incorporated, does not require annual meetings. Many still hold annual meetings, although Baidu has not held a meeting in over a decade.

Corporate governance: the race to the bottom

One of the attractions of listing in the U.S. is that the U.S. tolerates certain corporate governance practices that few other countries permit. First was the reverse merger process that has largely been shut down by exchange regulation. Second is lower disclosure and corporate governance practices for FPIs. Third is the use of control structures that allow the founders to retain voting control. Fourth is allowing loss making companies to list. Finally, is the acceptance of VIEs.

Hong Kong has modified its listing rules to permit the use of control structures and to allow loss making companies to list. These modifications were made despite considerable opposition because of fear that Hong Kong would miss out on future Chinese listings to the U.S. if it did not relax its rules. Hong Kong lost the Alibaba listing to New York when Hong Kong regulators refused to allow it to use a control structure. Hong Kong already permits the use of VIEs although it requires significantly less disclosure about them. US generally accepted accounting principles require vastly more disclosure about VIEs than does International Financial Reporting Standards that are used in Hong Kong.

While China does not allow the listing of loss-making companies, those with VIEs, those incorporated outside China, or those with control structures, it has indicated that it will allow these companies to list CDRs on Chinese exchanges.

U.S operations of U.S. listed Chinese companies

Few of the U.S. listed Chinese companies have significant U.S. based operations. That is because most are fairly early stage companies and have focused on the China market. As growth in the China market slows, some companies like Alibaba have begun to focus on developing international markets, but many, like bike sharing company OFO, have failed in efforts to do so.

Many U.S. listed Chinese companies have significant cash reserves and have been acquiring technology in the U.S. Acquisitions of U.S. companies have slowed significantly likely because of the combined impact of enhanced CFIUS oversight and China's crackdown on foreign exchange practices. Some U.S. listed Chinese companies are making early stage investments in U.S. based startups, such as TuSimple, a San Diego startup founded by Chinese nationals that is developing self-driving trucks in the U.S. and China. Sina has recently led a series D funding round that raised \$95 million and made the company a unicorn¹⁷.

Recommendations

In my opinion, the major problem with respect to U.S. listed Chinese companies is the inability of the PCAOB to conduct inspections of China based accounting firms. This has resulted in a situation where there is a double standard in regulation. All auditors of companies listed in the U.S. must be inspected, except for auditors of Chinese companies (and companies of a few other minor countries), which are not inspected. While this fact is routinely disclosed in the issuer's filings, the double standard makes a mockery of U.S. regulation.

In my view, there are three alternatives to eliminate the double standards. First, Sarbanes Oxley could be amended to remove the requirement that the PCAOB inspect foreign accounting firms. Instead, the PCAOB could follow the lead of the European Union and negotiate regulatory equivalency under which the PCAOB would accept the work of Chinese regulators as their own. I do not think this is the best option, since I think it is unlikely that Chinese regulators will rigorously examine overseas listed companies, nor do they have the necessary expertise in U.S. accounting and auditing rules.

The second option is to terminate the registration with the PCAOB of any auditors that the PCAOB is unable to inspect. The U.S. should require companies that seek to list in the U.S. to agree to follow all U.S. laws. If China determines that a company has state secrets that cannot be disclosed, a company with such secrets should not be permitted to list in the U.S.

Termination of accounting firm registrations would lead to the delisting of shares of companies audited by the deregistered firms, since financial statements audited by a PCAOB registered accounting firm are a requirement for continued listing. Delisted companies are likely to seek to relist in China or Hong Kong, although they may be required to restructure to eliminate control structures and/or variable interest entity arrangements that may not be permitted in the other jurisdiction. The PCAOB has so far been unwilling to go this far, likely due to opposition from capital market participants.

The final option would be to adopt legislation similar to HR 7234. This option is preferable to deregistering the firms, since it appears to avoid unintentionally hurting U.S. MNCs. It is also likely to lead to the U.S. listings move to Hong Kong, unless American negotiators can use the proposed legislation as leverage in obtaining inspection rights.

Another problem with U.S. regulation is the overlapping jurisdiction of financial regulators. There is little secret that there is considerable tension between the SEC and the PCAOB. I believe this both confuses Chinese regulators as well as creating opportunities for Chinese bureaucrats to play one regulator off the other. I think Congress should consider abolishing the

PCAOB, transferring the inspection and enforcement activities to the SEC and sending standard setting back to the American Institute of CPAs.

Finally, I recommend that the SEC modify the disclosure rules to limit the lower disclosure and corporate governance practices allowed for FPIs to those FPIs that are actually listed in their home countries and are subject to alternative disclosure and governance practices.

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¹⁰ Shroff, Nemit, Does Auditor Regulatory Oversight Affect Corporate Financing and Investment Decisions? (September 19, 2017). Available at SSRN: <https://ssrn.com/abstract=2667969> or <http://dx.doi.org/10.2139/ssrn.2667969>

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¹² <https://www.congress.gov/bill/115th-congress/house-bill/7234/text>

¹³ <https://www.wsj.com/articles/the-chinese-blind-spot-in-u-s-companies-financials-1532170801>

¹⁴ <http://www.chinaaccountingblog.com/weblog/mncs-and-the-sec-crisis.html>

¹⁵ https://www.rubio.senate.gov/public/_cache/files/d1c6db46-1a68-481a-b96e-356c8100f1b7/3EDECA923DB439A8E884C6229A4C6003.02.12.19-final-sbc-project-mic2025-report.pdf

¹⁶ <https://www.ropesgray.com/en/newsroom/alerts/2013/06/SECs-Cross-Border-Working-Group.aspx>

¹⁷ <https://techcrunch.com/2019/02/13/autonomous-truck-startup-tusimple-hits-unicorn-status-in-latest-round/?stream=top>

**OPENING STATEMENT OF WILLIAM KIRBY, PH. D., SPANGLER FAMILY
PROFESSOR OF BUSINESS ADMINISTRATION, HARVARD BUSINESS SCHOOL**

VICE CHAIRMAN CLEVELAND: Dr. Kirby.

DR. KIRBY: Thank you very much, Chairman Bartholomew, Vice Chairman Wessel, Vice Chairman Cleveland, and members of the Commission. It's a pleasure to be with you here this morning.

I'm not going to repeat what is in my printed document which focuses on Chinese investment in the United States, with a particular focus on private companies. But I want to take a macro view just at the beginning here as a historian.

We're at a moment of high stakes in the relationship between China and the United States. China was the largest economy in the world as late as 1820. And at some point in the coming decades it will be the largest economy again.

The United States is a preeminent economic, military, and political force in the world today and it faces both the challenges and the opportunities of a resurgent China.

In short order the United States and China, I think we all hope, will reach an agreement that resets our commercial relations for the next generation. And it is important that that happen.

For nearly 30 years after the founding of the People's Republic of China in 1949 there were virtually no economic relations between our countries. After two decades of experimentation in the 1980s and '90s, with rather mixed results, the United States and China have, since about the year 2000, been at the vanguard of a vast global expansion of trade and investment.

In more recent years, however, China has apparently reaffirmed its commitment to a broadly state-led economy and to the potentially leading role in every major firm, public or private, of the Communist Party. And the United States even more recently has become home to a different kind of statist intervention, that of protectionism and tariffs. Neither direction in my view is good for either country, let alone to their mutual interests.

In these conflicts between governments it's easy to forget that our mutual relations are mostly between people, between companies, between economies. A growing number of students in American universities study China and Chinese, in part because they know that some part of their future will be in interaction with China.

Chinese students flock to American universities because they value the education, research, and academic autonomy that has made American higher education the envy of the world. Giant American corporations have redefined their futures according to the opportunities of the China market.

It is surely fair to say that General Motors would not exist as a company today without the visionary investment by its former chairman and CEO Rick Wagoner in the Chinese market.

And for Chinese entrepreneurs, American and other western markets appear much more attractive than those to which their government would seek to direct them along the so-called Belt and Road Initiative.

We all live in the present, trying to make the future better. But it helps at times to look at the past for guidance. China was a more free economy, driven by market forces, than was either Western Europe or America as late as the early 1800s. Republican China in the first half of the 20th Century was home to extraordinary entrepreneurship, trained both at home and, to some considerable degree, in the United States, at once Chinese and international.

Only in the first three decades of the People's Republic was all entrepreneurship made

illegal and pushed underground. But now it is back in a very large way and it is making up for lost time. And many, many Chinese firms seek, as we have just heard, to invest in the United States.

I teach a course at Harvard Business School called Doing Business in China. And its original aim when it started about 10 years ago was to assist our graduates in their ventures in Greater China on the basis of a deep understanding of Chinese political economy. But today I am developing a revised course of doing business with China in which China is not simply a place in which you try to survive or thrive, but a place that can give you a global platform, and doing business with China also in the United States and the role of Chinese enterprise in our country.

The initial course was partly about what Chinese business could learn from the practices of international business. A revised course may well be about what we can learn from Chinese enterprise, and what role Chinese enterprise may play in the American economy.

To conclude, if this moment in time were written by historians a century or two from now, my guess is that neither President Xi nor President Trump's terms in office would look terribly important. The biggest story, at least on the Chinese side, by far is the return against all obstacles at home of a dynamic Chinese private sector to a position of global prominence. And to my mind, this is much more of an opportunity than a threat -- although certainly threats do exist, which I wrote about in my presentation -- to American enterprise.

At a time when it seems so easy to demonize our competitors, we need the courage and the confidence to build partnerships in this country, as in China, with the talent, expertise, and ambition that is emerging from China, be it from its enterprises, its universities, or simply from the human capital that is in China in greater abundance than anywhere else.

This talent has the capacity to endure and, indeed, to outlast any government. And it is our interest to cooperate with it and to entice more not less of it to our shores.

Finally, here we are quite far away from China and it's too easy, whether in the press or in Congress, to think of China and the Chinese as a unified, undifferentiated competitor. But China is not one market. China has not one but thousands of local governments with quite different capacities and interests.

And China is home to an extraordinary range of entrepreneurial cultures. Businessmen in Zhejiang, like the gentleman about whom I wrote, Mr. Lu Guanqiu, who once told me as long as there is a human race there will be Chinese, and as long as there is a market you will have people from Zhejiang like himself.

We are, indeed, in a competitive world but we have, as Vice President Pence reminded us in his recent speech, a rich history of cooperation to use as a foundation for the future if we are optimistic enough to grasp it.

Thank you.

**PREPARED STATEMENT OF WILLIAM KIRBY, PH. D., SPANGLER FAMILY
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Perspectives on Chinese Investment in the United States

William C. Kirby

Harvard University

Testimony for the U.S.-China Economic and Security Review Commission¹

Washington, D.C.

February 28, 2019

According to the National Committee on U.S.-China Relations and the Rhodium Group, Chinese direct investment into the U.S. has grown rapidly over the past fifteen years: breaking \$100 million in 2004, \$1 billion in 2010, \$10 billion in 2014, and reaching a peak of \$47 billion in 2016.² This growth was particularly dramatic during the years 2015 to 2017 when, prompted by a slowing Chinese economy, unstable financial markets at home, and encouragement by the Chinese government, Chinese companies, most of them privately owned, invested over \$90 billion in the United States.

The speed and scale of such investments raised concerns in the United States. The opaque governance structures of several of these companies gave rise to anxieties that several nominally private Chinese investors may have been closely tied with an increasingly assertive Chinese Party-State.

As companies, particularly a few large private enterprises, took on billions in Chinese state bank-financed debt to acquire assets often unrelated to their core business operations abroad, the Chinese government grew concerned as well. The resulting regulatory tightening in both the U.S. and China led to a significant decrease of Chinese investments in the U.S. in 2017, with the value of newly announced deals dropping by 90 percent.³ Several of the most acquisitive Chinese firms of the previous two years began rapid divestments to pay off debts.⁴

While the buying spree of 2015 to 2017 may have come to an end, Chinese-owned companies in the U.S. still employ over 100,000 people and generate tens of billions of dollars of economic

¹ Prepared with the assistance of Harvard Business School Research Associate Yuanzhuo Wang.

² “The U.S.-China FDI Project.” accessed February 7, 2019. link: <https://us-china-fdi.com/>; in comparison, annual U.S. FDI into China had ranged between \$10-15 billion since 2009.

³ Hanemann, Thilo et al. “Chinese FDI in the US in 2017: A Double Policy Punch.” Rhodium Group. January 17, 2018. link: <https://www.rhg.com/research/chinese-fdi-in-the-us-in-2017-a-double-policy-punch/>.

⁴ Steinberg, Julie et al. “HNA, Under Pressure From Beijing, to Sell Its Overseas Empire.” The Wall Street Journal. September 7, 2018. link: https://www.wsj.com/articles/chinas-hna-to-exit-deutsche-bank-stake-under-pressure-from-beijing-1536307095?mod=article_inline.

activity each year.⁵ Some have become partners of local institutions and governments in the creation of jobs and the provision of commercial and other links to China. Others are seeking to upgrade knowledge or technology that may help them compete in intensely competitive Chinese markets.

At a time of heightened U.S.-China strategic tensions, it is important to remember how the U.S. had benefited—and may continue to benefit—from investments by Chinese businesses. It is important also to understand the challenges faced by private Chinese entrepreneurs dealing with their own government. If the United States truly wishes to “pursue a future of peace and prosperity” with the “enduring friendship between the American people and the Chinese people,” as concluded by Vice President Mike Pence in his October 2018 *Remarks on the Administration’s Policy Toward China*, it should seek means to work cooperatively with Chinese entrepreneurs interested in investing in the United States and not shut them out of American markets.

To understand the opportunities—and the potential risks—of Chinese investment in the United States, let me first describe in general terms the relationship between business and government in China. I shall then focus on the history of one private firm, the Wanxiang Group, and its investments in the U.S., as an example of how the United States can benefit from private Chinese enterprise.

Brief Overview of the Relationship between Private Business and the State in China

For much of the last millennium, China has had a largely market-driven economy, led by private, largely family-based, enterprises. The People’s Republic of China was founded in 1949 on the model of the Soviet Union as a centralized, planned economy, and all private enterprises were nationalized by the end of 1956.⁶ For the first time since the Tang dynasty (618-907 CE), all land became state property. But the period of absolute state domination of the economy was short (compared to that of the Soviet Union), if catastrophic, in economic terms. Forms of private enterprise began to return in the 1980s. In 1992 the Chinese government declared China a “socialist market economy with Chinese characteristics.”

Over the course of the past four decades of “reform and opening,” the private sector in China has grown enormously and has returned to its historically central role. Even according to President Xi Jinping, who has emphasized the continued importance of state-led enterprise, by the end of 2017, there were more than 91 million registered private business entities in China with 165 trillion RMB (approximately 24 trillion USD) in registered capital. This accounted for over 50

⁵ “Close Up: Chinese Investments in America.” MacroPolo. Accessed February 7, 2019. link: <https://macropolo.org/know-the-numbers/>.

⁶ The nationalization of industrial assets began before 1949 under the former Nationalist Government; by 1949, two-thirds of Chinese industry had already been nationalized.

percent of tax revenue, 60 percent of GDP, 70 percent of product innovations, 80 percent of urban employment, and 90 percent of the total number of registered businesses in China.⁷

But the state sector, although much diminished in size and capacity, has indeed not gone away. Since the beginning of China's post-1978 reform era, the Communist Party of China has insisted that the state retain control of the "commanding heights" of the Chinese economy. These included monopolies or near-monopolies by state-owned enterprises (SOEs) in banking, telecommunication services, energy, heavy industry, and infrastructure. The state, through local government, continues to own all of the land in the name of "the people," and land and rental markets are mediated by local officials.

Of course, in many countries the government controls strategic industries such as railroads, airports, or energy-related industries. In China, however, a legacy of the pre-reform era is that national, provincial, and municipal state-owned enterprises can play important roles in sectors ranging from shipping to construction to tobacco to dairy to wine. As vested interests concerned with protecting their markets, they can erect significant obstacles to both private Chinese and foreign enterprise.

Despite being less efficient than private enterprises, including having a return on assets of 3.9 percent compared to private enterprises' 9.9 percent, SOEs receive over 50 percent of loans from the state-controlled banking sector.⁸ The stock exchanges in China were set up in the 1990s primarily as a means of recapitalizing SOEs. By the end of 2017, companies with a government entity as the controlling stakeholder accounted for nearly one-third of all listed firms in China.⁹ Companies with more than 20 percent government ownership accounted for 40 percent of total market capitalization on Chinese stock exchanges and 50 percent of revenue of listed companies.¹⁰ Even the most successful private business leaders sometimes complain that in the eyes of the government, their businesses will always be "adopted sons," second favorites to the "real sons," the SOEs, when it comes to opportunities and resources.

In a political system where judges at all levels of government report to the Communist Party's Political Legal Commissions of the same level, the legal rights of private businesses vis-à-vis the government or SOEs cannot be adequately protected through the judicial system. Faced with the Chinese Party-State's control of capital and key resources and the lack of protection from an independent judiciary, private Chinese businesses must find ways to work around, or with, the Party-State.

⁷ "习近平：在民营企业座谈会上的讲话," Xinhua. November 1, 2018. link: http://www.xinhuanet.com/politics/2018-11/01/c_1123649488.htm.

⁸ Rosen, Daniel H. et al. "Missing Link: Corporate Governance in China's State Sector." Asia Society. November 2018; "Reform of China's ailing state-owned firms is emboldening them." The Economist. July 2017. link: <https://www.economist.com/news/finance-and-economics/21725293-outperformed-private-firms-they-are-no-longer-shrinking-share-overall>.

⁹ Ibid

¹⁰ Ibid

Private enterprise has flourished especially in sectors where state-owned actors are absent. Take finance, for example: State-owned banks historically have not given loans to private enterprises or individuals. In recent years, new forms of financial companies and peer-to-peer lending platforms (e.g., China Rapid Finance) have emerged to fill an important need.¹¹ Or take cross-provincial commerce: China has historically been not one national economy, but a series of large economic “macroregions.” Even within those, there has been in the Communist era significant protectionism in cross-provincial trade. And without a strong system of commercial law, it has been difficult for entrepreneurs to conduct business with people from far away who do not share personal ties.¹² Alibaba, by taking on much of the risk of long-distance commerce between businesses, has done more to promote trade and investment across China’s internal borders than any government ministry.

Despite stereotypes to the contrary, the Chinese Party-State is not a monolith of unified interest. When private businesses cannot work around the government, some find able and entrepreneurial partners in the vast central and local bureaucracies. For example, the government of the county-level city of Kunshan in Jiangsu Province streamlined its bureaucracy to attract foreign direct investment and help both Chinese and international businesses succeed in Kunshan and navigate bureaucracy across China.¹³ As a result, Kunshan grew into one of the richest towns of China. Its per capita GDP rose from under \$1,500 in 1992 to \$19,000 by 2011. Neighboring Zhejiang Province, which had been relatively neglected by the PRC’s state-sector investments as the native province of former Nationalist leader Chiang Kai-shek, is also well-known for being supportive of private businesses. Both Jiangsu and Zhejiang had for centuries been among the most entrepreneurial places on earth, and they are again today.

Once they are successful, private business leaders may seek political insurance by joining the Communist Party or—in the case of heads of the largest enterprises—be “elected” (selected) to join either the National People’s Congress, China’s nominal legislature, or the Chinese People’s Consultative Conference, an advisory body that some call China’s “consultative democracy.” (Election to these bodies is not something one can easily turn down.) The annual sessions of the “Two Congresses” have become China’s biggest gatherings of billionaires. According to the *Hurun Report*, which tracks China’s super-rich, 153 out of the roughly 5,000 members in both national congresses had a collective net worth of \$650 billion.¹⁴ Membership in these bodies grant formal, albeit nominal, status within the political system and thus give some level of access to key party and government leaders. These and other successful entrepreneurs are expected to

¹¹ For more information, see: Abrami, Regina et al. “China Risk Finance: Riding the Wave of China’s Financial Services Industry,” Harvard Business School Case 912-417, July 2, 2012.

¹² This is a central reason why most private businesses in China are funded initially by family, friends, and hometown supporters.

¹³ For more information, see: Kirby, William C. et al. “Kunshan, Incorporated: The Making of China’s Richest Town,” Harvard Business School Case 313-103, January 2013. (Revised May 2013.)

¹⁴ Wee, Sui-Lee. “China’s Parliament Is a Growing Billionaires’ Club.” The New York Times. March 1, 2018. link: <https://www.nytimes.com/2018/03/01/business/china-parliament-billionaires.html>.

give back to state and society through ever-increasing levels of philanthropy and by supporting government priorities in their businesses and their investments.

However, there are limits as to what private entrepreneurs are willing to do to support government priorities at the expense of their own business interests. The Belt and Road Initiative, launched by President Xi Jinping in 2013 to spur Chinese infrastructure exports along new “silk roads,” has received tepid response from the private sector. To be seen as contributing to a major government initiative, companies began publicizing any activities they had related to “Belt and Road countries” or “near-Belt and Road countries,” designations that seem to mean anywhere outside North America and Japan. Actual investments by private businesses in the less-developed Belt and Road countries were dwarfed by their investments in more developed countries.¹⁵ When they occur, private investments in Belt and Road countries tend to move towards more developed markets like Israel, Singapore, and South Korea.¹⁶ When surveyed by Deloitte in 2017, private businesses were still much more enthusiastic about future investment in the U.S. and other mature markets than less-developed Belt and Road countries, where investments carry greater risk.¹⁷

Relying too heavily on state bank financing for growth can also carry risks for Chinese businesses. The Anbang Insurance Group, the Dalian Wanda Group, and the HNA Group began their aggressive international expansion with the support of the state banks, indicating implicit backing from a government eager to see Chinese companies internationalize. They also became victims of sudden changes in government policy when support for internationalization turned to worries about excessive capital outflow and financial risks brought on by excessive levels of corporate debt. Chairman Wu Xiaohui of Anbang Insurance, the former grandson-in-law to Paramount Leader Deng Xiaoping, was arrested and sentenced to prison. Dalian Wanda and the HNA Group were both ordered to divest from non-core assets and pay off debts.

A truly negative example of the intersection of state and private interests is the case of CEFC China Energy. This was a nominally private firm founded in 2002 by a little-known Fujianese merchant, Ye Jianming. It grew to number 222 on the Fortune 500 list by 2017 by positioning itself as China’s international oil and gas deal broker. How Ye managed to start the company in a sector that had been entirely controlled by the state is still unclear. What seemed to be clear, however, is that the success of the company depended in large part on the ties Ye had made to military figures, several of whom were on his board of directors, and his ability to secure government blessing and state bank financing for his international deals. Ye may have been able to secure some of his military and government ties by pretending to be the grandson of a founding military figure of the PRC, Marshal Ye Jianying.

¹⁵ Joy-Perez, Cecilia et al. “The Chinese state funds Belt and Road but does not have trillions to spare.” AEI. March 28, 2018.

¹⁶ Ibid

¹⁷ “新阶段 新机遇 “一带一路” 倡议纵深发展背景下对外投资的趋势和解决方案.” 德勤 (Deloitte) “一代一路”系列白皮书. 2018.

One can safely conclude that CEFC was never a truly “private” firm, but either an extension of the military or of the leading energy SOEs, a product of “bureaucratic capitalism.” What is less clear is why government support of the firm evaporated in 2018. Ye is now under arrest and his company has been taken over by state-owned entities. One of Ye’s associates has recently been convicted in the U.S. of violating the Foreign Corrupt Practices Act.¹⁸

Policies change along with politics in China just like they do elsewhere. The national champions of one day may become sacrificial lambs the next. Having to do business in a country with a powerful Party-State without becoming too reliant on its largess is a central challenge for many business leaders in China.

One company that seemed to have done well in this regard and has also become a major Chinese investor in the United States is the Wanxiang Group.

Wanxiang’s Journey in China and in the U.S.¹⁹

What became the Wanxiang Group, one of China’s largest manufacturers of automobile parts, was established in 1969 by Lu Guanqiu as a farm tool repair shop attached to a People’s Commune in rural Hangzhou, Zhejiang Province. The year 1969 was perhaps the worst in Chinese history to start a business. Mao Zedong’s Great Proletarian Cultural Revolution was at its height, and anyone suspected of harboring capitalist thoughts could be brutally persecuted. But the farming commune where Lu and his family lived was dirt poor, and people needed new livelihoods to make ends meet. Commune leaders turned a blind eye to Lu’s entrepreneurial activities whenever they could.

Even though Lu built the tool shop from scratch with \$500 in capital he had gathered, he had to register it under the commune since there was no such thing as private property under the political order of the day. Despite having to source his own scrap metal to make the farm tools, Lu’s products surpassed in quality those produced by state factories. It still took four years for his products to be accepted by a state company for distribution. This first break gave Lu access to state allocations of raw material and a state-sanctioned channel to sell his products.

By the time China began its reform and opening in the late 1970s and early 1980s, Lu had set his eyes on producing universal joints to meet the state’s growing demand for trucks. He introduced

¹⁸ “Former Hong Kong minister Patrick Ho Chi-ping convicted in US court on 7 of 8 counts in bribery and money-laundering case.” South China Morning Post. December 7, 2018. link: <https://www.scmp.com/news/hong-kong/law-and-crime/article/2176601/patrick-ho-convicted-us-court-7-8-counts-bribery-and>.

¹⁹ This section draws extensively from the following Harvard Business School cases: Kirby, William C. et al. “Wanxiang Group: A Chinese Company’s Global Strategy (C).” Harvard Business School Supplement 318-091, January 2018. (Revised May 2018.); Kirby, William C. et al. “Wanxiang Group: A Chinese Company’s Global Strategy (B).” Harvard Business School Supplement 313-096, January 2013.; Abrami, Regina M. et al. “Wanxiang Group: A Chinese Company’s Global Strategy.” Harvard Business School Case 308-058, February 2008. (Revised July 2008.)

performance-based compensation schemes to his “township and village enterprise” (TVE), nominally owned by the town collective but actually now controlled and managed by Lu, to improve both product quality and production levels. The high quality of Lu’s products allowed the TVE to become one of three suppliers of universal joints for government factories. By the mid-1980s, the company was making 19 million RMB (~2 million USD) per year. The company was formally privatized in the 1990s and its auto-parts division was listed on China’s Shenzhen Stock Exchange. Throughout this period, the company devoted significant resources to talent recruitment, equipment upgrades, and research and development, which enabled it to venture beyond universal joints to become an all-around manufacturer of automobile components.

Being a capitalist entrepreneur in an evolving but still officially communist country, Lu—whether by choice or necessity—became a party member in 1984.²⁰ Wanxiang also had an in-house Communist Party Committee. But with Lu as its Party Secretary and his son Lu Weiding being gradually groomed as his successor, no one had any doubt that Wanxiang was at its core a family business—the kind of Chinese family enterprise that was the leading engine of China’s economic growth in the pre-Communist period.

With a profitable and ever-expanding core business, Wanxiang never became overly dependent on state financing, even as it diversified into other markets like finance, real estate, agriculture, natural resources, and clean technology. Despite being frequently cited by the government as a model private enterprise and a market leader in auto-parts manufacturing, Wanxiang was never a hand-picked national champion, and the markets in which it competed were driven by market forces, with a wide range of domestic, foreign, and joint-venture competitors.

Wanxiang became the first Chinese supplier to an American auto-parts manufacturer in 1984, selling to the Zeller Corporation. It did not begin building a U.S. presence until 1993, when Lu’s son-in-law Ni Pin took leave from his economics Ph.D. program at the University of Kentucky and registered a 100 percent owned subsidiary of Wanxiang in the state. Wanxiang America was born and became headquartered in Elgin, Illinois, just outside Chicago.

Establishing a subsidiary in the U.S. allowed Wanxiang to export directly to U.S. auto-parts suppliers and eventually the automakers themselves. Meanwhile, ever-increasing demand by the Big Three U.S. automakers (GM, Ford, and Chrysler) for less expensive auto parts had created major consolidations in the industry. To expand its footprint in the U.S., Wanxiang began acquiring distressed assets.

Wanxiang relied on the sales force and brands of acquired companies to expand its customer base in the United States. To help acquired companies grow and achieve better economies of scale, Wanxiang sent the companies’ low value-added manufacturing processes to China while retaining high value-added processes in the United States. Chinese and American managers

²⁰ Lu would be selected as a delegate to the 13th and 14th Communist Party Congress and a delegate to the 9th, 10th, and 11th National People’s Congress (China’s national legislature).

would exchange visits to discuss how to improve efficiency and create synergies. Performance targets and product standards would be set by Wanxiang, but day-to-day management of acquired companies was left to local management. Profits made by Wanxiang America were retained in the U.S. to be reinvested either in existing businesses or to finance the acquisition of new ones.

None of this was risk-free. Wanxiang invested heavily in the U.S. automotive sector in the first decade of the 21st century when virtually no one else was doing so. Had the sector collapsed in the financial crisis (as certainly seemed possible in 2008), Wanxiang would have been a major loser. In retrospect, its acquisitions saved thousands of U.S. jobs in the American heartland.

Just as Wanxiang Group diversified into industries beyond auto parts in China, so would Wanxiang America's investments in the United States. By the early 2010s, Wanxiang America became a major investor in real estate, solar energy, and electric vehicles (EVs) in the U.S. It became known in 2012 as the winner of the bid to acquire the bankrupt A123 Systems, a U.S. developer and manufacturer of advanced lithium-ion batteries used in EVs, which had received over \$250 million in U.S. federal and local financial support in the past. Wanxiang also acquired the bankrupt Fisker Automotive, maker of an electric luxury sports vehicle, in 2014.

Clean technology and new energy vehicles have become new focus areas for Wanxiang outside auto parts. Since the 1990s, Lu Guanqiu had dreamt of building EVs at Wanxiang, which already manufactured most of the components of an electric vehicle. A123 helped Wanxiang fill its knowledge gap in EV batteries.

Upon acquiring A123, Wanxiang began optimizing the company's supply chain and facilitating its access to the growing EV market in China. Additional manufacturing capacity was built for A123 in China to supply batteries to power cars required to have engine start-stop systems to meet new fuel efficiency standards. In 2016, A123 was certified by the Chinese government to receive subsidies to produce EV batteries for the Chinese market, a perk only available to Chinese companies and their subsidiaries with significant manufacturing capacity in China. With the help of Wanxiang, A123 managed to make a profit in 2014 and continues operations today in Waltham, MA, Hopkinton, MA, and Livonia, MI, as well as in China and Europe.

With a \$1 billion cash injection from Wanxiang, the former Fisker Automotive was renamed Karma Automotive and moved its production site from Europe to California. It launched the electric luxury sports vehicle Karma Revero in the U.S. in May 2017 after extensive troubleshooting in design and industrial processes.

Wanxiang has received approval from the Chinese government to build facilities in China that can produce 50,000 EVs per year when completed. It also has ambitions to build a "clean energy city" outside Hangzhou in Zhejiang Province, not far from where Lu Guanqiu founded the company. The city would host sustainable living and office spaces, clean energy generation and storage sites, as well as manufacturing facilities for EVs and components.

But Wanxiang is far from alone in its clean energy and EV ambitions. Domestic Chinese automakers like BYD and Geely, foreign joint-ventures in China, and industry leaders like Tesla, encouraged by the market created by government policies and subsidies, are all producing or have plans to produce EVs in China. China has overtaken the U.S. in both new EV registration and EV stock. In 2016, Chinese OEMs made 43 percent of the world's EVs and China accounted for 40 percent of worldwide EV sales.²¹ Despite the jobs they are creating in both China and the U.S., the future of Wanxiang's clean technology investments is far from secure.

By 2018, Wanxiang America owned 21 manufacturing facilities across 12 states and employed 9,000 Americans. Outside of business, Wanxiang has become a partner to the University of Chicago and Northwestern University, setting up professional development programs and fellowships for the students of those universities to study in China, in part to learn about green technology industries there.²²

On October 25, 2017, Chairman Lu Guanqiu passed away in his hometown outside of Hangzhou. In China, Jack Ma, founding Chairman of Alibaba Group and one of China's most innovative business leaders, lauded Lu for being a trailblazer for entrepreneurs like himself and called on people to carry on Lu's entrepreneurial spirit. Many Chinese national leaders sent wreaths to Lu's funeral in Hangzhou.

More important for our purposes: Another memorial was held for Lu Guanqiu in Chicago, attended by Bruce Rauner, the Republican Governor of Illinois, and Rahm Emanuel, the Democratic Mayor of Chicago. Both Rauner and Emanuel thanked Lu and Wanxiang for the employment opportunities they created in Illinois as a private company and the links they provided to China.²³

While Wanxiang stands out as a business that has been praised by Republicans, Democrats, Chinese Communists, and Chinese entrepreneurs alike, it is but one of the hundreds of Chinese businesses creating employment with their investments in the U.S. To gain deeper access to the vast U.S. market or acquire brands, expertise, or technology that would allow them to be better positioned in China and other international markets, other private Chinese businesses such as Haier and the WH Group (formerly known as Shuanghui) have acquired well-known U.S.

²¹ "Global EV Outlook 2017." The International Energy Agency (2016); "Dynamics in the Global Electric Vehicle Market." McKinsey Center for Future Mobility (2017).

²² "Wanxiang America President Congratulates UChicago Students for Success in China." University of Chicago press release (2013). link: <https://careeradvancement.uchicago.edu/content/wanxiang-america-president-congratulates-uchicago-students-success-china>; "Students Work on Green Energy in China through New Wanxiang Program." University of Chicago press release (not dated). link: <https://careeradvancement.uchicago.edu/content/students-work-green-energy-china-through-new-wanxiang-program>; "Wanxiang America Corporation: Exploring and Growing Together." Northwestern University Corporate Engagement website. February 28, 2017.

²³ "鲁冠球先生追思会在芝加哥举行." Xinhua. November 2017. link: http://news.xinhuanet.com/world/2017-11/20/c_129745200.htm.

businesses like GE Appliances and Smithfield Foods, becoming major employers of Americans in the process, and creating opportunities for growth for the United States and China. Companies with less than 20 percent government ownership have accounted for 75 percent of the \$139 billion of Chinese investment in the U.S. since 1990.²⁴

Challenges and Opportunities

The United States can and must be wary of opaque, allegedly “private” enterprises like CEFC China Energy that may be direct extensions of Chinese government organs. U.S. regulators and businesses should scrutinize Chinese companies, private or state-owned, whose ability to expand abroad depends primarily on having access to state financing instead of winning customers in competitive markets.

But the United States must have the confidence to partner with the rapidly growing and diverse entrepreneurial private sector that has emerged in China over the past four decades. Demand from Chinese markets that face enormous challenges (for example in healthcare, education, and the environment) is driving Chinese investments abroad to invest in potential solutions. Americans, too, may very well benefit one day from the results of these investments.

And, since some Chinese state-owned enterprises are global leaders in their markets, there are opportunities also to do business with a broad range of Chinese firms. Massachusetts Governor Charlie Baker recently toured the Springfield, Massachusetts, plant of CRRC, the world’s largest manufacturer of rolling stock. This has been the largest industrial investment in generations in Springfield, which had once been a center of American rail manufacturing. The new CRRC MA Corporation will build modern subway cars in Springfield to replace the aging stock on Boston’s MBTA, America’s oldest subway system.²⁵

Far away from China, it is sometimes easy for Americans to think of “China” and “the Chinese” as a unified, undifferentiated competitor. But “China” is not one market. China has not one but thousands of local governments, with quite different capacities and interests. And China is home to an extraordinary range of entrepreneurial cultures: Businesspeople in Zhejiang are not like their counterparts in Harbin to the north or Guangzhou to the south, any more than a Boston banker is like a Texas oilman or a Silicon Valley tech entrepreneur. We are indeed in an intensely competitive world, but the United States and China also have, as Vice President Pence reminded us, a rich history of cooperation as a foundation for the future.

One final thought: At the heart of American anxieties about China is the fear that China will in time outpace the United States in technology. In a highly competitive world, the best way to ensure American leadership is a strong system of higher education. I am presently completing a

²⁴ “The U.S.-China FDI Project.” Accessed February 7, 2019. link: <https://us-china-fdi.com/>.

²⁵ “Springfield’s CRRC begins shipping cars to Boston, plans for Philadelphia, Los Angeles projects.” MassLive. February 7, 2019. link: <https://www.masslive.com/business/2019/02/springfields-crrc-begins-shipping-cars-to-boston-plans-for-philadelphia-los-angeles-projects.html>.

book on the past and future of research universities. It compares a set of German, American, and Chinese universities—leaders of the 19th, 20th, and (maybe?) 21st centuries. The Chinese government in recent years has devoted ever-growing resources to build “world class universities” with “world class academic disciplines.” In contrast, state funding for public universities in the U.S. has dropped since the 2008 recession in all but four states. Per-student spending is 45 percent less in 2018 than it was in 2008.²⁶ Hundreds of thousands of Chinese students still come to the United States for university because, frankly, this is one industry in which the United States is still preeminent. That is why we attract so many of the world’s best students to our shores, including some 370,000 Chinese a year, and we benefit greatly from this talent.

No one stays on top by standing still. In this competitive world, our challenges are as much at home as they are abroad. In education as in business, investment at home is a prerequisite for success abroad.

²⁶ Mitchell, Michael et al. “Unkept Promises: State Cuts to Higher Education Threaten Access and Equity.” Center on Budget and Policy Priorities. October 4, 2018. link: <https://www.cbpp.org/research/state-budget-and-tax/unkept-promises-state-cuts-to-higher-education-threaten-access-and>.

PANEL I QUESTION AND ANSWER

VICE CHAIRMAN CLEVELAND: Thank you.

Commissioner Wessel.

COMMISSIONER WESSEL: Thanks to all of you, of the witnesses for your written testimony, for your oral testimony, and for all the work that you've done on these issues over many years. In diving into the works of each of you I've learned a lot over the last days as I've read it. And appreciate it.

I hope that there will be a second round because I have a lot of questions.

Dr. Kirby, over the years I've spent a lot of time trying to identify Harvard Business Review type case studies to understand the operations of Chinese companies, mostly here, understanding that knowing how they operate in China is also critical. And I'm a now big contributor to Harvard having bought many of your case studies over the last several weeks, which I hope has added to the endowment.

(Laughter.)

COMMISSIONER WESSEL: As I noted in my testimony, there were 7,360 companies that filed controlled returns here in 2015, the last year. You've identified, you've worked on a number of case studies for U.S. companies. Quite frankly, I haven't found a lot of other professors at universities have the kind of what appears to be unparalleled access that you've had.

So, congratulations on that. And, as you're a guest, let me, this is a conversation not a criticism.

How have you been able to obtain that access? When I've talked to professors at other universities, some who have questioned, as you've just talked about in your oral comments, engagement or containment and all the various other issues that are now swirling, how are you able to obtain this access? Have you been denied access at certain companies?

For those where like in Nexteer or some others that people have questioned their sourcing patterns, Tianjin Pipe, which Ms. Drake has talked about, have you been denied? How do you get access? You're seeing the books, I hope they're the right books because we all hear of several sets of books.

Walk us through that and how the rest of us can learn and get access. I mean, if China wants to be treated as a good corporate citizen here, it seems to me they need to be a lot more transparent in what they do.

DR. KIRBY: Thank you very much. I would certainly agree with you in your last comment. And most investors in the Shanghai Stock Market would agree with you even more.

You know, getting access to individuals for the writing of cases is really a case by case enterprise. So, in this case of Wanxiang, I visited, I was introduced by a colleague from our Harvard office in Shanghai to Wanxiang. I had never heard of the company. I didn't know that they made -- they might make the brakes on my car, but I didn't know this.

And I met Mr. Lu Guanqiu. And because my interest had been strongly at that point largely in business history as well as contemporary business, I was kind of blown away by a guy who had been a serial entrepreneur, nearly put into prison earlier in his career, who develops this company from a people's commune in 1969, builds it out of nothing. And is still, until his death, the hands-on, total head of this very large enterprise.

And he was extraordinarily cooperative because he wanted -- he knew his story was not told in the United States. Nobody had heard of it, nobody could pronounce it outside of China, although it was well known in China.

But we don't do cases unless there's some decision point. Unless there's some question that a company has before them. And if a company doesn't want to cooperate with us and give us access to that, then we cannot do the case with their cooperation. But we can do a so-called library case --

COMMISSIONER WESSEL: Understood.

DR. KIRBY: -- based on external sources.

COMMISSIONER WESSEL: Which as Ms. Drake pointed out, and I similarly have followed Tianjin Pipe over many years and how, in my view, they're skirting the law.

Just going back to the --

DR. KIRBY: Please.

COMMISSIONER WESSEL: -- dynamics of the tax issue, 7,360 returns. They had \$49 almost \$50 billion in receipts. But they listed that they were operating at a deficit.

You know, and I understand, I serve on a corporate board so I understand, you know, how --

DR. KIRBY: Right.

COMMISSIONER WESSEL: -- year by year there are a lot of different things. But it seems to me that if these companies are operating at a loss situation, a lot of them, over many years, that either is not governed by market resources, or markets are not responsive, and as Dr. Gillis talked about loss situations in terms of listing, or there are games being played, you know, transfer pricing, et cetera.

How do we get to the bottom of that? How do we, you know, understand whether the companies operating here, Chinese companies operating here are operating as good corporate citizens?

DR. KIRBY: I think that, I think you really will have to investigate it, not simply on a macro basis but on a case by case basis. My guess is that there is a higher percentage of Chinese companies who are invested in the United States who pay taxes in the United States than those in China that pay taxes in China. But, so we may have --

COMMISSIONER WESSEL: That doesn't necessarily make me feel a lot better.

DR. KIRBY: That doesn't make you feel -- I can understand that that may not.

You may also have, I think, in recent years, and maybe other panelists will know better, a significant number of these large acquisitions that have come in which, it seems to me, that Chinese firms have clearly overpaid for the assets that they have purchased. And some of them are very what you might call vanity projects, the Anbang and Waldorf Astoria. Things that are very unlikely to make a profit but were purchased for other reasons, either for prestige or to try to make them a global player in certain markets.

But I think it's an excellent question that certainly would bear more scrutiny.

COMMISSIONER WESSEL: Thank you. Time has expired.

VICE CHAIRMAN CLEVELAND: Commissioner Bartholomew.

CHAIRMAN BARTHOLOMEW: Thank you very much. And thank you to all of our witnesses.

Dr. Kirby, I appreciate your focus and attention on the entrepreneurial spirit of the Chinese people. And would note, because sometimes we forget to do this, that our concerns actually are mostly with the practices of the Chinese Communist Party and the Chinese government, not with the Chinese people. And that's an important distinction.

I have a question for you even just about Wanxiang, which is, did it get subsidies along the way, tax breaks inside China, tax breaks inside of China, reduced rates on electricity, any of

the kinds of subsidies? Because I didn't see that in your, in your testimony.

DR. KIRBY: The major subsidies that Wanxiang will be getting today will be those that are open to anybody in the electric battery market, and particularly in electric vehicles. If they were to go, at the moment, as they plan to go into, Mr. Lu's dream before he passed away was to build an electric vehicle in China.

Now, there are many other competitors in this regard. But that industry is highly subsidized, still to his, in his point of view not subsidized enough that he would make a profit on it, and so he delayed entry into that market.

How -- it's difficult to use the exact kind of word of subsidy as to how this company became successful early on. What they did was their extraordinary success really turns on their investment in the quality of the making of universal joints in cars and trucks. And when I teach about this at Harvard, no student today has any idea how a car or a truck works or a what a universal joint is.

COMMISSIONER BARTHOLOMEW: You push the key. Or you don't even have a key anymore.

DR. KIRBY: I have to explain to them that a universal joint is not something that you smoke and pass around.

(Laughter.)

DR. KIRBY: But they get into the state plan as the only non-state company into the state plan because the quality and the investment in R&D -- and this was in the late 1970s -- is simply better. And Mr. Lu goes and buys university talent and engineering talent and brings them into this really quite you can think of as kind of a pathetic start-up at its time. But that, they're at the foundation of the takeoff of the truck market. And then they --

Now, of course getting into the state plan is a form of entry into markets that doesn't exist in other ways at that period of time in China. And you can think of it as a special privilege or something. It isn't a formal subsidy for -- they have almost none of the advantages of their state-owned competitors at that period of time.

COMMISSIONER BARTHOLOMEW: But did they even in the earlier years get incentives maybe from provincial or local governments that helped them attract talent or build facilities?

DR. KIRBY: No, I mean actually the remarkable story of this, and they have a wonderful way, they have one of the reasons I got interested in this company, they have the history of the company written in comic book form, Cultural Revolution style. And they acquire in 1969 some scrap metal, which they purchased actually, it's residue scrap metal has to be from the army, it's cannon barrels, in order to make tractor plows.

How is this poor village, nearly starving in the Great Leap Forward, going to make tractor plows? Well, it's Mr. Lu's wife and part of his family who spent three years smelting these cannons into tractor plows. Time is not money in the Chinese Cultural Revolution. They have nothing else to do.

And they then market this. He goes on his bicycle and markets this to local villages and so on. It's difficult to exaggerate how few market opportunities there are for a village like this and how dogged and almost insanely entrepreneurial Mr. Lu was in doing it. And protected, to be sure, by a Party Secretary who knew that this village was going nowhere unless something could be built in it that could employ people.

But it's not only no subsidy, but really almost everything against them. Moments in time, momentary loosening of government controls in 1973 helps them to market these tractor plows.

Then Deng Xiaoping's opening in 1979 helps them to get into the state plan and to opening that plan up to non-state enterprises.

But I have to say the fair assessment was that they earned virtually every break that they got.

COMMISSIONER BARTHOLOMEW: And do you think that they are unusual?

DR. KIRBY: I don't think that they are actually unusual. Most companies like that actually have not gone international. But I think that one -- I can give you three or four different examples of companies that have done extremely well, but from the ground up, where they have been.

All right, in Kunshan outside of Shanghai there's a company called Good Baby. Now, Good Baby it's a Kunshan local entrepreneur. Kunshan has one of the most entrepreneurial governments in the world, actually. But Good Baby makes about, now, half of the baby strollers in the world. But they made it from nothing, on their own.

Now, they have had successful partnerships with Taiwan and elsewhere, and so on. But, you know, your neighbor's baby stroller is probably made in Kunshan. But the guy who built that company built it from the bottom up from virtually nothing.

COMMISSIONER BARTHOLOMEW: Thank you. I'll have a second round of questions.

VICE CHAIRMAN CLEVELAND: Senator Talent.

SENATOR TALENT: Dr. Gillis, I'll state both, I've got two questions and I'll state them both then you can answer them.

First to Dr. Gillis and then Dr. Kirby, although anybody can jump in. So, Dr. Gillis, when I first heard several years ago that the Chinese were able to list here without complying with the requirements that other companies have to comply with in order to protect investors I was -- I was flabbergasted.

Can you think of a single, if I was still sitting on this side of the table as a member of this body I can't think of a single justification for allowing that to happen. Either these regulations are necessary to protect investors or they're not. And if they are, why would we go 10 years, what public policy is advanced by going 10 years allowing companies to continue to do that, Chinese companies?

DR. GILLIS: I think the sentiment when these rules came into effect was that the U.S. economy is better off by having foreign companies list here, and so we needed to remove obstacles that would discourage companies from listing here. And this was before the wave of Chinese companies came.

And so if they were looking at a German company that wanted to raise additional capital in the United States, that creates jobs for U.S. bankers, and lawyers, and accountants and was generally perceived as a good thing. And that we shouldn't create unnecessary burdens on these companies by requiring them to do additional things beyond what they're required to do in their home country.

But no one had anticipated that other countries would use the U.S. capital markets like they were their own and take advantage of the lower standard of regulation. But that is exactly what has happened with Chinese companies and Israeli companies.

Israel is another company -- country that uses the U.S. capital markets quite significantly.

SENATOR TALENT: And doesn't comply with the regulations?

DR. GILLIS: And also is not required to comply with the regulations.

SENATOR TALENT: I just, it's mystifying to me.

Dr. Kirby, so I was very interested in your testimony. You kind of took the 30,000 foot view, which I like because it's easier for me to function on that level than count all the details. So I will do the same thing with you.

So I, you know, I was in the House when we voted to allow China in the WTO. And I voted for it. I had doubts. And I believed a lot of the things that basically along the lines of what you were saying.

And I can sum it up to you this way: I knew that there was a danger but I thought that participating in the world trading system would change China. And what's happened is that China is changing the world trading system. It's unprecedented for an economy of this size to have a government which has been so persistent, consistent, purposeful in using various tools in order to evade and subvert the system.

So, we have on our website -- you've probably read it, if you haven't I'd recommend it -- China's technonational toolbox, you know, a primer. And at the same time, and the security side is something I am more familiar with in detail, they are attempting to subvert the norm-based international order at least in their part of the world.

So, if I was still here, and we do make recommendations to the people who are here, it seems to me that that's something that has to be taken into account. I understand the vision that you see for the future. And I think we'd all like to see that. But in the meantime we have a government, and you said in your testimony, that it is taking a leading role in both, in the private companies as well, but is out to subvert the order and the system that you believe in so much.

And it seems to me that something has to be done from the perspective of the United States to channel them in the right direction.

So, we're both at 30,000 feet now. So, if you could comment on that I'd appreciate it.

DR. KIRBY: Well, I think the world trading system has changed China very, very dramatically. And it's one of the reasons why hundreds of millions of people have, given the opportunity to participate in both growing domestic and international commerce, have lifted themselves out of impoverished lives.

At the same time, without question, it has particularly over the last five years under Xi Jinping, one could say over the last 15 years broadly speaking, led to a resurgence of statism and the idea that a managed economy is still possible even as China becomes more and more of a market economy.

And I think taking a -- going up to 50,000 feet, you know, this is not entirely new of modern Chinese governments. From the late Qing Empire, through the Republican period, Taiwan under the Nationalists in the 1950s, these were all places that believed in industrial policy, they believed in import substitution, they believed in technology transfer, they believed in strong state-led operations. And the aspiration was that that had come to -- our aspiration, but also the aspiration of private enterprise in China was that that would come gradually to an end.

And in the late 1990s under the last truly successful Premier in China, Premier Zhu Rongji, there was an extraordinary de-listing and a breakup of major state-owned enterprises. Instead, today we see under Xi Jinping the growth of state-owned enterprises and the corporatization of state-owned enterprises so that SOEs are one of the few vehicles that your average Chinese investor can invest in.

And so, but as we all know just because a company gets more money doesn't make it function automatically any better or any differently. And there are all kinds of artificial monopolies within the Chinese system.

Our concerns here, which I think would be broadly shared on this issue, are exactly the

concerns of the very large and growing private sector in China as well. There is enormous unease within that country about the direction of the country, and not just in the business sector but in many other sectors as well.

And I think this is one reason why, surprisingly, one hears occasionally in China support for the American position of being tough on China because a government that can retreat before the United States has to in some sense retreat also, in the same vein, in the same policies, toward domestic commerce and domestic actors.

SENATOR TALENT: Yes. Can I just add real briefly, Mr. Chairman, I want to suggest, with all due respect, Dr. Kirby, that you are doing what many of us did for many years, projecting onto them your view of what they should be doing in order to have a better country in the future. Okay. This is not the view of the people who run China.

I'm certain there are elements within the Chinese economy and Chinese scholars in a lot of places who want it to be different. But the regime knows what to do about them. And they're doing it.

So, I think from the perspective of the people to whom we make recommendations, we have to deal with where the people who are running that country want it to go. And, yes, they made some adjustments to participate in the world trading system, but in area after area after area, they are subverting it in both the letter and the spirit of it. And I just don't think we can say, well, the future will be different because in the near and intermediate term there are major threats, not just economically but from a security standpoint.

I've taken more than my time. And I appreciate your graciousness. Yes, certainly, if it's okay with the chair. Yes, sure.

DR. KIRBY: I agree with that. Thank you. I totally agree with you. There's a long history in China-American relations of our own wishful thinking that in time everyone ends up looking like us and acting like us. That is not going to happen, 100 percent. And I think we have to deal with the government that exists and with the powers that be. Absolutely, no question.

I think as we do so we should know that the sense, and it's a much broader sense than it is normally reported in the press, an enormous sense of disaffection and unease across important sectors in China and the direction which China is going.

That's my only point.

VICE CHAIRMAN CLEVELAND: Could you just offer a little more detail on that point of where you see that unease and how it is emerging or expressed?

DR. KIRBY: Well, I think, and I won't talk about individuals, but any, any discussion with senior business leaders or small fry business people, people who are active in the political system, it is a, you know, let's put it this way, it's probably not a surprise to anyone in this room that there's some opposition in the United States to President Trump. One can read about it.

It should not be a surprise, but it is, to many people, that there is significant opposition or has been significant opposition to President Xi during his tenure. You will recall that his tenure, his accession to power was accompanied by a purge of alternative leaders, accompanied by an ongoing purge that was in part, but only in part, an attack on corruption, a major purge of the military.

We have to understand that this is a place that from a distance looks all-powerful and all-secure. And it is powerful but it is a powerfully insecure government. If it weren't so insecure it would not need the levels of surveillance and others -- other instruments that it has. And, you know, there are reasons for its insecurity.

In the history, the entire history of the Chinese Communist Party there has been one transfer of power without either violence or a purge, and that was in the year 2002. So this is not a perfectly stable system. No system is perfect, to be sure, or perfectly stable. But I think if there is an obsession with stability and an obsession with repression at the moment of alternative views in China, that is because the government knows things that perhaps we do not.

VICE CHAIRMAN CLEVELAND: Commissioner Lee.

COMMISSIONER LEE: Thank you very much, Commissioner. Thanks to all three of the witnesses for your excellent testimony.

I wanted to drill down a little bit on some of the policy recommendations, particularly from Ms. Drake and Dr. Gillis, because it's the area I normally go to. But one of the things I was interested in, in both of your testimonies you talk about ways in which U.S. domestic measures, whether with respect to antitrust or SEC and accounting and so on, are inadequate. So it's not even just our international interaction, it is our own domestic provisions.

And, of course, you know, we hear a lot about we're in a global economy now. And so one of the, one of the issues is that if we -- we haven't even put in place measures that are adequate for U.S. domestic purposes, and they're particularly inadequate in the current situation.

But also, you know, are there some domestic benefits as well to improving, strengthening both our corporate governance provisions, the accounting transparency, and strengthening the antitrust provisions, frankly, which is something we haven't done very much of.

So I think, you know, Ms. Drake, if you could talk a little bit more about your policy recommendations on predatory pricing and antitrust provisions.

And, Dr. Gillis, I'm interested in hearing you talk a little bit more about the corporate governance measures and the transparency measures with respect to accounting, and how that would be good for the U.S. as well as for our relationship with China. Thanks.

MS. DRAKE: Thank you, Commissioner Lee.

With respect to the predatory pricing issue, I'm not an antitrust lawyer, so don't hire me for that. But my understanding is that the predatory pricing doctrine, the way that it's practiced in the U.S. is that if a company is selling at low prices, that is presumed to benefit consumers, and it's only anti-competitive if the firm uses that predatory pricing to drive competitors out of the market and to recoup the amount that it lost by engaging in predatory pricing. So that's the recoupment test.

And unless it can be shown that the predator would actually recoup at the end what it lost by driving out competition, it's not considered predatory pricing. It benefits consumers, and eventually if the firm goes out of business, it doesn't hurt competitors.

But, with a firm that enjoys foreign government subsidies, very low cost access to capital from state-owned banks, et cetera, they could engage in predatory pricing for years without any intention of ever recouping it, but simply to gain market share and to gain access to the U.S. market, to drive out competitors, to help export China's excess capacity. And that would not be considered predatory pricing under current rules.

So, one proposal is to think about adding an alternative means of showing predatory pricing based on selling below cost, which would be similar to what was done in the antidumping context where if they're selling below cost, if there, there could be an element related to support from foreign governments or foreign state-owned entities, and also there could be an element of, you know, are they driving out competitors that can't compete because they have to make a profit, they have shareholders they have to report to, they operate on market

principles.

COMMISSIONER LEE: Thank you.

DR. GILLIS: You know, as a general comment to what you're saying, I think the Chinese have become very good at using rules to their advantage. And I think they have largely followed most of the WTO rules, but they've taken advantage of the fact the way that they're written.

And the same thing has happened in corporate governance. Most of the things that I find fault with in terms of that is really our own fault, that we've made rules for reasons that were probably valid reasons at the time. We have lower corporate governance standards for foreign companies that list in the United States because we want foreign companies to list in the United States.

Now, Chinese companies just follow the rules. And that results in them having lower levels of compliance compared to a U.S. company. And so I think tightening those rules and looking at why the rule came about in the first place, which was to encourage companies to come and not to add additional regulatory burden.

If you ask Alibaba to have its quarterly financial statements reviewed by an independent accountant, that's not an unreasonable request for a company with \$400 billion in market cap, and listed only in the United States, not listed on any Chinese stock exchange. Those are not unreasonable things. But the U.S. never bothered to modify its rules.

One of the other problems is Reg FD, which is the rule that the SEC came up with says that all companies have to disclose all information to all shareholders at the same time. You can't selectively disclose information. That doesn't apply to foreign companies that are listed in the United States.

And, you know, there's no real logical reason for that, in my view. And I think it leads to a lot of insider trading on Chinese stocks that are listed in the United States, and to the detriment of U.S. investors.

COMMISSIONER LEE: Thank you. Those were great answers.

VICE CHAIRMAN CLEVELAND: Commissioner Lewis.

COMMISSIONER LEWIS: As you expressed before, I have been surprised also with the lack of enforcement for foreign companies for U.S. rules on the SEC and so on. When China joined the WTO, I think there was an attitude that somehow, if we allowed them in the WTO, their rules on environmental and human rights might be changed.

I'd like your views on that. But more importantly, I'd like your views, all three of you, on the national security implications of the Chinese economy for the United States, both in terms of the strategic industries in the United States that are being hurt by Chinese companies, and the military implications of the huge Chinese surpluses that are occurring with our trade with them, and what they do with the military, like what they're doing in the islands, the Southeast Asian islands.

I'd like your views on all those things.

MS. DRAKE: Thank you, Commissioner.

On the issue of surplus production and Chinese excess capacity and overcapacity, I do think that that has serious national security implications for the United States. You've seen that they now produce or have the capacity to produce more steel than the entire world demands. That's simply not rational and it has thrown the steel industry, not only in the United States but in many other countries, into a deep state of crisis.

And that even if only a small portion of steel is used for national security applications, to

have a sustainable domestic steel industry is crucial to our national security. So, for that reason I do support the President's assessment that imports of steel and aluminum are threatening national security.

And the challenge is how to force, or encourage, or convince China to rationalize that capacity. And part of the issue is that a lot of it is state-owned and so there is a lot of support both from the national government but also from provincial and local governments that each want their own steel mill, each want their own champion. And, unfortunately, even though the Chinese government has had plans for many, many years that identify steel and many other sectors with overcapacity and set out targets for reducing that overcapacity, it simply doesn't happen.

And especially because at the same time they're introducing contradictory policies about supporting strategic and emerging industries, they're propping up unprofitable state-owned enterprises, and they're providing state-owned financing at below market rates.

So, I do think there are both economic and national security implications that are very concerning that result from that.

COMMISSIONER LEWIS: In addition to the steel industry, what about the machine tool industry?

MS. DRAKE: I'm not as familiar with the machine tool industry. I am familiar with the foundry industry and casting industry. And there is another area where there are literally hundreds and hundreds of foundries in China, many operating with very low levels of technology, and which has environmental concerns, as you mentioned, but also leads to massive overproduction, overcapacity.

Whereas the foundry industry in the United States, if I -- used to have also hundreds of foundries, now it's a handful, it's a very, very small amount. And they have to comply with very high environmental standards, of course.

COMMISSIONER LEWIS: Do you have a view on the surplus that China is getting from the United States in terms of the military implications?

MS. DRAKE: I'm not sure I'm as familiar with the military aspect of that, sir.

DR. GILLIS: I think U.S. security has been enhanced by U.S. leadership and technology for the past decades. And when we look at -- I mentioned in my testimony that China has more unicorns now than the United States. And many of those unicorns are in artificial intelligence, and really the Industrial Revolution 4.0 direction.

And so I think one of the problems that we have is that, you know, China is likely to take leadership in those areas, and we are paying them to do it. Because they're going to use our capital to basically build this Industry 4.0.

COMMISSIONER LEWIS: How about using our capital to increase their military?

DR. GILLIS: Well, I think, I think that most of the U.S.-listed Chinese companies are not specifically making military technologies. But that doesn't mean that that technology won't be used for those kinds of purposes, particularly for security type purposes.

Because a lot of these companies are invested in things like identifying people, and they can use it for security cameras to provide great security information, which China is really good at now, at identifying people. So that every security camera can determine who everybody is just as you walk around in the streets.

COMMISSIONER LEWIS: Do you think that the great military buildup that's occurring in China is enhanced by their surplus with us?

DR. GILLIS: I don't really have an opinion on that.

DR. KIRBY: If I could possibly say one thing in response. These are -- there's two things actually. First, on the military buildup, we had at our Fairbank Center up at Harvard a couple years ago some very senior leaders of the People's Liberation Army. And we asked them point-blank, Why are you having, you know, getting a year-on-year increase 10 to 15 X percent budget?

And the answer was shockingly honest: because we can. I suppose an American military official might say the same at certain moments in time.

Just on one industry, I certainly agree with Ms. Drake and Dr. Gillis on what they said in response. And the national security implications, take the example of semiconductors. You know, every country around the world seems to have some effort to try to develop its own Silicon Valley.

One of the most successful efforts of this happened in Taiwan in Hsinchu to establish Taiwan Semiconductor Manufacturing Company, hiring individuals, a particularly fantastic entrepreneur named Morris Chang, an engineer from Texas Instruments, to do this. It's by far, it has a 50, 60 plus percent market share as a foundry of this.

And it was the model of what the Chinese government then tried to do in Shanghai, developing an industrial park at the center of which was Semiconductor Manufacturing International Company. Enormous amounts of state efforts and so on. Hiring their own people from Texas Instruments to come and run it.

And it's a total catastrophe. I wouldn't say it's a total catastrophe but it is, it is really just because something is a national priority, certainly we must know this on occasion, doesn't make it successful. And SMIC is decades behind TSMC in quality and in market capacity. And, indeed, in order to get ahead they stole some technology from TSMC and TSMC sued them in the United States. Won. And now TSMC owns I think 10 or so percent of SMIC.

So, we have to assume that -- we should not assume that just because a government, and in this case it's the Shanghai municipal government with a fair amount of central support, sets up this industrial park, brings in these fantastic engineers, that they're going to ratchet to the top of the world. It doesn't happen that way. And they are further behind TSMC today than they were 10 years ago.

VICE CHAIRMAN CLEVELAND: Commissioner Goodwin.

SENATOR GOODWIN: Thank you, Madam Chair. And my appreciation to the panel for your time this morning.

Dr. Kirby, I'd appreciate your insight as to the benefits which we should acknowledge of foreign direct investment from any source, including from China. It generates economic activity, creates jobs, fosters partnerships with local governments, universities, economic development officials, and the like.

But I'm curious about those local mayors, governors, and economic development officials and how they should assess foreign direct investment from China as distinguished from other countries. Because the problem is, as identified by your testimony this morning, the testimony of the panel, it's not always clear that these investments and these Chinese actors, especially state-owned enterprises, are acting as rational, profit-maximizing commercial actors.

And so then what are the risks posed by those investments in the United States so that when, hypothetically, a state-owned enterprise announces an investment of nearly \$80 billion in critical infrastructure in a state that is witnessing economic contraction and sorely needs investment, sorely needs economic activity, and sorely needs to create additional jobs, how do those mayors, and governors, and local economic development officials assess the benefits but

also the costs, especially in light of the fact that there is a possibility that they are not acting as rational, profit-maximizing commercial actors but, instead, their interest in that investment, if not their ability to do so, is derived from state directives and access to state assistance and state capital?

And I will open that question to the panel. And I suppose I would say what tools can we give not just federal policymakers but also those local officials to better assess the costs and benefits of those investments?

MS. DRAKE: A quick remark. That I agree that the challenge is that it's in a decentralized system, local or state officials are going to be focused on what's a benefit to my town, to my state, and not necessarily have the resources or the ability to think about what are the national implications for this. And is this long-term creating more risk than reward in my small local area?

So, just one quick example of Giti Tire that I mentioned that had made a large investment in South Carolina. There was at the same time an antidumping and countervailing duty investigation on passenger car tires from China that were being dumped and subsidized in the U.S. market. And they were able to convince Governor Nikki Haley at the time from South Carolina to lobby the federal government against imposing tariffs on these unfairly traded imports.

So, it was a bizarre situation where you had a U.S. official, a state official who was, you know, wanting to have a good relationship with her local Chinese-invested firm lobbying the U.S. government not to take action on unfair trade.

So, there are a lot of complications I think at the federal level. It would be wonderful if we could provide those state officials with more resources, more information, with tools so they can assess what would be the impact of this investment over the long term and on a national basis rather than just on a local basis.

DR. GILLIS: You know I, I have just one observation. I would observe that the behavior of Chinese governors and mayors on pursuing industrial projects doesn't seem much different to me than the behavior we observed when Amazon put its corporate headquarters up for bid. These mayors and governors behaved in their own best interests. And sometimes the central government tries to rein them in, and sometimes it's successful and sometimes it's not.

DR. KIRBY: May I?

SENATOR GOODWIN: Dr. Kirby, yes.

DR. KIRBY: I would just add I think one has to apply an extraordinary amount of due diligence and research to figure out, whom are you dealing with? Are you dealing in fact with some company that is a shell of another company and you really do not know who is in fact in charge of it? Or are you dealing with a private family business in which the CEO is likely to be there for, you know, 20 years from now, or the son or daughter is going to take over?

There's much greater continuity of leadership in private Chinese enterprise than there is in public enterprise in which the CEOs tend to change every three to five years. But I think you would -- it's kind of a fundamental question, and I don't know the answer to this and I don't know what the answer should be. Apart from absolute due diligence and capacity, you know, does it make economic sense to get X or Y subsidy to bring in this company from another country or this football team from another place? These are complex issues, as you well noted.

But if you'll remember, in the 1980s when we had this extraordinary trade tension with Japan, mostly to the considerable degree over their auto exports to the United States, one easy solution -- it wasn't an easy solution, but one solution that defused that over time was the

extraordinary investment by Japanese enterprise in the United States, building automobile factories largely in the American South in a way that was welcome to the governors and mayors of those jurisdictions.

A question that I do not know the answer to is that if Geely -- we already have Volvo -- now it's a Chinese company, were to wish to establish a factory in Chattanooga or Boston, Boston's okay as well, would we, would we welcome that?

My guess is that it's more at the moment, given the political rhetoric, it would be more welcome at the local level than at the national level. But I think the same elements of absolute due diligence, or knowing with whom you are working -- no American, no good American company invests with a Chinese partner without getting to know that partner very well on the ground, where they live, in China, and not everybody does that well. But the most successful ones do. And we would have to do the same.

SENATOR GOODWIN: Would you envision any reforms to CFIUS that might facilitate better transparency and better understanding among those local and state officials?

MS. DRAKE: The only -- I believe that CFIUS does not have jurisdiction over greenfield investments, only over acquisitions, joint ventures, et cetera. So, to the extent it could be expanded to greenfield investments, that could be of assistance to local officials in assessing the risks and benefits of any investment.

SENATOR GOODWIN: Thank you.

VICE CHAIRMAN CLEVELAND: Ms. Drake, I'm interested in your statement in your testimony that you think it would be of benefit to have the SEC require the identification of any government support on SEC filings.

And, Mr. Gillis, your comments on the fair disclosure rule that doesn't apply in China and has led to pervasive insider trading is another way that the SEC could support more clarity, more transparency.

We've been working on this issue since 2013, trying to tighten up rules with PCAOB and SEC. And I'm wondering what you think the effect would be if on Chinese listings, if these two, if the FD Reg was enforced for foreign companies?

And if there was this disclosure, what do you think the effect would be in terms of going forward on listings?

DR. GILLIS: I don't think that the changes that I suggested, which basically increase PCAOB oversight and more consistent compliance in terms of disclosures, would actually affect the number of Chinese listings in the United States, it would just simply make them more transparent.

MS. DRAKE: I tend to agree. I think the U.S. market is so incredibly attractive that adding more disclosure rules wouldn't change that equation in a material amount. And we should use the attractiveness of our market to get that disclosure.

I think there would be enormous benefits to having information on foreign government support, financial support, but also foreign government involvement: How many members of the board or the management are either former or current government officials? What kind of party committees operate within the company? Also, are there any requirements the company is under to either, you know, prefer Chinese sources or prefer Chinese technology that would pose a risk to their investors because it's not on commercial terms?

Investors should have a right to know that the company they're investing in is not operating on commercial terms solely to maximize its profits, and so we should use our leverage to require that type of disclosure.

VICE CHAIRMAN CLEVELAND: One of the issues that came up when we had the hearing in 2013 was -- we had the SEC appear at that point -- the lack of capacity or bandwidth. They don't have China language specialists. They don't have the kind of in-depth knowledge that clearly you do. That was one issue.

And the second one was the risk of being taken to the WTO or some other forum because if we tried to narrowly apply this to Chinese listings it would be deemed an unfair practice.

So, do you have any comment on how we might address that perception, that issue?

DR. GILLIS: Yes. In my view, any change that you make in this respect should apply to everybody, even though it may hit -- the Chinese, again, use the U.S. capital markets more than any other country so they would be the most affected. But I don't think you should make rules that specifically single out China. They should be across the board.

MS. DRAKE: I agree.

VICE CHAIRMAN CLEVELAND: Okay.

DR. KIRBY: I have a lot of graduate students who speak Chinese. Be happy to help the SEC.

(Laughter.)

VICE CHAIRMAN CLEVELAND: I think we were startled at the time at how few people that they have on global investment enforcement. I mean, it wasn't just China, it was --

DR. KIRBY: Yes. I would just say we can't overestimate the difficulty sometimes of actually scoping out what the corporate governance structure is. We had a case that we did a number of years ago on a company that's now defunct, a Chinese telecom company; you'd know it, China Netcom. And it was reorganized with considerable American help from people from Goldman and others to list on the New York Stock Exchange. It had all of the committees. Exactly looked, you know, like an AT&T or something, just wonderful.

But it's a corporate governance case worth teaching because the question that I ask the students, where is -- who's really in charge? Where is the center of authority in these boards?

And it comes out, if you read the case carefully, it's where the Party Secretary is in a certain oversight committee. And so it's a Where's Waldo of corporate governance. And it will take a lot of work, and it will take expertise, including some international expertise, not just about China but about other countries in order to be able to do this well.

VICE CHAIRMAN CLEVELAND: I think some of these disclosure statements are shockingly clear in terms of who's in charge, but I would say the majority of them are not, so.

COMMISSIONER MCDEVITT: You covered, you covered what I was going to ask.

VICE CHAIRMAN CLEVELAND: Okay. We have a few minutes for Commissioner Wessel who would like to ask a follow-up.

COMMISSIONER WESSEL: Again, thank you all. And I hope that we can have a dialogue after this hearing because all of you, each of you has a lot of creative ideas, background that can really help us as we engage this year.

Let me dive just a little bit deeper in terms of information. And, again, this is something you can also help us on afterwards.

You know, the SEC, you know, the discussion about transparency there is great. Support it completely. But that only applies to the 167, or whatever the number is, of publicly listed companies. Private companies are not affected. And, again, there was over 7,000 firms in 2015 doing business here.

The Bureau of Economic Affairs at Commerce has the ability to compel responses to questionnaires to any entity doing business in the U.S. And they have not utilized that authority.

We've discussed that with them and we've made recommendations, but I'd welcome your input as to the viability of that.

What kind of information do you think we should be seeking? It can't be a, you know, 5,000 man-hour response that these entities need to respond.

And, finally, and I believe it was you, Dr. Kirby, you raised the issue with Japan in the 1980s. I had been involved then and we found that Japanese companies were investing tens of billions of dollars, some of it wasted on Rockefeller Center, et cetera, clearly, but they were, they were claiming negative net income and losses.

And it turns out we changed the tax law because we found out it was transfer pricing mechanisms. Related parties where they would say that, you know, a good cost more when they sent it to their U.S. entity, as your Tianjin Pipe situation, then in fact they were doing otherwise. And so they, you know, were reducing the exposure to U.S. tax and, you know, paying their taxes at home at a lower rate.

To what extent should we be asking the IRS to look at those 7,360 companies and say, we want to see how you're doing business? Are you operating on market principles? If you're going to be doing business here, we want to see.

So, quick response as to whether those three information sources would be helpful. Are there others I didn't mention?

And, again, afterwards if you could provide your input as to what you think we should be asking each of those to do if it's appropriate. And a quick response.

DR. GILLIS: Yes, I would observe that most of the U.S.-listed Chinese companies don't do a lot of business in the United States. But their listing alone would give you the nexus that you would need --

COMMISSIONER WESSEL: Right.

DR. GILLIS: -- to do this sort of thing.

The IRS data, which is basically of companies that are doing business in the United States, is valid.

I'd make one observation. My U.S. home is in Silicon Valley. And one thing I observe as I'm driving around is all of the Chinese companies that have set up operations there that are mostly just listening posts, where they are sitting there and they're monitoring what is going on in U.S. technology and sending that information back home. And they're bound to lose money because they aren't selling anything in the United States, they're just listening and trying to acquire market knowledge so that they can -- they can plan for the future.

COMMISSIONER WESSEL: Well, if they have a business presence here, you know, for example engaging in venture capital investments, there is a business connection that would allow us --

DR. GILLIS: Yes.

COMMISSIONER WESSEL: -- separately to ask questions.

DR. GILLIS: Well, clearly everybody who's filing these forms with the IRS is doing enough business that they have to file forms with the IRS. And that gives you the ability to ask information. And there is some valid information that ought to be obtained, particularly from those that are making investments in U.S. technology enterprises, greenfield investments that are not subject to CFIUS review.

COMMISSIONER WESSEL: Ms. Drake?

MS. DRAKE: I'd agree with that. And I think the idea of using the BEA is an interesting one. I know that it's been -- we've been very concerned about the reduction in the number of

reports that they collect and issue. And so, increasing that and adding questions that would get at some of these issues would be great.

Of course, that would only be available in the aggregate, but that would still be much better than what we have now, which is more of a, more of a black box that we just kind of peak through the holes and try to get a picture of how big the elephant is, to mix metaphors.

DR. KIRBY: I would just say that, you know, having more IRS scrutiny over -- if it's reasonable and doable in a way that does not discourage legitimate investment in the United States, I think it makes a great deal of sense if it is doable. It does take a serious amount of area expertise.

The last thing I'd say is that in some sense one of the things that strikes me is that we're very reactive inevitably in this country because the Chinese companies come here because the opportunities are extraordinary in the United States, the legal and commercial system is so much better than in China. There are hundreds of reasons why much more would come here if their own government didn't restrict it or if they weren't worried about the political environment here.

But I think perhaps, and this is a challenge for governors and mayors because everything is done at the federal level in the United States, how do they get the expertise and so on to be proactive, to know what companies they would like to attract to their states or their cities? How do they begin to -- we do this within the United States because we think we know about X or Y company that might be thinking of moving from Cleveland to Alabama or something of this sort.

But to be international in our own kind of business strategies for the political entities that we have I think is something that demands a certain level of internationalization of governance or at least an expertise to assist those who are in politically responsible positions.

VICE CHAIRMAN CLEVELAND: Commissioner Bartholomew has one more question.

COMMISSIONER BARTHOLOMEW: Thank you.

So, I'm presuming of course that Chinese companies are the beneficiaries of having a lower regulatory burden than American companies. What I'm trying to think about is who, what parties in the United States benefit from China having it that way? And I'm presuming investments banks, they make money no matter what.

Do you have any sense of how much money our investment banking world is making, how much profit it's making from its work with Chinese companies?

DR. GILLIS: Yeah, I don't, I don't have numbers like that. But the typical commissions on an IPO run around 3 percent. And so if you look at the volume of money that's been raised in the U.S., it's a lot of money for investment banks and for accounting firms and for law firms.

COMMISSIONER BARTHOLOMEW: Right. And of course they're doing work in China, too. I mean, it's not just the work that they're doing --

DR. GILLIS: Most of the work is done in China.

COMMISSIONER BARTHOLOMEW: Yes.

DR. GILLIS: All these companies that are involved, even the law firms and the accounting firms, are using their operations in China or Hong Kong to do all this work.

COMMISSIONER BARTHOLOMEW: And one of the reasons I raise it is that whenever we talk about what can we do to try to improve the situation, we have to think about what parties would be opposing, opposing members of Congress who would try to do it.

And I am, again, presuming that Chinese companies and the Chinese government would be putting pressure on our investment banking community not to allow additional regulation to happen, or to bring Chinese companies, it's not a -- to bring Chinese companies up to the standard of what our companies have to deal with regulatorily.

Do you think that's accurate?

DR. GILLIS: Yeah. I attended a meeting once where the Chinese regulators were lobbying the investment banks to push back against the PCAOB strictly enforcing its rules.

COMMISSIONER BARTHOLOMEW: And the investment banks did what the Chinese government wanted?

DR. GILLIS: Sure.

COMMISSIONER BARTHOLOMEW: Yes. All right, thank you.

VICE CHAIRMAN CLEVELAND: On that cheerful and optimistic note, I always wish that there is more time. I think that we could have had just one of you today and had a very animated and interesting conversation. We really appreciate it. And do, as I agree with Commissioner Wessel, if we could follow up with you to clarify some of these points as we make our recommendation in our final annual report.

So, thank you very much. We will recess for about 10 minutes. Come back at 11:20 for the next panel. Thank you.

(Whereupon, the above-entitled matter went off the record at 11:10 a.m. and resumed at 11:22 a.m.)

PANEL II INTRODUCTION BY COMMISSIONER WESSEL

COMMISSIONER WESSEL: As our Commissioners trickle back in, I will introduce the second panel and thank all of you.

Our second panel today will focus on U.S. companies' operations and investments in China. We'll welcome another distinguished group of experts.

First, we'll hear from Scott Kennedy, Director of the Project on Chinese Business and Political Economy at the Center for Strategic and International Studies.

Dr. Kennedy's research focus includes multinational business challenges in China, global governance in Chinese industrial policy and technology innovation.

Dr. Kennedy has interviewed thousands of officials, business executives and scholars. And his recent work includes the Fat Tech Dragon: Benchmarking China's Innovation Drive, as well as an industry case study on China's automotive sector.

Dr. Kennedy's testimony will focus on U.S. multinationals' profitability in China, how U.S. multinationals' Chinese operations have been circumscribed by China's foreign investment regime, and U.S. policy responses.

Next we'll hear from Mary Lovely, Professor of Economics at the Syracuse University Maxwell School of Public Policy. Where my daughter is getting her second degree.

Dr. Lovely's -- she's not one of your students, I don't think.

(Laughter.)

CHAIRMAN BARTHOLOMEW: Well, she'll be real embarrassed now.

COMMISSIONER WESSEL: Yeah. Who, my daughter or Dr. Lovely?

Dr. Lovely's research focuses on international economics and Chinese economic development. In particular, the effect of China's foreign direct investment policies on trade and business entry.

She has also recently completed work on American manufacturing employment and outsourcing to low income countries.

Between 2011 and 2015, Dr. Lovely served as the co-editor of the Chinese Economic Review. In her testimony, Dr. Lovely will discuss the industry benefits and incentives that encourage U.S. companies to route their supply chains through China.

We will then hear from Mark Wu, Henry L. Stimson Professor of Law at Harvard Law School.

Professor Wu specializes in international trade law. And his work lies at the intersection of digital trade, investment, emerging economies and intellectual property.

Professor Wu served on the World Economic Forum's Global Future Council on Trade and Foreign Direct Investment, and the World Trade Organization appointed him to the advisory board of the WTO Chairs Program.

Prior to academia, Professor Wu served as the Director for Intellectual Property at the Office of the U.S. Trade Representative, where he was the lead U.S. negotiator for the IP chapters of several free trade agreements.

Professor Wu's testimony will address the implications of restructuring supply chains around China for U.S. companies, workers, and the U.S. industrial landscape, presenting considerations for U.S. negotiations.

Thank you all very much for your testimony. Please keep your remarks to seven minutes to leave time for the question and answer session.

And Dr. Kennedy, we'll begin with you.

**OPENING STATEMENT OF SCOTT KENNEDY, PH. D., DIRECTOR, PROJECT ON
CHINESE BUSINESS AND POLITICAL ECONOMY, CENTER FOR STRATEGIC
AND INTERNATIONAL STUDIES**

DR. KENNEDY: Thank you very much Chairman Bartholomew, Commissioners. This is my third time, I believe, testifying before the Commission.

And it's always a privilege to do so. The first time was in 2007 and then in early 2015. So time flies when you're having fun.

The Commission's work is not yet fully done. But, we can imagine that maybe it will be completed soon in a few weeks over cake in Florida.

It's dangerous for me to testify first, because I have two eminent experts to my left. And they will certainly correct any of the mistakes that I make. And you all are also extremely well informed.

So, but I wanted to offer a few points for your consideration to get the ball rolling. And then happy to pick up during the discussion.

The bottom line of the testimony that I submitted is that American companies operating in China are profitable, but they face a very problematic environment.

Especially for technology companies and those in services. And those obstacles that they face are primarily a result of Chinese industrial policy and blocks to market access.

The U.S. government is trying to help them. It's been trying for a very long time. But the U.S. government needs to try harder. And Congress can do a lot, a lot to help American companies in China.

So, let me delve into each of those points. First, the state of American business. If you have a chance, you should look at the American Chamber of Commerce's business climate survey, which they just issued two days ago, and which I lay out in my written testimony.

It shows that the sales and profits of American companies overall are up in China. It could be better. But their fears of operating in China are also up.

Their level of pessimism about the future is higher than ever. Their concerns about how they're going to be treated are more concerned than ever.

They're particularly concerned about Chinese regulatory policies that are unclear, or that are very clear and unfair. But, they're also worried about American policy and the overall bilateral relationship and the uncertainty that has come as a result of the trade war that the Trump Administration has prosecuted.

Nevertheless, they still don't want just any deal. They want a good deal. They want their situation to genuinely improve.

In particular, they're concerned about intellectual property rights. Overall, protection of IP in China has improved over the years. But it's shifted across sectors and the ways in which the Chinese obtain IP legally or illegally.

And so there's still a lot to be done. That's what the -- you'll find in the survey. I wanted to take a -- I want to sort of break it down a little bit in a little bit different way to describe the different ways that American companies face China's industrial policy machine in China.

I see sort of four kinds of approach -- faces that you have. The first are those American companies which I call nonstrategic market competitors. Folks that sell household goods like Proctor & Gamble or Walmart.

They face lots of problems in China. But from other competitors, Chinese and foreign, not as a result of Chinese industrial policy.

Then you have what I call industrial policy winners. Those are American companies that are in industries where the Chinese would love to dominate.

But these industries have very high technical barriers to entry, important -- not just IP, tacit knowledge. And as hard as the Chinese might try, American companies are staying ahead of them.

If you look at semiconductors, the Chinese have invested tens of billions in semiconductors. But American companies like Intel and others are still at the top of the game.

The Chinese are not going to knock them off the block any time soon. Even though we should be concerned.

Then you've got what I call industrial policy losers. Those are American companies that are in industries where the technical barriers aren't quite as high.

And the Chinese can use their standard strategy of throwing a ton of money at an industry. Scaling up very quickly, and enforcing demand through government procurement and other types of requirements to help domestic companies.

And even though Chinese companies aren't necessarily at the top of the market in these industries, it puts foreign companies on the defensive and gradually makes things much harder for them.

So if you think of the solar industry. If you think of wind. If you think of electric cars now. If you think of robotics. These are industries where the Chinese are moving very quickly.

And they are going to make it very difficult for American companies operating in China and for those sectors globally, as supply chains move as a result of Chinese gravity.

Lastly, you've got blocked outsiders. You've got companies who just have no chance in the China market. Consider cloud services providers like AWS, IBM, Microsoft. They can't offer the type of services they want.

They're supposed -- officially they can do so through joint ventures. But these don't let them really operate. And so that creates space for Alibaba's cloud services and others.

The Chinese use a whole bunch of rationales why they do this. But of course Alibaba and Tencent offer their cloud services in the United States. So, that seems a little bit unequal.

The current approach the U.S. government is taking, the more assertive unilateralist approach of brinksmanship is understandable given the lack of progress in the past. But it's very risky. Right.

It's very risky because we have short terms costs that we're causing as a result of this. This is the result of higher tariffs in both directions.

We're also -- the relationships with our allies are fraying. We have taken a hammer to the WTO and other multilateral institutions.

And the biggest risk of all is that we take a bad deal. Right? We take a deal that doesn't solve the problems. Lets the Chinese off the hook. That's the worst possible outcome of doing this. Then all the sacrifices would be for naught.

What can Congress do to help? First of all, I think one of the biggest things that we don't have, and that this Commission can help spur, is we don't have a comprehensive research on what the full balance sheet is of the benefits and losses in the commercial relationship that we have with China across the board.

For American companies in China, for American workers, American firms here, for supply chains. That research does not exist.

There's lots of partial research which is okay, but it could be a lot better. And so, how do we know what policy we should have if we don't know what the level the problem is.

You can provide oversight over the negotiations and make sure that we get as good a deal as possible. And if we don't, everyone hears about it.

You can help faithfully implement FIRRMA and ECRA to make sure that the implementation is consistent with what Congress passed into law. It protects national security at the same time. Allows for the reasonable and appropriate commercial activity with regard to high tech exports and foreign investment.

Fourth, I think Congress should consider adopting legislation that implements investment reciprocity with China. If the Chin -- if we can't invest in an industry in China, they shouldn't be able to invest in here possibly.

Let's analyze, consider, research what that would look like from a legislative perspective, not from a Congressional -- not from Executive action.

Lastly, we need to strengthen the multilateral system. There's lots of areas that need help. I'll just emphasize one in the final minute, which is Trans-Pacific Partnership.

Lots of folks in Congress pointed to flaws in TPP with regard to labor, the environment, IP, its weak requirements for state-owned enterprises. And so we got into a big bickering match in 2015 and '16.

Now we thought we'd get out of that by having a different candidate become President and then implement it. And we could all make some modest changes.

Things didn't turn out that way. And I think a lot of people may regret that in fact we're not -- that we stole defeat from the jaws of victory in that, and we need to go back.

If there's problems with TPP, Congress ought to proactively find out what those problems are, put forward proposals, and prepare for TPP 2.0 to give to this -- to the next administration that they can -- if they are more amenable to multilateral solutions.

And so when we get things going off the next, in early 2021, we'll be ready to go right away, rather than taking two years to find where the side door is.

Thank you very much.

**PREPARED STATEMENT OF SCOTT KENNEDY, PH. D., DIRECTOR, PROJECT ON
CHINESE BUSINESS AND POLITICAL ECONOMY, CENTER FOR STRATEGIC
AND INTERNATIONAL STUDIES**

**Statement before the U.S.—China Economic and Security
Review Commission**

**“RISKS, REWARDS, AND RESULTS:
U.S. COMPANIES IN CHINA AND CHINESE COMPANIES IN
THE UNITED STATES”**

A Statement by:

Scott Kennedy

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**February 28, 2019
216 Hart Senate Office Building
Washington, DC**

I. Introduction

When considering the state of China's economy and the country's domestic and international economic policy orientation, American policy makers should be concerned with a great number of issues. Foremost among them is the effect on the economy and security of the United States, including its growth, employment, industry development, the protection of critical infrastructure and privacy, and the provision of physical security. Also of growing importance is the impact of China's economy on the global economy, the health of industries worldwide, and the liberal international order. Today, though, I have been asked to comment on the state of American companies in China, and how they are faring in an era of intensified Chinese industrial policy. Since the 1990s American investment in China has grown dramatically. According to the Rhodium Group, between 1990 and 2017 total American direct investment in China total \$256.49 billion, including almost \$14 billion in 2017.¹ Analyzing the state of American business in China provides a useful window into understanding China's effect on the American economy and the global international system.

My bottom-line conclusion is that many American companies are operating profitably in China and that China is an important part of their global supply chains and innovation ecosystems, but that the obstacles to doing business in China are not subsiding but instead are increasing, measured in terms of reduced market access, growing operational costs, vulnerability to loss of intellectual property (IP), and the volatility of their global supply chains. American companies are resilient and adaptable and are responding to these risks, but they would respond even more effectively and in ways that more fully fit American national interests if American policy would effectively counter and constrain Chinese industrial policy as well as China's broader challenge to the liberal international order. Currently, despite the fact that the United States and China appear to be on the verge of a wide-ranging commercial deal, U.S. government policy is not as supportive as it could be, most importantly as a result of a poorly functional internal policymaking process and insufficient coordination and cooperation with America's allies informally and in multilateral institutions. The U.S. Congress could take a variety of actions to strengthen American policy vis-à-vis China.

II. The State of American Business in China

The most authoritative source for the condition of American companies in China is the annual business climate survey conducted by the American Chamber of Commerce in China as well as the Chamber's annual White Paper. The most recent version of the business climate survey was published earlier this week.² The findings of their annual surveys are highly consistent with

¹ Rhodium Group, "The US-China FDI Project," <https://us-china-fdi.com//>. One obstacle to effective policy is limited data on investment. Unlike trade in goods and services, government data on international investment flows is surprisingly incomplete. This is particularly true in areas of emerging technologies that are central to future innovation.

² American Chamber of Commerce in China, *2019 China Business Climate Survey Report* (Beijing, February 26, 2019), <https://www.amchamchina.org/about/press-center/amcham-statement/growth-continues-amid-heightened-uncertainty>; and American Chamber of Commerce

similar surveys taken by the American Chambers of Commerce in Shanghai and Guangzhou, the US-China Business Council, and the European Chamber of Commerce in China.

The latest results show that:

1. Business revenue grew in 2018 for over 60% of companies, remained the same for a quarter of American companies, and fell for 12% of firms. Revenue growth was up across the board except for resource and industrial companies, where almost half reported either no growth or a fall in revenue. Figures for profitability were almost identical to those for revenue and down slightly from 2017. For those reporting a fall in income, consumer and service sector firms stressed the overall slowdown in business and growing costs. By contrast, US firms in high-tech and resource sectors highlighted deteriorating industry conditions (by which they likely meant industrial policy) and competition from private Chinese companies. That said, US high-tech firms report that their profit margins in China are higher than their global margins and at a higher level compared to their cousins in any other industry. This potential contradiction is likely resolved by the fact that high-tech sectors continued to expand relatively fast in China in 2018, even as industrial policy became more supportive of domestic firms.

2. Looking ahead, American companies are more pessimistic about future business growth in China compared to years past, with 54% expecting growth to be under 5%, up from 45% who had the same expectation a year ago. Technology companies stand out as being more optimistic relative to companies in other sectors (resources, consumer, and services). Growing domestic competition, increasing costs, the regulatory environment and tense US-China relations all play a contribute to this unease.

3. Analysis of the overall investment environment improved modestly in 2018, with 79% saying it had improved (38%) or remained the same (41%). The most positive respondents were firms from the aerospace, healthcare services, and retail and distribution sectors. The most concerned were in telecom hardware and services, agribusiness, media and entertainment, real estate, transport & logistics, and other services (such as legal). It is no surprise that these areas are where market access obstacles are most severe. 48% of respondents said they would expand investment in China if its markets were as open as those in the United States. 19% of respondents said they have moved or are considering moving capacity outside of China, down slightly from the figure reported a year ago (23%). For those doing so, the top reason is US tariffs on goods exported from China (24%), followed by rising costs (17%), and expectations of slower growth (10%). A small minority of companies said they have or may move capacity because of China's "uncertain policy environment" (9%) or "market access barriers" (7%). For those moving outside China, 40% are going to "developing Asia," 11% to "developed Asia," 9% to the EU, 10% Mexico and Canada, and 17% the United States. This means that only 3.2% of US investors in China have moved or are considering moving some capacity to the United States.

in China, *AmCham China White Paper: 2018 American Business in China* (Beijing: 2018). For comparison, see European Chamber of Commerce in China, *European Business in China Position Paper 2018/2019* (Beijing: 2018).

4. The regulatory environment in China continues to be a large problem for American companies. Tech companies (54%), in particular, feel less welcome than companies in other sectors, followed by companies in resources (41%), consumer (39%), and services (39%). For the fourth year in a row, “inconsistent regulatory interpretation and unclear laws and enforcement” is the top problem and rising labor costs second, but rising US tensions suddenly became a much larger concern for US investors (45%). This is particularly true for companies in both high-tech and services. Tech companies were the most likely to report increased use of non-tariff barriers in limiting their business operations.

5. Although uncertainty in the bilateral US-China relationship is a growing concern for American businesses, they are not clamoring for the United States to reach just any deal simply in the name of stability. Sweeping problems under the rug does not solve the problems they face. Instead, they clearly want “the US government to advocate even more strongly for a level playing field, pursue investment reciprocity and engage in results-oriented inter-governmental dialogue.” The top four areas that need to be addressed are “increasing the transparency, predictability and fairness of the regulatory environment” (53%), “ensuring greater protection of intellectual property” (46%), “limiting the use of industrial policies that create barriers” (42%), and expanding market access in currently restricted areas (36%).

6. With regard to intellectual property rights (IPR) in particular, 53% of respondents reported that the risks of intellectual property rights leakage and data security threats are higher in China than elsewhere in the world. The top IP problem for US companies was difficulty prosecuting IP theft (39%) and insufficient legal protections in laws and regulations (26%). Tech companies in particular raised the need of reducing requirements for technology transfer.

III. The Varying Effect of Chinese Industrial Policy: Illustrative Cases

China’s business climate has become increasingly challenging as a result of a more concerted effort to push China’s economy toward the technology frontier. Chinese industrial policy is more ambitious, better funded, more highly organized, and increasingly connected to supporting China’s national security needs. In addition, Chinese central and local authorities utilize the full toolkit of discriminatory non-tariff barriers, from subsidies to competition policy to government procurement, and everything in between. In addition, China is more aggressively using globalization to its advantage. The Chinese government attracts foreign companies, technology and talent to do business and carry out research in China; Chinese industry, experts, and students are intensively operating abroad to address the same needs; and Chinese government agencies and companies are actively participating in international economic governance institutions to shape the global rules of business in the 21st century.³ Most importantly, China’s current leadership, although it often talks about win-win outcomes, sees its technological pursuit in zero-sum terms, in which Chinese companies are as a group in competition with non-Chinese companies for the “commanding heights” of the economic frontier, and winning this battle serves

³ Scott Kennedy “The Beijing Playbook: Chinese Industrial Policy and Its Implications for the United States,” in James Andrew Lewis, ed., *Meeting the China Challenge* (Washington, DC: CSIS, January 2018), pp. 1-9.

both China's economic and national security goals. In fact, the two goals are so inter-related that it is hard to distinguish between them.

China's industrial policy approach affects American firms from different industries in different ways, both because some sectors are high priorities and others are not, but also because the effectiveness of Chinese policy varies across high-priority sectors. There has been no highly detailed and comprehensive analysis of these patterns and what they mean for American companies, but we can point to some examples to illustrate the larger point.

Non-Strategic Market Competitors. Household goods may have once been a high-priority sector with obstacles to investment and imports, but that is no longer the case. Instead, for American companies such as **Proctor and Gamble** (P&G) or **Walmart**, the primary challenges are the standard ones companies would normally face in a large and increasingly wealthy market economy: evolving consumer tastes, increasing labor costs, and intensive competition from Chinese and international companies. US companies do run into occasional regulatory obstacles, such as unjustified onerous testing requirements or quality standards, but by and large these issues are not their most important obstacle to success in China.

Industrial Policy Winners. There are some industries where the Chinese are putting a great deal of emphasis. These sectors support a great deal of economic activity in their own right and generate substantial activity for other industries as well. However, despite their best efforts, licit and illicit, Chinese firms in these industries are far from catching up and are still highly dependent on foreign technology providers. The prospects for Chinese success in these sectors are murky at best, a combination of, on the one hand, sectors with high technical barriers to entry and poorly managed Chinese companies (often state-owned enterprises), and on the other, highly innovative and well-run American companies that also go to great lengths to protect their IP and the tacit knowledge that goes into manufacturing and servicing their products.

Columbus, Indiana-based **Cummins** makes the world's most advanced engines for large-scale trucks. No Chinese company can match their sophistication and quality, and Cummins selfishly guards its IP even in its joint ventures. As a result, Cummins has built up its business of selling its engines to Chinese truck companies, including state-owned enterprises (SOEs), and Cummins can benefit from China's infrastructure push, at home and abroad.

China has made it a top mission to build its own commercial aircraft, and in 2008 created the Commercial Aircraft Corporation of China (COMAC) to fulfill this goal. COMAC has put a regional jet into operation (the ARJ21), it is developing a larger narrow-body aircraft (the C919), and it has started to draw up plans for a wide-body aircraft (the CRJ929). COMAC has invested hundreds of billions of yuan in this effort, and there are a wide assortment of Chinese component suppliers. But despite these efforts and the sector's size, China's commercial aircraft industry is an abysmal failure. Chinese component makers can make parts to order, but they can't successfully design parts, manufacture them from scratch, let alone smoothly manage the complex process of integrating thousands of suppliers' components and systems into a safe, reliable and efficient aircraft. Because China's domestic aerospace industry is so weak, the core components of the C919, which is now in testing, have come almost entirely from foreign suppliers, including American companies such as **Honeywell**, **General Electric**, **Rockwell**

Collins, and **United Technologies**. Because aircraft are certified as a unit with all of the individual components, if the C919 is ever certified and is delivered to airlines, these American suppliers will gain business, and they won't be easily replaced. That said, the C919 is far behind schedule and may never make it to market. The chances of the CRJ929 ever getting off the drawing board and being built and put into commercial service are even more remote. As a result, **Boeing** (and Airbus, too) is likely to continue to have brisk sales in China, which currently is the customer for one-quarter of all of their planes. Boeing recently opened a finishing center near Shanghai, but it has not followed Airbus's model of creating a full assembly line in China.⁴

Similarly, China is investing heavily in building its semiconductor industry. It has made some progress in certain kinds of semiconductors and boasts a small number of competitive firms, such as HiSilicon. Nevertheless, Chinese firms are still behind in designing the most advanced chips that are made by American companies such as **Intel** and **Nvidia**. Moreover, they are still unable to build their own manufacturing equipment and are dependent on companies such as **Applied Materials**. And in fabrication, the leaders of this sub-sector, Taiwan's TSMC, and the US firm **Global Foundries**, are in greater demand than ever, and they still do not face major Chinese competition.⁵

Industrial Policy Losers. Chinese industrial policy certainly does create American corporate victims. There are a variety of industries whose technological barriers to entry are somewhat lower and somewhat easier to master than in the sectors described above. In these industries the Chinese are sometimes able to persuade foreign parties to share their technology or they obtain it illegally. Beyond such foreign inspiration, a growing proportion of Chinese are able to learn and incrementally innovate, adding their own distinctive new elements to the original technologies. In addition, China is also able to utilize its systematic advantages to ramp up in priority sectors through a combination of unleashing a bevy of investment, being able to scale-up production quickly, and generating demand, all of which together provide a path to success.

In such sectors companies from the United States and elsewhere have a variety of technical and brand advantages, but this is only enough to provide protection for them at the high end of the market, and over time the power of commodification and cost so eat into foreign companies' market share that they end up primarily playing defense. In such industries government support

⁴ Marc Szepan, "Is China Ready To Compete in The Commercial Aircraft Industry?" *Forbes*, December 2, 2015; Trefor Moss, "Boeing Flies Close to Trade Tussle With New Facility in China," *Wall Street Journal*, December 15, 2018, <https://www.wsj.com/articles/boeing-flies-close-to-trade-tussle-with-new-facility-in-china-11544875263>; and Jon Sindreu, "How China Could Challenge the Boeing-Airbus Duopoly," *Wall Street Journal*, January 6, 2019, <https://www.wsj.com/articles/how-china-could-challenge-the-boeing-airbus-duopoly-11546786800>.

⁵ Junko Yoshida, "U.S.-China Crisis: Fallout for Chip Industry," *EE Times*, February 24, 2019, https://www.eetimes.com/document.asp?doc_id=1334360#; and James A. Lewis, *Learning the Superior Techniques of the Barbarians: China's Pursuit of Semiconductor Independence* (Washington, DC: CSIS, February 27, 2019), <https://www.csis.org/analysis/learning-superior-techniques-barbarians>.

often is too effective at attracting investment, and as a result, supply eventually overtakes demand, resulting in overcapacity and built-up inventories. Chinese firms backed by state banks and local governments can weather these valleys, but American firms that operate on tighter budget constraints cannot, and this further helps Chinese firms gain market strength despite their lesser technological prowess. The result is that entire supply chains gravitate to China or fall within its orbit.

Looking at well-developed cases, one of the best examples of such a sector is the solar industry. China was able to obtain technology from a variety of Western companies and invested in capacity far beyond what the China market could support. Many companies in market economies were unable to survive the rapid drop in prices that was caused by such overcapacity. The result was China's takeover of final production and much of the supply chain. Moreover, China's quick dominance of the sector led to technology lock-in, with the solar industry scaling up technologies that are relatively old and less efficient than other potential alternatives.⁶ In high-speed rail, German producer Siemens and Japanese producer Kawasaki Heavy Industries (KHI) shared much of their technology willingly with China. Yet these foreign producers have not been able to find any market for their own complete high-speed rail solutions in China, and China Railway Corporation is now a global powerhouse beyond China's borders.⁷ Telecom equipment would be another case, where Chinese makers Huawei and ZTE, by hook and by crook, were able to acquire technology from American companies, such as **Cisco** and **Motorola**, and then outlive them by following the above playbook.

There are other industries where this pattern is just starting to unfold. In the electric vehicle sector, the same dynamic seems to be at play. China has over 400 electric car producers, and in 2018 the country produced over 1 million passenger vehicles and buses. The vast majority of the vehicles were made by Chinese companies. **GM** and **Ford** are developing electrified versions of their models, but it is quite possible they will face enormous obstacles being successful in the China market. **Tesla** will open its own production facility in Shanghai within the next year, but even with its very high brand advantage, it will take some time for Tesla to acclimate to producing in China. Relatedly, a few years ago China essentially banned foreign electric car battery makers from its market by not permitting subsidies for cars that carried their batteries. As a result, the world's leading producers – Samsung SDI, LG Chem, and Panasonic – were all effectively shut out of the market, creating space for domestic Chinese producers. Chinese battery makers BYD and CATL took advantage of this opportunity, leaving much less room permanently for foreign suppliers. This not only affects these South Korean and Japanese battery producers, but also the American companies with whom they partner, such as Tesla. Tesla's gigafactory in the United States is a partnership with Panasonic, but one could speculate that Tesla could be pushed to collaborate with one of the Chinese battery makers for the cars it

⁶ Varun Sivaram, *Taming the Sun: Innovations to Harness Solar Energy and Power the Planet* (Cambridge, MA: MIT Press, 2018).

⁷ Michael Fitzpatrick, "Did China Steal Japan's High-Speed Train?" *Fortune*, April 15, 2013, <http://fortune.com/2013/04/15/did-china-steal-japans-high-speed-train/>; Henry Lu, "How Did China Become a Strong Competitor in the High-Speed Rail Industry?" Quora, January 8, 2015, <https://www.quora.com/How-did-China-become-a-strong-competitor-in-the-high-speed-rail-industry>.

manufacturers in China.⁸ There is reason to worry that the robotics sector, where American firms such as **Rockwell Automation** are highly prominent and operate in China, may be facing the same dynamics. These firms are still operating at the high end of the market without substantial local competition, but one should question whether their vaunted positions will endure indefinitely.

Blocked Outsiders. There are a variety of sectors to which Chinese authorities have simply blocked market entry or made market entry so onerous as to be an effective ban. In cloud services, American firms such as **AWS**, **Microsoft** and **IBM** are required to operate via joint-venture partners, and there are major restrictions on data flows and the services they can provide. As a result, domestic companies such as Alibaba Cloud have moved into the gap. Based on China's WTO accession protocol, electronic payment services providers **AMEX**, **Mastercard** and **Visa** were supposed to be allowed to operate independently in the Chinese market no later than December 2006. Instead, China locked them out of the market to create space for its domestic alternative, ChinaUnionpay (CUP), a company owned by several Chinese state-owned banks. China lost a WTO verdict in 2012, but as 2019 started none of these companies had an operating license. During that time, CUP expanded its business in China and abroad, and has a 36% share of the global market.⁹ The same circumstances trapped American credit rating agencies, including **S&P**, **Moody's**, and **Fitch**, for many years, though again they recently have seen some progress in their circumstances. American companies in media, entertainment and social media likewise face severe restrictions in their operations, and their revenues in China are far short of what they would otherwise be if the market were more open. In the case of content-based services, China has cited its sovereign right to manage information and ideas as important to the protection of the country's culture and ideological, but this rationale may be exploiting loopholes in the WTO to serve industrial policy goals.

IV. The Current U.S. Government Approach to China's Commercial Environment

The United States has adopted an approach of "patient integration" toward China for most of the period since China joined the WTO in late 2001. China's WTO accession protocol effectively served as a contract between China and its trading partners, including the United States. This was supplemented by bilateral meetings and processes, regional arrangements such as the Asia-

⁸ Anjani Trivedi, "Tesla May be Trampled by CATL in China," BloombergOpinion, May 8, 2018, <https://www.bloomberg.com/opinion/articles/2018-05-08/china-s-car-battery-champion-catl-may-trample-tesla-s-dream>; and Scott Kennedy, *China's Risky Drive into New-Energy Vehicles* (Washington, DC: CSIS, November 19, 2018), <https://www.csis.org/analysis/chinas-risky-drive-new-energy-vehicles>.

⁹ Tom Miles and Doug Palmer, "U.S. Wins WTO Case Over China Bank Card Monopoly," Reuters, July 16, 2012, <https://www.reuters.com/article/us-usa-china-wto-idUSBRE86F0J020120716>; Gabriel Wildau, "China's Central Bank Delays Market Entry for Visa and Mastercard," *Financial Times*, January 13, 2019, <https://www.ft.com/content/8dee4b22-13ef-11e9-a581-4ff78404524e>. In the last few weeks, AMEX was issued a license to operate independently, and Mastercard announced it would form a joint venture with a Chinese partner.

Pacific Economic Cooperation (APEC) Forum, and China's participation in other multilateral organizations, including the IMF, G20, International Organization for Standardization (ISO) and International Telecommunication Union (ITU). It was expected that through greater economic interdependence, bilateral policy engagement, and participation in international institutions, China would adapt and become integrated to the point that its economic system would align sufficiently enough with those of the US and others that disputes would be limited and manageable through standardized mechanisms. This approach understood China would not always live up to its commitments and would try to game the system, but that patience engagement would be effective over the long-term.

That approach was not without merit given that the commercial relationship has been broadly beneficial to the United States. However, patience did not yield consistent success and unsolved problems began to pile up over the last decade. Moreover, under the leadership of Xi Jinping, although he originally emphasized that China would seek to have the market play a definitive role in allocating resources, in reality, the role of the state has expanded, and China no longer identifies itself as an economy in transition from plan to market. Rather, the current leadership's goal is to protect and improve upon the current hybrid model. As a result, China increasingly has taken advantage of the "patient integration" strategy and has used bilateral dialogue and the multilateral dispute resolution system as stalling tactics that have permitted them to pursue industrial policy without major diplomatic opposition.

The final two years of the Obama Administration saw a modest turn away from patient integration, but taking an all-around more assertive approach toward China took a backseat to other priorities, including completing climate change negotiations and slowing Iran's nuclear weapons program. The Trump Administration, by contrast, has fundamentally shifted its approach to China in the direction of what might be called "impatient disengagement." Instead of using mutually acceptable processes of dialogue and dispute resolution, the Trump administration upset the rhythm of the relationship by carrying out the Section 301 investigation regarding violations of IPR. On that basis it instituted tariffs on a large portion of China's exports to the United States and issued a long list of demands regarding expanding American exports, leveling the playing field in China and putting significant constraints on Chinese industrial policy. In addition, the United States began to encourage American companies in China to consider moving some or all of their operations from China and modifying their global supply chains, raising the prospect that China would go from being at the center of the global super-highway of production to becoming a subsidiary cul-de-sac, albeit a large one. In the context of this mounting pressure, starting in April 2018 the two sides began to have substantial negotiations over how to resolve their differences. Negotiations seemed to make little headway until late January of this year, and following the conclusion of the most recent round of negotiations the Trump administration has indicated that a potential major deal is in sight, and that it could potentially be concluded in a summit meeting between Presidents Trump and Xi in the second half of March.

The merit of this more aggressive approach is that it recognizes the futility of endless patience and dialogue when China was likely disingenuous about its willingness to fully meet its WTO and bilateral commitments and broadly liberalize its economy. By eliminating China's sense of complete certainty and stability in its relationship with the United States, the Trump

Administration was able to impress upon China's leadership and others the significance of these concerns, that business as usual would no longer be acceptable, and that China would need to make major changes in its economic governance in order to maintain the current breadth and depth of economic engagement with the United States.

Nevertheless, this approach also carries with it substantial risks. In the short term, fewer imports from China have led to less products and materials available to American producers and consumers, and the prices of these items has risen. And China's retaliation has led to a substantial drop in American exports. There is no guarantee that the elimination of penalizing tariffs will result in trade returning to its earlier levels and previous pattern, which could hurt U.S. businesses operating in China as well as those at home. Relatedly, although the U.S. has campaigned for support from American allies who face the same problems with China, the administration has also exacerbated commercial tensions with these same countries through a series of actions: the withdrawal of the U.S. from the Trans-Pacific Partnership and the Paris climate accords, its criticisms of the WTO and its blocking of new members to the Appellate Body, demands for bilateral new or revised bilateral agreements, implementation of Section 232 tariffs on steel and aluminum, the threat of additional Section 232 tariffs on autos, and pressuring friends and allies to not acquire Chinese telecom equipment. Alienating countries that should be natural allies in addressing the China challenge offers Beijing the chance to divide the U.S. from its friends. The result could be that companies from these countries don't disengage from China but instead acquire market share shed by American industry. In addition, U.S. actions are putting at risk the web of regional and multilateral institutions that sit at the heart of the liberal international economic order that has provided the foundation for global prosperity in the seven decades since World War II.

The final risk of this approach is that the United States might negotiate a deal with China that falls short of its original goals and that does not address the underlying core issues that were the original impetus for abandoning a strategy of patient integration to begin with. If a deal is reached that does not level the playing field in China and does not constrain Chinese industrial policy, then the United States would have lost much in both the short- and long-run without achieving the results that would have reasonably justified such sacrifices. To make matters worse, it would make future attempts to rein in China's deeply interventionist approach to economic governance that much more difficult, potentially compounding the problems American companies in China already face.¹⁰

IV. How Congress Can Help

Congress can and should play a major role in improving America's effort to protect American companies operating in China and push China to shift its economy more fully in a more market-oriented direction, all at the same time supporting and improving international economic institutions.

¹⁰ For suggestion on how to achieve a good deal with China, see Daniel H. Rosen and Scott Kennedy, "Building a Better Deal with China," CSIS Commentary, January 28, 2019, <https://www.csis.org/analysis/building-better-deal-china>.

Here is a list of priority recommendations:

1. Support a comprehensive analysis by U.S. government agencies and the Congressional Research Service of the full range of benefits and losses to the United States from the US-China commercial relationship. This means not only American companies in China, but American companies who export from the United States or operate in third markets, as well as American workers, consumers, and the industries as a whole. Existing studies on the effects of the “China shock” on American labor trends are helpful, but are not unanimous in their conclusions and are largely out-of-date and not reflective of developments in the last five years. Studies of economic losses from IP theft have illuminated the general issue, but their calculations of losses have severe methodological weaknesses which render these figures educated guesses at best. As noted above, data on investment flows is far from adequate, and without better data viewed as comprehensive and accurate by governments, it is hard to reach robust conclusions about the economic impact of investment.
2. Provide extensive oversight of the Trump administration’s negotiations with China to raise the prospects that the two sides reach a solid agreement that opens up China’s market and puts constraints on Chinese industrial policy, and at the same time does not include inappropriate concessions by the United States, such as with regard to China’s non-market economy status and export and investment restrictions based on national security. Congressional committees can hold hearings, and individual members can critique administration positions and offer alternative proposals. Should a deal be reached, members of Congress can engage with stakeholders and their constituents to appropriately critique or defend the outcome.
3. Provide oversight and support so that the executive branch implements the new laws related to security-related investment restrictions (Foreign Investment Risk Review Modernization Act, FIRRMA) and export controls (Export Control Reform Act, ECRA) in a way that is faithful to Congress’s original intent. It is critical these regulations fully protect American national security but do so in ways that do not unnecessarily restrict legitimate and beneficial commercial activity.
4. Hold hearings and consider legislation that provides for investment reciprocity with China, whereby Chinese investors are only allowed to invest in American industries when American investors have the same ability to invest in the same sectors in China. Such steps would not be covered by FIRRMA because they would be based on a rationale of fairness and competition, not national security.
5. Strengthen and reform existing institutions of the multilateral trading system and support the development of new complementary institutions where appropriate. The WTO has been hugely beneficial to the United States and for global prosperity, but it needs to be reformed in order to make it more efficacious and restore its legitimacy among advanced industrialized economies and developing countries alike. Likewise, TPP (now the CP-TPP) is on balance an excellent agreement that serves American interests. To the extent it has possible weaknesses – for example, regarding labor rights, the environment, pharmaceutical patents, or treatment of state-owned enterprises – Congressional committees and individual members can develop new proposals, engage with Japan and other members, and prepare the ground for a TPP 2.0 that the United States could join should the executive branch adjust its view toward TPP.

6. Invest in America's economic foundations, with greater support for high-tech research and development, education, healthcare, and infrastructure, and do so in ways that promote not only economic growth but also expanded access to technology and services to as large a proportion of the American population as possible, while also addressing sources of climate change and protecting the environment.

OPENING STATEMENT OF MARY LOVELY, PH. D., PROFESSOR OF ECONOMICS, SYRACUSE UNIVERSITY MAXWELL SCHOOL OF PUBLIC POLICY

COMMISSIONER WESSEL: Thank you. Dr. Lovely?

DR. LOVELY: Good morning. It's my honor and pleasure to join this panel today. And I thank the co-chairs and the Chairman for the invitation, as well as the terrific staff support that we received prior to the com -- prior to the hearing.

I will focus my testimony on the operations of U.S. multinationals in China as well as the barriers these U.S. firms face in entering and operating in the Chinese market.

It's a little surprise to me, not that big a surprise, that I actually agree with everything that Scott just said. And I found it really useful. And I'm taking notes to steal those ideas.

Removing barriers for American companies providing knowledge intensive goods and services in a Chinese market will expand employment opportunities here at home. Expansion of sales abroad benefits workers in both production and non-production jobs.

While we often see multinationals as the chief villains in the rapid decline of U.S. manufacturing employment, they remain an important source of U.S. manufacturing jobs. Multinationals constitute only 4 percent of all manufacturing firms, but they provide 51 percent of manufacturing employment.

So these firms are important. And what happens to them in their operations abroad is important for what happens here at home.

Progressive opening to foreign investment as a means of industrial upgrading is a hallmark of China's economic transition. Liberalization of restrictive trade and investment regimes began at least as early as the 1990s, and accelerated later in the same decade.

Although economic reforms slowed after 2003, China continued to reduce barriers to foreign investment after its WTO accession. In 2017, due to this opening in reform, China absorbed 131 billion dollars of new foreign investment.

Sales of goods and services by all U.S. affiliates in China in 2016 totaled 464 billion dollars. Of this total, U.S. foreign affiliates directly supplied 286 billion to the Chinese domestic market.

The magnitude of these sales and their importance to the United States can be gained by comparison to U.S. exports of goods and services to China, which totaled only about 171 billion in the same year. So, 171 billion in exports, but 286 billion in direct sales by U.S. affiliates.

American investment in China accounts for a relatively small but growing share of total U.S. multinational activity around the world. U.S. affiliates in China accounted for 2.3 percent of worldwide assets of foreign affiliates of U.S. multinational parents, but 7 percent of worldwide sales.

Assuming a 10 percent annual growth for U.S. sales in China, Deutsche Bank predicts that China will likely become the largest market for U.S. subsidiaries by 2020. Accounting for 15 percent of all sales abroad.

Manufacturing affiliates clearly dominate this activity, accounting for 58 percent of total affiliate sales in China. Followed by the wholesale services that support that activity.

Sales in two service sectors where the U.S. has comparative advantage, finance and insurance, and information studies, lag far behind manufacturing. And we might ask if this pattern is unique to China?

And the answer really is no. This pattern of sales across industries is very similar to those of U.S. affiliates operating in Mexico and Brazil, two other large, upper-middle income

countries.

I would also note, they are also countries that use industrial policy. So, -- and their markets are not nearly as large as China.

Within manufacturing, three industries dominate. Computer and electronic products, transportation equipment, and chemicals.

We might ask why U.S. firms invest in China? Surprisingly, the answer is not to produce to ship home.

The most important reason for U.S. firms to invest in China is proximity to the Chinese domestic market. Including the ability to serve other foreign affiliates such as those from German multinationals operating inside China.

Viewers of economic analysis confirm that the major destination for goods and services supplied by U.S. affiliates in China is the Chinese domestic market. Affiliates direct 83 percent of their production to the local market.

This local sales share is high in comparison to the average local share over all U.S. foreign affiliates, which is 59 percent. One reason for this, of course, is that U.S. multinationals are much more likely than non-multinationals to source from our NAFTA partners, and so they don't need China as much in some sense.

Central and provincial government policies also drive the American presence in China. Trade barriers, both tariff and non-tariff barriers, induce production inside China. For example, high Chinese tariffs on automobile imports led to American investment in motor vehicle production in China.

In recent years China has reshaped its foreign investment policies to conform to an increasingly state level industrial development. These changes are already altering American affiliate operations abroad.

Most investment barriers have fallen. And most investors face no ownership restrictions. However, even as outright prohibitions on entry and ownership caps have become rare, the government increasingly relies upon industrial and regulatory policy to reduce entry in forms consistent with its innovation strategy, or to prevent entry altogether. The main instruments used to unite foreign investment policy and industrial policy are foreign investment entry approvals, licensing and regulatory approvals, and innovation policies.

A recent survey of American firms operating in China by the U.S. China Business Council finds that only 18 percent of responding members report being asked to transfer technology to a Chinese partner. These requests typically come when a U.S. entry seeks approval to enter.

The limited number of firms reporting this request clearly shows that forced technology transfer is limited to particular sectors, as Scott indicated. Recent trends in the mode of entry of foreign investors provide more evidence that Chinese efforts for technology transfer target particular sectors and firms.

As my colleague at Peterson has shown, Nick Lardy, the share of incoming FDI that occurs in the form of wholly foreign owned affiliates, rose to an average of almost 80 percent in 2008 and 2014. So, no joint venture partner to steal your technology.

However, that share has fallen since 2014, to 70 percent. And we know that this is not going to be across the board. They are not trying to steal our wonderful diaper technology. Even though I do love American diapers.

Which industries are likely to face continuing requests for technology transfer? To answer this question, we need to look beyond simply restrictive policies to those that induce

entry.

By 2010, the Chinese government prohibited or restricted foreign investment in less than 10 percent of all industries. Instead the share of sectors for which the government held a "neutral" or "encouraging" stance rose over time.

While foreign investors and sectors treated as neutral by the Chinese foreign investment catalog or rules, are unlikely to face pressure to form a joint venture or transfer technology, the situation is far less transparent in so called encouraged sectors.

There are explicit limitations on foreign ownership sectors in some of these encouraged industries. Even as investors find otherwise favorable or preferential treatment.

For example, ownership restrictions currently remain on investors seeking to manufacture motor vehicles. Yet the government may offer foreign investors expedited regulatory approval, access to prepared sites, or locations in desirable free trade zones.

What is often overlooked is the way in which China's development strategy combines industrial policy and FDI approval to seek tech transfer.

In an investigation of changes over time in the foreign investment catalog, Yang Liang, Hongsheng Zhang, and I have found that the best predictor of an industry's movement in the so called encouraged catalog for foreign investment is its status as a high technology sector as designated by the Chinese government.

This finding indicates the increasingly innovation-focused nature of the Chinese foreign investment approval regime and its marriage to industrial policy.

Evidence suggests the Chinese government also uses licensing and regulatory approval processes to delay or defer entry by U.S. multinationals. In particular, this form of non-tariff barriers appears most restrictive in sectors involving health and safety standards. Including things such as pharmaceuticals or chemicals.

COMMISSIONER WESSEL: If you could wrap up.

DR. LOVELY: Sure.

COMMISSIONER WESSEL: We're over time.

DR. LOVELY: Oh, sorry.

COMMISSIONER WESSEL: Yeah.

DR. LOVELY: As noted above, foreign investment in high technology manufacturing is likely to be encouraged. Although similar statistics on high technology services, such as cloud computing, are not available, restriction on entry and ownership shares are clearly in line with China's innovation aspirations and national security policies.

In particular, American technology companies find their ability to provide data and other business services to Chinese customers to be severely constrained.

In closing, I would argue that there may be ways to take this through the WTO, including by challenging the use of subsidies. I do realize that this might be us challenging subsidies that benefit our own corporations, but to the extent that they're there to transfer technology, it's unlikely that they benefit U.S. interest as a whole.

The other approach, which is most -- most likely to bear fruit, and which is very common, is to join with our allies. Often times American corporations find themselves in the play or lose.

Either they're going to face the market being served by foreign competitors or by domestic competitors. We need to have a united front to say no.

We also, I think, have to consider some -- one of the recommendations that was made by Dr. Kennedy, which is to block entry into the U.S. market.

If we are unable to serve foreign firms adequately in China and that prevents us from serving foreign multinationals, we need to make sure that U.S. -- I'm sorry, that Chinese companies cannot then serve worldwide and replace us.

So, thank you very much.

**PREPARED STATEMENT OF MARY LOVELY, PH. D., PROFESSOR OF
ECONOMICS, SYRACUSE UNIVERSITY MAXWELL SCHOOL OF PUBLIC POLICY**

Testimony before the US-China Economic and Security Review Commission

Hearing on Risks, Rewards, and Results: US Companies in China and Chinese Companies in the United States

Mary E. Lovely¹

Syracuse University and Peterson Institute for International Economics

February 28, 2019 (revised March 10, 2019)

1. Introduction

This testimony supports the second panel of these hearings, focusing on the risks and rewards for US companies operating in China. We meet during a period of intense negotiation between China and the United States, prompted by the March 2018 findings of the US investigation “China’s Acts, Policies, and Practices related to Technology Transfer, Intellectual Property and Innovation Under Section 301 of the Trade Act of 1974” (hereafter “Section 301 report”). The investigation found evidence of Chinese practices of forced technology transfer as well as other forms of intellectual property appropriation.

Challenges for US-China economic relations extend well beyond the outcome of the current Section 301 case. China has maintained rapid growth for 40 years by continually adapting its economic institutions and policies to changing internal and external conditions and goals. American companies seeking to serve the Chinese market, therefore, face an ever-evolving policy environment. My testimony provides an overview of US foreign affiliate activity in China and offers perspective on how China has adapted its foreign direct investment (FDI) policies to further its industrial development goals. Other members of this panel shed light on the consequences of these actions for American business interests. A clear message emerging from the panel is that the US Congress should monitor Chinese investment policies and view these actions within the wider context of the overall bilateral relationship. If the US Congress sees fit to counter Chinese practices, the most effective responses will be those taken in concert with allies and that reinforce existing multilateral institutions.

Congressional attention to investment barriers that unduly disadvantage American companies providing goods and services to the Chinese market will benefit the overall health of the US economy. While multinational enterprises are often seen as villains in the rapid decline of US manufacturing employment, they remain an important source of US manufacturing jobs. US parent companies accounted for 22.3 percent of total private industry employment in the United States in 2016, with the largest shares in manufacturing and retail trade.² Multinationals operating in the United States, including those with parents outside the United States, employ 51 percent of the manufacturing workforce.³ US actions that reduce discriminatory foreign

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² These figures are from the Bureau of Economic Analysis (BEA). <https://www.bea.gov/news/2018/activities-us-multinational-enterprises-2016>

³ This figure is taken from Kamal and Lovely (2017, p. 105).

investment barriers will expand sales abroad and benefit workers at home in both the manufacturing and service sectors.

2. China's Use of Foreign Investment for Development Goals

Using foreign direct investment (FDI) as a pathway for technology transfer from advanced economies to less developed economies is not unique to China nor to the present day. Indeed, a number of provisions in World Trade Organization (WTO) agreements mention the need for such transfers to take place between developed and developing countries.⁴ A working group of the WTO is dedicated to understanding the links between trade and technology transfer and finding ways to increase the flow of technology to developing countries. It is widely recognized that foreign investment is an important channel for such flows.

Progressive opening to foreign investment as a means of industrial upgrading is a hallmark of China's economic transition. Despite the presence of only rudimentary market institutions, foreign investment flowed into China soon after its opening in 1978. Liberalization of restrictive trade and investment regimes began at least by the early 1990s and accelerated later in the same decade.⁵ Although economic reforms slowed after 2003, China continued to reduce barriers to foreign investment after its WTO accession.⁶ The 2018 World Investment Report published by the United Nations Conference on Trade and Development (UNCTAD) ranked China as the world's second largest FDI recipient after the United States and before Hong Kong. In 2017, China absorbed \$131 billion of new foreign investment.

China's trade patterns have long been closely tied to foreign direct investment.⁷ Soon after former Chinese communist leader Deng Xiaoping's famous Southern Tour in 1992, foreign invested enterprises (FIEs) supplied more than half of the country's manufacturing exports.⁸ Analysis of data compiled by China Customs indicates that foreign investors remain important to China's export success even after almost 40 years of reform and opening: In 2014, FIEs were the source of 46 percent of Chinese exports to the world. The FIE share of China's exports to the United States was significantly larger, at 60 percent.⁹

Foreign investment has played an outsized role in the development of China's high-technology sector. Foreign-invested enterprises are key to the country's exports of high-tech products to the world, including to the United States. Lovely and Huang (2018) find that in 2016 foreign firms provided 77 percent of Chinese high-tech exports, with 33 percent produced by foreign enterprises other than those funded through Hong Kong, Macau, and Taiwan.

⁴ See, for example the Working Group on Trade and Transfer of Technology, available at https://www.wto.org/english/tratop_e/devel_e/dev_wkgrp_trade_transfer_technology_e.htm.

⁵ Lardy (2002) makes this point and supplies supporting evidence.

⁶ Naughton (2018) discusses the slowdown in reforms after 2003 in the context of China's development goals.

⁷ Foreign direct investment is defined by a threshold of at least 10 percent equity share or equivalent voting power.

⁸ Using data from the 1995 Third Industrial Enterprises Census, Huang (2003) finds that foreign invested enterprises operating in China produced 51.2 percent of the country's manufactured exports. FIE shares are significantly higher than average in a subset of both labor-intensive and capital-intensive industries.

⁹ Calculations and context described in Lovely and Liang (2018).

Foreign investors provide access to innovative technology, advanced management practices, and connections to global supply chains, as well as capital. For example, a recent report for the U.S.-China Economic and Security Review Commission on China's biotechnology industry finds that of the many ways foreign capital flows into the industry, FDI has likely contributed the most to development of Chinese biotech.¹⁰

Chinese industrial policies reflect a clear understanding of these advantages. From the so-called "22 Regulations" in the late 1980s, a major regulatory liberalization applied to foreign investment throughout China, to the current negative list of sectors off limits to foreign investors, China has progressively eased restrictions on inward foreign investment.¹¹ Most recently, at the 2018 Boao Forum for Asia, Chinese president Xi Jinping promised foreign companies greater access to China's market.

3. US Foreign Direct Investment in China

The United States was slower than some other investors in accumulating assets in China, but today American multinational enterprises are important players in the region. As shown in table 1, which provides the top FDI investors in China as of 2015, the official source of 48 percent of FDI stock is Hong Kong, China. The third largest source of investment is Japan, accounting for approximately 6 percent of the stock. The United States was the fifth largest investor, accounting for approximately 4.5 percent of total FDI stock.

The official source of information on foreign affiliates of US companies is the US Bureau of the Census's Bureau of Economic Analysis. The BEA surveys US-owned multinational enterprises (MNEs) with the primary goal of measuring the scale of their direct investment abroad. US investors hold assets in Chinese mining, manufacturing, wholesale and retail trade, and services. Using data from the BEA's Survey of US Direct Investment Abroad, the total assets of US MNE affiliates in China was \$643 billion in 2016.¹² The largest share of these assets, 37 percent, reflects investment in manufacturing activities, while another 28 percent are in finance and insurance.

Sales of goods and services by all US affiliates in China in 2016 totaled \$464 billion.¹³ Of this total, US foreign affiliates supplied \$286 billion to the Chinese domestic market. The magnitude of these sales, and their importance to the United States, can be gauged by comparison to US exports of goods and services to China, which totaled \$170.5 billion in the same year.¹⁴

¹⁰ Gryphon Scientific and Rhodium Group, *China's Biotechnology Development: The Role of US and Other Foreign Engagement* (p. 46, (<https://www.uscc.gov/sites/default/files/Research/US-China%20Biotech%20Report.pdf>).

¹¹ Branstetter and Lardy (2008) summarize China's progressive opening to foreign trade and investment. The 2017 version of the Chinese government's Catalogue of Industries for Guiding Foreign Investment is available at <http://www.ndrc.gov.cn/zcfb/zcfbl/201706/W020170628553266458339.pdf>

¹² Asset data taken from Table I.B5, available online at <https://www.bea.gov/international/usdia2016p>.

¹³ Sales data taken from Table I.D3, available online at <https://www.bea.gov/international/usdia2016p>.

¹⁴ "US-China Trade Facts," US Office of the Trade Representative, <https://ustr.gov/countries-regions/china-mongolia-taiwan/peoples-republic-china>

American investment in China accounts for a relatively small but growing share of total US multinational activity around the world.¹⁵ US affiliates in China accounted for 2.3 percent of worldwide assets of foreign affiliates of US MNE parents but 7 percent of worldwide sales. Assuming 10 percent annual growth for US sales in China, Deutsche Bank Research (2018) predicts that China will likely become the largest market for US subsidiaries by 2020, accounting for 15 percent of all their sales abroad.

Figure 1 shows the distribution of total 2016 sales of US MNE affiliates in China by major sector. Manufacturing clearly dominates this activity, accounting for 58 percent of total affiliate sales, followed by wholesale trade. Sales in two service sectors where the United States has comparative advantage, finance and insurance and information services, lag far behind manufacturing.

Figure 1 also shows the distribution of total sales of US MNE affiliates in Mexico and Brazil, both large upper-middle income countries. Except for information services, which account for a relatively high sale share in Brazil, the distribution of activity in China looks similar to these comparison countries.

A closer decomposition of US affiliate sales in the Chinese manufacturing sector is possible with the help of figure 2. Within manufacturing, three industries dominate—computer and electronic products, transportation equipment, and chemicals. This dominance reflects the strength of US producers in each of these industries.

Information collected by the US-China FDI Project, headed by the National Committee on US China Relations, suggests that both market conditions and Chinese government policy shape American investment in China.¹⁶ China's information and communications technology (ICT) sector has attracted the most direct investment from the United States, estimated at \$41 billion since 1990. Before China joined the WTO, American IT firms invested in equipment assembly plants. After WTO accession, investment flowed into semiconductor assembly, again following China's comparative advantage in labor-intensive activities. After 2005, investment shifted toward software and IT services and, more recently, into research and development facilities. Reportedly, American companies hold a controlling interest in 70 percent of their total investments in ICT, although the shift toward IT services, which often require a domestic partner, suggests that this share may fall over time.

4. Why do US Firms Invest in China?

From the perspective of foreign investors, direct investment in China offers numerous attractions. Key drivers of foreign investment are the benefits of being close to customers, cost-savings from reduced shipping costs, and offshoring of some production stages to lower labor costs. While offshoring of production from the United States to China clearly occurred,

¹⁵ Branstetter and Foley (2010) report that in 2004 China's share of US nonbank affiliates of nonbank US parent sales and assets were 1.9 percent and 0.7 percent, respectively.

¹⁶ Details in this paragraph are drawn from the US-China FDI Project, a joint effort by the Rhodium Group and the National Committee on US-China Relations, on the ICT industry. <https://us-china-fdi.com/>

especially between 2000 and 2007, much of this activity is performed by enterprises other than the foreign affiliates of US multinational parents. Analysis of US import patterns shows that in 2016, only 25 percent of imports from China were between related parties, a measure that includes trade between US parents and their affiliates.¹⁷ Instead of seeking a low-wage export platform, US investment and affiliate sales patterns indicate that the most important reasons for American investment in China are for proximity to the Chinese market and as a response to investment and trade barriers.

Some production must be undertaken close to consumers, as in the case of restaurants, hotels, and certain entertainment activities. PepsiCo, a food and beverage company, was one of the first multinational companies to enter China, establishing its first bottling plant in Shenzhen, Guangdong province in 1981. Since then, the Chinese market has been an important driver of the company's global growth.¹⁸

Delivery of some business services also requires close contact with customers, often necessitating face-to-face interaction or an on-site presence. IBM, which first installed a computer system in China in 1979, set up a service center in 1983 in Beijing to provide installation and maintenance support for users throughout the country.¹⁹ Its current operations include mainframe sales and service as well as a wide array of business services.

Other investors, such as those producing consumer goods, benefit from proximity to local tastes and preferences and adapt product characteristics accordingly. Procter & Gamble, for example, is the largest consumer products company in China, with annual local sales of \$2 billion. Procter & Gamble entered Mainland China in 1988 by establishing its first joint venture—P&G (Guangzhou) Ltd. headquartered in Guangzhou. P&G China currently has operations in seven Chinese cities and a technical center in Beijing.²⁰

Central and provincial government policies also drive the American presence in China. Trade barriers, both tariffs and non-tariff barriers, induce production inside China. For example, high Chinese tariffs on automobile imports (which have recently been lowered except for US autos because of the trade conflict) engender American investment in motor vehicle production in China.

BEA data confirm that the major destination for goods and services supplied by US affiliates in China is the Chinese domestic market. As shown in figure 3, these affiliates direct 83 percent of their production locally. This local sales share is high in comparison to the average local share over all US foreign affiliates, which as shown in the bottom panel is 59 percent. US affiliates in China do export to other regions, but this activity accounts for only 11 percent of affiliate production, and about two-thirds of these sales are to other US foreign affiliates. These data

¹⁷ The sector with the largest share of related party trade is computer and electronic products, with a related party share of 41 percent, some of which is trade between US-based affiliates of foreign companies and their Chinese-based affiliates. Source of related-party trade data is US Bureau of the Census, with calculations by author.

¹⁸ PepsiCo's Asia, Middle East and North Africa division, which includes China, contributes about 10 percent of the company's net revenues. <https://www.statista.com/statistics/532389/global-net-revenue-of-pepsico-by-division/>

¹⁹ IBM has a rich history of Chinese operations. https://www.ibm.com/ibm/history/exhibits/china/china_ch2.html

²⁰ P&G opened operations in Hong Kong and Taiwan a few years before entering mainland China. <https://www.pghongkong.com/en-us/Company/China.aspx>

indicate that US multinationals make little use of China for production of goods used in US-based activities: They export a relatively low share of affiliate production, 6 percent, to the American market, and most of these goods are sold to their American parent. In sum, evidence suggests that proximity and access to the domestic market are dominant drivers of American investment to China.

5. Changes in Chinese Policies toward Foreign Direct Investment

After the start of “reform and opening” in 1978, the state dramatically reduced funneling of resources into technology upgrades and, as noted earlier, gradually embraced foreign investment. China used market reforms and technological “catch-up” to advance its development, in concert with reduced trade and investment barriers.²¹ More recently, as China faces a declining working-age population, rising wages, and growing competition from other developing economies, it has reshaped its foreign investment policies to conform to its increasingly state-led industrial development.²²

In general, investment barriers have fallen, and most investors face no ownership restrictions. However, even as outright prohibitions on entry and ownership caps have become rarer, the government increasingly relies upon industrial and regulatory policy to induce entry in forms consistent with its innovation strategy. The main instruments used to unite foreign investment and industrial policy are foreign investment entry approval, licensing and regulatory approval, and information technology policies.

a. Entry Approvals

Chinese state or non-state actors may place conditions on foreign investors seeking approval for entry or expansion into new markets. These conditions are not uniform, but rather target activities that advance Chinese development goals. A recent survey of American firms operating in China by the US-China Business Council finds that only 18 percent of responding members report being asked to transfer technology to a Chinese partner. Of these members, 67 percent report that the request came directly from a Chinese company, and 33 percent report the request came from a government entity.²³ Importantly, only 30 percent of those asked to transfer technology report that they did so, while another 50 percent report mitigating the request before transferring technology. These responses clearly show that “forced” technology transfer is limited to particular investments and that companies involved seek ways to minimize the impact.

Recent trends in the mode of entry of foreign investors provide more evidence that Chinese efforts to force technology transfer target particular sectors and firms. As Lardy (2018) reports,

²¹ Chen and Naughton (2016) contend that this hands-off phase ended in 2003, when China returned to “techno-industrial” policies.

²² Using data on firm growth and resource allocation, Lardy (2019) argues that President Xi Jinping has consistently championed state-owned or controlled enterprises, encouraging local political leaders and financial institutions to prop up ailing, underperforming companies that are a drag on China's potential.

²³ Full survey results available from the US-China Business Council (USCBC), 2017 Member Survey, https://www.uschina.org/sites/default/files/2017_uscbc_member_survey.pdf. Unfortunately, the USCBC report provides no details by industry of member.

the share of incoming FDI that occurs in the form of wholly foreign-owned affiliates rose to an average of almost 80 percent in 2008–14 before falling to around 70 percent in the last few years. He notes that, “In a wholly foreign-owned firm there is no transfer of technology, and the foreign firm can take the same steps it would take in any other market to prevent its technology from leaking to domestic firms.” Although this is undoubtedly true for many US affiliates, evidence suggests that some investors face continued requests for technology transfer.

The US Trade Representative’s (USTR) Section 301 report emphasizes foreign ownership restrictions, in particular joint venture (JV) requirements, as a “cornerstone of China’s technology transfer regime” (Office of the Trade Representative 2018, page 23). Three major laws govern foreign investment in China: the Law on Sino-Foreign Equity Joint Ventures, the Law on Sino-Foreign Cooperative Joint Ventures, and the Law on Wholly Foreign-Owned Enterprises.²⁴ Reflecting these major laws, the Ministry of Commerce periodically updates a catalogue for the Guidance of Foreign Investment Industries (the “Catalogue”) to regulate foreign investment in China. The most recent Catalogue contains a list of encouraged industries, a “negative list” of sectors where ownership limits or other investment restrictions apply, and a schedule of prohibited sectors. Examining past changes to this guidance provides some insight into which investments may be subject to forced technology transfer through a joint venture partnership.

Figure 4 illustrates the sorting of Chinese manufacturing sectors into investment policy categories, as defined by the Catalogue. Based on the work of Sheng and Yang (2016), who associate manufacturing activities included in the Catalogue with specific Chinese industries, the figure indicates that the Chinese government adopted a “neutral” stance toward investment in a large share of sectors. Moreover, the share of manufacturing sectors for which foreign investment in one or more activities was prohibited or restricted fell dramatically between 1995 and 2010. Indeed, by 2010, the Chinese government prohibited or restricted foreign investment in less than 10 percent of all industries. Instead, the share of sectors for which the government held an “encouraging” stance rose over time.

While foreign investors in sectors treated as “neutral” by the Catalogue are unlikely to face pressure to form JVs or transfer technology, and investors in sectors listed as “restricted” must form a JV, the situation is far less transparent in “encouraged” sectors. There are explicit limits on foreign ownership shares in some encouraged sectors, even as investors find otherwise favorable entry conditions. For example, ownership restrictions currently remain on investors seeking to manufacture motor vehicles, yet the government may offer foreign manufacturers expedited regulatory approval, access to prepared sites, or locations in desirable free trade zones. These preferences raise the profitability of operating in China and may compensate, to some extent, for forced technology transfer to local partners.

In an investigation of changes over time in the foreign investment Catalogue, Yang Liang, Hongsheng Zhang, and I find that the best predictor of an industry’s movement into the “encouraged” category is its status as a “high-technology” sector by the Chinese government.²⁵

²⁴ The new 2019 Chinese foreign investment law combines and amends these three laws.

²⁵ This investigation is in process. Most recent slides showing this finding are available here: https://www.dropbox.com/s/ds0iqft5xol949c/fdi_llz_slides.pdf?dl=0.

This finding indicates the increasingly innovation-focused nature of China's foreign investment approval regime. In short, foreign investment policy is closely linked to industrial policy, primarily on a case-by-case and non-transparent basis.

b. Licensing and Regulatory Approvals

Evidence suggests the Chinese government uses licensing and regulatory approval processes to delay or defer entry by US multinationals. In particular, these forms of non-tariff barriers appear to be most restrictive in sectors involving health and safety standards. Government approval procedures can also be used to reveal proprietary technology, as when foreign firms are required to share technical specifications or formulas with local officials.

c. Information Technology Policies

As noted above, foreign investment in high-technology manufacturing is likely to be “encouraged.” Although similar statistics on investment policy toward high-technology services are not available, restrictions on entry and ownership shares are common in these sectors and clearly in line with China's innovation aspirations and national security policies. In particular, American technology companies find their ability to provide data and other business services to Chinese-based customers severely constrained. ICT investments, as noted by the US-China FDI Project, are heavily impacted by “Chinese cybersecurity rules, national security constraints, industrial policy and counter-terrorism policies.”²⁶ These policies favor domestic companies and often require US firms to enter into joint ventures with Chinese firms to provide services.

6. Implications for Congressional Action

National and multilateral tools are available for seeking change within the current rules-based trading system. Other experts, including my fellow panelists today, have assessed the potential for redress through multilateral institutions, including WTO litigation. Given this coverage, I will focus on an approach that has been underutilized, coordinating the US policy response with key allies. In my view, coordinated action by the small group of technologically innovative nations is likely to result in amended Chinese practices. Moreover, such an approach can be undertaken in a way that is consistent with the rules-based trading system. To promote such coalition building, the Congress should exert greater oversight of Trump administration trade policy.

a. Promote coordination and collective action with American allies.

The goal of Chinese policy is acquisition of advanced technology, and the method is to trade market access for technology transfer. Given this Chinese strategy, US coordination with other innovative nations is necessary to invalidate current “divide and conquer” strategies. American multinational firms face a choice between transferring technology and ceding the Chinese market to competitors. The Section 301 report notes American firms are reluctant to resist unwanted

²⁶ See industry details for the Information and Communications Technology industry, available at <https://us-china-fdi.com/>.

tech transfer requests for fear of losing the Chinese market to firms that will take the deal. There is ample evidence that European and Japanese competitors also face such demands. These firms experience a “prisoner’s dilemma” in that they would be better off resisting such requests but only if they could be sure that other firms would not capitulate, an outcome they cannot insure on their own. The leading innovating nations can overcome this collective action problem by coordinating. A common platform for reporting and responding to such requests would make it more difficult for China or any other nation to play one firm off another. Once a claim of forced transfer is made by a participating nation, outward investment in these technologies would be subject to review by all parties according to a common set of criteria.

Forced technology transfer may also occur where American firms have few outside competitors. For example, in the case of cloud computing, the Section 301 report argues that without the ability to handle data flows for clients inside China, American companies are hindered in their ability to manage data flows for clients worldwide. In the absence of strong non-Chinese service providers, a refusal by American companies to engage on Chinese terms would cede the market to Chinese providers. Again, coordinated action with allies to bar Chinese service providers access to foreign markets (making them unable to serve clients worldwide), would change the payoff to China of its current restrictive policies.

Coordinated action also has the advantage of being amenable to use of traditional trade policy tools, such as anti-dumping and countervailing duties. Even in areas where WTO rules are absent or incomplete, as in certain business services, the world trading system is supported by a willingness to act in a manner consistent with non-discrimination and reciprocity.

b. Remove existing tariffs and tariff threats aimed at American allies

Tariffs recently placed by the Trump administration on washing machines, steel, and aluminum, and the ongoing threat of tariffs on motor vehicle imports create a wedge between the United States and like-minded allies.²⁷ These tariffs suggest that the United States puts its own short-term interests above all else, including a long-term coordinated response to unfair Chinese industrial policies.

It is clear that these tariffs do more harm than good. They have been in place long enough for their corrosive effect to be evident. Prices for washing machines and for steel and aluminum have risen substantially, placing pressure on employment in industries that use these goods as inputs and on households that buy final products.

Equally important, Trump administration tariffs on a wide bundle of US imports from China do little to address the constraints faced by American companies operating in China or seeking entry to the Chinese market. As I have documented elsewhere with Yang Liang, US tariffs levied under Section 301 primarily hit goods shipped from foreign-owned plants operating in China, including those of our allies. They unduly burden American-based manufacturers who rely on

²⁷ My colleagues at the Peterson Institute for International Economics, Chad Bown and Eva Zhang, show that the five sets of tariffs imposed in 2018 alone covered \$303.7 billion, or 12.6 percent, of all US imports in 2017. Detailed description can be found at <https://piie.com/blogs/trade-investment-policy-watch/measuring-trumps-2018-trade-protection-five-takeaways>.

these intermediate and capital goods to remain globally competitive. Lastly, tariffs on goods have no effect on Chinese service providers, even though American companies are facing numerous restrictions that limit competition in the ICT, finance and insurance, and professional service sectors.

c. Invest in American capacity to analyze China-US economic relations

Despite the intense scrutiny given to Chinese treatment of American firms operating in China, including that undertaken for the Section 301 report, there is much we do not know about US firms operating in China. BEA data are an important resource for researchers studying the effects of these activities on the US economy. Unfortunately, the detail they offer is insufficient for investigating many policy-relevant questions.²⁸ In particular, the surveys do not provide information about barriers that deter investment nor business conditions that affect investment returns. Particularly when investigating the profitability of US business operations abroad, these data may present a skewed impression because firms engage in international tax optimization and other strategic behaviors that influence the location of reported income.

The US government also has limited capacity to analyze Chinese trade and investment patterns. Although the US International Trade Commission was one of the first US institutions to obtain and examine detailed information on Chinese trade flows, its resources have eroded over time even as trade tensions have mounted. Similarly, the US government has limited capacity to measure and assess the level of US investment in China, barriers faced by investors, and how these conditions compare to those in other markets. Without a proper understanding of the many ways in which the American and Chinese economies are linked, it is impossible to develop policies that protect American interests while preventing unfair Chinese practices. Congress should shine a light on this strategic weakness and provide resources to build the analytical infrastructure needed for an effective response to our current challenges.

7. Benefits for the US Economy of Reducing Barriers to US Investment in China

Leveling the playing field for US affiliates operating in China will yield benefits for the US economy. Reforms will have both push and pull effects. Chinese removal of ownership caps and reductions in regulatory barriers are likely to induce more foreign investment because MNEs will be able to deploy advanced technology without fear of appropriation. Such reforms can open new sales opportunities in China for US firms that are currently blocked, especially in information technology and services.

Other reforms may decrease American investment flows, however. To the extent that China has used preferential policies to compensate investors for unwanted business restraints, such as ownership caps, industrial policy reforms will reduce the return that some firms are likely to receive through entry. Overall, however, given that American comparative advantage matches

²⁸ To fill in some informational gaps, it is necessary to supplement census data with industry surveys and public testimony or news reports. The Section 301 report itself relied heavily on less formal methods of data collection. For example, to identify Chinese practices regarding technology transfer, the USTR collected evidence from “hearing witnesses, written submissions, public reports, journal articles and other reliable sources” (Office of the United States Trade Representative, March 22, 2018, p. 19).

the areas in which Chinese barriers remain high (e.g., advanced manufacturing, ICT services, financial services, etc.), the level of American investment in China will, *ceteris paribus*, increase.

American investment in Chinese high technology goods-producing and service sectors will benefit American workers. Compared to the offshoring of labor-intensive activities in the 1990s and 2000s, reduced barriers to American foreign investment in high tech sectors are likely to largely stimulate job creation in the United States. In a recent study of offshoring, Oldenski (2012) finds that US multinationals are significantly less likely to offshore a stage of production the more intensively it uses communication tasks and the less intensively that input uses routine tasks. These findings suggest that US-based activities, such as headquarter functions, design, marketing, and research and development, will grow as the United States and its allies successfully reduce Chinese entry barriers. While new jobs in these areas will not replace manufacturing employment lost in earlier decades, they will benefit America's workers by raising the demand for labor in sectors that match US comparative advantage.

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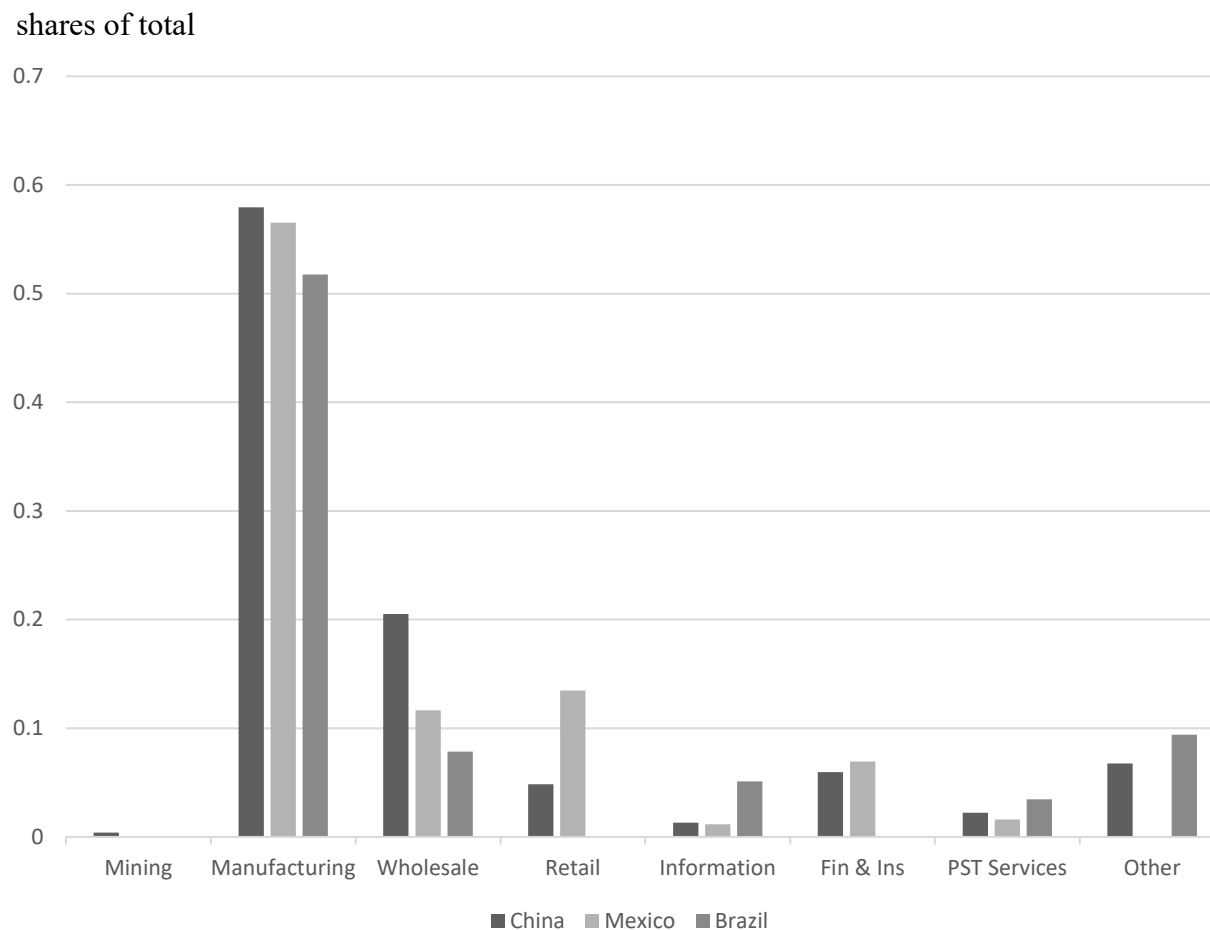
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Table 1 Chinese foreign direct investment (FDI) stock by source, 2015

Country/Region	Share of total FDI (percent)
Hong Kong, China	47.87
British Virgin Islands	8.57
Japan	5.85
Singapore	4.55
United States	4.45
Republic of Korea	3.67
Taiwan, China	3.60
Cayman Islands	1.73
Germany	1.46
Samoa	1.46
United Kingdom	1.13
Netherlands	0.89
France	0.85
Other	13.90

Source: MOFCOM (2016).

Figure 1 Distribution of US affiliate sales across affiliate industries, selected host countries, 2016

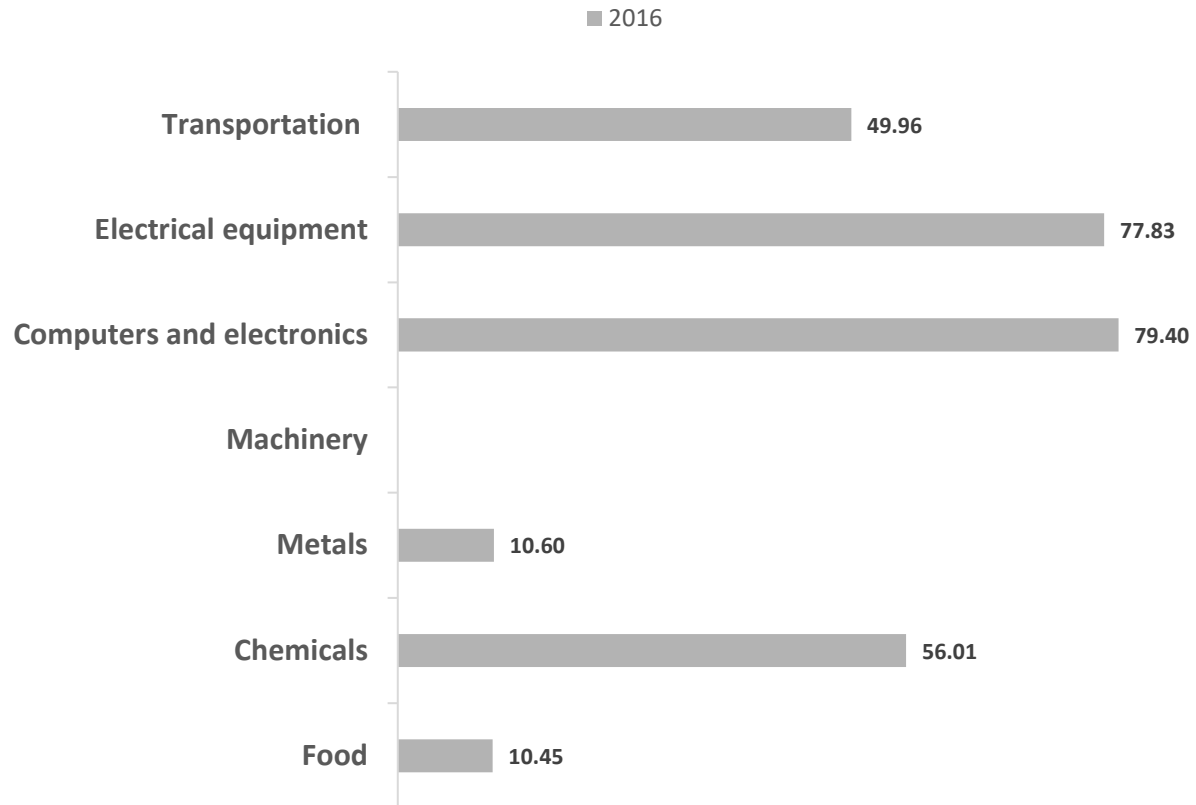


Note: For data confidentiality reasons, the BEA does not provide total sales in some sectors as indicated by a missing bar.

Source: US Bureau of Census, Bureau of Economic Analysis, US Direct Investment Abroad, and calculations by author.

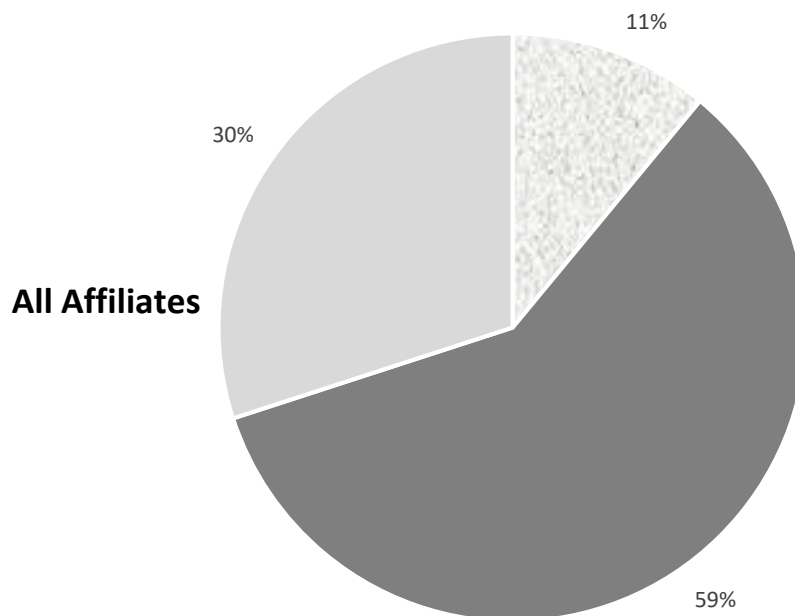
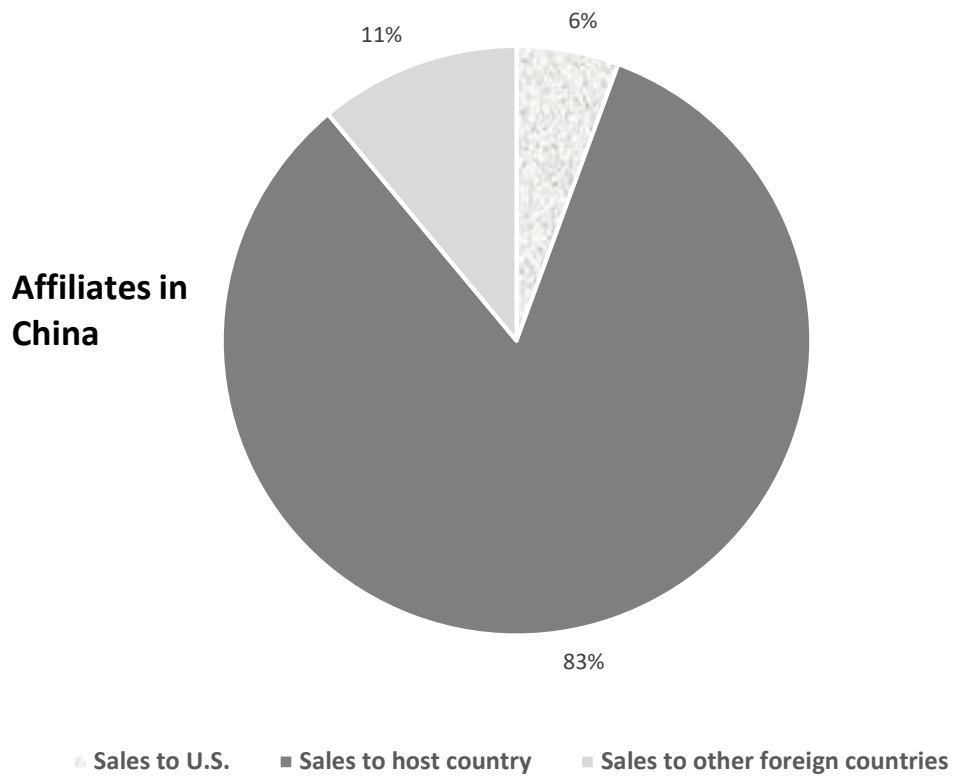
**Figure 2 Total sales of US affiliates in China by
manufacturing sector of affiliate, 2016**

(in billions of dollars)



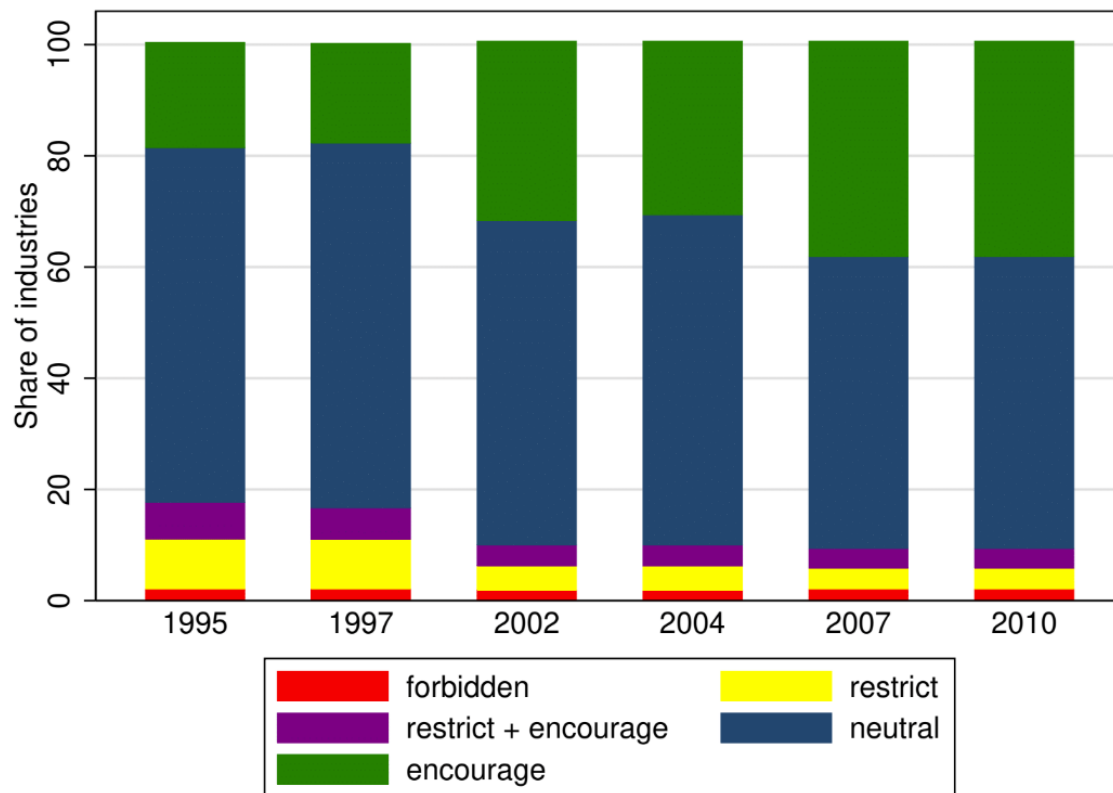
Sources: US Bureau of Census, Bureau of Economic Analysis, US Direct Investment Abroad, and calculations by author. For data confidentiality reasons, information on sales in the machinery industry is not disclosed.

Figure 3 Destination of goods and services supplied by US affiliates in China, 2016



Source: US Bureau of Census, Bureau of Economic Analysis, US Direct Investment Abroad, Table 11.E2, and calculations by author.

Figure 4 Manufacturing industries grouped by Catalogue of Foreign Investment designation, selected years



Source: Policy designation based on Standard Industrial Classification (SIC) four-digit code taken from Sheng and Yang (2016). Grouping and calculations by author.

OPENING STATEMENT OF MARK WU, HENRY L. STIMSON PROFESSOR OF LAW, HARVARD LAW SCHOOL

COMMISSIONER WESSEL: Thank you. Dr. Wu?

MR. WU: Thank you very much to the Commission for having me here this morning. I also just want to take a minute to acknowledge the dedication and hard work of the Commission staff for all the service that you do for our country.

My fellow distinguished panelists have already elaborated upon the importance of the Chinese market and the need for global cooperation beyond the economic space between the U.S. and China.

I won't elaborate on that. I think my fellow panelists have also highlighted how there are winners in the Chinese market amongst U.S. firms. That U.S. firms, especially multinationals are very much adaptable.

But there are also losers. There are harms, especially for U.S. workers. And sometimes those don't match up one to one between U.S. companies winning but U.S. workers being hurt by the adaptations being made by U.S. companies.

So, I won't elaborate upon those. But I want to make three points here this morning in my oral testimony to complement those of my written testimony. We all know there are distortions in the Chinese market.

I think Dr. Lovely highlighted an important thing is not to think of these as isolated problems. It's not an SOE problem. It's not a tech transfer problem. It's not a subsidies problem.

It's the integration of these various tools and instruments and how they're deployed. And how they're dynamically altered over time that gives rise to distortions and the pressures that our companies face.

Most importantly, this is a long-standing clash of economic systems. And it's important that we understand that, because the Chinese understand there are limitations to their model.

They understand there are weaknesses behind it. They will tweak and adjust it over time. In fact one of the strengths of their system has been their ability to do so.

But there is not an intention to align over the course of time along global norms, particularly in the cyber space. And as the Internet of Things and AI and the Fourth Industrial Revolution progresses, this clash of systems is under -- going to underscore the types of pressures that U.S. companies face in the China market.

And increasingly as China goes global, these clashes are going to extend themselves outside of China to third markets elsewhere as well.

Now my second point is, there have been a lot of distinguished panelists to come before this Commission. Experts who have suggested that what the U.S. ought to be doing is to engage multilaterally with our allies through multilateral institutions.

I don't disagree with that approach. But where I perhaps disagree with my fellow experts is in the suggestion that this is first and foremost the best strategy and it will be relatively effective in addressing the problems that U.S. companies face.

I certainly think America is stronger when we work with our friends. When we work to uphold the norms that we've built through the multilateral institutions.

But I also want to caution us that the solution is not as simple as bringing a big bold case before the WTO, whether on subsidies or on non-violation complaints around nullification impairment. It's not as simple as rejoining the CPTPP, forming a Trans-Atlantic trade partnership, and putting pressure on China that they're going to be freezed out of the global

economy.

And it's certainly not as simple as working with our allies to reform WTO rules. Granted, these all have positive effects. But, we should not be so naive to think that these will pressure the China -- the Chinese or the Chinese government to change.

Nor that there is a large coterie of reformist-minded allies who are going to latch upon these to push for reform within the system. The Chinese domestic political dynamics are very different than they were in the 1990s.

Which leads me then to my third point. Which is to say that if this is a long-standing set of tensions, these are a set of tensions that we cannot expect to solve.

They are a set of tensions that we ought to be thinking in terms of framing about how do we manage these tensions. How do we mitigate the types of clashes that we have such that we can continue to cooperate and benefit from a mutually cooperative economic and security realm.

This requires that we change our orientation within the U.S. government from a piecemeal approach towards a whole-of-government approach. And if I may use an analogy, right now it doesn't help when we're beefing up resources for USTR, for defense and intelligence, for USPTO, for Customs, when at the same time we are not doing our share to fund basic infrastructure, basic research, and we have not acted to recast the President's PCAST Commission and so forth to provide the type of basic knowledge that we need to deal with this.

If I use an analogy, it's simply like saying I buy a pass for my local rock climbing gym, but I only go on the weekends when it's convenient for me. And I break my shoulder going cross country skiing going down the bunny slope.

Which as you will have noted, is the current state of my own body. As my children will say, dad, you know you're not really dedicated. And while your friends can't quite tell yet, you know you're getting fat, you're getting lazy, and your body is breaking down.

And I think they are right. I'm sorry to say, I think they are right. They're harsh. Right? They're about to become teenagers. Any of you with girls know that I'm entering a very difficult stage of parenthood.

But, what we need to do as a country, and we owe it to our kids to do this, is to say, we need to rededicate ourselves to strengthening our core.

And in the written testimony, I elaborate just on the questions that you posed to me about what Congress can do to do that. I'm going to take just the remaining couple of minutes just to highlight a few of those.

One of those specifically for trade agreements is with China we need to make sure that there are observable metrics. That Congress monitors those metrics.

And that there is a snap back mechanism that Congress works actively with the Executive Branch to ensure that those commitments are met.

I agree completely with my fellow panelists that the biggest danger is that all the sacrifice was for naught. And that we don't get a meaningful deal.

But, it extends beyond monitoring trade agreements with China in terms of the impending trade agreements that we have with our allies. USMCA, U.S.-Japan, U.S.-EU, and so forth, we need to aggressively monitor how changes in trade flows coming out of those, particularly rules of origin, will impact global supply chains with regards to China.

And we need to ensure that the rules of origin and those agreements don't create backdoor loopholes by which Chinese firms can benefit through our preferential trade agreements, through transformations, to basically bolster their industrial policies.

That's a difficult task. At the same time we also need to make sure they're not so

stringent that U.S. firms basically ignore the preferences altogether.

Outside of the trade agreements, I highlight a number of different areas. When it comes to export controls, certainly we need to make sure that the interagency processes that came about with the 2018 act, that there is staffing provided for each of the different agencies, including Chinese language skills.

That remuneration for experts is at a level such that it becomes attractive for U.S. experts to spend a long term service towards aiding those agencies. We're not aided when we don't have the language skills along with the technical skills, and we have frequent turn over in those staffing agencies.

When it comes to dealing with what I call the egregious industrial policies, whether you're talking about outright theft, cyber-espionage, circumvention, end runs around sanctions, we need to make sure that U.S. laws not only target those who directly engage in those activities, but that the ecosystem of actors who helped to enable that, those who profit commercially from those relationships, are able to be targeted through U.S. laws.

And what I stated in my testimony, is while we do have the means by which to do so, I think it would benefit all of us for Congress to elaborate upon those through broader actions rather than relying solely upon IEEPA to do so.

I also just want to note that that targeting should include a set of financiers, board of directors, individuals, and so forth, right. Who are outright engaged in assisting those types of activities.

But finally, I just want to reiterate again, the most important thing Congress can do to aid U.S. companies to be competitive in China is to take care of things on the home front.

And it needs to do so in terms of investing in our infrastructure, and create an ecosystem that this country remains the most attractive place for talent, both homegrown and around the world, to come build businesses, innovate, and build up their families.

So, thank you very much. And I look forward to your questions.

**PREPARED STATEMENT OF MARK WU, HENRY L. STIMSON PROFESSOR OF
LAW, HARVARD LAW SCHOOL**

Testimony Before the U.S.-China Economic and Security Review Commission
Hearing on U.S. Companies in China

Mark Wu¹
February 28, 2019

I. Introduction

Thank you to the Commission for the opportunity to provide views of the policies impacting U.S. companies in China.

At the onset, I note that as a legal scholar, my research focuses on laws, regulations, policies, and other measures that impact trade and investment decisions. As my focus is not on analyzing firm-specific finances or operations, I will leave it to the other distinguished experts on the two panels to answer your questions about U.S. firms' operational structure, profitability, etc.

Much of my testimony will focus on the problems and challenges confronting U.S. companies in the Chinese market. This is because these are the issues that require the most urgent action from Congress. However, while the Chinese market poses enormous challenges for some U.S. companies, at the same time, China has represented an opportunity and boon for others. While I will not dwell on that side of the equation in this testimony, some statistics are worth noting.

In 2018, China was the largest destination market for U.S. exports outside of North America, a position that it has held since 2007. Two decades ago, in 1999, the U.S. exported only \$13.1 billion worth of goods to China, amounting to less than 2% of total U.S. exports (placing China outside of the top 10 U.S. export markets.) Barriers were so great that the U.S. exported more goods to Singapore than it did to China, even though the Chinese economy was already more than twelve times bigger than Singapore's in 1999.

Nor is it just agricultural producers and consumer goods companies that have benefited as the Chinese middle class emerges. So too have high-tech companies. Sales revenue in China already account for more than *half* of total global revenues for several S&P 500 U.S. technology companies including Broadcom, Micron Technology, Qualcomm, and Skyworks Solutions.² While I will dwell on the problems today, we ought not lose sight of the fact that some U.S. companies have made tremendous gains in the Chinese market, as positive Chinese economic policies and market reforms reap their dividends.

Nevertheless, despite some commercial gains, overall, U.S. companies continue to express dissatisfaction.³ Many feel disadvantaged or aggrieved by Chinese trade and industrial policies. All is not well in the bilateral relationship. The first part of this testimony will focus on these problems. I contend that these can be divided into three main types. First, there are a set of "classic" issues that have been at the heart of the Sino-U.S. trade negotiations and strategic economic dialogues since China's WTO accession: market access, investment restrictions, subsidies, regulatory delays, weak / inconsistent IP protection, forced/coerced technology transfer, etc. Second, there are a set of structural issues that arise out of what I and others have termed "China, Inc.," meaning a unique economic structure that was not

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² Philip van Dorn, "Apple, Nike, and 18 Other Companies Have \$158 Billion at Stake in China Trade War," *MarketWatch*, April 4, 2018. Note, however, that a sizeable proportion of those sales is likely for assembly into products destined for export, rather than for the Chinese market.

³ Trends over time can be seen in the annual survey of U.S. companies operating in China conducted by the American Chamber of Commerce.

readily anticipated when China joined the WTO. Finally, there is a category of newly emerging issues related to the digital economy. These too arise out of a unique Chinese governance structure, as applied to cyber and digital domains.

The second part of my testimony examines the efficacy of a series of traditional tools that have been used to address trade distortions in the Chinese market. These include: (a) WTO litigation; (b) working with like-minded countries to develop new rules through preferential trade agreements; and (c) working with allies to update WTO rules. While each of these tools has some utility, I explain why they also cannot be expected to solve fully the problems outlined in the first section. It is absolutely imperative that we understand the limits of these strategies – so that we have realistic expectations about what can be achieved through these approaches.

The final part of my testimony offers a series of additional recommendations for actions that the Commission ought to consider. Much as the U.S. should strive to work collaboratively with its allies to find amenable solutions, I conclude that an equally, if not more, important task is for the U.S. to bolster its own unilateral capabilities aggressively to safeguard U.S. economic security. This includes dramatically scaling up funds for innovation and basic research as well as increasing enforcement resources in various executive agencies.

II. Trade and Supply-Chain Distortions Impacting U.S. Companies

As the Commission is well aware of the wide range of trade-distorting policies employed by China in order to advance its industrial policies, I will simply highlight several key ones that I believe impact U.S. firm behavior, with negative repercussions for U.S. workers or economic security. One way to conceptualize the problem is simply as a “laundry list” of issues to be resolved across a range of sectors.

1. Tariffs and Value Added Tax (VAT) Rebates

China’s tariffs remain higher than those of many other major economies, including some that are at a comparable level of development. This creates an incentive for U.S. companies to shift manufacturing to China rather than export from the U.S. To be clear, this is only one of several drivers. Others may include lower labor costs, lower costs for regulatory compliance, a desire to base production closer to the end customer, gains from agglomeration effects, etc.

It is true that over the last few years, Chinese tariff rates have come down for certain goods. However, this is often only after China has attracted the desired investment and/or developed competitiveness in the sector. For example, in 2015, China lowered tariffs for categories of shoes, outerwear, and consumer goods where China was already an export power.⁴ In recent months, China has lowered automobile tariffs. Again, this is happening only years after all major U.S. auto companies have already set up joint ventures (JVs) and shifted production to China.

With much of the focus on tariffs, an often overlooked element of Chinese industrial policy is its use of value-added tax (VAT) rebates. WTO rules permit countries to impose a VAT on imports. China applies a 16% VAT on most imported U.S. goods and services, with the exception of a few categories that are exempt or subject to a lower 6-10% rate. Many countries will refund the full VAT upon export, but this is not required. China therefore can manipulate the VAT rebate rate in order to induce companies to produce in China rather than import the product from abroad. Of concern is the pressure this may place on U.S. companies that currently export high-value intermediate goods (*e.g.*, semiconductors) to offshore production of such goods to China instead. This tool can be especially effective if the downstream parts

⁴ Tom Mitchell, “China Slashes Tariffs on a Range of Consumer Goods,” *Financial Times*, June 1, 2015.

of the manufacturing supply chain have already clustered in China, but China hopes to acquire greater indigenous production capability in the more valuable upstream portions of the supply chain.

VAT exemptions and VAT rebates can also be manipulated to develop domestic capacity at the expense of U.S. firms. Nor is it just high-tech or value-added inputs that are affected. An example is phosphate fertilizers. For years, China exempted certain, but not all, phosphate fertilizers from the VAT. This dichotomy was instituted to bolster the competitiveness of domestically-produced substitutes for U.S.-made imports. In 2015, China once again changed its fertilizer VAT policies in order “to optimize the agricultural production investment structure.”⁵ After years of rapid double-digit growth, U.S. exports of phosphate fertilizers peaked at \$43.6 million in 2012; they have since plummeted to \$2.5 million in 2016 and less than \$3,000 in 2017.⁶ This example illustrates how VAT exemption and VAT rebate policies can quickly transform what once seemed to be a very promising export market for U.S. companies into one which is now dominated by Chinese producers.

2. Investment Restrictions and Subsidies

Also well-documented is China’s aggressive use of subsidies and investment restrictions. The negative impact on U.S. companies and workers is straightforward. Subsidies prop up Chinese competitors, providing them with an unfair advantage both domestically and overseas. Examples of sectors affected include steel, aluminum, semiconductors, fisheries, renewable technologies, etc. Investment restrictions keep foreign firms out or limits them, allowing Chinese competitors to capture the lion’s share of the market. Examples of sectors affected include agriculture, automotive, cloud computing, entertainment and video services, extractive industries, film-related services, financial services, telecommunications services, etc.

Subsidies are used not just to bolster Chinese companies at the expense of foreign firms. They can also be used to provide an incentive for foreign multinationals to invest in China and offshore production. These programs are not always transparent and can be provided by different levels of government (central, provincial, municipal, etc.). By imposing a cap on the permissible equity stake of a foreign firm, the investment restriction will force a U.S. producer to engage in some form of a joint venture as the price of participation in the Chinese market. An explicit condition may be that the Chinese partner must have greater than 50% equity stake, thereby allowing it to retain control over the operation. Examples of sectors that have been affected by this requirement are aircraft, film-related services, financial services, and market research services.

One of the questions posed by the Commission is whether the market environment has improved over the past five years. As far as investment restrictions are concerned, the answer is yes. Chinese government has committed to easing investment restrictions, including lifting the equity cap on participation in several sectors. The most recent example is the 2018 announcement that China will ease or lift ownership limits for automobile, insurance, and several other sectors, as indicated in the revised negative list issued by the National Reform and Development Commission.

However, it is important to keep three points in mind when analyzing this trend:

- Investment restrictions decrease primarily in one of two circumstances: (1) The Chinese market has matured; Chinese firms have already established competitiveness; and the industrial policy

⁵ “New Chinese Fertilizer VAT to Have Limited Industry Impact,” *Fastmarkets IM*, August 27, 2015 (quoting a Ministry of Finance announcement).

⁶ This is based on an analysis of HS-code 3103 of the UN Comtrade database compiling data from Chinese figures. Between 2008 and 2012, Chinese imports of phosphate fertilizer grew at a compound annual growth rate of 73%.

objectives are accomplished; or (2) Market reform efforts have stalled; and policymakers deem a fresh injection of foreign competition to be necessary to spur further reform.

- Despite the positive direction of these changes, China remains an outlier among large emerging economies. According to the OECD Foreign Direct Investment (FDI) Restrictiveness Index, Chinese restrictions are significantly higher than those faced by foreign firms in Brazil, India, South Africa, Argentina and Vietnam. Among G20 countries, only Indonesia and Saudi Arabia are comparable.
- The lifting of such restrictions may be staged over time. These transition periods provide time for domestic Chinese firms to adjust and limits the economic benefits to U.S. companies.

While investment curbs may exist on one part of the supply chain, subsidies may exist on another part in order to induce the greater movement of foreign production and technology than would otherwise be the case. The goal is to embed a significant portion of the overarching ecosystem that underlies the supply chain within China, so as to position China to become a market leader in portions, if not all, of that supply chain.

The automotive sector serves as an illustrative example for how this strategy works and its impact. Until the recent 2018 announcement, U.S. and other foreign car companies have faced ownership curbs on their foreign investment in China, requiring that they engage in joint ventures with Chinese car manufacturers. Leveraging its large domestic market with a combination of high tariffs and lower costs, China induced many U.S. and foreign car companies to set up manufacturing facilities in China. At the same time that FDI in the production of complete automobiles was “restricted,” Chinese planning authorities placed FDI in auto engines and auto parts into the “encouraged” category. China offered subsidies to induce upstream parts manufacturers to offshore production to China.⁷ It then enacted a series of policies served to create incentives for these ventures to source parts domestically from China rather than import them from overseas.⁸

The net result is that a much greater portion of the automotive supply chain shifted to China, with upstream U.S. workers paying the price. While China has yet to emerge as a major global player in finished automobiles, this industrial policy has allowed China to become a major player in auto parts. Whereas U.S. car manufacturers once imported their parts from U.S.-based parts suppliers to supply their joint ventures, they have increasingly de-linked from North American sources and now source their parts directly from China.⁹ Instead of conceding this market to Chinese upstarts, some U.S. auto parts companies have followed by establishing and expanding production facilities in China. For example, shortly after Goodyear closed its Tennessee factory in 2011, it opened a production facility in Dalian; in 2016, Goodyear announced plans to expand its factory significantly by 2020.¹⁰ Very quickly, a reversal in trade flows for auto parts has happened. North American auto supply chains increasingly source a greater percentage of their parts from China than was the case more than a decade ago. In each of the last five years, the U.S. has consistently imported approximately five to seven dollars’ worth of Chinese auto parts for every dollar of auto parts exported from the U.S. to China.¹¹

⁷ For a description of these subsidy programs and their overall impact, see Usha Haley, *Putting the Pedal to the Metal*, Economic Policy Institute, Jan. 31, 2012.

⁸ These additional measures have been at the heart of several WTO disputes, including *China – Measures Affecting the Import of Auto Parts* (DS 339, 340, and 342), filed in 2006 by the U.S., Canada, and EU, and *China – Certain Measures Affecting the Automobile and Automobile Parts Industry* (DS 450).

⁹ The 2004 International Trade Administration staff reports noted that at the time, General Motors imported more auto parts into China than it exported but had plans to reverse

¹⁰ See Goodyear News Release, Nov. 2, 2016, <https://corporate.goodyear.com/en-US/media/news/goodyear-expands-tire-factory-in-china.html>.

¹¹ This is based on data reported by the Department of Commerce’s International Trade Administration on the balance of trade in auto parts with various countries for the period of 2012 to 2017. The OECD-WTO Trade in Value-Added database does not break out for

Importantly, these industrial policies have not only undermined the U.S. auto parts industry but also enabled China to position itself to become a leader in next-generation electric vehicles (EV). To be clear, this is not the only reason; China has also undertaken much greater infrastructure investments to spur the development of a nascent EV market. In response, several U.S. auto parts companies are scaling up their investments in China, as opposed to the U.S. or North America. For example, BorgWarner is expanding its Wuhan production factory for motors, starters, alternators, and other components for propulsion systems for EVs and hybrid EVs.¹² Dana is repurposing a factory in Yancheng to manufacture thermal management solutions and battery cool plates for EVs.¹³

It is difficult to judge the exact overall impact of these policies on U.S. companies and workers. In their absence, it is likely that a sizeable proportion of U.S. firms would have shifted production overseas anyway to take advantage of lower labor costs, etc. What these policies are likely to have distorted is the pace of such shifts and their distributional impact. They are likely to have created incentives for various U.S. companies to shift more of their production to China (as opposed to Mexico) sooner and to enjoy lesser gains than they would have otherwise reaped without JV requirements. In other words, they create an artificial “price to play” in order to try to reap sales and profits from the growing Chinese market. For the U.S. workers, these distortions are likely to have accelerated the decline in manufacturing jobs, with the impacts concentrated in certain geographic regions of the U.S.

3. Export Restrictions

Over the past decade, China has enacted a series of export bans, quotas, and taxes on a wide range of inputs. From an industrial policy standpoint, the aim is to create a price wedge and supply uncertainty, so as to induce downstream firms to relocate production to China. Several of the products for which Chinese planners have imposed export restrictions those that are necessary in high-tech supply chains (*e.g.*, rare earth minerals, antimony, bauxite, cobalt, coke, fluorspar, graphite, tungsten, etc.). These export restrictions have given rise to several WTO cases challenging Chinese export restrictions, all of which have resulted in U.S. litigation victories or the removal of the export restraints prior to the litigation’s completion.

These export restrictions have affected a range of U.S. manufacturing industries, including aerospace, automobiles, EVs, medical equipment, and semiconductors. Again, while it is hard to judge the exact impact that these restrictions may have had on investment decisions, what is clear is that in each of these sectors, American companies have increased their FDI and China-based manufacturing. Export restrictions act as yet another distortive instrument to bolster the competitiveness of downstream Chinese producers and to induce shift of manufacturing toward China.

4. Regulatory Approval Delays

Even when China has agreed to open up a market formally, delays in regulatory approval can negatively impact the ability of U.S. and other foreign firms to gain actual access to the Chinese market. Two examples follow: In 2017, China agreed to remove restrictions on foreign payment providers from being able to process renminbi payments, a highly lucrative market. However, both Visa and Mastercard have yet to receive formal approval from the People’s Bank of China to do so.¹⁴ During the decade-long battle,

auto parts, but a general examination of the trade for motor vehicles shows that even only if value-added trade is considered, there has been a dramatic shift, due to offshoring of U.S. production.

¹² See BorgWarner Press Release, Oct. 8, 2018, <https://www.borgwarner.com/newsroom/press-releases/2018/10/08/borgwarner-opens-new-plant-in-wuhan-significantly-expanding-propulsion-system-capability-and-capacity-for-hybrid-and-electric-vehicles>.

¹³ See Dana, Inc. News Release as reported on PR Newswire, May 23, 2018, <https://www.prnewswire.com/news-releases/dana-inaugurates-new-facility-to-support-automakers-with-thermal-management-and-new-energy-solutions-in-yancheng-china-300653295.html>

¹⁴ Gabriel Wildau, “China’s Central Bank Delays Market Entry for Visa and Mastercard,” *Financial Times*, Jan. 13, 2019.

China's Unionpay has leveraged its dominant position in the domestic market to become a formidable global competitor. In agriculture, despite discussion and commitments at numerous bilateral meetings, U.S. agricultural products derived from biotechnology continue to face frustrating delays in regulatory approval.¹⁵ Once again, they are left on the sidelines while Chinese firms are given time to gradually increasing their own ability to compete in agricultural biotechnology.

5. Intellectual Property

Finally, much attention has been given to how various issues concerning technology transfer and intellectual property are of concern to U.S. companies in the Chinese market. These cover a wide range of practices, from outright intellectual property theft to inconsistent enforcement of IP laws to pressure to enter into JVs. Again, as the Commission has already heard from several leading experts in previous hearings, I will not engage in extensive discussion about the details of such practices. I simply note that while there has been progress in the creation of IP laws and specialized IP courts, the problem is still severe. In the American Chamber of Commerce's 2018 Business Climate Survey, more than half of U.S. member companies still believe that IP leakage and data security threats are higher in China than elsewhere. Inadequate IP enforcement and pressure to transfer technology remain an important issue of concern for U.S. companies seeking to operate in China.

III. The “China, Inc.” Challenge: How China's Unique Economic Structure Makes Resolving These Trade-Distortive Practices Much More Difficult

It is a mistake to believe that the solution to resolving this “laundry list” of issues is as simple as creating a “laundry list” of new legally-binding commitments to address each of the concerns, to be captured in a bilateral agreement or new WTO rules. What is important to understand is that China's unique economic structure renders such an approach inadequate to fixing the problem.

In my academic work, I have suggested that six elements make China's economic structure different than that of any other economy. Any of these individual elements might be found in another country, but it is how the combination of these six elements operate in tandem that makes China unique. Together, they give rise to “China, Inc.”

- First, the Party-state retains control over the “commanding heights” of the Chinese economy through the State-owned Assets Supervision and Administration Commission (SASAC). This includes China's aerospace, aviation, chemicals, energy, metals, minerals, nuclear, petroleum, power, railway, steel, shipbuilding, and telecommunications companies – in short, all of the key components that underlie the economy. This structure is then replicated from the central government level down to the provincial and municipal level. The equivalent would be if the U.S. government had one holding entity that allowed it retain control over Boeing, Dow Chemicals, Duke Energy, General Electric, United Technologies, Honeywell, US Steel, American, United, Delta, Verizon, AT&T, Sprint, ExxonMobil, Chevron, Amtrak, etc.

The Party-state uses its control over these key assets to direct its industrial policies. At the same time, Chinese policymakers have been careful not to allow these companies ossify into rent-seeking “national champions” that gradually lose competitiveness. To do so, SASAC ensures that there is competition among its holding companies and between its holding companies and non-SASAC firms. There is no guarantee that the state-owned enterprise will prevail over private companies. Indeed for much of the reform era, private companies have outperformed state-owned

¹⁵ As the various sources of frustration were discussed in detail during the Commission's hearing on China's agricultural policies held on April 26, 2018, I will not elaborate upon them here.

enterprises and been responsible for driving a large proportion of China's rapid economic growth. The degree of interference by the Party-state will vary depending on the necessity for intervention if a firm behavior deviates from the Party-state's interests. Traditionally, policymakers have recognized the important role to be played by market forces and competition to shape the economy's development and embarked on sequential economic reforms as necessary. Whether or not this approach has changed in the Xi era is open to debate.

- Second, the Party-state retains control over the Chinese financial sector by maintaining significant ownership stakes in China's most important banks. This is done through various financial vehicles that are separate from SASAC. The control extends beyond the "Big Four" banks, which are among the world's largest, to include leading regional institutions. The exact structure of ownership and control will vary by financial institution, but the important point is that once again, the Party-state can direct resources to serve its interests as necessary that well exceeds that of any other major government. Also, once again, it has set up a structure to allow for competition and market forces to play a role, without ceding control.
- Third, there are entities that shape an overarching plan to guide the economy. This includes the traditional planning agency, the National Development and Reform Commission (NDRC). In the Xi era, it also includes the Central Financial and Economic Affairs Commission of the Communist Party.¹⁶ Both have much broader and greater powers than planning agencies to be found in most countries.
- Fourth, there are relatively nimble formal or informal networks that are much smaller in scale than other Asian conglomerates (*e.g.*, Korean *chaebol* or Japanese *keiretsu*). Nevertheless, they allow firms to achieve synergies.
- Fifth, the Party's Organizational Bureau retains control over top-level appointments. Individuals compete to advance, but the Party considers a much broader set of metrics to measure performance beyond shareholder value that includes the ability to accomplish Party objectives. Moreover, promising individuals rotate through a series of roles to ensure that they gain relevant experience while preventing them from being captured by special interests.
- Sixth, as private entities succeed, the Party may seek to co-opt them by taking out a financial stake or inviting the business leaders to join the Party and/or take on positions of responsibility. Moreover, entities with three or more Party members, including private and foreign ones, are required to have an operating Party cell. This allows the Party to retain some degree of oversight over private entities that it does not control.

The combination of these six elements give rise to an economy that, on the one hand, remains extremely sensitive to the Party-state's interests, while on the other hand, can still spark competition and innovation to allow Chinese firms to move up the value chain. It involves both state interference and market forces, with the exact balance between the two vacillating over time. To prevent overt capture by any special interest or faction, traditionally, it has involved some internal checks-and-balances along with a sense of meritocratic competition, but both mechanisms operating within the confines of the Communist Party rather than the state.

This structure provides the Party-state with a powerful set of mechanisms to marshal resources in advance of a set of desired goals. When deployed effectively, it can achieve impressive economic results,

¹⁶ Members of this Commission include the NDRC director, the Minister of Finance, the Minister of Industry and Information Technology, the central bank governor, and several other leading officials.

by overcoming market failures and allowing for an integrated, long-term strategy. However, it also carries with it the risk of spectacular collapse if deployed ineffectively, since the impact of mistakes, if not caught early enough, are compounded and magnified. As I see it, much of the contemporary debate over the course of the U.S.'s strategy toward a rising China reflects a debate over whether this structure is bound to stumble in the long-run or not.

All companies in China – whether state-owned or private, domestic or foreign – operate in the shadow of this overarching “China, Inc.” structure. To succeed, one must be sensitive to Party-state’s interest. Herein lies the “China, Inc.” problem.

Even if the U.S. is able to manage a formal commitment from the Chinese government itself that it will not engage in a particular practice, there is no guarantee that other related entities will not do so. In other words, the “China, Inc.” structure provides the Party-state with various informal mechanisms to indirectly carry out a particular industrial policy that harms U.S. companies, even if there is no formal directive. It allows the government, on the one hand, to proclaim formal innocence, while on the other hand, still accomplishing what it seeks.

The tensions over technology transfer helps to illustrate this point. In acceding to the WTO, China undertook a clear and binding commitment that it would not link import rights or investment to the transfer of technology, export performance, or the conduct of research and development in China.¹⁷ Were it to do so, China’s trading partners could bring a case alleging a violation and impose retaliatory sanctions if such conditionality were not dropped.

In the 2018 AmCham survey, one in five U.S. companies surveyed said that they faced pressure to transfer technology to Chinese partners. The percentage of such firms was much higher in aerospace (44%) and chemicals (41%). Chinese government officials, however, dismiss such pressure as indicative of forced technology transfer, arguing that they have never directly pressured U.S. firms to do so.

Why is it that despite an explicit WTO law prohibiting the conditionality of import rights or investment approval on technology transfer, backed up with the power of authorized retaliatory sanctions, U.S. firms still face such pressures? And why, if such pressures are genuine, have foreign governments not brought more WTO cases against China on technology transfer?

To bring a suit requires that there be some actual evidence that there was such a demand for technology transfer placed on a foreign firm. There may very well have been some actual cases of such demands being issued, but firms are reluctant to come forward out of fear of future retaliation. However, the “China, Inc.” structure makes it possible that there was no such explicit demand, but rather implicit pressure that arose out of structural pressures.

For example, consider aircraft, a major U.S. export. The major consumers are state-owned airlines. Or consider medical equipment, another major U.S. export. The major consumers are a mix of public and private hospitals, but even the latter will require government licenses and may be reliant on financing from banks. In both instances, the government may never request the U.S. firm to shift production to China, establish a joint venture, or transfer technology. But the corporate consumers making the purchases know that they will be looked upon more favorably if they buy from suppliers whose behavior more closely aligns with the expressed goals of the government to increase Chinese manufacturing value in the sector. At the same time, they will be hesitant to sacrifice quality. Market forces remain at work, but the degree to which they dominate depends on the dynamics of the sector.

¹⁷ Protocol on the Accession of the People’s Republic of China, para. 7.3.

Foreign firms are caught in a collective action problem. If all are able to resist the temptation to shift production and technology to China, then they can resist the pressure. But if one defects, then that firm can capture outsized gains from being a first mover. Downstream consumers with some link to the Party-state are likely to reward it with more purchases of its aircraft, medical equipment, etc., even if purchasers were never instructed explicitly to do so. Thus, the foreign firm feels some form of implicit pressure. It is faced with what game theorists call a prisoners' dilemma. If it resists but its other foreign competitors do not, it will be left worse off because it will have yielded the large and growing Chinese market to its competitors. This sparks a potential race-to-the-bottom, with offshoring to China and the transfer of technology to JV partners. Whether this is simply a business decision made in the pursuit of profits and markets (as Chinese negotiators assert) or cajoled/forced by government policies, depends on one's perspective.

The aviation industry provides clear examples of this dynamic at work. Boeing and Airbus have both increased their footprint in China. For nearly a decade, Airbus has manufactured its narrow-body A320s outside Tianjin for nearly a decade; it recently announced that the facility would be expanded to include finishing for its A330s and that it would open an innovation center in Shenzhen.¹⁸ Boeing had been more reluctant to shift production to China. Boeing suffered the consequences as Chinese aircraft purchases tilted toward Airbus. In December 2018, Boeing responded by opening its first 737 finishing facility outside Shanghai. Meanwhile, Chinese authorities continue to pressure Airbus to produce more in China, by slowing down the regulatory approval process for its newer models.¹⁹ Both firms are betting that they can manage to innovate at a faster pace and control the flow of technology transfer successfully in order to prevent the Chinese domestic upstart (*i.e.*, Comac) from becoming a major competitor. Meanwhile, upstream aircraft parts manufacturers have already set up JVs in China, anticipating growing demand and the shift of downstream players.

What I hope to make clear is that the difficulties confronting U.S. companies in China are not simply on account of a "laundry list" of problems. They run deeper. Problems arise because of China's unique economic structure. Therefore, a "laundry list" of commitments to make additional purchases, lower investment restrictions, enact new laws, etc. against trade-distorting problems is only likely to have limited effect. They may assuage problems for a while. However, as long as the "China, Inc." structure remains in place, the impact of such commitments will be limited. The long shadow that the Party-state casts over China's economic structure will continue to influence behaviors of both state and private actors in the Chinese economy.

Given that the tentacles of "China, Inc." extend wide and deep, the possibility remains that foreign firms can and will be manipulated through a variety of policies in order to advance industrial policy interests. That is not to say that they always will. As I noted in the opening section, while some foreign companies express legitimate and deep-seated complaints, others are thriving. Nor is this structure static. The success of China's economic reforms to date is due, in large part, to the open-minded willingness of its leaders to adapt the economic governance model as China's economic needs evolve. This leaves open the possibility of positive structural reforms.

At the same time, we ought to be realistic. While the Chinese leadership will seek further reforms of "China, Inc." on its own, there are sharp limits to how far and how fast it will go. At best, structural reforms will be incremental. After all, many view the economic governance model as critical to the Party's desire to balance the goals of fostering dynamic growth, maintaining political control, and addressing negative market externalities.

¹⁸ "Boeing to Open Its First 737 Plant in China Under Shadow of a Trade War," *Bloomberg*, Dec. 13, 2018.

¹⁹ Jon Ostrower, "Airbus Built a Lot of Planes for China Last Year – But Can't Deliver Them," *CNN Business*, Jan. 13, 2018.

Profound differences are likely to remain for the foreseeable future, arising out of these competing models of economic governance. Against this backdrop, we ought to abandon any pretense that commitments obtained in a trade agreement can solve problems once and for all. They are simply a tool for managing and dialing back the problems that arise.

IV. Digital Protectionism: Tensions Emerging From the Governance of “China.com”

The likely persistence of differences becomes even clearer when the digital domain is concerned. Although the major Chinese internet companies are all private firms, the tentacles of “China, Inc.” nevertheless extend deeply into “China.com.”

- Chinese telecommunications companies, operated by SASAC, control the cables and infrastructure underlying the Chinese internet.
- The Party-state itself and/or financial services companies with ties to the Party-state control the payment mechanisms on which e-commerce depends.
- Chinese banks and venture capital funds with ties to the Party-state, supply much of the capital necessary to finance start-ups and internet activity. These include specialized funds targeted at the development of particular technologies (*e.g.*, artificial intelligence (AI)) or general funds.
- Coordination and planning agencies issue plans to guide the development of the Internet of Things (IoT), AI, and other key emerging sectors. These include the Central Cyberspace Affairs Commission and the Cyberspace Administration of China.
- Linkages, both through formal ownership stakes as well as informal ties, exist between the major Chinese internet giants, “unicorns” (privately-held companies valued above \$1B), and government-related entities at a level well beyond that found in the U.S. market.

The Chinese internet operates by a set of rules and regulations that are different from those in the rest of the world. In addition to the so-called Great Firewall, there is an elaborate system of heavy-handed content controls along with Party-state oversight of the critical components of each layer of the internet ecosystem. While “China.com” remains porous enough to allow for information flows and collaboration across borders, it rejects the open, interoperable, stakeholder-driven model of the internet that is dominant in the West. Instead, China favors an internet governance model with closer collaboration between the state and private players and with greater emphasis on cyber-sovereignty.

There are parallels between the physical domain of “China, Inc.” and the digital domain of “China.com,” but also important differences. One similarity is that “China.com” is also structured to balance and achieve multiple interests of the Party-state. These include fostering innovation and growth, maintaining political control, and guarding against cybersecurity threats. However, the Party-state plays less of a direct role in the daily operations of China’s internet giants than it does with industrial giants; it also does not exert control over appointments in the internet giants as it does with SASAC firms. In both domains, however, state-led industrial policy is at the heart of a unique economic structure and governance model.

Through the growth of the Internet of Things (IoT) and data-driven analytics, the digital and physical domains will increasingly intersect. As they do, the various restrictions placed on the digital domain will have greater negative spillover effects for a broader array of American companies operating in China. These include concerns over requirements for data localization, restrictions on the cross-border transfer of data, mandatory source code disclosure for regulatory review, content controls and censorship, etc. For critical digital sectors (*e.g.*, cloud computing), the government will use a similar array of policy instruments – *i.e.*, investment restrictions, regulatory approval delays, subsidies, etc. – to direct outcomes to favor its interests.

Altogether, this gives rise to yet another set of major distortions for a broad array of U.S. internet, cloud computing, digital services, data analytics and e-commerce companies already operating or hoping to operate in the Chinese market. Some U.S. companies find themselves shut out altogether because their services are prohibited or because they refuse to comply with strict Chinese content controls. Other American companies acquiesce to the investment restrictions in order to gain a toehold in the rapidly-growing market, out of fear that if they do not, they will cede the market to competitors. For example, both Microsoft and IBM have entered into partnerships with Chinese cloud computing companies because investment restrictions prevent them from operating independently. Still others attempt to curry favor with influential agencies through research investments. For example, Dell formed an AI lab with the Chinese Academy of Sciences in 2015. Were the Chinese digital domain not subject to such distortions, it is questionable whether U.S. firms would have chosen to make these moves.

Chinese policymakers are determined to capture the opportunities associated with the next wave of transformative technologies to catapult both “China, Inc.” and “China.com” ahead. Despite the enormous gains made by the Chinese economy over the past four decades, Chinese companies in traditional industrial manufacturing sectors still depend on Western and U.S. high-tech inputs (*e.g.*, semiconductors). Recent incidents with ZTE and Huawei have highlighted how vulnerable Chinese firms remain to U.S. pressure. Chinese policymakers are determined to reduce their vulnerability with the coming Fourth Industrial Revolution. China, therefore, will deploy enormous resources while seeking to leverage its scale to attract foreign capital and know-how related for core technologies, such as quantum computing and AI. At the same time, they will keep the Chinese digital domain relatively closed to nurture its own companies and carefully develop its controlled ecosystem.

Whether this form of digital protectionism will ultimately succeed remains to be seen. What is clear is that the industrial policy leveraging “China, Inc.” to support the development of “China.com” has yielded more impressive results than most expected a decade ago. For the foreseeable future, this has given Chinese policymakers the confidence necessary to proceed with their digital industrial policies and their alternative approach to internet governance.²⁰ Profound differences therefore are also likely to remain for the foreseeable future in the digital realm. Again, trade agreements are simply a tool to manage and dial back the sources of tensions but cannot be expected to eliminate these problems once and for all.

V. Why Multilateral and Alliance-Based Approaches are Likely to Yield Only Limited Results

Several experts, whether through prior Commission testimony or in other public reports, have emphasized the need for the U.S. to return to WTO litigation and alliance-based approaches to counter Chinese practices. I share the overall view. America is much more likely to push back effectively against problematic Chinese practices working through institutional structures and with like-minded countries collectively to exert pressure on China than in going at it alone.

Where I perhaps differ, however, is in my assessment of how much can be achieved through these approaches. Some have suggested that a coalition of G7 countries can push China to embrace new rules and norms, by cajoling China eventually to sign on to regional trade agreements such as the Comprehensive and Progressive Agreement for the Trans-Pacific Partnership (CPTPP) and/or WTO plurilateral agreement(s). I am dubious that this will be the case. There are strong merits to embrace such an approach for reasons related to our strategic alliances, norms construction in international law, etc. But we ought to be realistic about the fact that they are unlikely to achieve dramatic reform of “China, Inc.”

²⁰ In addition, there are some signs that China may be trying to spread certain norms associated with its governance approach to other developing countries. See Sam Sacks, “Beijing Wants to Rewrite the Rules of the Internet,” *Atlantic*, June 18, 2018.

China will embrace new rules when Chinese policymakers deem it to be their domestic reform interests to do so. However, they need not do so wholesale, but can do so in a piecemeal fashion. Intra-Party dynamics have changed dramatically since the late 1990s. Even pro-reformers within the Party will not find it politically useful to latch onto a treaty to push a reform agenda, as was the case with WTO accession.

In short, we ought not deceive ourselves into thinking that tackling the “China, Inc.” challenge is as simple as just returning to the pre-Trump era policies of combining WTO litigation with new regional trade agreements. This section explains why.

1. WTO Litigation is Likely to Be of Only Limited Use

In an academic article, I suggested that WTO cases are effective only against a limited range of problematic Chinese trade practices. Importantly, existing WTO rules were not written with China’s unique economic structure in mind. Moreover, they were developed prior to the rise of digital trade. Therefore, while the U.S. ought to devote resources to WTO litigation, there are limits to how much can be achieved because the law itself is outdated.²¹

Even where the law makes clear that a practice is illegal, WTO law does not provide for retrospective remedies. In other words, there is no way to receive restitution for the harm arising out of the illegal activity, as is the case in domestic law or international commercial arbitration. Therefore, WTO members can exploit a “free pass” to breach for a limited period of time and consolidate the gains that it receives during the period. China has effectively taken advantage of this loophole in the remedies provided under WTO law to advance its industrial policies. A clear example is in the case of illegal export restrictions, where the U.S. and its allies prevailed in two different WTO cases. Yet, China continued to implement additional export restrictions because this would advantage downstream firms and shift investment patterns temporarily. By the time China acquiesces in the wake of WTO litigation, “China, Inc.” has already consolidated the desired benefits from the export restrictions, which WTO law is powerless to dislodge.

The Commission has recommended that the Office of the U.S. Trade Representative should work with allies to bring a “non-violation, nullification and impairment” (NVNI) case to address Chinese practices not explicitly deemed illegal. This is an ambitious approach which has not been tested for matters of this scale. The Commission should realize that several roadblocks stand in the way of this approach, which I will elaborate upon only in brief. First, the resources necessary to acquire the proof to meet the evidentiary burden to demonstrate such a claim are rather large. Second, not only must the U.S. cajole its firms (and/or intelligence officials) to provide this evidence, it will also need to convince allies to do the same. Third, the case will require at least three years to prepare and litigate before it bears any fruit. Finally, the U.S. will only be able to retaliate if the U.S. lifts its current blockage of WTO Appellate Body appointments. All this is not to suggest that a NVNI case against China with allies is not worth undertaking. It is simply to caution that the Commission ought not put too much weight on a NVNI case as the primary tool to achieve a comprehensive solution to problems arising out Chinese market distortions.

2. CPTPP is Unlikely to Change China’s Practices in the Medium-Term

Some have suggested that the U.S. ought to consider joining CPTPP and negotiating a trans-Atlantic trade agreement as a means of instilling fear in China that it will be disadvantaged in its key export markets

²¹ For a more elaborate discussion of this argument, see Mark Wu, “The ‘China, Inc.’ Challenge to Global Trade Governance,” *Harvard International Law Journal* (2016).

unless it signs on to the new norms addressing state-owned enterprises, digital trade, etc. in these agreements. My research suggests that this strategy is unlikely to work.²²

There are three reasons why this is the case. First, Chinese firms are already so deeply enmeshed in global supply chains where the inputs they supply fall largely into tariff lines for which the U.S., EU, Japan, and others have made binding commitments to keep tariffs low. Thus, the additional advantage that CPTPP countries gain over China is minimal and unlikely to induce FDI shifts, unless the U.S. and/or others undertake additional steps to raise tariffs on these categories.

Second, the products where Chinese firms would be placed at a competitive disadvantage are largely in industries such as textiles and shoes from which China is already trying to shift production. China is unlikely to agree to undertake fundamental reform of its economic system simply to save these sunset industries.

Third, at least for the CPTPP, the current rules of origin (ROOs) for autos and textiles are written in a way that provides loopholes for Chinese firms to exploit without formally joining the agreement. For example, the CPTPP contains lower ROO thresholds for autos and auto parts as compared to NAFTA or the new USMCA. Should the U.S. rejoin the CPTPP and the existing ROOs remain in place, it may ironically end up benefiting Chinese auto parts manufacturers, even if China does not join, since downstream car manufacturers can shift away from North America suppliers to buy a greater share of Chinese-made parts up to a certain point without risking the loss of preferential tariffs.

Collectively, this means that the economic cost of remaining outside of CPTPP is not sufficiently high enough to compel China to seek to join. Pro-reformers in China can simply adopt the positive elements of CPTPP that they like unilaterally while avoiding those elements that are more politically sensitive (such as rules impacting data governance). As noted above, there may be good reasons for the U.S. to consider joining the CPTPP for strategic and alliance-building purposes, independent of its effect on China. But we ought to free ourselves from the illusion that CPTPP plus a trans-Atlantic deal will exert enough pressure on China to cause it to undertake fundamental reform of “China, Inc.” and “China.com.” It will not.

3. WTO Reform is Unlikely to Deliver Fundamental Changes in WTO Rules to Curb Chinese Practices

The same is true of working within the confines of the WTO to shape new rules to address trade-distorting Chinese practices. It too is unlikely to yield major results. The problems are two-fold.

First, the process itself is time-consuming. Even if issues are rendered manageable by dividing them across a scope of plurilateral agreements led by G7 countries, it may take several years for negotiating parties to agree upon the exact treaty language. The strength of commitments for sensitive issues such as data localization are likely to be diluted as negotiators compromise. And as already noted, the system has incomplete remedies to enforce such commitments.

Second, and more importantly, the U.S. and its allies are no longer in a position where it can impose new WTO rules on China, unless they want to make a credible threat that they are prepared to abandon the WTO altogether. If not, then the U.S. and its allies will need to provide some concessions back to China. After all, China has provided numerous suggestions and proposals for WTO reforms and new rules itself. So far, the U.S. and its allies have not discussed what they might be prepared to do in exchange.

²² Please contact me at mwu@law.harvard.edu if you would like to see a more elaborate article discussing this research. A preliminary version was presented to the economics faculty at Cambridge University in 2017 and a working draft of that presentation is available online.

All this is not say that the U.S. ought not to try to negotiate new rules with like-minded allies through the WTO. Again, there may be legitimate reasons apart from China for the U.S. to undertake this approach. Once more, I am simply cautioning that even if the WTO can overcome long odds and update its rulebook, it is unlikely that China will sign up to most of the vital ones aimed at changing its economic regime, at least in the near-to-medium term.

VI. Recommendations

What I hope to have highlighted through the analysis above is that there are structural factors that render both the industrial and digital economic landscapes in China unique. The challenges arising out of “China, Inc.” and “China.com” implicate a much greater range of actors than state-owned enterprises. They concern an ecosystem of corporate actors, both state-owned and private, as well as regulatory agencies that collectively implement industrial policy goals in line with the Party-state’s interest. We need to realize that these structures are unlikely to be dismantled proactively in the near to medium term, but may be further evolve as interests shift. Due to the economic and social stresses that they face, there is also a possibility that these structure could eventually collapse on its own if major Chinese policy mistakes are committed. However, such an outcome is far from certain.

Given the above, regardless of what may be achieved in current negotiations, trade tensions with China are likely to persist for an extended period due to these structural differences. Efforts to engage like-minded allies through bilateral, regional, and multilateral approaches to tackle these tensions are to be welcomed. However, we need to realize that they are not likely to succeed in pressuring China to undertake deep structural reforms, in the absence of additional unilateral or collective tariffs or other efforts to erect higher trade barriers. Still, these efforts can yield limited results in guiding selective current and future Chinese policies toward global norms, even in the absence of deep structural reform.

Where then do we go from here?

On the question posed by the Commission concerning the evaluation of possible outcomes from ongoing trade negotiations:

- 1. Congress should evaluate any possible agreement with China to resolve ongoing trade tensions on the basis of firm commitments to dismantle existing trade-distorting Chinese policies and to undertake observable structural changes.***

We ought not to be distracted by Chinese negotiating promises to make additional purchases of American exports, welcome as those may be. Success is not to be measured by near-term reductions in the bilateral trade deficit, but whether the economic sacrifices made by American producers in this extended trade conflagration give rise to specific commitments on issues covered by the ongoing negotiations including:

- Lifting of investment restrictions on U.S. firms, particularly for next-generation industries such as cloud computing, IoT, and renewable products.
- A list of specific subsidies program to be dismantled and a commitment to not reintroduce similar programs in these sectors.
- A firm commitment that China will advance or back a WTO reform proposal allowing WTO members to temporarily nullify benefits against any WTO member whose submissions notifying subsidies are deemed incomplete until fixed.
- A list of goods and services for which VAT rebate policies, export restrictions, export taxes, and other policies will be kept stable and unchanged for the next five years, so that they cannot be manipulated to generate uncertainty
- Specific targets to lower the incidence of cybertheft activity originating from China

- Specific targets to lower the percentage of U.S. companies reporting that they deem enforcement of intellectual property protections to be inadequate and that report pressure to transfer technology

To ensure that these commitments are enforceable, the agreement ought to include agreed-upon monitoring mechanisms that allow for tariff “snap-back” without the possibility for retaliation.

2. *Congress should evaluate any possible future trade agreement with other countries (e.g., USMCA, US-Japan, US-EU) specifically for its impact on shifts in global supply and value chains vis-à-vis China.*

The incentives for corporations to shift production, technology, and/or the sourcing of inputs to China arises not just from Chinese policies but also shifts arising out of bilateral and regional trade agreements concluded by the U.S. with other major trading partners. Congress ought to evaluate whether future U.S. trade agreements will lower ROO thresholds or contain other provisions that generate incentives to shift production to China. For example, were the US to accede to the CPTPP under its current ROOs, such incentives would arise for certain downstream U.S. auto and auto parts manufacturers. At the same time, Congress should also evaluate whether the rules are tightened so stringently that corporations will simply decide not to seek preferential access for their goods and shift production to China in response. This is a careful balancing act, and the evaluation of such policies is highly technical. Congress ought to strengthen the resources and capabilities of its own committee staff members to undertake such evaluation as well as to draw on experts to provide advice specifically on this issue during the course of negotiations. It also ought to require USTR negotiators to provide briefings specifically on this issue during closed hearing throughout the course of negotiations. Finally, it should require the International Trade Commission (ITC) to include an addendum to its mandated evaluation of U.S. trade agreements highlighting such risks. It should provide the ITC with additional funds to hire the staff necessary to conduct such analyses.

On the question posed by the Commission of what additional tools Congress ought to consider to address problematic Chinese practices:

3. *Congress should increase appropriations to U.S. enforcement authorities to bolster its resources to target firms that benefit from commercial cyberespionage, illicit acquisition of intellectual property, and circumvention of U.S. sanctions.*

The U.S. approach toward tackling problematic practices ought to shift away applying across-the-board tariffs toward a targeted policy of applying heavy pressure against actual offenders and those that benefit from the offense. Tariffs are a crude instrument that inadvertently harm U.S. bystanders, as other experts will testify. They also unnecessarily turn ordinary Chinese who may otherwise support deeper economic reforms into ardent nationalists. A smarter strategy would be target specific Chinese companies and their benefactors who enable and profit from egregious policies, including but not limited to cyberespionage, illicit intellectual property acquisition, and circumvention of U.S. sanctions.

Existing U.S. law provides a variety of tools through which to target such firms. These include the imposition of trade remedies, Section 337 investigations, scrutiny by the Committee on Foreign Investment in the United States (CFIUS), and the International Emergency Economic Powers Act (IEEPA). However, to do so effectively requires that the various agencies involved in employing these tools have greater resources available to deploy against these tasks. Congress ought to commit to appropriate greater resources to various departments and agencies involved in scrutinizing Chinese trade-distorting practices. These include, but are not limited to, USTR, Commerce, Justice, Treasury, Homeland Security, ITC, and various national security agencies.

4. Congress should update U.S. law to expand the scope of firms and individuals who may be held liable and sanctioned to include all those that interact in a commercially meaningful manner with problematic firms.

We are engaged in a protracted competition of not only economic systems but also of values. The U.S. must hold true to the principles that underlie its soft power. To that end, it is imperative that the U.S. not succumb to any nationality-based targeting and continue to remain an open society to anyone, including Chinese citizens and firms, whose behavior aligns with our core values. Congress plays an important role in safeguarding such values, especially if the other branches of government fail to do so.

The flip side of this equation is that the U.S. ought to have a broader no-tolerance policy against any entity or individual that may enable the illegal or illicit behavior that we condemn. To date, if targeted actions have been taken, they have been mainly against firms or the individuals who directly oversee the illegal act. However, as the earlier analysis suggested, Chinese policies are enabled by a broad array of actors that operate within its unique economic structure.

Therefore, Congress ought to consider broadening the category of firms and individuals who are targeted to include:

- Firms that supply financing to the firms engaging in the illegal activities, whether directly or through pass-through entities
- Firms that source inputs and/or procure products whose development has benefitted from cyberespionage, illegal intellectual property theft, or other forms of unauthorized activities
- Firms and individuals that engage in research collaborations that profit from these illegal activities

In addition to holding firms accountable, Congress should consider extending responsibility to top executives as well as board members of such firms, as well as government officials involved.

While these categories, at first glance, may seem overly broad, the idea is to develop a model of community self-policing within the Chinese economic system itself. Rather than turn a blind eye to the egregious acts happening around them, individual and corporate actors should be enlisted to conduct due diligence of their partners, suppliers, clients, etc. so as to create greater costs and instill a chilling effect for undesirable actions.

Because of its broad sweeping powers, the IEEPA could be utilized for such purposes, although there may be judicial challenges over its permissible bounds. So as to guard against unnecessary abuse of the notion of a “national emergency,” Congress should draft specific legislation to complement the IEEPA. This new set of laws should extend criminal and civil liability to individuals and entities who support, facilitate, or substantially benefit from an enumerated list of the most egregious trade-distortive activities, such as cyberespionage or IP theft. Doing so will make clear to the economic actors who wish to gain from our open markets and open society that they have a responsibility to devote their own resources to patrol against those who seek to undermine it.

5. Congress should increase the resources provided to U.S. enforcement authorities to evaluate the scope of technology to be moved offshore to China and to update export controls as necessary.

Provided the analysis above is correct that China’s economic structure is unlikely to be reformed in fundamental ways in the foreseeable future, regardless of the outcome of the ongoing bilateral negotiations, U.S. and other foreign companies will continue to face pressures to shift production and technology to China. Congress ought to urge executive agencies to make broader use of its existing powers to evaluate technology transfers, particularly over core technologies and dual-use technologies, in

specific transactions on an ongoing basis. Agencies should make greater use of document requests for investigations, subpoena powers, the power to compel testimony, etc. This will require that Congress provide greater appropriations to the Department of Commerce's Bureau of Industry and Security as well as the Justice Department so that they can increase the number of agents devoted to such actions.

In addition, greater interagency coordination is required, particularly across economic and national security agencies, to suspend or postpone outbound transactions by U.S. firms if it poses a danger to U.S. national security interests. Currently, much attention is devoted to inbound transactions, and the Commission has been briefed about efforts to reform CFIUS. A similar effort must be devoted to outbound transactions, especially when many more may have dual-use implications given the growing importance of data analytics and IoT products.

Similarly, Congress should require that the National Economic Council and National Security Council to engage in regular consultations with each other and with Congress on efforts to keep export controls current. It is imperative that the national security agencies be kept abreast of what technologies are being moved offshore, just as it is imperative for economic agencies to be kept abreast of what technologies are deemed vital for future national security purposes. Congress can play an important role in creating the procedural mechanisms to ensure that these exchanges happen regularly and in providing the resources necessary to safeguard against supply chain, cyber, or data security vulnerabilities.

6. Congress should take steps to bolster U.S. technology competitiveness, both through investments in fundamental research as well as in an ecosystem that is able to make use of applied technologies.

As many experts have emphasized in past testimony before this Commission, the U.S. has fallen behind in terms of making necessary investments in education, infrastructure, and support for basic research. I wish to re-emphasize the point that the most important thing that Congress can do to ensure long-term U.S. economic competitiveness is to devote greater resources to cultivate talent and to ensure that the U.S. remains the most exciting place for global talent to conduct research, build businesses, and raise families.

If trade conflicts and trade accords are unlikely to change the fundamental nature of China's economic system for the foreseeable future, then many of the next-generation industries with disruptive potential will continue to be distorted through a series of Chinese industrial policies. This gives rise to the inevitable question of whether the U.S. must respond in-kind, even if such spending may not always be efficient or desirable, in order to counter Chinese industrial policies. These are difficult questions that will require additional policy debate. But they will become increasingly irrelevant questions if Congress does not quickly take steps to reverse the stagnation or decline in U.S. education, basic and applied research, and physical infrastructure while the Chinese are investing heavily in next-generation technologies. Much greater funding by Congress for research in core technologies and infrastructure upgrading is vital for safeguarding long-term U.S. economic security.

PANEL II QUESTION AND ANSWER

COMMISSIONER WESSEL: Thank you all. And again, thank you all for the work, for being here today, for your testimony and your work over time, your bodies of work.

We have examined, appreciate, and they certainly help for the debate. For each of the panelists, but I'm going to start with you, Dr. Lovely, to make sure I understand some things.

And certainly U.S. companies should be in China. They should be all over the globe to meet the needs of consumers, to be able to be outposts for our products, et cetera.

But, your testimony included, and I used it in my opening statement, sorry, that 46 percent of Chinese exports emanate from foreign invested enterprises. And when you're looking at U.S./China trade, 60 percent of the trade emanates from foreign invested enterprises.

That difference to me, and you know, help me understand this, means that, you know, we're looking at a lot of industrial tourism. That U.S. companies are going to China and using it as an export platform.

And we all know that, you know, China had an export led growth model. Which, you know, supposedly was being altered as we and they domestically understood that a consumption approach would be helpful.

You talked about, you know, that only 10 percent of China's market is -- has broad restrictions on it. Again, correct me if any of my -- if I'm making any misstatements.

But to me those are probably the highest value, long term industries. Their Made in China 2025, their aerospace, their, you know, AI, et cetera.

They're not the old industries. It's where all of us want to be going in the future. And to me that, you know, creates enormous stresses for us.

One point three billion people we'd like to sell to. A, you know, great burgeoning middle class.

But then we see our companies are being squeezed. Some of that by the, you know, economic down drafts there. But a lot of it by governmental policies.

Why is it, aside from wanting to be in the Chinese market and serve it, you know, opening up China's investment restrictions to me means that we may be seeing the off-shoring and outsourcing of more production and jobs. A lot of which may come back here rather than promoting, as Dr. Wu is talking about, you know, a competitive strategy here that will enable us to access the Chinese market through our exports.

Help me with the economic data, not the philosophy and theory.

DR. LOVELY: Great. Thank you for reading my work. So, the numbers that you're citing from my report on foreign direct -- foreign invested enterprises and exports to the United States refer to all foreign invested enterprises.

COMMISSIONER WESSEL: Understand.

DR. LOVELY: So, you know, these include Taiwanese, Korean, Japanese firms. And here we really don't have enough light to shed on this.

I go back to what my colleague said about the need for more research. I had really hoped that this Section 301 report would highlight this.

It's something in my own work that I'm frustrated with. What I have provided is from analysis of Chinese customs records. So you actually can't find that out with U.S. data.

So, it's a problem. We don't really understand the depth of the trade relationship that we have. As well as maybe we should.

COMMISSIONER WESSEL: Let me just dive into this so I understand it.

DR. LOVELY: Um-hum.

COMMISSIONER WESSEL: Understanding the PIERS database and all the various other things.

DR. LOVELY: Um-hum.

COMMISSIONER WESSEL: Do we -- is it simply that it's not available publically? The BPI-type issues?

Are we not doing the right kind of collection? Is that something we should be directing? Is it obtainable in some way?

DR. LOVELY: Not that I know of. What we know through the Bureau of Economic Analysis, which does the U.S. surveys of multinational activities abroad.

COMMISSIONER WESSEL: Um-hum.

DR. LOVELY: We will know if our companies are trading with related parties.

COMMISSIONER WESSEL: Right.

DR. LOVELY: And in the report that I think you read, I also provide information on that.

COMMISSIONER WESSEL: Um-hum.

DR. LOVELY: However, we know that companies like Foxconn are operating in China to serve American companies. Right? And Apple is their biggest customer.

COMMISSIONER WESSEL: Right.

DR. LOVELY: So, in that particular report that you're looking at, I was interested in seeing who are the tariffs going to hit?

And it's not mainly domestic Chinese firms that are providing this. It's affiliates of other companies -- countries, including many of our allies.

So, that I think explains the particular, the first facts. The second about only 10 percent of industries have formal restrictions.

Yes, and some of these sectors are ones where we're really not contesting, like nuclear materials. They have certain national security justifications. And we wouldn't really contest them.

But what I was trying to point to was, these barriers on paper look very low. But when we go deeper into industries that are encouraged, we see there are also barriers or ways that entry is shaped to maximize technology transfer.

And I completely agree with your statement that these are exactly the most knowledge intensive industries. And the industries in which the United States has comparative advantage.

And I think this is the reason why this issue has become of such great concern not only to the U.S. Congress, but also to American companies.

Many observers have noted a change in American companies' attitudes toward China. As Dr. Kennedy mentioned, these firms are still profitable.

And yet anxiety is very high. Because they're being blocked exactly in the way that their business models are moving.

So, take a company like an IBM, it can provide mainframes. But its business is growing much faster in cloud services and other business services.

And if it's blocked in those areas, its business in China looks very different than its business in other places.

So yes, I think you're absolutely right. We have only 10 percent blocked. There are these other barriers on encouraged.

Do we have much information on what ancillary restrictions go with the subsidies? The

answer is, no we don't.

These are contained in Chinese language-based documents. And again, I think both of my colleagues have pointed to the lack of specialists in this area, and funding for research in the area.

Related to strategy here, and why I believe that it would be good for U.S. employment, you know, many of us in the academic biz think that basically the so-called China shock is mostly over.

China's wages have raised at almost 10 percent, you know, real wages. And many of the most labor intensive, or even semi-labor intensive activities are moving out of China.

What we need to do is have access to their market so that U.S.-based employees can support operations abroad. Which we see: U.S. workers excelling in design, marketing, and headquarter services like accounting and other services.

Also, providing specialized professional services. So, these are very important areas.

And we have very little information on services trade to begin with. We have very little information on the barriers to service trade.

So, I think you're raising some very important issues. It's -- these sales are important to the future of the American work force.

Unfortunately, we don't have the light that we would really need to fully understand what the barriers are, and how we might best approach them.

COMMISSIONER WESSEL: Any quick responses? Or we'll go to our next round.

(No response.)

COMMISSIONER WESSEL: No? Admiral McDevitt?

COMMISSIONER MCDEVITT: Thank you all for very informative presentations. I was particularly taken by Dr. Wu and then Dr. Lovely's commentary about the personnel, the staffing support within the U.S. government, or lack thereof.

And we heard a bit of that in the first panel as well. And of course we're always in the quest for more recommendations and sensible recommendations on what Congress can do legislatively to improve the situation and in particular in this particular area.

So, I'm taken with the idea of other than a one liner that says we should -- we should improve the language skills and career possibilities or potential for people who are working on the -- in the SEC or wherever it is.

Can I ask each of you to give me, give us some more specifics so that we can shape a sensible recommendation on the personnel problem?

MR. WU: I'd be happy to start, Admiral. Let me use an analogy to help, perhaps help guide this. And then I will give you a couple of very concrete examples.

When I was the Intellectual Property Director at the Office of the U.S. Trade Representative, I was responsible for China, but perhaps 40, 50 other countries at the same time.

I was the lead negotiator for the negotiations over the Central America Free Trade Agreement with Morocco, with Bahrain, and so forth. It just so happened that I spoke and can read Chinese.

But, it was not a requirement for the job in which I was hired. One of the things which Congress did after the fact, which was very helpful -- oh, wait, and I should also point out, right, that my counterpart in the General Counsel's Office who worked on this, it just so happened that he also, right, had worked in Shanghai and could read and speak Chinese.

But one of things which Congress did which was very helpful, was to appropriate specific funding for the Office of the U.S. Trade Representative. So that there is a dedicated person,

right, specifically in the IP Office to focus on China.

There is a dedicated person in the General Counsel's Office to focus specifically on China-related enforcement, right. In the USPTO we now have three dedicated individuals in Beijing, Shanghai, Guangzhou to focus on that.

My concern is that other parts of the U.S. government, whether you're talking about in Commerce, right, Commissioner Wessel earlier mentioned, right, that different parts of Commerce, they have authority to do this.

In the Justice Department that's pursuing the civil and criminal investigations, whether we're talking about like intelligence agencies, right. Are there people who have the language skills and who have the technical skills?

And then you have to ask, to say, in appropriating those funds, right, Congress has the power to put these at a level above the standard GS levels. Because those are not attractive for -- I have plenty of students, right, who have these skills. They do not find those wages to be attractive for a long-term salary.

So, I think those are some very specific -- what Congress ought to do is to look at each of the agencies that are involved in FIRREA and ECRA, and just as it has done with USTR, right, we talked earlier even about the IRS, right.

So, appropriate specific line items at wages way above the standard GS pay scale to make it attractive to attract long-term talent.

If I may highlight some specific areas, right. I've already alluded to Commerce. I've alluded to other parts of the Defense agencies. I would also highlight, right, in terms of where Congress is getting its knowledge.

I think several people have already highlighted, right, that the Office of Technology Assessment has been defunded. Essentially Congress depends on the GAO to provide with this knowledge.

And GAO does not have a dedicated specialist under this. I would urge you to refund OTA.

And I would urge you to have parts of OTA specifically focused on these core new technologies, as well as having Chinese language experts that can analyze not just what we're doing in our country, but what our competitors worldwide are doing on this.

When it comes to those IP attaches that I had mentioned in China, we all know the Chinese work on a hierarchy and they work on rank. They are not the equivalent of the Chinese counterparts here.

They are not even at the level of our State Department counselors. And yet they are doing some of the most important work.

Right, we need to make sure that they have that rank and they have the authority to negotiate on behalf of our Government. And those are positions which are already funded.

So, I'm happy to elaborate further. I'm happy to provide any additional thought that you may have.

But I hope that analogy is helpful. So we can look at how much better USTR is able to do its work than it was 15 years ago.

We shouldn't count on just the accident that we have, right, a Chinese language official, or a young person who is dedicated to that. Thank you.

COMMISSIONER MCDEVITT: If I could just quickly on the USTR case. Your comments suggest that USTR in fact did use that money, did fill those positions, and does have career officials.

Is that correct? In other words, it did work for USTR?

MR. WU: It did work very well for USTR. Right, I think we have, right, some like Commissioner Cho on the ITC worked a number of years as my successor in the IP Office.

Right, right now, right, we had long-term staff who have worked for a long term number of years. Including, folks who then moved into Congress, right.

So, the Lead Trade Counsel for the House Ways and Means Committee, right, Katherine Tai, right, took up that position. So I think it was a very successful path to build dedicated public servants for that to fill that type of role.

But we only did it in a trade part. And what I'm saying is, we need to do this on the whole of government.

COMMISSIONER MCDEVITT: I got it.

DR. KENNEDY: I don't disagree with anything that Dr. Wu said. But, one point that I think that it's worth mentioning, which may sound like I'm crit -- disagreeing, but I'm not, and then one elaboration about how to carry out what he's doing in an effective way.

The first is, if you look at the trade negotiations with China recently, you'd be shocked that the U.S. got this far. Right?

No organization. No interagency coordination. No China specialists. Just hey, we're not -- we're going to raise tariffs until you guys come to the table.

Actually amazingly effective. As far as I know, most China specialists in the U.S. government had a very easy life the last year and a half.

Got to work at 9:00. Went home at 5:00. No weekends. They weren't needed. To get to the table to negotiate, actually you don't necessarily need a whole of government.

What you need is like a very clear precise strategy that you're willing to see to the end. And so to start the process, that's really critical. And that's not about a China skills talent. That's about clarity.

But then -- then once you get to the table, once you want to solve the issues, then you need all the talent that Dr. Wu mentioned.

But, in addition to that, you need two other things. You need a clear policy that ranks the priorities of all the things that you're trying to achieve. And you need to coordinate. Right?

And we've got plenty -- we don't have plenty, we need more China experts. I want everyone who enters kindergarten this year and on to study Chinese. To be experts, et cetera.

And we need that. But, if we don't have clear policy, if we don't have clear organization, that's going to be -- that's going to be ingredients that aren't used and to develop a high-quality meal that actually provides us policy nutrition and success.

DR. LOVELY: I feel I need to put in a plug for economics. Our understanding of our economic relationship with China is just way below where it needs to be to support the negotiations that we're in today.

Let me give you two, just anecdotes. I got into studying China because I started to work with someone who was at the International Trade Commission, one of the economists in the Office of Economics.

At that time the ITC was a leader in accessing Chinese data and making it accessible for Americans and studying the relationship closely.

Fast forward to 2017, I went to the ITC to give a seminar and find out that those data systems have never been updated. There is one brave economist who is trying to revive the China program.

This is at a time when we're levying tariffs on half of our bundle with China. And no

understanding of what the incidence of that is going to be, who's going to bear the burden, where the pressure points are, what's happening in the industrial policy, nothing.

One other anecdote. Last spring I think I was sitting -- I was here in Washington, and I got a call from someone working for the Council of Economic Advisors:

"The numbers on foreign direct investment as put by the Chinese and as put by the Americans are different, different numbers. How do I reconcile those?"

I do mostly trade, not finance. And I just said, you're kidding me, right? You're sitting there, and you have everyone in the U.S. government at your disposal, and this is what -- and we're already in the middle of this trade dispute.

I mean, this is really kind of like the Keystone Kops. So, I mean, I have to say when I read the Section 301 Report, there was clearly an enormous amount of work that went into it.

But I really, really, really, wanted to be educated. I wanted to learn new things that I can't find out by sitting in Syracuse University.

Now I do have access to a lot of Chinese data. And I use it in my own work. But, I mean, this is the U.S. government.

We should be -- we should have the best research. We should have people who are at the cusp, who have the best tools. And it's just not there.

And as a result, the policies are -- they may very well have gotten them up to the table and not really achieved much.

COMMISSIONER WESSEL: Thank you. We couldn't agree more about more information and hopefully --- and data.

And hopefully one of the products of this hearing will be some discussion about what can be done there.

Commissioner Kamphausen?

COMMISSIONER KAMPHAUSEN: Dr. Kennedy, in your recommendations, your second recommendation is for the Congress to provide extensive oversight of the Trump Administration's negotiations.

And I wanted to use that recommendation to call out an article that you wrote with Dan Rosen at the end of January. And just read a couple of statements and then ask you to elaborate on your recommendation in light of what you earlier wrote.

You said there are things that Beijing can do to make progress immediately. Above average tariffs on autos and other manufactured products can be normalized.

Foreign joint venture requirements can be eliminated. Yes, now and across every sector. China's negative list for inward direct investment can be cut by three-quarters to the advanced economy average, applications for U.S. banks in China to buy out their partners can be approved, licenses for Visa/MasterCard to offer electronic payment services and for Moody's, Standard & Poor's, and Fitch to issue domestic ratings in China can be issued, quotas on U.S. movies can be eliminated entirely, state-owned enterprises can be held to antitrust guidelines, and so on and so forth.

And then you say, if this looks like a run-on sentence, it is. It's far from a comprehensive list however. But it describes the right degree of ambition for our negotiating outcomes.

I wanted to just offer you a chance to elaborate on that and those things that maybe Congress can do to pay attention to these issues.

DR. KENNEDY: Sure. Thank you very much. The -- I guess with that list and with our recommendations, I think what we were trying to do was delineate two kinds of ways that the Chinese could address structural impediments to those -- to foreign industries and others that

engage with the economy in ways that China could change -- could address them.

I do agree with Dr. Wu's statement that you don't want to take individual policies and just say reduce subsidies, or just do that. That it's a systemic issue and we have a clash.

Nevertheless, China can address many of the things that we are most concerned about and still keep their system. I mean, pre-Xi Jinping it was still that system, and going back further.

There are variations on a theme, right. And you can make it better or worse. And I think there's -- we're not going to get to Adam Smith's free market system there.

Even with the things that I wanted in my -- in our run-on sentence. But we could do a lot. And the Chinese could do a lot and still keep China, Inc. in business and organized.

So, the things that you mentioned, I privately call -- now publically call -- my five minute list. Here are things in five minutes the Chinese could do if Xi Jinping just said, do these things.

It doesn't require any changes of law in China. Any regulation, State Council, don't need any local governments. Don't need state-owned enterprises to assent.

These are all things that take a snap of a finger. Many of these things they've got documents on the desk, all they need to do is hit the send button. Right.

All of those things seem to me like obvious early harvest benefits that would show that the Chinese are operating in good faith. And in many of these industries, wouldn't necessarily lead to the wiping out of the Chinese.

If MasterCard and Visa, Amex, all start doing business on their own in China, China UnionPay is going to be able to stand on their own two feet. Alipay, WeChat Pay, they're all going to still be there.

So, there's no reason that they can't do this. They'll still be able to manage their financial system the way they want.

So, we could have come up with more. That was an arbitrary list. The other things that are even more important are the fundamental institutions that get to the challenges that Dr. Wu and Dr. Lovely also pointed to: competition policy, the way the financial system operates, and how IP is addressed, particularly in strategic areas. Those will require more legal changes that can't be done at the snap of a finger. We'll have to monitor them over time.

Again, I think we're saying that the system needs to change in many ways. But it doesn't need to -- this is not from black to white. This is things that they can do.

And I guess the other point that we were trying to make is that America has a choice, right, with how we decide to deal with China. We can say -- you know, we can say this is our maximum list goal.

But, Dr. Rosen and I proposed a sliding scale. China, you tell us how open you want to be, we'll be that open to you.

You want to keep China, Inc. running at full blast the way you're going? Well, then we're going to close down a lot.

You want to open up a lot? You want full engagement? You don't want divorce? Then you're going to have to come to the table and open up.

I think we can take any of those positions, adult-like, and live with them. The U.S. economy is strong enough. We'll adapt. We'll find, you know, higher costs given the -- for us and for the Chinese.

But I think that would be the way I would frame it toward them.

COMMISSIONER WESSEL: Commissioner Bartholomew? Chair Bartholomew, excuse me.

CHAIRMAN BARTHOLOMEW: Thanks. Thank you very much. And thank you to our witnesses. An observation first, and then a question.

The observation is, how interesting it is that people are comfortable with reciprocity now. When I think as recently as two or three years ago, when we were talking about reciprocity, many times our witnesses and other people had allergic reactions to it.

So, it's interesting to see how the debate has shifted over time. And economists and China experts are now basically saying, we need to be doing reciprocity.

Dr. Kennedy, I want to follow up on Commissioner Kamphausen's question though, which is so you guys identified some things that the Chinese could do.

My question is, why should they do any of those things if there's no incentive for them to do it? I mean, they -- no matter how small they are.

And what do we do to incentivize them to actually make some of these changes? That's the first piece.

The second piece though is, one of the concerns that many of us have watching the Administration do these negotiations -- I use that word loosely -- doing these negotiations is that they will be willing to accept superficial changes and not get to the underlying -- the real underlying problems that are going on, or real structural concerns about the Chinese economy.

Where would you say that these recommended changes fall in that? I mean, is there concern that if they did some of those it still allows them to continue on with the serious structural issues? Which are really underlying the concerns about what China does.

DR. KENNEDY: I bet you that we're basically in full agreement about the analysis and what ought to be done. Just to back up a little bit on terms of reciprocity.

I think the reason people have become a lot more interested in reciprocity is typically there are two standards by which you judge -- manage your commercial relationship with another country.

The first are commitments. Legal commitments that you have that -- and those legal commitments are supposed to represent some level of fairness. Right.

Then you've got national security. Stuff that's just either red or go -- yes or no. Right. Based on totally different criteria. It doesn't matter whether it's fair or not, it's --- national security is national security.

What happened is that over time, the agreements that we had with the Chinese that were about fairness became obsolete. Right. Because there are new areas of our economic -- of economic activity and China's behavior in the world changed.

China didn't have foreign investment outwardly in 2001. That -- and so we never thought that we really needed to govern that in any particular way because even though we knew the Chinese had industrial policy, we didn't realize their outward investment was going to be connected to industrial policy.

And that they were going to use their protected markets and things like that. So, as that space of obsolescence has grown, and new areas, we need reciprocity.

But, my goal would be that over time, we'd eventually find out new compliance systems, new rules, new agreements, where it wouldn't be about just simply some informal notion of fairness and reciprocity. But we'd go back. We'd find a way to fit it back into compliance.

So I see reciprocity as a short term solution to get us back to some level of fairness, which we could write down in some type of contractual way. But anyway, so that's my short-term plug on reciprocity.

I would agree in terms of the specific list, we saw that as a starting point, not an end

point. And for darn sure, the U.S. shouldn't see that as an end point.

And that was -- it's very clear that those should be the easy, low-hanging fruits just to get things started. And if anyone settles for just those things, then shame on them.

We've got a lot of leverage. We have a lot of ability to get what we want if we do it correctly. If we organize our policy.

And so I think we ought to take it -- it wouldn't have necessarily been my way to generate the leverage this way and go at it. But once you have this, you might as well take advantage of this and not lose the benefits and then combine it with the other types of institutional solutions. So, I would agree.

Why would the Chinese agree to any of these things? Well, the companies -- the Chinese companies that benefit from the protection wouldn't like it. Right. But, too bad. The Chinese economy would benefit a lot. The -- China's economy is running at 25 percent below what it could run.

According to Nick Lardy and his study on China -- on the state of the economy, improved efficiency and productivity of the Chinese economy by taking less -- giving less money to state-owned enterprises and more to the private sector, liberalizing, you'd get -- instead of growth around -- you know, just using the official numbers, 6 point something percent to 8 point something percent. That's a lot of jobs in China. That's a lot of improvements to their economy.

So, just as an example, if you let Moody's, Fitch, and S&P do independent ratings of China's bond market, it's going to put -- it's going to help improve the allocation of credit in China, which is a huge problem. The Chinese government should think that is more important than protecting some small Chinese credit rating company.

You could look at subsidies and where they're providing subsidies. My goal -- I'm not saying the Chinese should get rid of subsidies. I think we should all get Chinese subsidies. If they're going to give them, it should be transparent. They should be connected to performance. They shouldn't -- they should file whatever the requirements of the WTO are. That will make China's economy grow faster, healthier.

So my suggestions are not that China take actions that retard Chinese growth, that hurt its economy to the benefit just of Americans because I work in Washington, but because I think it's better for China's economy.

CHAIRMAN BARTHOLOMEW: Okay. Thanks.

COMMISSIONER WESSEL: Commissioner Lee?

COMMISSIONER LEE: Thank you very much. Well, thank you so much to the panel for your testimony. And I think my question actually follows up on Chairman Bartholomew's.

What I was looking at was, I hear broad agreement from the three of you that there are a lot of negative consequences for American companies, for American workers, and even for the Chinese economy to the kinds of obstacles, and barriers, and incentives that the Chinese government employs.

And then the question is, sort of what are the levers to incentivize the Chinese government to change?

But I hear actually -- and this is where it's interesting. I just want to probe a little bit of the differences between the three of you on that.

Because, you know, I think Dr. Kennedy, you are -- I think you rightly called out the fricassee of the tariffs as a way of bringing the Chinese government to the table.

Something that's a little bit different, I think, from Dr. Lovely, you were talking about

sort of the economic impact of the tariffs. With all, you know, deference to that and to economics, I don't think the tariffs are about economics. I think they're about power. And in that sense maybe they're more effective.

And then Dr. Wu, you know, you made this point -- which I think is really important too -- that even though in an abstract sense multilateralism is a good idea, the question is, in this particular context, is that going to be the most effective?

And there was one particular area where Dr. Kennedy and Dr. Wu, you were on different places around the TPP. And you know, I think sometimes we have these kind of general concepts that multilateralism is a good thing, and we can all sort of agree with that platitude.

But, I think Dr. Wu in his testimony raised a really important point. Which is that specifically with respect to China, the TPP rules on rule of origin were designed actually to give the Chinese government a lot -- China a lot of access to the U.S. market without making any concessions about actually joining those agreements.

So, I think on those very specifics I'm just -- I'm sort of interested in all of you talking a little bit more about, you know, unilateralism on the part of the U.S. to bring China to the table versus coordination, the benefits, and the disadvantages of those approaches.

DR. LOVELY: Well, there's a lot there. I mean, tariffs are about power. But they are about economics as well.

And bringing China to the table, it's done. They're there. So, I think that's what Dr. Kennedy was saying. We want to make the best use of it now that they're there.

Was it -- if we went back would this be the best way to bring them to the table? I would argue not. But, I think that's water under the bridge now and really not worth our time here today.

I worry about reciprocity as does the Chairman only because I think that we have to worry about its misuse. And in particular, as we're monitoring tariffs. And now Ambassador Lighthizer has said that tariffs will be kept even if the tariffs are not -- they are now published in the Federal Register. They're not going to raise the tariffs, but they're holding that back.

You know, one wonders what are the criteria they're going to use for these tariffs? When tariffs are raised, some companies are hurt. Others are helped.

And so it's a distributional issue. But it also goes against some sense of fairness and transparency in the United States.

Here we have tariffs on steel. We know steel stocks have risen recently. And yet there's lot of employment in the downstream industries that's being hurt.

So, I think this is something that at a minimum needs to be transparent so that the Congress can see what's happening on these. And we have the same thing that's happening now with the exemptions. Who's getting exemptions? Who's not getting exemptions?

This is something that is at least potentially ripe for corruption. So I think transparency at a minimum is key, is absolutely essential.

So, as far as multilateralism, it may not be everything, but it's clearly necessary. Why? For one thing we rely on our allies for a whole host of other things.

Secondly, divide and conquer is the policy that -- is the strategy that China has used successfully. If you don't transfer the technology, I'll get it from a German firm. I'll get it from a UK firm.

So, we need a united front. I don't think it's either/or. It's both, moving together. We could be moving more effectively right now if we were in concert with our allies.

Instead, I think we have shown a certain ability to use our power in a way that frankly is

frightening to some of our allies. And they're worried if they're going to be the next ones on which the power beacon will turn as we face potentially restrictions in the automobile sector, in particular under the pending 232.

So, again, I think all of these tools are important. It's how you pack them together. And transparency and oversight are key.

MR. WU: Thanks very much for the question. I think you highlighted some very important policy debates that we need to be having in the United States.

I agree with Dr. Lovely. This is not an either/or. The point that I wanted to make in my testimony is that oftentimes we seem to think alliance building and multilateralism should be the primary prong by which we make the thrust.

I think there's no disagreement amongst any of us at this panel that we are stronger when we work with our allies. And that when we work through multilateral institutions, flawed as they may be, right, to uphold a set of global norms.

That norms building exercise itself is useful. And if I didn't feel that way, I wouldn't be involved with the World Trade Organization, World Economic Forum, and others, where I definitely see those benefits of those discussions, including engaging with our Chinese friends for whom I think that process is also very helpful.

I think the point of difference that we may have is in terms of how much more we ought to be doing unilaterally. And what I simply want to caution is to say, to put too much eggs into the multilateral basket.

I think if we look at the steel issue, we can clearly see how slow that process was through the OECD. Including the first year of the Trump Administration.

We can clearly see where we've tried to exert more pressure on our allies and our allies didn't deliver in terms of putting more pressure on the Chinese. I think Commissioner Lewis knows all too well how that's also been the case when it comes to ship building, right, and other elements as well.

So, the question is, when the alliance doesn't move in concert, what do we do? And I think we do see some differences within the alliance in terms of the willingness to engage on brandishing a stick.

In terms of working with China on its cyber controls, we have tremendous differences even across the Atlantic in terms of how we think about managing data. Right.

So, I think we need to recognize that there are going to be those differences. Those multilateral processes are going to be very slow.

We need to work with our allies to come towards a common position. But we also need to realize that's not the path where we ought to be putting all of our eggs in our basket, and what we need to be doing in the meantime.

Now, on your question specifically on the TPP, I'm not sure -- and I'd be curious if Dr. Kennedy and I actually have a disagreement on this.

Right. I think Dr. Kennedy alluded to, right, a need for a TPP 2.0. And having clarify -- Congress clarify what that means.

I think, right, what we have right now is a TPP 1.2, right. Because CC-TPP is not actually identical to the TPP which was concluded in 2016. Right, we have TPP 1.2.

And Commissioner Lee, I think you're absolutely correct in terms of were we to just sign on to TPP 1.2, or were we to go back to TPP 1.0, there would be some negative repercussions for our American workers --- in particular industries upstream -- that might benefit American companies downstream.

And I've mentioned this point before, others in Congress before as well. There are certainly some geopolitical gains from this. But, I think Dr. Kennedy's point was, we not -- we need not settle for either 1.0 or 1.2. It's not a debate of either/or.

But we need to recognize what 2.0 looks like. And Congress needs to be providing greater assistance to this. And we need to be thinking about the U.S./Japan negotiations as a pathway towards getting us to 2.0.

My concern is the Administration is focused on the U.S./Japan negotiations in terms of thinking about this just geopolitically. Right. But this is also a pathway towards building -- or bridging these differences that we may have.

And if we settle for an agreement that looks like the Korea agreement on some of these rules of origin, right, they create these types of back doors.

And as we've seen in the Korea agreement, the trade deficit has gone up. Two-thirds of that is in autos. And many -- as the Chinese auto parts industry increases its competitiveness, that flow into the Korea supply chains and its ability to then transform its working way into the U.S. industry.

So, I think -- I think there's some common themes between us. Which is the need for Congress to think about this across a range of different issues and moving us towards helping our allies understand what a 2.0 version will look like that could get the political support in the Congress to push this type of agreement forward.

COMMISSIONER WESSEL: Commissioner Lewis?

COMMISSIONER LEWIS: I'd like to ask each of you a question about American companies that sell goods in the United States that are produced in China, and two aspects of that.

Number one, American companies that have employees in China, and number two, American companies like Apple, that do not have employees in China, but they use contractors who have employees in China to sell the goods back to the United States.

Two questions. Number one, is there any way that we can find out how many employees are owned by -- how many employees there are of U.S. companies doing business in China who sell goods back to the United States?

And is there any way to get the numbers of the contractors' employees -- like Apple's contractors' employees --- who sell goods back to the United States?

I'm not talking about American companies who produce in China who sell in China. I'm talking about who produce in China and sell back to the United States.

And then the second question would be, is there any way to get that information about the number of employees and contractors' employees?

And number two, is there a way to incentivize American companies to bring back the employees back to the United States by giving American companies incentives?

DR. LOVELY: I'll take the data question. So, the answer is, what we know, we know from the year of economic analysis survey of U.S. affiliates abroad.

And there we would know about the activities of U.S. affiliates that are shipping back to the United States. It's a very low share of what they do.

It's about, I think, 8 percent of their sales come back to the United States. We will know something about their employees. We won't know exactly which are involved in, you know, activities for the domestic market or activities to ship back.

But we could make some, you know, reasonable estimates of how many employees they are. But, primarily the employees of U.S. affiliates are engaged in serving the Chinese market.

As far as the contractors --

COMMISSIONER LEWIS: But that's not true of Apple though, is it?

DR. LOVELY: Apple's contractors are not American firms. So we would have to use a different source of data. Because the U.S. survey surveys American affiliates.

There we actually could rely on information that -- provided by the Chinese through the Chinese Manufacturing Census. Which includes both domestic manufacturers and foreign manufacturers operating on their soil, as does ours.

There is -- it's very difficult, those data, like our data, are protected in some instances. We don't know exactly which firms they are.

And in particular, we know they are foreign-invested enterprises, but we don't know which company -- sorry, which country is the -- is the residence of the parent.

So, we would see a Foxconn. It wouldn't have a name. And we wouldn't know it was Taiwanese, for example.

So, the answer is not really, at least not with the tools we have right now. We can make some educated guesses based on how much investment goes in from different countries.

But there we have a very big problem, which is that a lot of the investment is coming from tax havens. So, you know, who owns companies that are domiciled in the Cayman Islands?

Or Hong Kong even? Which is where most of the foreign direct investment comes from. So there are serious data difficulties, especially in the second part on contractors.

Having said that, the U.S. Census now is reporting separately on so-called factoryless goods producers. This is a new initiative that the Census has.

It will shed more light on companies like Apple. Which are very important to the growth of U.S. employment, but have been not in manufacturing.

We haven't been able to kind of turn the spotlight on them separately. And now we are finally being able to.

That's a new initiative over the last three to five years. And it should bear fruit over the next five years.

COMMISSIONER LEWIS: What kind of incentives can the United States give, the government do, to bring employees back here?

What kind of incentives should be given to the companies?

DR. LOVELY: That's a difficult question. I think largely there aren't any. I personally have looked at a lot of the wage differentials, especially in many industries that rely -- and the activities that are being done in China are much more labor intensive, tend to be more toward assembly. It's a very large gap to overcome.

I think with their --

COMMISSIONER LEWIS: Even with tax incentives?

DR. LOVELY: Yeah. Even with tax incentives. I think that we have other ways to grow businesses here, including talent retention. As Dr. Wu mentioned, other ways to open up activities which would be more skill intensive, I think.

So, I think on -- it's a very difficult problem. I think the gap is very large. But, perhaps my colleagues will be able to shed some light on that.

COMMISSIONER LEWIS: Thank you.

DR. KENNEDY: Dr. Lovely really is the expert on this. I typically don't deal with large data sets like this.

And I think maybe to answer the policy question that you eventually want to answer and come up with a proposal, it seems to me you're probably really interested in two kinds of things.

One is with regard to labor. What are -- in terms of number of employees and wages, and how those are distributed.

And the second is, value added. Where is the value added being created for these products? And who is benefitting from that value added?

Not just in terms of the wages, but in terms of the profits that go to the various companies that are in that.

Then you can decide is, is globalization a net-plus for wages and for value added that accrues to Americans? Or are we losing a lot?

And certainly there's lots of examples where we've been losing net as a result of some of these changes. But there's some where it's positive.

I think globalization in many -- it certainly redistributes things quite a bit. I would encourage two kinds of case studies where you would pull apart these and you would have a finite number of companies to look at.

One would be the auto sector, right, where we've got, you know, Ford and BMW, for example, doing final assembly and production in the United States. Yet, a lot of their parts and things coming from elsewhere. Some of the design is done here. Some of the design is done abroad. China is a big exporter of auto parts, for example. And you could basically see what this era looks like in terms of the auto industry, in terms of its effect on employment, in terms of wages.

The other I would go, is I would just take cell phones. And because that is also -- I think a lot of people have paid attention to it, and so you had a lot of -- a good start on who are the companies that are part of those supply chains, their employment levels, wages, et cetera. And then I think you could come up with the reasonable story just on cases like that, that would give you purchase to make a policy argument about whether it would be effective to adjust tax policy with regard to where corporations are taxed or the type of exemptions they have. Or other types of policies regarding to labor, R&D credits, or other types of policies.

I personally think there should -- since many of these -- since the labor contribution to many of these high tech goods is relatively low as a cost to the overall product.

And as we automate more, the cost of the labor ought not to be the defining thing on where that -- a lot of the production is done.

So I personally think there could be plenty of production that's done in the United States. Despite the fact that we have very high wages and that we need higher wages and more benefits.

MR. WU: If I may just take a minute on the legal elements of it. For particular industrial goods that fall under export controls, certainly this can be part of the investigation into that particular firm with regard to a particular pending export control application.

But, what I would urge the Commission to think about is, less the implications for industrial goods. And more about what this means as we move towards a world of data analytics, Internet of Things, and so forth.

I think tax incentives along data policies have not really been thoroughly considered by Congress or elsewhere. I think we are going to see a world where China is going to have the biggest data sets.

They're going to have different sets of privacy standards and so forth that are going to make it attractive for certain data analytics to be done within China. We're not going to have reciprocity on data flows. And so what does this mean in terms of a world where data analytics can be done anywhere?

How do we prevent this type of talent round-tripping? Right, where people come here,

get educated here, and then go back. Or sort of a foot in both sets.

And I think there, tax policy, immigration policy, types of support for particular innovation ecosystems, are particularly important. Rather than getting a handle on exactly the numbers of who's doing what where.

COMMISSIONER LEWIS: If you would, one last question. Do you agree that tax policy is not sufficient to incentivize companies to bring back employees here?

MR. WU: I think I would defer to Dr. Lovely or my colleague, Professor Kirby at business school to examine that further.

But certainly from the legal point of view, they have an effect on companies' bottom lines. But the actual impact, I defer to my colleagues in business schools.

COMMISSIONER LEWIS: Thank you very much.

COMMISSIONER WESSEL: Before turning to my colleague, Commissioner Cleveland, let me say that some of the issues that were just raised, value added trade, the question of UBOs, ultimate beneficial owners, et cetera, all of that can divert attention away from some of the core issues we're trying to deal with right now.

As we all know, value added trade pushed by OECD to WTO has enormous impact on the current debate with China. And I'd prefer not to let go, to try and get a better grip as they say, as we're trying to address those issues.

Commissioner Cleveland?

VICE CHAIRMAN CLEVELAND: Thank you. I have two completely unrelated questions. The first is for Dr. Lovely.

When we look at China's growth rate, we always talk about this 6 percent, 6.5 percent. How credible do you think that number is? And what do you think actually supports it?

All right. Anybody can answer. But I -- yes, I was -- the economist, yeah.

DR. LOVELY: I think that there is concern about the accuracy of Chinese government GDP. There is a number -- there is a lot of other ways that we can look at this.

What we are better at than the actual pinpointing with a very small confidence interval is looking at the direction.

And we know that the Chinese economy right now is under stress for a variety of reasons. Some of them their own policies. But clearly, also the trade conflict.

So, if your question is actually getting at, is there -- is this having an effect on the Chinese economy? The answer is yes.

VICE CHAIRMAN CLEVELAND: No. I was more interested in learning that, yeah.

DR. LOVELY: Oh. Yeah, I do think that we have some concerns.

But there are lots of different ways to look at this, including energy usage and other types of things that we can look and see what direction they're taking.

VICE CHAIRMAN CLEVELAND: And what would you consider the most critical components of assessing what the actual GDP is?

I mean, is it the Manufacturing Index? And -- which I guess is showing contraction. What do you see as the building blocks? Because we are constantly talking about this number, because it reflects the rising middle class and the potential for markets.

So, accuracy or some clarity is pretty important.

DR. LOVELY: Well, we do look at the Purchasing Managers' Index, as well as what happens on -- with the official statements.

We look at energy usage to see -- these factories require energy. We can look at that province by province and see. You know, the export sector is relatively concentrated. Less so

than it used to be by far.

But still, we have to look also at the health of the service sector, which is almost 50 percent of employment in China, as we look, for example, at whether this is going to affect the growth of their middle class, and therefore, our sales opportunities in China.

So, I think you have to put it all into a bowl and look at it all. And I think we know that the Chinese economy is going through a rough patch.

The --- if this trade conflict is resolved soon, they will resume some policies. Particularly in trying to get a handle on credit that could also keep the economy somewhat depressed.

Alternatively, they could undertake reforms as Dr. Kennedy mentioned before, which actually improved the performance of their economy. We know, for example, that credit in the system has been heavily skewed to state-owned enterprises since 2015 in particular. And that these firms have very low return on investment.

So, there's things that we'll have to wait and see. Their policies will affect the future growth of the GDP as well as the resolution of the trade conflict.

VICE CHAIRMAN CLEVELAND: Okay. Dr. Kennedy for you, unrelated. I'm -- I read with great interest your piece on new energy vehicles.

And I think we spend a lot of time looking at mistakes that were made. And I think what's interesting about this piece is it sort of gives us a lens into the future of how the Chinese will manage their industrial policy.

And on this credit issue, I'm particularly interested in the dual-credit system. I'm not sure I really understand it.

And so I'm hoping you can offer an explanation that may tell us a little bit about the direction they're heading when it comes to new energy vehicles.

In other words, talk about new energy vehicles. You brought up the old cars.

DR. KENNEDY: Sure.

VICE CHAIRMAN CLEVELAND: But, I think this is an area that can give us some guidance on what we should be looking for in terms of future problems.

DR. KENNEDY: Okay. With -- I'd love to talk about it all day. It says 48 seconds there.

And so China is -- wants to promote electric cars because that helps them overcome the obstacles that they had with the technology and internal combustion engines that they could never fully master. It helps them deal with the pollution problem, which is something. And it reduces their independence -- their dependence on importing oil from the Mid-East and other places.

They -- this is a totally top-down effort. We calculate of all spending that has occurred in the last decade, 42 percent plus from the Chinese government. So, it's not a market. It's commercial activity. But it doesn't exist without the government.

They have lots of policies to support supply and policies to manufacture demand, to require demand. Subsidies to buyers. Limiting license plates for internal combustion engine cars. Government procurement requirements that you buy electric. Policies for electric buses, et cetera.

Reasonable goals, but the approach is very top-down. Already over capacity before we even expected it when we were working on the report.

And they are most likely going to dump these cars abroad. And it's going to affect the global car market when they do so.

Battery sector, they block foreign battery companies from producing in China. Samsung

SDI, LG Chem, Panasonic, just outright bans. Really ridiculous rules. Gave a chance to BYD and CATL, a company in Fujian in a small town called Ningde.

No one would have ever heard of this town except there was this guy -- and I don't know if anyone has heard of him -- his name is Xi Jinping. He was the Party Secretary in the late 80s there. So, very supportive of their sector.

This dual-credit system is -- that you mentioned is modeled on the California's EV program to encourage companies, car makers to have a certain proportion of their fleet that are electric or a new energy hybrid.

And basically it says that here's what the goal should be if you produce. And for each car you produce, you get a certain amount of credits.

But there's a standard we all should achieve. If you produce above that line, you have credits you can sell to others.

If you produce below it, you can buy credits from others. All right. That's the basic idea.

And so -- and they keep raising this average threshold up year by year to get a higher proportion of electric over time.

It's not -- not a bad idea. The way they're implementing it is that actually this is just a mandate.

There is no pollution or carbon market in China that has ever worked. They've never been able to take some externality, some pollution, stick a price on it and then watch people trade over some type of platform.

If they did it in this case, the price of those credits would be about zero. Because there's already so many cars. In general, they're way over subscribed. And if I was smart, I wouldn't be making electric cars right now.

I'd do internal combustion engine cars. I'd buy the credits dirt cheap. Wait until that market -- every -- you know, the -- you know, this is going to be a killing field of companies. Because four hundred electric car companies can't survive in a place even as large as China. And then after they die off, then I'd jump into the market.

So that's what I'd do. But they're not doing that. They're going to say, mandate. Everyone's got to hit this target. It's China.

So, that's how it's going to work. It's going to be potentially huge problems for everybody.

They're saying they're going to reduce the subsidies. But as soon as demand falls off when folks don't want these cars, back will come the subsidies.

VICE CHAIRMAN CLEVELAND: I think it's interesting to note that one of the companies that you mentioned in your study has also had an IPO here.

So we are financing the imminent catastrophe. So, thank you.

COMMISSIONER WESSEL: Is it quick?

COMMISSIONER MCDEVITT: Yep. A question for Dr. Kennedy. The National Security Strategy argues that China is a strategic competitor and it will be for a long time.

So, the question I have for you and for other members of the panel is, how is it possible to level the playing field with regard to economic relations and trade relations without improving China's ability to strategically compete?

Because the suggestions you made on how to make their economy more efficient, means ipso facto they'll be able more -- more capable in their competition.

So, is there a way to essentially have our cake and eat it too?

DR. KENNEDY: That's the -- what used to be called the \$64,000 question, until \$64,000 didn't mean anything. We're going to have to come up with a new number for that.

Can we have a commercial relationship that helps China but doesn't threaten our national security? That's the basic question.

And I think it comes down to, can we -- through our commercial relationships, China's relationship with others through other areas of interaction -- shift Chinese goals?

So that if -- so that they don't see themselves trying to achieve preeminence as necessarily meaning they have to defeat the United States or that it's a zero sum with us. That's a tall order given the folks running China right now. But, it means that we have to play the long game. Have some faith in our system that our system works well.

I would start from the initial premise that our ultimate goal should be the restoration improvement of the liberal international order that we lead, that serves us.

And we can create an opportunity for the Chinese to be in that order or be outside that order. And working individually using our own power, working with allies, create that opportunity -- that choice for them to make. And if they don't take that choice, that's up to them. Then the level of our commercial interaction is going to drop precipitously as a result.

But I think we should start from the first premise of what's the world that we want. And then adapt our China policy to address that larger goal.

COMMISSIONER WESSEL: Thank you all. I want to thank our staff who helped us get here today, not only physically, but mentally and educationally, et cetera.

They do a great job on a daily basis. Not always easy working with all of us.

I hope that each of you will keep us apprised of your work going forward. We've appreciated some of the work we've learned of in the past, your testimony today, and hope you will provide any further thoughts you've had as a result of today's hearing.

With that, we are adjourned.

(Whereupon, the above-entitled matter went off the record at 12:55 p.m.)