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CENSORSHIP AS A NON-TARIFF BARRIER TO TRADE

HEARING

BEFORE THE SUBCOMMITTEE ON INTERNATIONAL TRADE, CUSTOMS, AND GLOBAL COMPETITIVENESS OF THE

COMMITTEE ON FINANCE UNITED STATES SENATE

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CENSORSHIP AS A NON-TARIFF BARRIER TO TRADE

TUESDAY, JUNE 30, 2020

U.S. SENATE, SUBCOMMITTEE ON INTERNATIONAL TRADE, CUSTOMS, AND GLOBAL COMPETITIVENESS, COMMITTEE ON FINANCE, Washington, DC.

The WebEx hearing was convened, pursuant to notice, at 2:31 p.m., in Room SD–215, Dirksen Senate Office Building, Hon. John Cornyn (chairman of the subcommittee) presiding.

Present: Senators Cassidy, Wyden, Menendez, Brown, Casey, and Cortez Masto.

Also present: Republican staff: Andrew Cooper, Legislative Assistant for Senator Cornyn; Democratic staff: Livia Shmavonian, Legislative Assistant for Senator Casey.

OPENING STATEMENT OF HON. JOHN CORNYN, A U.S. SEN-ATOR FROM TEXAS, CHAIRMAN, SUBCOMMITTEE ON INTER-NATIONAL TRADE, CUSTOMS, AND GLOBAL COMPETITIVE-NESS, COMMITTEE ON FINANCE

Senator CORNYN. The Senate Committee on Finance Subcommittee on International Trade, Customs, and Global Competitiveness will come to order.

I know this seems a little strange with an empty room except for three witnesses live in front of me—and many of our colleagues are going to be joining us virtually—but I want to welcome all of you nonetheless to this important hearing.

This subcommittee continues to do its work in exploring the unfair trade practices of foreign governments, especially China and Russia. The topic of censorship in China is a common one because of its growing effect on business in the United States, as well as culture. Last fall, for example, the National Basketball Association had its market access blocked in China because an individual American citizen, using a media platform not even allowed in China, expressed a political opinion.

Now the topics have become much more important. A lack of timely, accurate information about the spread of COVID-19 due to Chinese censorship has contributed to the havoc wreaked on our economy and health, and indeed the pandemic.

This story is nothing new. For some joining us today, Chinese censorship has long been growing, and it has long had a negative effect on people around the world, such as those in Tibet or the Uyghurs in China's Xinjiang Province. First, I want to set the scene for what censorship actually is, and a simple dictionary definition is a good place to start: "The suppression or prohibition of any parts of media that are considered obscene, politically unacceptable, or a threat to security."

Today we will focus on how the use of censorship has become a barrier to global trade. When the World Trade Organization was founded, two exceptions to the principles of national treatment and most-favored nation were created. Those are for public morals and national security. Notably, there is no exception for a country to restrict trade because it deemed something politically unacceptable.

strict trade because it deemed something politically unacceptable. With discussions over reforming the WTO, multilateral talks on e-commerce, and the prospect of the Phase Two bilateral trade deal with China progressing, this subcommittee is uniquely positioned to inform Congress, the public, and the executive branch on the use of censorship as a non-tariff barrier to trade.

We will help determine if the suppression of information, data, goods, and services via digital media by countries like China constitutes a trade barrier in violation of the WTO, as well as multilateral and bilateral agreements and practices. If so, we will look to determine the economic damage caused; the human, cultural, business, and political ramifications; and what remedies are currently available or should be created to combat the unfair trade practice.

On a bilateral basis, what is clear is the lack of reciprocity from countries like China or Russia and the United States. The Chinese Government spends billions of dollars to promote its propaganda overseas, a form of offensive censorship.

For years, Russia has broadcast state propaganda in the United States, and has justly been designated as a foreign agent. The lack of reciprocity takes advantage of our system of free expression to promote these countries' agendas online, in media, entertainment, as well as our education system.

Meanwhile, China and Russia do not grant the United States the same access to their markets or media. Instead, China has been expelling our media, having kicked out three *Wall Street Journal* and other reporters earlier this year over Chinese censorship of COVID-19. For centuries, countries blocked trade through physically restricting access to their ports. Today, the same thing happens, but with firewalls, filters, and outright restrictions to access.

In fact, nearly 100 percent of global Internet traffic travels through a crisscrossing network of undersea cables that form the backbone of global digital trade. These cables are another front in the global technology race, with companies like Huawei Marine rapidly moving to control the media by which content and trade is censored.

In the era of information, where data is the new gold, blocking or filtering of that traffic by nation-states is growing. The censorship is fragmenting our markets, culture, and understanding of one another.

The Internet itself is becoming less global. Countries like China and Russia are not only building their own infrastructure to cut themselves off from the world, but exporting their authoritarian model to other nation-states through efforts such as the Digital Silk Road.

It is imperative that Congress support our Nation in meeting this challenge, and that is why I am working together with all of our colleagues in the Senate and in the House to include parts of the CHIPS for America Act in the National Defense Authorization bill currently on the Senate floor.

If we are forced to rely on China to build our networks and our technology, the world we know will be much less freer and open to express opinions and do business. This bill will help us create our own domestic production capacity for high-end semiconductors that underpin the technology we use in our daily lives. It will also let the United States remain a global leader in promoting free trade of goods, information, and speech.

Finally, I look forward to discussing what remedies are available to address the abuse of censorship as a non-tariff barrier to trade. Last fall, a Chinese-American constituent of mine in Texas reported that he was censored here on American soil by the Chinese Government. His American WeChat account was shut down for supporting protests in Hong Kong.

His response was, quote, "If you have censorship in China, fine. But in this country? I am a Republican, but I suffer the same as Democrats. We are all censored.'

I look forward to exploring this topic in the same bipartisan fashion in which we always hope to proceed. It is time for Congress to ask hard questions, and that is why we have called our panel of four experts here today to discuss this issue.

I will now recognize Ranking Member Casey. [The prepared statement of Senator Cornyn appears in the appendix.]

OPENING STATEMENT OF HON. ROBERT P. CASEY, JR., A U.S. SENATOR FROM PENNSYLVANIA

Senator CASEY. Mr. Chairman, thanks very much for this hearing, and I want to thank our witnesses for being with us today.

This is, as the chairman has noted, the third in a series of hearings held by the subcommittee outlining the Chinese Government's civil/military agenda, and efforts to influence the economic and geopolitical order in a manner that benefits their authoritarian and anticompetitive practices.

Just yesterday, the Chinese National People's Congress passed a national security law for Hong Kong that significantly erodes Hong Kong's special status and, based on available reporting, will deny the people of Hong Kong the right to protest, the right to assemble, or the right to criticize their government.

The U.S. Congress has been clear time and again: the citizens of Hong Kong must enjoy certain rights that are distinct from mainland China. An effort to undermine the status quo is an affront to the people of Hong Kong and decades of international agreements regarding the status of Hong Kong.

As I have said before, when it comes to China, we must work with our allies to execute a clear and coordinated strategy. This applies to trade and to the Chinese Government's most recent efforts to erode the rights of the people of Hong Kong.

Here in the United States at this time, we know that we are in the midst of a public health and jobs crisis—so much suffering all across our country. We have seen the cost, in the context of this pandemic, this public health crisis, of our reliance on a singlesource supplier and, more to the point, our reliance on production from a non-market economy.

Last year, Senator Cornyn and I began this effort by outlining the main issues related to market access to China. We then focused on specific initiatives and actions undertaken by the Chinese Government, starting with the Belt and Road Initiative. Today we turn our attention to censorship.

The actions undertaken by the Chinese Government include direct barriers, such as blocking movies from entering their market or restricting content, to blocking Internet firms, to dictating content related to China's territorial and economic claims, to demanding action or inaction by businesses related to Taiwan, Hong Kong, Tibet, and the ongoing human rights abuses in Xinjiang.

The Chinese Government has become increasingly assertive in its demands within and outside of its borders. Their mandates related to extraterritorial censorship are particularly troubling. The Chinese Government's response to a message of solidarity for Hong Kong by the General Manager of the Houston Rockets, for one example, brings to light the lengths the government will go to censor speech, no matter where in the world it occurs.

The intended message sent by Beijing's disproportional response is clear: the Chinese Government can exert command and control over any enterprise operating in China, public or private. Simply stated, the Chinese Government is using its market power to study both speech of our firms and speech of our people. These actions are inconsistent with our principles, inconsistent with our values and those of our allies.

The introduction of a corporate social credit system takes this activity to a new level. The actions undertaken by the Chinese Government are clearly restrictive and discriminatory. They are insidious and counter to the necessary conditions of a fair global economic system.

Since this hearing was originally scheduled in March, we have seen all too clearly the costs of relying on China, a non-market economy, for production of our Nation's critical capabilities, whether that is personal protective equipment or otherwise.

I recently introduced the Market Economy Sourcing Act, which will begin to right-size the supply chains toward the United States and other market-oriented countries. But this is but one measure that must be adopted to refocus our trade rules in the global economic system.

If we hope to sustain market-oriented principles for the next 100 years, we must take action now to ensure competition and market principles are not simply words in a textbook, but rather infused into our system of government and governance. When it comes to trade, we must be responsive and creative to address challenges and harness opportunity.

There is no doubt Congress, citizens, and businesses must support and defend the economic security of the United States of America.

I look forward to hearing today from our witnesses and discussing potential responses, including the required disclosure of these types of requests to the appropriate Federal entities, and trade rules that prevent free-riding from non-market economies.

Thank you, Mr. Chairman.

Senator CORNYN. Thank you, Senator Casey.

[The prepared statement of Senator Casey appears in the appendix.]

Senator CORNYN. Now I would like to take a few minutes to introduce our witnesses, and we look forward to hearing from all of you today. I ask all witnesses to summarize your written testimony and try to abide by the 5-minute rule. We will come back and ask more questions. All of your written statements will be made part of the record, without any objection.

Our first witness is Mr. Richard Gere. He is chairman of the International Campaign for Tibet, headquartered in Washington, DC. Of course Mr. Gere is an internationally known actor, social activist, and philanthropist who has worked for more than 25 years to advocate for human rights of the Tibetan people and preserve the Tibetan culture. He is also co-founder of Tibet House U.S. and creator of the Gere Foundation. He has co-sponsored five historic visits to the United States by the Dalai Lama.

Mr. Gere, I understand you had a recent addition to your family. Congratulations on your new son. Thank you for being here.

Next I would like to welcome Nigel Cory, associate director for trade policy for the Information Technology and Innovation Foundation here in DC. Mr. Cory is an expert on data and digital trade issues in the global economy. He spent 8 years working for Australia's Department of Foreign Affairs and Trade, which includes positions covering global, economic, and trade issues among G20 countries, and at the World Trade Organization. He has also held diplomatic postings in Malaysia and Afghanistan.

Third, I would like to welcome Beth Baltzan, a fellow in the Open Markets Institute here in DC. Ms. Baltzan currently focuses on the impact of monopoly power on trade and its consequences for national security. She previously served as Democratic counsel for the House Ways and Means Trade Subcommittee. She spent 6 years as an Associate General Counsel at the United States Trade Representative, where she participated in trade negotiations and litigated trade disputes. Ms. Baltzan spent 3 years detailed to the Senate Permanent Subcommittee on Investigations.

And finally, I would like to welcome Mr. Clete Willems, who is a partner at Akin, Gump, Straus, Hauer, and Feld here in Washington, DC. Mr. Willems currently advises a variety of clients on international economic law and policy matters. Before he joined the firm, Mr. Willems served at the White House as Deputy Assistant to the President for International Economics. He has represented the United States as a key negotiator with foreign governments and has litigated more than 30 WTO disputes. Mr. Willems worked here on Capitol Hill on the House Budget Committee and for the former Speaker Paul Ryan.

Thank you very much for being here, Mr. Willems, and all of our witnesses.

And, Mr. Gere, if you are there, please proceed with your opening statement.

STATEMENT OF RICHARD GERE, CHAIRMAN, INTERNATIONAL CAMPAIGN FOR TIBET, WASHINGTON, DC

Mr. GERE. I am here, somewhere. This is all a bit bizarre. I certainly prefer this face-to-face, but let us engage each other anyhow.

Chairman Cornyn, Ranking Member Casey, members of the committee, thank you so much for your introduction and inviting me to testify.

It has been 35 years since I first testified in Congress, and that was on behalf of our Central American brothers and sisters—and then of course on Tibet for the last 30 years or so. Tibet has certainly been my compass that has helped me navigate through the world, and certainly through Washington, and probably through all of my life.

This is the first time I have testified before the Senate since I last met with one of your greatest colleagues, John McCain. He was a good man. He was a good friend. He was a good friend of His Holiness the Dalai Lama, and of the Tibetan people. He certainly was the best of us. And like John McCain, and many of you I am sure, I hope that our government can deliver at its best, not only for the American people but for the millions of people all over the world who look to us, look to the United States and its democracy and its freedoms and its openness, as a source of inspiration and refuge while they live under oppression and violence.

American leadership is at its best when it sets its view beyond the horizon and looks with balanced confidence at the challenges and the opportunities that lie ahead. But the rise of China in the world today is not something beyond our horizon. It is right here. It is right in front of us. It is in our face. And it effects our daily lives, our workplaces, our freedoms, our privacy, our health—obviously, we are finding out—our elections, and it will certainly shape the future of our world.

After looking at the committee's work on the Chinese Government's plans since 1949 to replace the U.S. on the world stage and advance the communist party's authoritarian model everywhere in the world, I am happy to offer my experience to this existentially important conversation.

The conversation about the future of our relationship with the Chinese is crucial, not only to the U.S.—and frankly, we have been tragically naive under both Republican and Democratic administrations—but it is equally crucial for our democratic allies.

I have been involved in supporting the Tibetan people, and the vision of His Holiness the Dalai Lama for peaceful coexistence with the Chinese Government, for almost 40 years now. When it comes to China, we Tibet supporters have been in for the long haul, I would say. We knew that what was happening in Tibet would not stop there, and that China's authoritarianism would expand well beyond Tibet, as now we see in Xinjiang, now especially in Hong Kong, and beyond China's borders.

Now clearly, we have no quarrel with the Chinese people. They are wonderful people. They are the same as us. We wish the Chinese people to enjoy development, and quality of life improvements, and opportunities, and joy and happiness for their families and for their children. But what I fear is the Chinese Communist Party's model of development that is predicated on control, dominance, and violence. Chinese leaders have often quoted an old Chinese proverb in private: "Wai ru, nei fa"—"On the outside, be benevolent. On the inside, be ruthless."

I recall vividly a time in the 1990s when a very strong bipartisan coalition of members of Congress called on the White House many times to condition Chinese most-favored nation status on clear criteria that would protect the rule of law and human rights. That coalition, unfortunately, was defeated by powerful interests with short-sighted financial goals and a very naive understanding of China's 100-year plan, which they are probably 50 years ahead of already.

Conventional wisdom was that by opening our markets to China, this would somehow, and by itself, produce meaningful political and social reforms. As we now know, the opposite has proven to be true, with more restrictions imposed, Communist Party control of religion, mass incarceration, crackdowns on all forms of dissent, including concealing critical information about the spread of the coronavirus.

We also see the Chinese Government using economic policies to prey on weaker countries through the extremely dangerous Belt and Road Initiative, their long-term plan to control natural resources, supply chains, trade, ports, and sea lanes.

The point I am trying to make here is that the environmental, human rights, and worker rights reforms we advocated for then would have also protected the larger economic interests of the U.S. and our allies now.

Let me give an example. The U.S. opened its doors to Chinese products, Chinese investments, and various forms of Chinese cultural influence, including state media. We have even allowed statesponsored Confucius Institutes to gain a foothold in our universities and Chinese companies like Huawei to spend large sums of money to lobby the U.S. and enter the U.S. markets.

But as you also know, China does not reciprocate. Access to Chinese markets is limited. They do not allow American media to broadcast in China. This lack of reciprocity, fueled by an Orwellian system of state censorship, powerfully restricts the Chinese people's access to information and American and foreign media companies' access to one of the world's largest media markets. In fact, China has repeatedly insisted that U.S. tech companies accept strict censorship to gain access to its 1.4 billion people

Another example is freedom of movement. Americans have a strong interest and appreciation for Tibetan people, for their unique Buddhist culture and their fragile, very beautiful land. It is the roof of our world. It is the third pole. And it is the greatest source of the world's fresh water. But here is what happens in Tibet.

The Chinese Government highly restricts access to Tibet for Americans, including journalists and politicians, like no other areas of China, while Chinese citizens face no such limitations when they visit the U.S. They go where they want.

Now Congress recently took action and passed the Reciprocal Access to Tibet Act. This is a good, very rational and systematic response, and we hope the State Department will implement it soon, as required by law now. As an actor, which is why I am here, I

think, I know you are interested in my experience in the entertainment industry and growing Chinese influence there.

Well, I cannot say that my speaking out for human rights in China has directly affected my career. I am probably an unusual case, and we can talk about that more in the Q&A session. There is no doubt that the combination of Chinese censorship, coupled with American film studios' desire to access China's market, can lead to self-censorship and to avoiding social issues that great American films once addressed.

Imagine Martin Scorsese's "Kundun" about the life of the Dalai Lama, or my own film "Red Corner," which is highly critical of the Chinese legal system—imagine them being made today. It would not happen.

As I conclude my remarks, I would like to call your attention to two bills in the Senate. The first is sponsored by Senators Cardin, Casey, Cornyn, Rubio, and Wyden and has already passed the House with overwhelming support. The Tibet Policy and Support Act strengthens U.S. policy in Tibet while addressing one key and overriding issue, the selection of the next Dalai Lama. This cannot be allowed to be controlled by the Communist Party, only by Tibetan Buddhists. I am sure that you support this basic principle, and I ask you to co-sponsor this bill and raise it with the Senate leadership for swift passage by the Senate Foreign Relations Committee.

Now the second bill is the Mongolian Third Neighbor Trade Act introduced by Senators Sullivan and Cardin and co-sponsored by Ranking Member Wyden and Majority Whip Thune. This bill would grant a democratic and independent Mongolia better access to the U.S. market for cashmere products manufactured in Mongolia. We can go into this later. Mongolia is under extraordinary pressure and threat from China right now. This will greatly benefit Mongolia, create jobs for Mongolian women, and reinforce democratic institutions. It is a concrete way of strengthening democracy at a most critical time in the Indo-Pacific and of helping Mongolia remain independent. I call on the Senate to pass this bill as well, as soon as possible.

Thank you very much for your attention, and I look forward to your questions.

[The prepared statement of Mr. Gere appears in the appendix.] Senator CORNYN. Thank you for joining us. We will hear the other opening statements and come back for some questions.

Mr. Cory?

STATEMENT OF NIGEL CORY, ASSOCIATE DIRECTOR, TRADE POLICY, INFORMATION TECHNOLOGY AND INNOVATION FOUNDATION, WASHINGTON, DC

Mr. CORY. Thank you. Good afternoon, Senators. I greatly appreciate the opportunity to testify on the use of censorship as a nontariff barrier to trade.

Let me start by saying that it is important to acknowledge that China uses censorship as a disguised tool for protectionism. And censorship in the Chinese context means overly broad and discriminatory control over digital content, distribution platforms, infrastructure, and the firms involved. And this disguised protectionism has already cost the U.S. economy so dearly, but this cost will only rise if China is able to export its model of digital governance to other markets around the world.

The United States needs the strongest strategy to push back on the direct trade impact of censorship in China, but also to prevent it from moving to other markets. Stakes are high. If we fail to act, the U.S. could lose its edge in the global digital economy. And this is especially the case, given censorship along with other disputes over Internet policy, as part of a broader troubling rise of so-called digital sovereignty.

And while not alone, China is the world's leader in using overly broad and restrictive and discriminatory rules around content it deems illegal. China is advocating for its own model, but other countries are also attracted to it. And they are drawn to it for political reasons, because it provides them with control, but it also provides them with a protectionist tool because they lack the economic impact.

And while censorship is not the only restrictive tool that China has used, it is a central one that has led to a generation of Chinese Internet consumers having an Internet experience that is completely different from most people in most countries around the world. And it is known that China uses the Great Firewall to block access to thousands of foreign websites, which is obviously a clear barrier to market access. But it is only one tool of many.

It is less known that censorship is also a key factor that leads to U.S. firms being prohibited from operating in key Internet service sectors in how it plays a part in the opaque, discriminatory, and restrictive content review process for video games, movies, and TV. And it is also a key factor that limits or restricts their ability to connect to the global Internet, which essentially hinders their ability to use or develop software on a cross-border basis.

Now, while the primary motivation for censorship in China is regime stability, it also gets the economic benefit. And the economic benefit to China and the cost to the United States is already significant, in that over the last 20 years a host of U.S. industries and firms have lost hundreds of billions of dollars in revenue. And while it is hard to calculate an exact cost, the Information Technology and Innovation Foundation conservatively estimates that, for example Google, which withdrew from the Chinese market in 2010, has lost in excess of \$32 billion just over a 5-year period from 2013 to 2019.

In contrast, Amazon and Microsoft cloud services, which are also severely restricted in China, are estimated to have lost over \$1.6 billion just over a 2-year period from 2017 to 2018.

And why should we care about this? Because this lost revenue of billions of dollars would otherwise have supported innovation and employment here in the United States. Now some U.S. policymakers want to exacerbate the impact of censorship in China by calling for U.S. firms to either leave China or stay out of China because they believe it is immoral to do business there.

But the fact is that, with or without U.S. firms, China's Internet will remain censored. It has been essentially censored since they first connected to the Internet. But there should be no doubt that it is in America's economic and security interest that as many American firms as possible sell goods and services into the Chinese market. Every dollar's worth of digital and physical exports is a dollar that Chinese firms do not earn. And it is a dollar that U.S. firms can otherwise use to reinvest in research and development, and to support economic and employment opportunities here in the United States.

It is also important to recognize that human rights and trade are not mutually exclusive. The U.S. Government should still obviously lead the charge around the world in advocating for human rights and democracy, both in China and elsewhere, but it should also be able to develop a more nuanced, detailed understanding of how it is playing out and develop a countering strategy to how China has deployed censorship in the way it has, and to ensure that it does not spread any further.

As a consequence, we recommend to Congress that it ask the U.S. International Trade Commission for a detailed study into the impact of censorship, and this study could form the basis for new rules for the USTR to use in future trade agreements, and also to be used by the Department of Commerce. But it could also form the basis for a more holistic, global digital economy strategy that is needed to counteract China's effort to advocate for its own model, because there is a fierce debate underway at the moment over which direction countries should go, which approach they should take, and China's is obviously based on censorship and protectionism.

Again, I thank you for the opportunity to testify, and I look forward to your questions.

[The prepared statement of Mr. Cory appears in the appendix.] Senator CORNYN. Thank you. Ms. Baltzan?

STATEMENT OF BETH BALTZAN, FELLOW, OPEN MARKETS INSTITUTE, WASHINGTON, DC

Ms. BALTZAN. My name is Beth Baltzan, and I am a fellow at the Open Markets Institute. I have been a trade lawyer for nearly 25 years.

As Senator Cornyn noted, I have worked at USTR, the Public Company Accounting Oversight Board, the Senate Permanent Subcommittee on Investigations, and the House Ways and Means Committee. All of these experiences inform my testimony today.

In 1989, Francis Fukuyama published an influential article called "The End of History." He argued that the imminent dissolution of the Soviet Union reflected the triumph of economic and political liberalism and that economic liberalism would pave the way for political liberalism globally. This view permeated the zeitgeist when we designed the WTO and when we let China into it.

Developments in China have shattered that theory. Rather than democratizing as a result of its integration into the global economy, the Chinese Community Party has weaponized that integration, using its economic leverage to quash the rights of foreign citizens in their home countries.

Economic liberalism has become a vector for political illibralism. Fukuyama has recognized his mistake, going so far as to identify Chinese state capitalism as the most salient ideological threat to democracy. When we look at the actual rules of globalization, we see how this came to pass. In designing the rules in the 1990s, we focused on liberalizing capital flows, believing that a laissez faire model would produce ideal economic and political outcomes. We did not guard against a government that would exploit that system with a fundamentally anticompetitive, zero-sum strategy. It is that anticompetitive strategy, not natural comparative advantage, that has led us to be economically dependent on an authoritarian regime.

It is wrong to say we could not have seen this coming. The founders of the multilateral trading system foretold this outcome and sought to prevent it. They designed a regime grounded in fair competition. Cheating through currency manipulation, labor rights suppression, or monopolistic behavior was prohibited. They presciently warned that without these rules, state-trading governments, ubermonopolists, would destroy free enterprise and democracy.

These rules were memorialized in the Havana Charter signed in 1948 by over 50 countries, but it never entered into force. It is popular lore that an isolationist Congress rejected it, but that is not accurate. The charter failed because the American business community rejected it. We managed to forestall the immediate threat to democracy and free enterprise by keeping the Soviet Union out of the gap, but we did allow the PRC, a modern state-trading government, into the WTO, and prophesy now seems to be coming true.

It is not too late to mitigate the risk. Addressing the CCP's ability to interfere in our civil liberties requires us to reduce its economic leverage over us. I offer five recommendations.

First, we must address our supply chain dependency. So much has changed since early March when this hearing was first scheduled. People now understand in very real terms what it means to have a supply chain dependency on China. Fortunately, for the first time since the 1970s, the United States is having a conversation about strategic industrial policy. We need to identify critical sectors, map out supply chains, and ensure we have diverse sources not just of finished goods, but of components as well.

Second, we must recognize that unless we reform the systemic global trading incentives, that it will be difficult for us to sustain supply chain diversification. As long as the rules tolerate anticompetitive inducements to offshore, we must anticipate that any newly rebuilt supply chains will eventually end up back where they started. Therefore, we need the right slate of reforms at the WTO. The narrow focus on subsidies is grossly insufficient to deal with the much more structural problem of the CCP's anticompetitive approach to trade.

Third, and related to the question of sustaining supply chain diversification, we must keep an open mind about tariffs. Tariffs can be a useful tool for driving behavior. The United States has the lowest bound rate at the WTO. That low rate, coupled with anticompetitive CCP behavior, has made it particularly lucrative to offshore American production and export it back. Until we have achieved global reform, we must consider tariffs to be one way of incentivizing the sourcing need.

Fourth, we should work with our allies but be realistic. Many of our allies simply do not yet see the CCP as a threat to economic and political freedom. However, supply chain diversification is one area where we can cooperate with countries that share our values.

Fifth, we must accept that true market access in China is illusory. The CCP will give us exactly as much market access as they want to. The more we telegraph that we believe unfettered market access is possible, the more leverage they have over us. Being a market access demandeur puts us in a position of weakness and increases their ability to interfere with our civil liberties.

Thank you for the opportunity to present these views.

[The prepared statement of Ms. Baltzan appears in the appendix.]

Senator CORNYN. Thank you very much. Mr. Willems?

STATEMENT OF CLETE R. WILLEMS, PARTNER, AKIN, GUMP, STRAUSS, HAUER, AND FELD LLP, WASHINGTON, DC

Mr. WILLEMS. Mr. Chairman, Ranking Member, and members of the committee, thank you very much for the opportunity to testify today.

China is expanding its use of censorship to promote national interests, with adverse consequences around the globe. This has been driven home for us by the suppression of information on the coronavirus and the impact that this has had in the United States.

While censorship is just one of the many tools that has been used to promote the party's interest—and we have talked about others already today—it is something that has not been prioritized in policymaking, including the Phase One negotiations that I was a part of while I was in the administration, and therefore it is ripe for further exploration and action.

China's censorship activities manifest themselves in many ways. One primary example is the Great Firewall, which restricts free speech through website blocking and filtering. According to USTR, China currently blocks over 10,000 websites. And as I have been getting ready for this hearing, I have seen other estimates that put that number closer to 20,000 or even 30,000. China also controls domestic news outlets and directs them to avoid unfavorable stories on issues related to the economy and, of course, the coronavirus itself.

China's indirect efforts to censor speech are equally troubling. During last year's NBA Twitter controversy, China retaliated against a single tweet by a single individual with a single team by prohibiting the broadcast of all games of all teams in China, which was a clear effort to intimidate those abroad who intended to speak out, and whoever wanted to do business in China.

And this is just the tip of the iceberg. China's social credit scoring system will enable its regulators to comprehensively monitor and influence behavior in real time. Overall, China's policies enable it to suppress disfavored views, spread propaganda, and promote a business environment where only its companies can compete.

China has also been encouraging other repressive regimes to adopt similar policies and has yet to back down in the face of U.S. pressure. After the State Department classified Chinese news outlets as foreign agents, China responded by expelling journalists from Beijing. And I find it particularly ironic that China's wolf warrior diplomats have taken to Twitter to influence global opinion on a site that is totally banned in China.

At the WTO, the U.S. can seek to challenge China's restrictions on foreign Internet service providers under the service agreement which bans prohibitions on market access and discrimination. However, these rules were drafted before the Internet age, and they are not particularly specific when it comes to censorship, which could lead to uncertainty.

China could also try to avail itself of certain exceptions such as public morals or national security. I believe that the U.S., on balance, has a strong case. But given the time and resources that it would take to bring a dispute and some of the uncertainty I mentioned, I think it is better to move in a different direction.

So how should we deal with this issue? Let me give you a couple of ideas at the outset.

First, we must consistently highlight China's nefarious policies and use the full power of government to seek change. Governments are better positioned than companies to push back against this behavior, and we should not expect our companies to do it alone, and we cannot even always expect them to do what we think is the right thing, on their own. They need the government behind them.

Second, we must work with key allies to do the same. China will find it much more difficult to stir up anti-U.S. sentiment and excuse its behavior if others stand by our side. But those others must not hedge their bets, and they must not send the wrong signal to China by adopting similar policies. The EU's digital sovereignty agenda and the discussion of the European Firewall is a case in point.

Third, I would apply the same advice to us. As we seek to counter the threat that is posed by China, we must be careful not to adopt the same policies that we are condemning, policies that stifle free speech or increase market access barriers. This will backfire economically, and it will cause us to lose moral high ground that is so important to building an effective international coalition.

Fourth, we should pursue a broad WTO reform agenda with explicit rules on censorship, forced technology transfer, subsidies, intellectual property theft—and I think some of the ideas that Beth raised as well are worth considering. We should require China to take on the same obligations as the United States, and fix the dispute settlement system. The WTO is falling short of its objectives, no doubt, but abandoning the system that we, not China, helped to create would be a tragic mistake. China would like nothing more than to see the U.S.-created system collapse.

Fifth, we should negotiate a broader range of trade agreements with strong censorship provisions. This includes a revamped U.S.-EU-Japan trilateral, add-on digital trade chapters with existing FTA partners like Australia, a new Taiwan FTA, and a renegotiated TPP. Putting politics aside, the TPP provides a great opportunity to encircle China with policies that stand in contrast to its economic model. There are legitimate concerns about it, but it should be reformed just like NAFTA, which we are going to bring into force tomorrow, the new USMCA. Let us do the same thing on TPP. Sixth, we must pass new laws to protect U.S. companies so they can safely access a market of over a billion consumers. Ideas like protecting employees from being terminated for voicing opinions about foreign governments, prohibiting U.S. companies from complying with censorship requests, and disclosing pressure received from the Chinese Government, all deserve debate.

Finally, we must not draw a false equivalence between the Chinese Government and its people. Many good Chinese citizens are suffering, with their voices muffled by the same policies I have just been describing. A commentary that was briefly posted online in China earlier this year, before it was deleted by the censorship police, stated: "The openness of information is the best vaccine. Blocked ears and eyes are also a contagious disease, and no one can escape."

Thank you.

[The prepared statement of Mr. Willems appears in the appendix.]

Senator CORNYN. Thank you very much. We will proceed with a round of 5 minutes of questions per Senator.

Mr. Gere, let me start with you, if I may. Your courage in confronting the Chinese Communist Party for its methods and tactics of censoring, retaliating, and punishing those with whom it disagrees is commendable. And I thank you for that.

As China's economy has grown, though, we have seen more selfcensorship. There is the censorship that can be imposed directly by the government, but there is also the practice of self-censorship by companies and individuals that want to do business in China. Can you describe how Chinese practices operate and how the magnitude has changed in parallel with the growth that it has experienced?

Mr. GERE. Yes. Well, in my experience, certainly in the government diplomatic world I have seen over the last 40 years, China is not shy about letting everyone know that they do not like the Dalai Lama to be treated well and the Tibetans to be treated well.

The three Ts that they freak out about are Tiananmen Square, Tibet, and Taiwan. And certainly they do call everyone—local, State, national, Federal, all over the world—if any of those issues do come up. But I have seen over the last 30 or 40 years that countries and diplomats do self-censor now, that they take it upon themselves not to put themselves in a position where they are going to be reprimanded by the Chinese or that they are going to lack some kind of economic access.

Norway went through a horrible period when Liu Xiaobo was given the Nobel Prize. They were cut out completely from trade with China. Moving on to movies, I see the same thing happening over these last years.

As I said before, certainly you are not going to see any film made by a studio that was critical of China, because of investment, money coming in from China invested in U.S. films. But let me go back a little bit and understand how the film system works in China.

There are only 34 international films that are allowed to be shown a year in China, and 12 of those, one-third of those, have to be an IMAX film or a 3D film, at minimum. So what they want is these high-profile "tent-pole" movies they are called, digital CGI films—you know, the Marvel movies, et cetera—which are consumed at a very high level in China, and entrepreneurs can make a lot of money. The two biggest distributing companies in China are state-owned. The film industry is owned by the state in China. So of course there is a lot of self-censorship.

What would have been maybe a Chinese villain is now a North Korean villain in a movie. I mean some of it is quite silly. There is a movie, a high-profile movie, where I noticed Tom Cruise was walking through Shanghai and there was some underwear on a clothes line. The censor objected to that because it made Shanghai look like a less developed city, and it was removed.

"Christopher Robin" was not allowed to be screened in China because there was some amusement that Winnie the Pooh looked like Xi Jinping, and it was refused entry into China. But yes, I see this in studios, and it came up even recently with me. There was a Hollywood script that takes place partly in China, and the producers of it at first balked at the idea of me being in the film. And then they were talked to—and actually they are supporters of the Dalai Lama in Tibet, and they took a deep breath and said, "No, no, we are going to make the moral decision here."

So we are talking about making that film. Of course we will never be able to shoot it in Shanghai. I am not allowed to go to China. I do not even know now if I would be allowed in Hong Kong. I asked, point blank, to some very well-known actresses, friends of mine, Chinese actresses, if I could work with them. And they said, absolutely not. Their careers would be over in China, and they would never be allowed to work again.

I have had other circumstances with very talented Chinese directors who—one was in tears with me, having to call me up and say that he could not work with me, that his career would be over and his family could not travel.

So I mean, this is personal to a lot of people. My own career I cannot say has suffered at all because I don't make CGI-kinds of films. My films would not naturally be shown in China anyhow, except underground and on the black market. I know the film that I made, "Red Corner," many years ago—of course we could not shoot it in Asia. We could not even get insurance because of me and the threat from the Community Party. But when it was shown, I did go to Hong Kong after that and, although it was not officially shown in China, as I was going up the elevator in the hotel there, the elevator operator looked up at the camera that was watching us in the elevator and, as I passed him at my floor, he said, "Thank you for 'Red Corner'."

Senator CORNYN. Well, there is that ubiquitous technical surveillance in a police state that—

Mr. GERE. Well, we know that the budget for surveillance in China is larger than the military budget.

Senator CORNYN. Thank you very much.

Senator Casey, do you have some questions?

[Pause.]

Senator CORNYN. Senator Casey? I understand we have a little technology issue. Let me turn to Senator Cassidy—

Senator CASEY. Mr. Chairman, thanks very much.

Senator CORNYN. Oh, there he is. Thank you. Go ahead, Senator Casey.

Senator CASEY. Mr. Chairman, thanks very much. I want to thank you for the hearing. I will start with Mr. Gere and then go to Ms. Baltzan.

Mr. Gere, I want to first note for the record, because some other members of the Senate may not know this, but you have strong Pennsylvania roots personally, and then your family, both your parents, and I know that we want to note that for the record, and we appreciate that. I know that we always are welcoming people back who want to move back. But I want to thank you for that.

I also want to thank you today for the great work that you have done calling attention to these issues over decades now in a manner that is the kind of sustained effort that those of us in Washington sometimes do not undertake. There has to be a lot more focus than we have brought to bear on these issues that relate to China. And you have been sounding the alarm for years.

I wanted to start with your observations with regard to both the tactics and the strategy employed by the Chinese Government, especially over the last decade, to compel or to elicit actions from individuals or companies, or in some cases governments.

So I guess it is a two-part question: your observations of both the tactics and strategies employed by the Chinese Government. And secondly, what is your advice for both firms here in the United States as well as the Congress?

Mr. GERE. Am I on now? Can you hear me? Hello? Yes, good. Well, thank you for your kind words, and I have to say, yes, my mother and father both came from Susquehanna County-Brooklyn, PA, which I do not think is any larger today than it was in the 1920s when they were born. It is a farming community, dairy farms. My father grew up milking cows by hand, early on. So I still have family there and consider that maybe my spiritual home.

I think the big, overriding thing, from my point of view, is that we have to understand that China is playing the long game. They have been playing the long game. They do have a 100-year plan, and they are way ahead. They were very clever. They realized they were coming from a very weak position, and they decided that they would be the cheapest place in the world to make products. And this was well thought-out from their side. They were not looking to make profits. What they were looking to do was own the markets, which they do at this point.

We get our medicines from China. We get most of our manufactured goods from China. We get almost everything we buy in the store made in China. They own us in many ways. And certainly that, to them, is controlling the world, the world that we have bought into, which is one of, who is going to make the most money? We have made some huge mistakes along the line, very shortsighted, very naive. They are much smarter than we are. They are much more patient than we are.

They creep into power, as we back off, as we pivot away from Asia and we leave a vacuum. They fill it immediately. When we back off in the environmental world, they fill it in immediately. When we break up our alliances, they come immediately. They are making alliances with Italy right now. The Belt and Road is now ensconced in Italy. It should be the American Belt and Road. It is the Chinese Belt and Road.

Again, it is long-term thinking. And especially now that they have made Xi Jinping Emperor for Life, this 100-year plan will be continuous. As we change administrations, as we change the focus of what we are doing, how we are thinking, how we approach the world, there are spaces and vacuums that are created, and the Chinese have taken them every single time. They creep into every open space.

And I have talked to leaders all over Europe, all over Central America and Asia. I have said, "Please, do not take a loan to build an airport or a port from the Chinese, because they will take that airport. They will take that railroad. They will take that port away." We have seen it in Sri Lanka, and we are going to see it in Italy.

So I think the strategy for us is to step back and understand this long-term strategy for world dominance that is coming from the Chinese Communist Party. And part of that is talking to each other, having these alliances, relying on TPP, relying on real, honest relationships with the EU.

This is a world of strong alliances that can confront what the Chinese are doing and win.

Senator CORNYN. Senator Casey, I know you had a question for Ms. Baltzan.

Senator CASEY. I will go to that on the second round. Thank you. Senator CORNYN. Thank you. Senator Cassidy?

Senator CASSIDY. Thank you. Mr. Gere, you just said something—by the way, thank you all for testifying. Incredibly important hearing, and I thank you very much.

And, Mr. Gere, you just mentioned creeping into power. I kind of like that, as they kind of, you know, creep into the vacuum. But I am trying to ask myself, how do we stop it?

Now, Ms. Baltzan, I am struck by your testimony because it actually links their ability, the Chinese ability, to do digital censorship to the economic power that they are accruing. And it suggests that—I liked that whole exchange that you had in your testimony about how free trade by itself does not necessarily make things happen. It has to have other guard rails.

I say that because I was recently told by Central American countries that the workers' rights, the human rights, and the environmental requirements we place upon them in order to conduct trade have increased their cost of production and put them at a competitive disadvantage for a company looking for a low-cost place to produce. Therefore, they go to China, which does not have the workers' protections, to say the least, the environmental protections, et cetera. And so it kind of slides that way, which, if you will, works against our interests in multiple fashions.

Do you have a thought on that?

Mr. GERE. Yes; is that to me? Or is that to—

Senator CASSIDY. Ms. Baltzan. Am I pronouncing your name correctly, ma'am?

Ms. BALTZAN. You did, thank you very much. Thank you very much.

Yes, I think this is something that we see with Mexico as well. I think the answer to stopping this race to the bottom, which is fundamentally based on anticompetitiveness—these are anticompetitive bases for trade—is to incorporate these standards at the WTO. And it is very surprising to me that, in light of not only these issues in Central America and Mexico and other places, but in light of Tazreen, the fire at Tazreen in Bangladesh, the collapse of Rana Plaza in Bangladesh, it surprises me that labor issues and environmental issues in this race to the bottom are not part of a WTO reform package.

I did point out in my testimony that there were labor rules in the Havana Charter, which was supposed to be the governing document for the global trading system going back to 1948. If China were actually required to adhere to those rules like everyone else, then you would have the opportunity to mitigate the race to the bottom.

Senator CASSIDY. But let me ask you for a second, if you will. If we are—you mentioned the problem with our supply chains going through China. But they are going to be the lower cost as long as they are willing to sacrifice international environmental standards, labor rules, human rights, et cetera. Granted, Vietnam might be lower cost in some places based upon labor, but nonetheless, even that is a further race to the bottom.

If we are talking about bringing supply chains back to more secure places and decreasing the economic growth of China by which they can coerce people into accepting their censorship, we really have to kind of take into accommodation that which you are describing now.

Is that kind of the essence of—I am adding to it, but would you agree with that which I said?

Ms. BALTZAN. I think that is right. I think we need a race to the top, not a race to the bottom. And I think—you know, labor is part of section 301, so that could be on the table, not just IP, but section 301 on labor with respect to our negotiations with China as well. Why not?

Senator CASSIDY. Okay. That is very helpful. And I am sorry, I do not have my notes in front of me. I am not used to working remotely. The gentleman who spoke at the very end, I think you spoke of a need to confront this digital and censorship issue across the globe. But tell me again how the U.S. is to do that? How do we get, for example, Italy to not accept censorship when, according to Mr. Gere, Hollywood is effectively accepting censorship?

Mr. WILLEMS. So thank you for the question. What I was referring to in general was that I think we need a much more robust negotiating agenda, with a range of potential allies that is more explicit on the censorship question.

We have made some progress in some trade agreements—the USMCA, the U.S.-Japan Digital Trade Agreement—where we talk about nondiscrimination and the free flow of information across borders, but I think we can go much further and much deeper and be much more explicit on censorship. And I think that doing so would actually help address some of the concerns that I have about a WTO dispute and some of the uncertainty that could be put into place by some of China's counter-argument. So I think a much broader trade negotiating agenda is the way to go.

The other thing, though, on Italy that I think Mr. Gere was referring to was that Italy had basically signed up for some Belt and Road money. It happened about 2 years ago while I was in the administration. And I personally was involved in calling Italy and trying to get them to stop. The problem was, they were in an economic crisis. They wanted infrastructure, and China was offering it cheaply. It is a huge problem. We need to have an American alternative.

We have tried to do that with the International Finance Corporation. I think it is a very helpful addition to the U.S. toolkit. But I would like to see us put even more money at that effort, and like to see us link up with other trading partners, and then have international standards on development financing—standards about transparency and accountability, standards that we meet, that Europe meets, and that China cannot.

That is another area where I would like to go.

Senator CASSIDY. Thank you. I yield back.

Senator CORNYN. Thank you very much. Senator Menendez?

Senator MENENDEZ. Thank you, Mr. Chairman, for holding this hearing. And thank you to all of our witnesses.

You know, the movie industry's thirst for profits and for access to China's huge audiences makes it uniquely susceptible in many ways to the sort of self-censorship that the Chinese Communist Party, the CCP, likes to encourage others to impose on themselves.

One-quarter of "Aquaman's" global box office came from China. Disney earned \$600 million off of "Avengers: Endgame" in China. That is a lot of leverage. And the People's Republic of China is very clear that when it comes to movies, it wants products that are not only entertaining, but that align with the party's world view. So, Mr. Gere, can films that are not CCP propaganda pieces real-

So, Mr. Gere, can films that are not CCP propaganda pieces really get access to China, given the role of China in the global box office? What effect is China having on the movie industry overall?

fice? What effect is China having on the movie industry overall? Mr. GERE. Yes; I mean, look, I do not think it is as dark as you were describing, in this moment. And there are certainly benign movies that are completely apolitical that have access. Those movies that you brought up are pure entertainment and politically neutral.

I think those will never have a problem having access to 1.4 billion Chinese viewers. But I do think that challenging films along the lines of "All the President's Men" or "Red Corner," that I made, it is highly unlikely that these kind of films are going to be supported by Chinese investors. And especially if they say in advance, which they often do, that there is no way that that film will have access to the Chinese people.

Senator MENENDEZ. Yes. How about—and I get that those are rather benign—but even in the case of "Top Gun: Maverick," whose producers removed references to the Japanese and Taiwanese flags at the request of the Chinese investor, China still has a lot of power to dictate their preferences. Is that not fair to say?

Mr. GERE. It is very fair to say. But also it is very illustrative of their weakness. I mean, how silly is that? How completely ridiculous? The way that they are hypersensitive about the Dalai Lama, you know, the kindest, most generous man on the planet, who is consumed and saturated with love and compassion and forgiveness. The mere mention of his name makes them crazy.

The problem is that communist parties everywhere lack legitimacy. And someone like the Dalai Lama, for instance, is legitimate. People love the Dalai Lama, for deep and powerful reasons. You do not love the Communist Party. You abide by it because it is powerful, and it controls you. But you do not love it.

Legitimacy truly—true legitimacy comes from the heart, and that is really what they are afraid of: something that touches the heart, and through the heart a sense of right and wrong and decency. Anything that basically has that, that would challenge even the idea of a communist party, or of totalitarianism, or the kind of surveillance state that they have developed there, anything that challenges that even in a poetic way is going to make them crazy.

Senator MENENDEZ. Yes. I agree with you. How small is it of them to be worried about a Japanese or Taiwanese flag? But even something as small as that is something that the film makers were willing to submit themselves to. And so that is what worries me.

And I agree with you on the Dalai Lama. And I so appreciated in my other role on the Foreign Relations Committee, what you have done in your long quest to have the recognition and the freedom of the Dalai Lama to do what he does as a spiritual leader of so many.

But this is what I am concerned about. You know, we know what the Chinese are and what they do. I am concerned about their influence over us. I look at the fact that President Xi has declared that every foreign movie to be shown in China must be vetted by the Central Propaganda Department. And, depending on the content, the Ministry of State Security, the Ministry of Public Security, the Ethnic Affairs Committee, and the Bureau of Religious Affairs also may be involved.

Now I do not think they are looking at lighting or cinematography or editing. I think they are looking to preempt themselves and this is a challenge. I wonder, I wonder—and I say this to the panel—does this influence film makers' choices to preempt themselves from offending Chinese censors?

What happens if the creative team is unwilling to make the sorts of changes that China wants?

Mr. GERE. Well, you have different types of movies. And certainly a "Top Gun" kind of movie, that is not an art-film festival kind of movie. It is a mass-market entertainment. And I do not know that the changing of the flags on his uniform, you know, is a major blow to the soul of the film makers. It is not that kind of a film. I am not worried about those kind of films.

I am worried about the rabbit hole that one goes down at this point. If all of our films become primarily financed by Chinese money, then clearly you are going to see films that are to glorify the Chinese Party in some way. But that is a ways down the rabbit hole.

I think still, serious film makers are going to make the kind of films that they want to make. The commercial movies that you are talking about, you know, they want access to a mass market. And I cannot blame them for that. And minor changes along the way, it is hard for me to fault. I am more concerned about the soul of storytelling and movies and entertainment which are beyond the kind of Marvel movie kind of movie making.

Now clearly you are not going to have Chinese villains anymore. That is not going to happen. That is done. It is going to be North Koreans. They are all going to be North Koreans from now on. But, you know, I always thought those were paper tigers anyhow. I never felt comfortable with that in any event.

But as I mentioned in my original talk, the serious films looking deeply, profoundly at the situation in China will not happen now.

Senator MENENDEZ. Mr. Chairman, I just want to make one last comment, if I may.

Senator CORNYN. Sure.

Senator MENENDEZ. I understand, Richard, what you are saying. But sometimes the soul is lost step by step and dollar by dollar.

Mr. GERE. That is the rabbit hole I am afraid of, yes.

Senator MENENDEZ. Thank you, Mr. Chairman.

Senator CORNYN. Thank you, Senator. Senator Cortez Masto?

Senator CORTEZ MASTO. Thank you. Thank you to the panel. I appreciate the conversation today.

So let me approach it from this perspective, and let me turn to Hong Kong. American and European countries are receiving pressure from the Chinese Communist Party to endorse national security law and other CCP actions toward restricting freedom and civil liberties in Hong Kong. We know that. The pressure will almost certainly extend to other issues that

The pressure will almost certainly extend to other issues that CCP deems sensitive. But what we have also seen is the pressure on American companies who want to do business in China to change some of their, I do not know, policies, principles, some of their products in response to the pressure from China.

So I guess my question to all the panelists is, what can Congress do to support American companies experiencing the CCP government pressure and propaganda? I mean, that is the challenge we have here. I sit on Banking and Housing as well, and we just had this discussion on how American companies are succumbing to the pressure put on by the Chinese Government.

What do we need to be aware of here in Congress? And what can we do to support our American companies that want to get into that market, but at the same time stay true to our freedoms, our democracy, and who they truly are as a business?

Mr. GERE. Yes, I just had one comment here, and it is to bring, again, the attention of reciprocity, international norms of reciprocity. We have to demand. We have given away way too much way, way, way too much. We did not have to. The Chinese are sitting back in their chairs and going, "Ah, we got what we wanted again. We got what we wanted again, again, and again." Reciprocity, just the norms of international behavior, access to

Reciprocity, just the norms of international behavior, access to their markets, access to information, those are huge things to them—huge. But we can demand that there is reciprocity. Reciprocity of movement, you know? No one gets to Xinjiang. No one gets to Tibet. It is impossible. It is easier for a journalist—journalist friends of mine have told me this: it is easier to get into North Korea than into Tibet. Reciprocity, the norms of international behavior have to be demanded, and we cannot be drunk with those short-term goals of money. We cannot, because we have seen what it has done to us over the last 25, 30 years.

Senator CORTEZ MASTO. I appreciate that. Thank you. But let me ask you—well, let me open it up to the panel, because I think, Mr. Cory, earlier you said that the U.S. should ask the International Trade Commission for a study on China censorship and protectionism. So we get this study; then what do we do? And let me put it in this perspective. Once we have the study, is there an opportunity to bring in international organizations or other countries, or allies, or friends to really put pressure here and to focus on this reciprocity, or what we should be doing to address the censorship and protectionism?

Mr. CORY. I think the study is a simple first step that sort of sends a clear signal that the United States recognizes that this is no longer some minor trade irritant, that this is a part of the strategic calculation with China. And what we have seen is that countries, like my home country of Australia, the United States, Canada, and the European Union, are all somewhere along a spectrum in waking up to what China and the Chinese Communist Party represents to their trade interests, their economic interests, but also their own political interests and values there.

And so it sends that clear signal. And then it starts the process of outlining what are the corresponding steps that the United States can take? And that is multi-faceted. That is addressing the cases where Chinese Communist Party action is applied extraterritorially, outside of China, in the United States, in Australia, and elsewhere, documenting those. It is bringing the transparency to that.

It is also setting up the mechanisms to talk with U.S. firms and industries that are in the impossible position of trying to stand up to the Chinese Communist Party to get a better understanding what exactly is going on. What are they asking for? How are they asking for it? What is the legal basis for that? Because only then does the United States have the information it needs to respond.

But also, and importantly, I think the study would reflect, and the strategy that it should lead to is, that the United States cannot do this alone. It most definitely needs to lead the charge in making the case and pressing back against what China is doing, but the point has passed where the United States can do this on its own. Whether that point was 10 or 15 years ago, it is a matter of fact now that the United States really does need to work with its likeminded value-sharing partners, especially the European Union, Japan, Australia, and others, in providing a collective response. Because that is really the best chance we have for affecting change in China and its effect outside of China.

Senator CORNYN. Thank you, Senator Cortez Masto. We will now turn to Senator Wyden.

Senator WYDEN. Thank you very much, Mr. Chairman, and I appreciate all our guests being with us. And as ranking Democrat of the full committee, I take a great interest in this. Good to see you again, Mr. Gere, as well. Welcome.

And I want to ask you all about something John Bolton wrote in his book—and of course he is the former National Security Advisor—and I am just going to read it to you. "At the opening dinner of the Osaka G20 meeting in June of 2019 with only interpreters present, Xi had explained to Trump why he was basically building concentration camps in Xinjiang. According to our interpreter, Trump said that Xi should go ahead with building the camps, which Trump thought was exactly the right thing to do. The National Security Council's top Asia staffer, Matthew Pottinger, told me that Trump said something very similar during his November 2017 trip to China."

So we have very knowledgeable witnesses on this panel, and I would just like to see if any of you believe that encouraging foreign leaders to build detention and forced labor facilities for religious minorities is anything but a repudiation of American values? Does anybody think that that is not the case, that this is a repudiation of American values?

Mr. GERE. Yes, I mean it is—I do not know what crazy movie we are in all of a sudden. This is "Dr. Strangelove." I cannot imagine there is another person in the U.S. Government or another person, an American citizen, who even remotely would believe what the President said, would feel that same way, that the concentration camps are the right way to go. It is appalling.

Senator WYDEN. Anybody want to add to that? I think that pretty much sums it up. It certainly does for me, and our family knows a lot about concentration camps as well.

Okay; thank you very much, Mr. Chairman, Senator Casey. Good job—an incredibly important hearing, and I look forward to learning more about all that you have discussed. Thank you. Senator CORNYN. Mr. Willems, before we move to the next ques-

Senator CORNYN. Mr. Willems, before we move to the next questioner, you had your hand up and wanted to make a comment on some earlier testimony or questions. Go ahead.

Mr. WILLEMS. Thank you very much. And let me just comment quickly on the last two questions. First on this question about the Osaka dinner. I was out of the administration by that time, so I have no first-hand knowledge of it. I can tell you that while I was in the administration, I did work closely with Matt Pottinger and Ambassador Bolton and others on trying to push back on the policies in Xinjiang. And I think that ultimately, you know, action has been taken there, as it should. What is going on in that region is appalling, and the U.S. and allies around the world need to stand up against it.

The comment I also had just wanted to make on the previous question was about what we can do to help our companies. And I do think in particular we need to play a robust role at the governmental level. A lot of this conversation has been about how it is terrible that we are trying to access China's market, because that gives them more leverage.

I might flip it another way and say that by having access to China's market, we are getting a lot of money that our companies can then pump into research and development to make sure that they are an innovation leader ahead of China.

So another way to put it is that China is subsidizing our innovation. And I think if you look at our semiconductor industry, which you have paid a lot of attention to, they get 30 to 40 percent of their sales in China. So that is an important source of revenue for them. I think we also need to do our part, like the CHIPS Act, but I think it is important not to only look at what the adverse consequences are of market access, but also to look at the positive ones.

But in terms of helping our companies, I like the idea—I mentioned this in my opening—of disclosure, making our companies disclose when they are pressured by the Chinese Government. I think you should do that for forced technology transfer as well. It puts the onus on the U.S. law instead of on the company and therefore makes it much more difficult for China to retaliate, because the problem is not the U.S. companies; the problem is the U.S. Government. So bring it to us. We can stand up.

A similar thing I would consider is prohibiting U.S. companies from complying with censorship requests with respect to the activities that they are conducting in our jurisdiction. And what I like about this is that it is reciprocal, as Mr. Gere was talking about. And Beth will be familiar with this, with her time at the PCAOB: the legislation that you all have been looking at to say it is unacceptable for Chinese companies to refuse access to our auditors who want to regulate their financial records.

Now what those companies tell our regulators is, we cannot do it because of Chinese law. So let us do the same thing. Let us tell our companies they cannot comply with censorship because of U.S. law. And that is exactly what China is doing to us, so let us do it back to them.

Just as it is unacceptable for them to say we cannot access the audits, it is also unacceptable for them to say they should censor our companies. And so let us use a robust response from the U.S. Government to help those companies.

Senator CORNYN. Thank you for mentioning the CHIPS Act. This is a major bipartisan effort to bring high-end semiconductor manufacturing back onshore and to reduce dependence on China, as Ms. Baltzan pointed out in her testimony, in these supply chains of critical technology. Can you imagine if we did not have access to that and we did not have the capacity to build it here in America? Obviously, that is a huge vulnerability, and the virus has taught us many lessons, most of them painful, but some of them point to a much different path than we have traveled down before. We simply cannot continue to depend on China just because it is cheap, especially in some of these very sensitive areas.

I think Senator Brown is next, if he is with us.

[No response.]

Senator CORNYN. Well, I understand that he is not able to be with us. So, Mr. Gere, let me just ask you. How much money does the Chinese Government invest in Hollywood? Do you have any way of quantifying that?

Mr. GERE. I am probably not the person to ask. I was looking through some material last night, and there were some deals in the \$250-million range. There were several in the hundred-million-plus range.

Senator CORNYN. Well, we can run those numbers down. Let me ask you this. Last year I was very much involved in the effort to reform the Committee on Foreign Investment in the United States, but we were focused primarily on foreign investment in technology and start-ups. As you know, the Chinese Government does not observe any distinction between the private sector and their military. And in fact the private sector is compelled to share anything they have that the military wants with them and the communist party. But given what you have described about the self-censorship and the influence that China has on the sorts of movies that Hollywood makes, do you think we ought to be looking more broadly, beyond just technology, at other investments that China is making in the United States that help facilitate the path they are on?

Mr. GERE. Well, I think they read us very well, as I said before. Their 100-year plan was to step back and really look at the rest of the world. And they saw the trajectory that the U.S. was on. If they could—money was the way. And they began by creating products that were manufactured the cheapest in the world, as we all know. And that created the situation where they controlled those markets that we are seeing, tragically, now with the medicines that they own, our pharmaceuticals.

This is going to permeate everything in our society as long as money is our prime motivator. It was not for them. It was power and control. They gave up the money part of it early on to create control, understanding that that control would pay off decades later. And that is what they are reaping right now.

I want to go back to something I think Mr. Cory said and emphasize it. The turn that this administration made that the U.S. should go it alone has been a huge mistake in terms of China. The only way we can counter China is if the U.S. and the EU—our European friends and allies, true friends and allies—and Japan and India create a coalition that really understands what the Chinese are trying to do, and that we negotiate with them as a group, as democracies, free-market democracies, independent. That is the only way that we are going to make any real change here. And the U.S. Government, the U.S. Congress has done extraordinary things, but the U.S. cannot do it alone, and especially in this situation where it is "America First" and all those, frankly, kind of naive clichés.

We are in a very interconnected world, and let us be interconnected with the best of the world. And the best of the world still exists. Our European brothers and sisters, Japan, India, the great democracies of the world, we can do this together and create the world we want, and counter the Chinese Communist Party.

Senator CORNYN. Thank you. Senator Casey, do you have any other questions you would like to ask?

Senator CASEY. Mr. Chairman, I hope you can see and hear me. Senator CORNYN. We can see and hear you.

Senator CASEY. That is great. I was hoping at least for audio. But thanks so much for the hearing. I just had one question I wanted to ask earlier to Ms. Baltzan about the Havana Charter, which she gave some of the history of, the fact that it was signed by 54 countries but never went into force, and that there was opposition, at the time, from our business community.

I guess I would ask you, in addition to the history and the significance of it, what is still relevant today, and in particular, how does it relate to conditions of trade, in terms of trade? Ms. BALTZAN. Thank you so much for the question, Senator Casey. I think there has been this narrative that the foundation of the global trading system was about tariff liberalization and nothing else. And I think that narrative is false and extremely harmful.

Some of the things Mr. Gere was talking about, about the philosophy we had in the 1990s about the conditions in which we created the WTO and let China in, are directly traceable to that misunderstanding of our own history.

If you look at what was motivating the founders of the system and we are talking about initially FDR and John Maynard Keynes, and then those who followed them—these were people who had lived through the Gilded Age. They had seen income inequality. They had seen nationalism. They had seen political instability. They had seen authoritarianism. And more importantly, they had seen how, particularly in Europe, authoritarian governments had been able to deploy concentrated economic power in the form of cartels and trusts to pursue an authoritarian agenda.

And they were not just thinking about Italy and Germany in the past, they were looking ahead to the Soviet Union, and that was communist rather than fascist, but it was the same fundamental problem, which is this relationship between an authoritarian government and concentrated industrial production. And that is why so much of the Havana Charter is about making sure that you are protecting competition itself, because they believed that protecting competition was a way of protecting democracy.

And somehow that entire line of thinking has been lost. So let us look at what we are confronting today. Is the Havana Charter relevant today? Well, it is a second Gilded Age. We have again problems with income inequality, and this goes to the issue with Senator Cassidy. You cannot just keep suppressing labor rights and expect not to have authoritarianism and a revolt by the working people.

So if we want to deal with these structural issues, then we have to have a set of rules that promotes competition. We are seeing, again, a rise in industrial concentration. When we bring all this to bear and look at what is going on in China, in my view we see the emergence of the very thing that the founders of the global trading system were trying to prevent, which is an authoritarian government that is not only able to leverage industrial power to pursue its ends, but is actually able to use the multilateral trading system to execute that agenda.

And I really want to point out something in your opening remarks that is important. This really is not about publicly owned versus privately owned. And the Havana Charter covers both.

I am extremely concerned that we spend a lot of our time talking about state-owned enterprises in China, when the pivotal variable is not who owns what, it is the relationship between those industries and the government.

Senator CASEY. Thank you very much, Mr. Chairman.

Senator CORNYN. Thank you, Senator Casey. Senator Cassidy, do you have another question?

Senator CASSIDY. I do.

Senator CORNYN. We are sort of winding down here a little bit, but I want to give everybody who has another question an opportunity. Go ahead, please.

Senator CASSIDY. Ms. Baltzan, again I go back to your, I guess, thesis, that it is their economic power that allows them to exert this censorship. And again, I find that valid.

So it is a little bit far afield from this hearing, but still you have raised it, so I am going to ask you. I agree, we should not allow people to use arbitrage of environmental laws or of workers' rights or of human rights, using slave labor, et cetera, in order to undercut the ability of a worker in the United States, for example.

On the other hand, there is a tension there. If we have environmental laws that we really need and another nation does not, it would require everybody to have the same environmental laws and the same labor laws, even though obviously conditions in, say Central America are different than those in the United States. I say that as regards what is the minimum wage, for example.

So if we are going to reexamine our trade relationship, I think everybody would agree—I do at least—that if we are going to demand a certain environmental standard for air pollution in the U.S.—and Chinese air pollution blows over to the U.S.—we should ask for the same environmental standard there. I get that.

But going back to wage rates, do you concede that wage rates would also be required to have some sort of equivalency? Because otherwise our folks would be disadvantaged.

Ms. BALTZAN. I am actually very supportive of what is in the new NAFTA. I am supportive of the rules that have been enforceable in our trade agreements since 2007, which are core labor standards.

This is not about setting a specific, prescriptive set of rules that every country must follow without regard to its development level. This is about setting a floor. And that is also what the founders of the system did in the Havana Charter.

Senator CASSIDY. Okay; and so if we had that floor as part of a trade agreement with China, that may be a remedy, if you will, knowing that that is easier said than done, but nonetheless that would be a potential remedy. Correct?

Ms. BALTZAN. Yes. I would use the WTO, and I would use section 301 to establish that.

Senator CASSIDY. Although in your testimony, you point out that since that is a consensus organization, that would be difficult to work through WTO.

Ms. BALTZAN. I think that is true. I think we should ask for it. Senator CASSIDY. And if we fail there, because undoubtedly we will fail—what was it, the section 301 and anything else?

Ms. BALTZAN. I think there have been proposals, not in any concrete terms, but proposals about access to U.S. markets and having essential standards as part of our domestic regime. And I think those are worth considering.

Senator CASSIDY. Okay. Thank you very much.

Senator CORNYN. Senator Cortez Masto, do you have an additional question?

[No response.]

Senator CORNYN. Senator Wyden, do you have any other questions you want to ask?

[No response.]

Senator CORNYN. Well, let me just say how much I appreciate and I know we all appreciate your testimony here today.

Mr. Gere, for what it is worth, I think we need to sort of get to a place where we recognize that administrations, whether they are Republican or Democrat, can have good ideas, and some not-sogood ideas. I know this administration seems to believe that bilateral trade negotiations are optimal, and I can understand why their argument is that if you do a multilateral trade agreement you are going to have to give up too much in order to get it. But there are benefits. And I think you described one of them, particularly dealing with China. We do need to work with our allies and to confront this challenge. One, because they are in the same situation we are in. They are being eviscerated economically and threatened militarily, and it is important for us to work with people who share our values to counter this incredible aggressive economic and military threat from China.

So let me thank you for raising that point, and I think you will find a lot of people in Congress who share that view.

So with that, let me thank all of you for joining us here today on this very, very important topic. We are going to have a deadline of 2 weeks for additional questions. It may be that Senators have some additional written questions they would like to ask, and we will keep the record open for 2 weeks. If the witnesses would be so kind as to respond to those, we would very much appreciate it.

And with that, the Subcommittee on International Trade, Customs, and Global Competitiveness stands adjourned. Thanks so much.

[Whereupon, at 4 p.m., the hearing was concluded.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

PREPARED STATEMENT OF BETH BALTZAN, FELLOW, OPEN MARKETS INSTITUTE

ECONOMIC LIBERALISM, THE CHINESE COMMUNIST PARTY, AND FREE SPEECH

Those of us who remember the debate over whether the United States should grant China Permanent Normal Trade Relations (PNTR) status in 2000 also remember the ultimate justification for it: integrating China into the global economic order would promote democracy there. This line of thinking was spurred on by the collapse of the Soviet Union in 1989–1990. Works like Francis Fukuyama's "The End of History?" postulated that we might have reached the culmination of political evolution, and that political conflict would give way toward democracy—with economic liberalism as the driver. As Fukuyama noted, the imminent implosion of the Soviet Union seemed to be a "an unabashed victory of economic and political liberalism."¹

Fukuyama himself had praised China's evolution toward liberalism as far back as 1989. At the time, he found little room for backsliding:

the pull of the liberal idea continues to be very strong as economic power devolves and the economy becomes more open to the outside world. . . . The People's Republic of China can no longer act as a beacon for illiberal forces around the world.²

Precisely because we assumed the march toward economic and political liberalism to be inexorable, we failed to contemplate that any other outcome was possible or to construct rules that would prevent any other outcome from occurring. Because of it, we are now witnessing the outcome opposite to the one the PNTR proponents believed would occur.

As discussed further below, it is global economic integration that has given the Chinese government the economic leverage over the rest of us to advance an illiberal agenda. Thus, rather than having global economic integration incubate democracy and suppress autocracy, global economic integration has become a vector for autocratic suppression of democracy. Economic liberalism did not lead to political liberalism: it has led to political repression.

There are various ways to address the threat the behavior the Chinese Communist Party poses to the system. The most critical is to reduce the CCP's ability to engage in this kind of behavior. That means reducing the amount of economic leverage China has over us, and our trading partners.

More broadly, we must also reform the rules of globalization. The current reform proposals are woefully inadequate to address the scope of the problem. It is not clear that our allies yet share our concerns about the seriousness of threat. As a result, cooperation with allies alone is unlikely to suffice to address the problem, at least in the short-term.

EXTRATERRITORIAL SUPPRESSION OF FREEDOM OF SPEECH

With increasing boldness, the CCP—the Chinese Government—has used its considerable leverage over global markets to attack the right to freedom of expression. For Americans, the most notorious examples have involved the NBA and "South

¹Francis Fukuyama, "The End of History?", *The National Interest*, Summer 1989 (https://www.embl.de/aboutus/science_society/discussion/discussion_2006/ref1-22june06.pdf). ²Id., at 10.

Park." Houston Rockets General Manager Daryl Morey had the temerity to support democratic protestors in Hong Kong, tweeting "Fight for freedom, stand with Hong Kong."³ This statement, which would be anodyne to a secure, non-authoritarian state, set off the CCP. The Chinese Government canceled broadcasts of pre-season NBA games in China and ominously indicated that it was reviewing its relationship with the NBA.⁴ The Chinese broadcaster squarely addressed the free speech issue, stating that

We express our strong dissatisfaction and opposition to [NBA Commissioner] Silver's stated support of Morey's right to free speech. We believe any remarks that challenge national sovereignty and social stability do not belong to the category of free speech.⁵

Not surprisingly, the CCP's interpretation of the meaning of free speech is at odds with the very concept of it.

When the CCP was "offended" by a "South Park" episode, the creators had a dif-ferent response. They used the government's attitude to mock it—and the Morley critics. "We, too, love money more than freedom."6

Though the apology was satirical, it drove home the issue: by doing business with China, Americans are too often forced to choose between money and freedom. This choice is fundamentally inconsistent with the premise under which Congress voted to give China PNTR. Économic liberalism was meant to pave the way for political liberalism, not to facilitate political repression through threats to withdraw market access.

Chinese efforts to control speech about Hong Kong are the most well-known, but the third-rail subjects are much broader. They range from the Uyghurs, to Tibet, to Taiwan, to the nine-dash line, to COVID-19. The episode with "South Park" should be no surprise: it has been an open secret for years that Hollywood cannot include Chinese bad guys in its movies. Judd Apatow explained how this came to be:

I think it happened very slowly and insidiously. . . . You would not see a major film company or studio make a movie that has story lines which are critical of countries with major markets or investors. The question becomes: what's the result of all of this? The result is, there are a million or more Muslims in reeducation camps in China, and you don't really hear much about it.7

The Chinese Government is obsessed with controlling information, and deploying it in furtherance of an agenda that uses increasingly Orwellian tactics. 2020 is the year the Chinese Government is set to execute its social credit system. The system is described as a "creepy" take on a credit score, where the government's judgment of a citizen's social conduct is baked into a social credit score. The consequences of a bad score range from slowing the person's internet speed to banning him or her from flying to being named a bad citizen.⁸ Coupling the social credit system with the Chinese government's push into facial recognition, and the concept of being a private citizen will lose all meaning.⁹

For the time being, the social credit system seems to be a domestic enterprise. But if there was any doubt that the CCP is on the march to extend its control over domestic speech overseas, we need look no further than the revocation of the press

⁶Id. ⁶Katie Shepherd, "We Too Love Money More Than Freedom: South Park Creators Issue Mock Apology Over Chinese Censorship," Washington Post, October 8, 2019 (https://www. washingtonpost.com/nation/2019/10/08/south-park-creators-blast-china-nba-over-censorship/). ⁷Evan Osnos, "The Future of America's Contest With China," New Yorker, January 6, 2020 (https://www.newyorker.com/magazine/2020/01/13/the-future-of-americas-contest-with-china). ⁸Alexandra Ma, "China Has Started Ranking Citizens With a Creepy Social Credit System," Businges Insider October 29, 2018 (https://www.busingesingider.com/china.social-credit.system.

Business Insider, October 29, 2018 (https://www.businessinsider.com/china-social-credit-system-punishments-and-rewards-explained-2018-4).

⁹Lily Kuo, "China Brings in Mandatory Facial Recognition for Mobile Phone Users," The Guardian, December 2, 2019 (https://www.theguardian.com/world/2019/dec/02/china-brings-in-mandatory-facial-recognition-for-mobile-phone-users).

³CNN Business, "The NBA Faces a No-Win Situation in China. Here's What It Stands to October 8, 2019 (https://www.cnn.com/2019/10/08/business/daryl-morey-tweet-nba-Lose,"

China / index.html).
⁴ CNN Business, "China Won't Show NBA Pre-Season Games as Backlash Over Hong Kong Tweet Grows," October 8, 2019 (https://www.cnn.com/2019/10/08/media/nba-china-hongkong-morey/index.html). ⁵Id.

credentials of three Wall Street Journal reporters.¹⁰ As a sign of the extreme direction in which the Chinese Communist Party is headed, the newspaper noted that it is

the first time the Chinese Government has expelled multiple journalists sibegan re-engaging with the world in the post-Mao era.¹¹

The Chinese Government's extraterritorial control of speech is not limited to Americans, either. The Swedes gave a freedom of speech award to a Chinese-born Swedish publisher under detention in China.¹² The Chinese Government warned that Sweden would "suffer the consequences" for it.

Chinese diplomats have also escalated their decidedly undiplomatic barbs.¹³ The double standard is jarring. Anyone commenting critically on the CCP's conduct is subject to accusations of "hurt feelings" and retaliation. In the meantime, Chinese diplomats insult other countries with increasing abandon.

The Chinese Government's behavior takes on ever greater characteristics of the authoritarian heyday that Fukuyama believed was over.

Ironically, by concluding that the fall of the Soviet Union meant we need not worry about becoming deeply integrated with a Communist country, we have facili-tated the very integration that gives the CCP the leverage to impose its authoritarian views all over the world.

How did this happen?

A BRIEF, RELEVANT HISTORY OF THE NEGOTIATIONS TO CREATE THE GATT

Our appreciation of the true roots of the multilateral global trading system is a bit rusty. We have a vague notion that there were tariff wars in the 1930s, and that the architects of peace felt that a rules-based global trading system would promote harmony.

What we remember less is that the Soviet Union was not part of that system. The Soviet Union was invited to join the talks but ignored the invitation.¹⁴ Without this communist presence, the negotiations focused on the construction of a system that would promote free enterprise.

The architects, which included Franklin Roosevelt's lieutenants and the famous British economist John Maynard Keynes, did not, as is commonly understood, believe that tariff cuts alone would protect free enterprise. Instead, they believed the system needed a comprehensive set of rules that would promote fair competition in the global marketplace, ultimately reflected in the Havana Charter¹⁵ These rules included standard antitrust fare, such as antimonopoly provisions, as well as provi-sions to prevent labor arbitrage, cheating through currency manipulation, and de-stabilizing behavior by foreign investors.¹⁶

These rules did not survive. The received wisdom is that they failed because Congress was in an isolationist mood and did not want to set up an International Trade Organization. But this received wisdom is incorrect. The rules failed because the American business community, including the Chamber of Commerce, the National Association of Manufacturers, and the National Foreign Trade Council, balked at the constraints on capital.¹⁷ They wanted tariff cuts without disciplines on their own freedoms. Some of the objections were thought to come from businesses affili-

swer-to-global-trade/). ¹⁷C. Donald Johnson, Wealth of a Nation, 2018, at 414, 430.

¹⁰ Wall Street Journal, "China Expels Three Wall Street Journal Reporters," February 19, 2020 (https://www.wsj.com/articles/china-expels-three-wall-street-journal-reporters-11582100 355). 11 Id

¹²The Guardian, "China Threatens Sweden After Gui Minhai Wins Free Speech Award," https://www.theguardian.com/books/2019/nov/18/china-threatens-sweden-after-gui-minhai-

¹³The Straits Times, "Diplomatic Outbursts Mar Xi's Plan to Raise China on the World Stage," March 7, 2019 (https://www.straitstimes.com/asia/east-asia/diplomatic-outbursts-marxis-plan-to-raise-china-on-the-world-stage). ¹⁴C. Donald Johnson, Wealth of a Nation, 2018, at 343.

¹⁵United Nations Conference on Trade and Employment, Final Act and Related Documents, (Havana Charter) (*https://www.wto.org/english/docs e/legal e/havana_e.pdf*). ¹⁶Beth Baltzan, "The Old School Answer to Global Trade," Washington Monthly, April/May/ June 2019 (*https://washingtonmonthly.com/magazine/april-may-june-2019/the-old-school-an-*

ated with pre-war German cartels 18-and ridding the economy of cartels was one of the principal goals of the Charter drafters. As the United States explained in its 1945 trade proposal,

[t]rade may . . . be restricted by business interests in order to obtain the unfair advantage of monopoly. . . These practices destroy fair competition and fair trade, damage new businesses and small businesses, and levy an unjust toll upon consumers. Upon occasion, they may be even more destructive of world trade than are restrictions imposed by governments.¹⁹

The Charter's negotiators-successful businessmen themselves-were exasperated by the short-sightedness of the business community's opposition. What the business community considered limitations on free enterprise, the negotiators considered essential elements of free enterprise. In advocating for the Havana Charter, which re-flected the original U.S. trade proposal, State Department Adviser Will Clayton pointed out that:

There are two roads we can take here. One leads in the direction of free enterprise and the preservation of democratic principles. The other road leads in the direction of Socialism and state trading.20

Compare this more nuanced view to the one handed down over generations: it is not trade by itself that produces a social good, but trade as part of a system of free enterprise. And, critically, free enterprise was not synonymous with "laissez-faire," but rather with a suite of rules designed to impose restraint on the excesses of cap-ital that, for example, led to the 1929 crash. That the system designed by the postwar architects was based on laissez-faire is unthinkable in light of the fact that Keynes himself repudiated such a system in 1926 with his essay "The End of Laissez Faire.²¹ Keynes celebrated the American proposal, deeming it "the blue prints for long term commercial . . . policy" and "the first elaborate and comprehensive attempt to combine the advantages of freedom of commerce with safeguards against the disastrous consequences of a laissez-faire system."²²

In describing the two paths that lay ahead, Clayton was referring to the Soviet Union. But his words ring true with respect to the CCP today. State capitalism is the direct descendant of Soviet state trading. It is less focused on command and control over every aspect of the economy, but any sector of the economy is subject to command and control if the Chinese Government wants it to be. As finance scholar and Beijing resident Michael Pettis and his co-author Matthew Klein explain:

[T]he Chinese party-state has enormous power to tell companies what to do. Communist Party cells are embedded in most Chinese companies, even the subsidiaries of non-Chinese firms. Executives at many large companies, including those without direct government ownership, are party members, which makes them eligible for promotions and favors—and vulnerable to party discipline. . . . The legal academics Curtis J. Milhaupt and Wentong Zheng . . . note that private firms have "little autonomy from discretionary state intervention in business judgment" because "the state exercises sig-nificant extra-legal control rights over private firms." . . . Executives can simply be told to pick Chinese suppliers over foreign ones. . . . The result is that, unlike most other countries, imports have become less and less im-portant to the Chinese economy since the mid 2000c 22 portant to the Chinese economy since the mid-2000s.28

When this approach is married with the corporate emphasis on short-term re-turns, it becomes easier to see how the Chinese Government has achieved such leverage in the global marketplace that it can control the speech of private citizens thousands of miles away.

When China joined the WTO, its allure for manufacturers and service providers (mainly banks) was both the size of its market, and the size of its low-wage workforce. The combination-along with a chronic currency manipulation regime that

¹⁸*Id.*, at 419.

 ¹⁸Id., at 419.
¹⁹United States State Department, Proposals for Expansion of World Trade and Employment, November 1945 (https://fraser.stlouisfed.org/files/docs/historical/eccles/036 04 0003.pdf).
²⁰ "Why and How We Came to Find Ourselves at the Havana Conference," William L. Clayton, Adviser to the Secretary of State, State Department Bulletin, June 27, 1948.
²¹John Maynard Keynes, "The End of Laissez Faire," 1926 (https://delong.typepad.com/egregious_moderation/2009/01/john-maynard-keynes-the-end-of-laissez-faire-1926.html). "The phrase laissez-faire is not to be found in the works of Adam Smith [or] Ricardo." ²² Quoted in Wealth of a Nation, at 332-33.

²³ Matthew C. Klein and Michael Pettis, *Trade Wars Are Class Wars* (Yale University Press 2020), at 122.
made it even more lucrative to manufacture products in China and export them back to the United States—lured capital to China's shores.

But it was not just the size of the market, or the cheapness of the labor that led to the rapid rise of China as an economic powerhouse after PNTR, shown in the graph below.²⁴



The interventionist nature of the Chinese Government also played a critical, and underappreciated, role. It is typical to ascribe the Chinese economy's rise to the simple operation of Ricardo's comparative advantage. However, in exploring how China has risen to the top of the lithium ion battery industry, *The Wall Street Journal* has done an excellent job of demonstrating how incorrect that premise is.²⁵ The economic rise is not through comparative advantage, but a combination of subsidies and forced joint ventures. While the *Journal*'s article was limited to batteries, the underlying model is prevalent. It has been used in other industries, and will be used in still others. The increasing awareness of the Made in China 2025 initiative is awakening policymakers and defenders of the global trading system to the comprehensive nature of the threat.²⁶

Why do companies participate in these forced joint ventures? The size of the market and the size of the low-wage workforce.

If we examine the approach of the Chinese Government to the global marketplace from a broader lens, we start to see the common thread across its behavior. China, Inc. is, at its core, a monopoly. It is not a monopoly of a particular company, or in a particular sector: it is a monopoly of a country that both wishes to be autarkic in terms of domestic consumption, and mercantilist in terms of taking advantage of export markets to generate revenue. This, of course, is at odds with the very purpose of the multilateral trading system, which rejects both autarky *and* mercantilism.

²⁴Visual Capitalist, "70 Years of Economic Development and Policy in the People's Republic of China" (https://www.visualcapitalist.com/china-economic-growth-history/). A time-lapse version is also available that shows China's position in the global economy compared to others. ²⁵Trefor Moss, "The Key to Electric Cars Is Batteries. One Chinese Firm Dominates the In-

²⁵ Trefor Moss, "The Key to Electric Cars Is Batteries. One Chinese Firm Dominates the Industry," Wall Street Journal, November 3, 2019 (https://www.wsj.com/articles/how-china-positioned-itself-to-dominate-the-future-of-electric-cars-11572804489).
²⁶ U.S. Chamber of Commerce, Made in China 2025: Global Ambitions Built on Local Protec-

²⁶U.S. Chamber of Commerce, Made in China 2025: Global Ambitions Built on Local Protections (https://www.uschamber.com/sites/default/files/final_made_in_china_2025_report_full. pdf).

BUT JAPAN

Many trade experts remain relatively unconcerned by the behavior of the Chinese Government. According to this view, similar arguments were made about Japan in the 1980s. The Japanese economy eventually sputtered; this is presumed to be the path Chinese economy will follow.

The increasing aggression of the Chinese Government illustrates the radical differences between the Japan of the 1980s, and the China of the 2020s. Japan's ambitions in the 1980s, which were mercantilist in nature, centered around economic development. Like China, Japan used export-led growth to move through the manufacturing value chain, creating significant domestic wealth. That economic ambition was not, however, coupled with grand geopolitical ambitions.

By contrast, as its behavior in the South China Sea, Taiwan, and Hong Kong indicates, the CCP indeed does have grand geopolitical ambitions. Moreover, the size of China's economy is orders of magnitude larger than that of Japan. Japan's economy at its peak has been around \$5 trillion; China's today is nearly three times that size 27

Finally, a state capitalist economy with an authoritarian government is able to deploy subsidies of a size that would be more difficult to justify in a system with checks and balances. Authors Pettis and Klein, in describing CCP control over business, take the position that "the Chinese economy may be fundamentally incompatible with the spirit of any rules-based trading system."28

It is critical to factor in that the United States is now profoundly dependent on supply chains in China in a way that was not the case with Japan in the 1980s. COVID-19 has illustrated the point vividly, as Americans have been plagued with shortages of personal protective equipment because of a dependency on Chinese production.

It is not only PPE, however. One review of the transcripts at the USTR section 301 hearings reveals an extraordinary list of products that witnesses claimed could not be made outside of China.²⁹ It is not simply that these goods cannot be made in the United States; it is that, according to these witnesses, they cannot be made anywhere *but* China. This is not a recent development: supply chain concentration in China has been a problem for at least the better part of a decade.³⁰

This situation is serious enough that it has gotten the attention of the Pentagon. In a report on the industrial base, the Department of Defense identifies areas in which we have become dependent on China as the sole source of some materials essential to national defense.³¹ According to the report:

China is . . . the sole source or a primary supplier for a number of critical energetic materials used in munitions and missiles. In many cases, there is no other source of drop-in replacement material and even in cases where that option exists, the time and cost to test and quality the new material can be prohibitive-especially for larger systems (hundreds of millions of dollars each).32

Part of the reason we have not, historically, concerned ourselves with supply chains is because our approach to trade for decades has emphasized "efficiency"low cost-as virtually the only relevant value. But, as we are now finding out, efficiency is in fact not the only value in a global trading regime. Redundancy has value too. This is why information technology systems have backups. It is not necessarily "efficient" in a dollars-and-cents calculation—until the day the system crashes.

 $^{^{27}}Id.$

 ²¹ Ia.
 ²⁸ Klein and Pettis, Trade Wars Are Class Wars, at 121-22.
 ²⁹ Matt Stoller, "Bible Lobbyist: We Can't Print Bibles in America Anymore" (https://mattstoller.substack.com/p/bible-lobbyist-we-cant-print-bibles).
 ³⁰ Matt Stoller, "How America Could Collapse," The Nation, July 21, 2011 (https://www.thenation.com/article/archive/how-america-could-collapse/); Barry Lynn, "A Glitch in the Matrix," Foreign Policy, Sortomber 12, 2012 (https://carianpolicy.com/2019/12/09/12/a glitch) Matrix," Foreign Policy, September 12, 2012 (https://foreignpolicy.com/2012/09/12/a-glitch-in-

Matrix, Foreign Foucy, September 12, 2012 (https://ice.foreign CHAIN-RESILIENCY.PDF) ³²Id., at 36.

Trade policymakers are now in the process of finding out what IT workers have known for decades: redundancy is critical.

Because of the size of the Chinese economy, its geopolitical ambitions, our extreme supply chain dependency, and the Chinese Government's willingness to exert that power in ways inimical to the interests of democratic societies, the CCP poses a threat that is simply not analogous to Japanese economic ambitions in the 1980s.

SOLUTIONS

The CCP's leverage over the speech of American citizens comes in large part from its economic leverage over the United States. Abating the Chinese Government's economic leverage over us in turn abates its leverage over our exercise of our constitutional rights. There are different approaches that can be adopted to diminish that leverage.

Some of these approaches will involve coordinating with our allies, be it at the WTO or through other mechanisms. However, we must be cognizant that the WTO is a consensus-based organization. That means all WTO members would be expected to agree to any new rules. As a member, China has the ability to frustrate the negotiations, particularly if it has the backing of other like-minded members (or Belt-and-Road beneficiaries). China has already rejected U.S. subsidy reform efforts.³³

In addition, as many experienced American trade negotiators are aware, our allies are not necessarily as concerned—yet—about addressing the problematic behaviors of the CCP. Prior efforts to cooperate, including the Global Steel Forum, have produced little to nothing in the way of real results.

We cannot afford to rely exclusively on collaboration with allies to address to threat the CCP now presents. It will take a mix of strategies.

The following priorities stand out, though these are by no means exhaustive:

• Promote redundancy in supply chains. Although there are mixed feelings about the section 301 tariffs, one benefit is that they have been moving supply chains out of China, and to other countries.³⁴ Among the countries benefiting are those with values more akin to our own, including Mexico.

We must be more deliberate, however. For example, building on the Pentagon's efforts, we should examine supply chains and identify alternatives for those that are important to the U.S. economy and the welfare of the American peo-ple. We can then work to mitigate any outsized dependence on the Chinese Government. In light of COVID-19, pharmaceuticals and PPE are areas that have emerged as a priority. In addition, Senators Cornyn and Warner have in-reduced logical time to restore accompany durate manufacturing in the United troduced legislation to restore semiconductor manufacturing in the United States.³⁵ In considering supply chain diversification, we can and should seek to collaborate with allies, so that we are not swapping one supply chain dependency for another.

Although the concept of industrial policy was out of vogue for the past 40 years, there was a strong bipartisan consensus in favor of it in the 1970s. Supporters included Pete Peterson, after whom the Peterson Institute is named,³⁶ and David Rockefeller.³⁷ Even Alan Greenspan considered that the United States might need to revive the wartime Reconstruction Finance Corporation; in the strange bedfellows department, the AFL-CIO agreed.³⁸ COVID-19, in exposing the depth of our dependence on the CCP, has reignited the discussion.

However, to ensure that we address the true scope of the problem, we must understand all the ways in which the trading system facilitates supply chain

³³ "China: U.S. Proposal Merely 'Scene Setting' for Desired Subsidy Rules," Inside U.S. Trade (March 3, 2020) (https://insidetrade.com/daily-news/china-us-proposal-merely-'scene-setting'-de-

Sired-subsidy-rules)
 ³⁴Austen Hufford and Bob Tita, Wall Street Journal, "Manufacturers Move Supply Chains Out of China," July 14, 2019 (https://www.wsj.com/articles/manufacturers-move-supply-chains-

Out of China," July 14, 2019 (https://www.wsj.com/articles/manufacturers-move-supply-chains-out-of-china-11563096601). ³⁵ Creating Helpful Incentives to Produce Semiconductors for America Act (https:// www.cornyn.senate.gov/node/5599). ³⁶ One Peterson Institute fellow, Simon Johnson, has coauthored a book that reexamines U.S. industrial policy during World War II, which sets out a detailed proposal for a modern version. See Jonathan Gruber and Simon Johnson, Jump Starting America, 2019. ³⁷ Judith Stein, Pivotal Decade, 2011, at 39, 75. ³⁸ Id., at 103, 250.

concentration in China. One area, for example, is the rules of origin in bilat-eral and regional trade agreements. TPP in some cases permits 70 percent of a good to come from China, yet the good trades preferentially under the agreement. In fact, there are goods in which the content is likely much higher. Even NAFTA, which has stronger rules (because it was it written in the 1990s) allows significant Chinese content; this is equally true even of the new auto rules under the USMCA, which allow lithium ion batteries from China to be incorporated into a USMCA car. Senator Casey has introduced legislation to address the systemic flaw with our approach to rules of origin.³⁹

• Negotiate comprehensive reforms to the rules of globalization to preserve competition. Even if we succeed in diversifying supply chains, it will be difficult to sustain that diversification unless the rules of globalization themselves are reformed. Otherwise, the same incentives that led to offshoring and concentration in the first place will lead to offshoring and concentration again. Therefore, reforms must address the fundamentally anticompetitive behaviors at the heart of the problem: monopolistic conduct, currency manipulation, and labor and environmental arbitrage.

To address monopolistic behavior, this paragraph from the Havana Charter is a useful starting point:

Each member shall take appropriate measures and shall co-operate with the Organization to prevent, on the part of private or public commercial en-terprises, business practices affecting international trade which restrain competition, limit access to markets, or foster monopolistic control, whenever such practices have harmful effects on the expansion of production or trade. . .

These rules cover both private and public commercial enterprises and allow us to avoid the pointless debate over whether a particular company is stateowned or not

The Havana Charter also had rules to guard against labor arbitrage. With re-spect to currency manipulation, the Charter set out a mechanism for dispute settlement that included fact-finding by the International Monetary Fund.

Rethink our asks of the CCP during the ongoing negotiations. Some of the pridominance and indeed would *increase* CCP leverage over us. For example, the Chinese Government's lack of respect for intellectual property rights is one of the reasons companies choose not to produce there. By improving the invest-ment climate in China, we are doubling down on our excessive dependence on a hostile authoritarian government. Democrats and Republicans both agreed to nearly eliminate investor-state in the new NAFTA, for example, under the rationale that it was not the role of U.S. trade policy to facilitate offshoring. The same rationale applies to intellectual property in China.

We should instead use the talks to discuss labor and environmental arbitrage.⁴¹ It is not because labor and environmental issues are "social" issues, as has been the traditional perception. Rather, the Chinese Government suppresses these rights in order to create a false comparative advantage, and that is bad for American workers and American businesses. Indeed, it is bad for every country in the world that has to compete with Chinese production of industrial goods. Part of the reason Mexico, for example, has a history of labor rights suppression is because its workers compete with Chinese workers. Mexico is our ally, and our neighbor; we should create a trading system that does not put Mexico at a disadvantage when it agrees to respect labor rights.⁴²

And it is also bad for Chinese workers.

³⁹Market Economy Sourcing Act (https://www.casey.senate.gov/download/market-economy-

sourcing-act). ⁴⁰United Nations Conference on Trade and Employment, held at Havana, Cuba, April 1948,

 ⁴¹Andy Green and Daniella Zessoules, ⁴¹U.S. Trade Policy in North American, China, and Beyond, ²Center for American Progress, February 27, 2019 (*https://www.americanprogress.org/isues/economy/reports/2019/02/27/466705/u-s-trade-policy-north-america-china-beyond/).* ⁴²Beth Baltzan and Jeff Kucik, "NAFTA's Replacement Gives Labor Some Shelter From Globalization's Storms," Foreign Policy, January 16, 2020 (*https://foreignpolicy.com/2020/01/1/16/105/u-strade-polacement Gives Labor Some Shelter From Globalization's Storms, Foreign Policy, January 16, 2020 (<i>https://foreignpolicy.com/2020/01/1/16/105/u-strade-polacement Gives Labor Some Shelter From Globalization's Storms, Foreign Policy, January 16, 2020 (<i>https://foreignpolicy.com/2020/01/1/16/105/u-strade-polacement Gives Labor Some Shelter From Globalization's Storms, Foreign Policy, January 16, 2020 (https://foreignpolicy.com/2020/01/1/16/105/u-strade-polacement Gives Labor Some Shelter From Globalization's Storms, Foreign Policy, January 16, 2020 (https://foreignpolicy.com/2020/01/1/16/105/u-strade-polacement Gives Labor Some Shelter From Globalization's Storms, Foreign Policy, January 16, 2020 (https://foreignpolicy.com/2020/01/1/16/105/u-strade-polacement Gives Labor Some Shelter From Globalization's Storms, Foreign Policy, January 16, 2020 (https://foreignpolicy.com/2020/01/1/16/105/u-strade-polacement Gives Labor Some Shelter From Globalization's Storms, Foreign Policy, January 16, 2020 (https://foreignpolicy.com/2020/01/1/16/105/u-strade-policy.com/2020/01/1/16/105/u-strade-policy.com/2020/01/1/16/105/u-strade-policy.com/2020/01/1/16/105/u-strade-policy.com/2020/01/1/16/105/u-strade-policy.com/2020/01/1/16/105/u-strade-policy.com/2020/01/1/16/105/u-strade-policy.com/2020/01/1/16/105/u-strade-policy.com/2020/01/1/16/105/u-strade-policy.com/2020/01/1/16/105/u-strade-policy.com/2020/01/1/16/105/u-strade-policy.com/2020/01/1/16/105/u-strade-policy.com/2020/01/1/16/105/u-strade-policy.com/2020/01/1/105/u-strade-policy.com/202*

^{16 /} usmca-mexico-canada-trump-workers-democrats-naftas-replacement-gives-labor-some-shelter-independent of the second secondfrom-globalizations-storms/).

This is reason enough to revive the Charter's rules on labor rights, and to expand them to include environmental rights, as part of the WTO reform agenda. 54 countries agreed to enforceable labor rights in 1948. There is no reason not to support them today.

CONCLUSION

The optimism that prevailed after the demise of the Soviet Union led some to believe that authoritarian state trading regimes would never surface again. According to Fukuyama, following his view that we were potentially reaching the end of history:

The state that emerges at the end of history is liberal insofar as it recognizes and protects through a system of law man's universal right to freedom, and democratic insofar as it exists only with the consent of the governed.48

Although the founders of the GATT had the foresight to devise rules to frustrate the ability of state trading systems to thrive, precisely because of the threat they pose to free enterprise and democracy, the American business community persuaded Congress to reject them. Our failure to know our own history—or the hubris of be-lieving it did not matter—meant that we did not think to revive them either when the WTO was formed, or when China joined.

Ironically, then, we are now living through the very outcome the founders of the system sought to prevent. If the Chinese Government continues on its present path, which is to bend others to its will, we may well end up with a global trading system that more closely resembles state capitalism than free enterprise. The loss of free speech we are witnessing seems merely to be a harbinger of the loss of other freedoms, too.

We are not powerless to act, but it does require us to part company with the theories of trade that have predominated over the past 25 years. Trade does not produce peace by itself. Rather, trade fosters peace when the rules are designed to promote peace.

Fukuyama has more recently revisited his views. Commenting that the "unregulated markets" associated with Thatcherism had in many ways a "disastrous effect," he went on to comment that the only "plausible systemic rival to liberal democracy" is Chinese state capitalism.

The Chinese are arguing openly that [state capitalism] is a superior [model] because they can guarantee stability and economic growth over the long run that democracy can't.44

The system we thought would breed democracy has instead facilitated a rival ide-ology that threatens democracy itself. Fukuyama has the integrity—and the courage-to revisit his assumptions, and to recognize his mistake.

We must do the same.

QUESTIONS SUBMITTED FOR THE RECORD TO BETH BALTZAN

QUESTIONS SUBMITTED BY HON. JOHN CORNYN

Question. In the past, countries blocked access to their markets by closing or limiting maritime ports to the trade of goods. So too, today, can nations block the trade of information, services, and even goods by using firewalls and filters. The infrastructure of our global Internet runs through a maze of roughly 300 undersea cables that connect the continents and countries that use them.

How do our international trade agreements and laws apply to a digital product traveling through an undersea cable in comparison with the shipment of a good into a port?

Answer. Our trade agreements recognize that digital products may be considered goods or services. To avoid having to resolve which, our agreements now refer to

 ⁴³ Francis Fukuyama, "The End of History?", at 3.
 ⁴⁴ George Eaton, "Francis Fukuyama Interview: Socialism Ought to Come Back," *The New* Statesman, October 17, 2018 (https://www.newstatesman.com/culture/observations/2018/10/ francis-fukuyama-interview-socialism-ought-come-back).

them as "digital products." In that way the agreements focus on the treatment of the products, not the method of delivery.

The WTO rules were negotiated before the modern digital trade era emerged, and thus the rules are crafted somewhat differently for goods and services. Columbia Professor Tim Wu provides an excellent overview¹ of the various rules that may apply.

In both instances, the obligation to provide national treatment applies. However, any analysis of services obligations depends on specific, affirmative commitments that WTO members made on a sectoral basis. As Professor Wu explains, this is where the analysis of a member's obligations can become complicated.

Question. Do our agreements need to be updated to reflect this area of digital trade and what conversations are currently ongoing internationally, multilaterally, and bilaterally?

Answer. The problem may have less to do with the rules themselves than the fact that the global trading system was originally designed on the basis that authoritarian state trading governments, such as the Soviet Union, were not part of the system. Authoritarian state capitalist governments were admitted in an era in which, as my testimony indicated, economic liberalization would pave the way for political liberalization. We now realize that theory was flawed, but it is proving nearly impossible to change the global trading rules because individual members can block these efforts.

While some call for WTO members to accommodate alternative economic models, such as state capitalism, doing so would be a fundamental rejection of the vision of the founders of the multilateral trading system, who believed that free enterprise was an integral part of democracy, and that state trading would destroy democracy.

In this regard, the use of censorship as a trade barrier is a symptom of a much deeper problem.

The WTO is engaged in e-commerce negotiations. However, it is unlikely that those who deploy censorship as a barrier to trade will agree to any efforts to craft rules to discipline the behavior, the United States may, if it chooses to confront this issue directly, consider domestic legal provisions. Section 301 provides the executive branch with broad authority to address behaviors by trading partners that are unreasonable or discriminatory and burden or restrict U.S. commerce.

It is important to recognize, as I suggested in my testimony,² that liberalizing trade in cross-border data, and prohibiting data localization, runs the risk of having all the data end up in China. At present, our trade agreement rules do not prevent such an outcome. The agreements do, however, provide room for the signatories to agree on data storage rules that would protect against this outcome.

Question. What remedies are currently available under our trade laws to confront censorship as a trade barrier?

Answer. WTO rules prohibit import bans and quotas with respect to goods. WTO rules on services require national treatment. Depending on the nature of the trade barrier, there is an argument that using censorship as a non-tariff barrier can breach either the provisions covering import bans in goods, or the national treatment provisions for services. A WTO member could explore bringing a claim grounded in one or both of those provisions.

However, any member accused of breaching those obligations can avail itself of a defense. GATT Article XX(a) provides as follows:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:

(a) Necessary to protect public morals. . . .

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 $^{^2\,}https: \BaltzanWrittenTestimony.pdf.$

Thus, a member could argue that any censorship measures were necessary to protect public morals. A panel would then evaluate whether the exception applied. It is difficult to predict how a panel might rule. In any event, the Appellate Body is currently not functional, and as a result, there would be no final adjudication until dispute settlement finality is restored. The WTO did just issue a decision on the U.S. invocation of the public morals exception in a dispute with China, finding against the United States.

Question. As the Internet becomes more fractured, should we be having a conversation about flagging data from countries that do not reciprocate access to markets? This would be similar to how the Law of the Sea requires vessels to flag their ships.

Answer. If the Internet continues to become more fractured, then the old model that liberalization would minimize the relevance of individual nationalities as we moved toward free flow of goods and services—will no longer be as relevant. In that context, flagging data is one way to begin to recognize the reality that the nationality of digital products matters, and it would begin to establish pathways for executing strategies of requiring reciprocity should the United States choose to do so.

Question. The World Trade Organization has two core principles. The first is national treatment, which requires a country to treat domestic and international products the same. The second is most-favored nation that requires a nation to treat all countries under the WTO equally. There are two exceptions to these principles for public morals and national security. These exceptions, intentionally or not, align well with the definition of censorship which allows for the blocking of media due to obscenity or security. The third piece in that definition is content deemed "politically unacceptable." The WTO does not provide for an exception to that one.

Was the topic of censorship raised during the negotiations over GATT and eventually the WTO and what conclusions were reached?

Answer. As my written testimony indicates, the GATT was originally created with the understanding that the Soviet Union and other state trading countries would be excluded. In general, the contracting parties were democratically-oriented. As a result, the rules were designed with democratic governance in mind, and the founders did not see a need to protect against censorship and other tools of authoritarianism.

As my written testimony also indicates, the WTO was created after the collapse of the Soviet Union, when policymakers tended to believe that economic liberalization would produce political liberalization. Therefore, WTO rules similarly do not include protections against censorship and other tools of authoritarianism because the assumption was that political liberalization was to some degree inevitable.

As referenced above, Professor Tim Wu wrote an article in the Columbia Law Review in 2006 that explains the analytical complexities of censorship, and Internet filtering more generally, and concludes that censorship was not to be considered a trade barrier in the WTO, including with respect to China's accession (https:// scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=1879&context=faculty_ scholarship). However, Wu also explains that the WTO dispute settlement system

scholarship). However, Wu also explains that the WTO dispute settlement system sometimes adapts the rules to contemporary circumstances. This, of course, is one of the longstanding U.S. criticisms of the dispute settlement system: that it does not adhere to bargain struck by the parties, but rather deploys its own judgment instead.

QUESTIONS SUBMITTED BY HON. BENJAMIN L. CARDIN

Question. The Third Neighbor Trade act proposes improved economic and trade ties between the United States and Mongolia, chiefly by lowering barriers on the import of Mongolian cashmere.

What other initiatives can the United States take to expand bilateral economic ties for mutual benefit?

Answer. The challenge in this regard is, to some, extent, geographical. Any effort to expand bilateral economic ties must in fact be for mutual benefit, rather than providing a greater benefit to Mongolia's immediate neighbors. As I testified before the House Ways and Means Trade Subcommittee earlier this month, GSP and other preference program beneficiaries are typically under pressure from textile and apparel importers, and non-GSP beneficiaries, to request relaxed rules of origin. While this approach is often presented as a job creator in GSP beneficiaries, weak rules of origin mean that most of the benefits flow to non-beneficiaries. In my testimony, I also explained that our existing model of preference program does not adequately reflect the goal of inclusive prosperity, and we may therefore need to consider new rules for these programs that are designed to promote the creation of a middle class in the beneficiary countries. One of the proposals is to include an environment criterion, to begin to protect developing countries against the practice of advanced economies' exporting their polluting industries as part of a broader investment strategy grounded in environmental arbitrage.

It is also worth exploring ways to encourage more integrated production among beneficiaries themselves. Can Mongolian semi-finished products be finished in, for example, beneficiary countries in the Caribbean, rather than in non-beneficiaries such as China? Can they be finished in the United States?

Question. What other opportunities exist for Mongolia to diversify its economy sustainably and break away from over reliance on extractive industries?

Answer. One of the unfortunate outcomes of some of our preference programs is that the principal exports under them may be raw materials. This has not been the goal of the programs, and the United States has struggled for some time to devise incentives to use the programs to diversify away from, for example, extractive industries.

When Congress renewed the African Growth and Opportunity Act in 2016, one way of promoting diversification and better use of the program was to encourage each beneficiary to develop an AGOA strategy. Many beneficiaries were in fact unaware of the scope of the benefits under AGOA and would often ask for product expansion to include goods that were in fact already covered. Mongolia might likewise benefit from a review of the preferences available under GSP, and whether it is in a position to better take advantage of the program.

Mongolia might also consider new compacts with the Millennium Challenge Corporation.

PREPARED STATEMENT OF HON. ROBERT P. CASEY, JR., A U.S. SENATOR FROM PENNSYLVANIA

This hearing is the third of a series of hearings held by the Trade Subcommittee outlining the Chinese Government's civil-military agenda and efforts to influence the economic and geopolitical order in a manner that benefits its authoritarian and anticompetitive practices.

Just yesterday, the Chinese National People's Congress passed a national security law for Hong Kong that significantly erodes Hong Kong's special status and, based on available reporting, will deny the people of Hong Kong the right to protest, assemble, or the right to criticize their government.

The United States Congress has been clear time and time again: the citizens of Hong Kong must enjoy certain rights that are distinct from mainland China, and efforts to undermine the status quo is an affront to the people of Hong Kong and decades of international agreement regarding the status of Hong Kong.

As I've said before: when it comes to China, we must work with our allies to execute a clear and coordinated strategy. This applies to trade and to the Chinese Government's most recent efforts to erode the rights of the people of Hong Kong.

Here in the United States, we are in the midst of a public health and jobs crisis. We have seen the cost of our reliance on a single source supplier, and more to the point, our reliance on production from a non-market economy.

Last year, Senator Cornyn and I began this effort by outlining the main issues related to market access in China. We then focused on specific initiatives and actions undertaken by the Chinese Government, starting with the Belt and Road Initiative.

Today, we turn our attention to censorship. The actions undertaken by the Chinese Government include direct barriers, such as blocking movies from entering their market or restricting content, to blocking Internet firms, to dictating content related to China's territorial and economic claims, to demanding action or inaction by businesses related to Taiwan, Hong Kong, Tibet, and the ongoing human rights abuses in Xinjian. The Chinese Government has become increasingly assertive in its demands within and outside of its borders. Their mandates related to extra-territorial censorship are particularly troubling. The Chinese Government's response to a message of solidarity for Hong Kong by the general manager of the Houston Rockets, brings to light the lengths the government will go to censor speech, no matter where in the world it occurs.

The intended message sent by Beijing's disproportional response is clear: the Chinese Government can exert command and control over any enterprise operating in China—public or private. Simply stated, the Chinese Government is using its market power to stifle speech of our firms and people. These actions are inconsistent with our principles; they are inconsistent with our values, and those of our allies.

The introduction of the corporate social credit system takes this activity to a new level. The actions undertaken by the Chinese Government are clearly restrictive and discriminatory. The actions undertaken by the Chinese Government are clearly insidious and counter to the necessary conditions of a fair global economic system.

Since this hearing was originally scheduled in March, we have seen all too clearly the cost of relying on China, a non-market economy, for production of our Nation's critical capabilities.

I recently introduced the Market Economy Sourcing Act, which will begin to rightsize supply chains towards the United States and other market-oriented countries. This is but one measure that must be adopted to refocus our trade rules and the global economic system.

If we hope to sustain market-oriented principles for the next 100 years, we must take action now to ensure competition and market principles are not simply words in a textbook, but rather infused into our system of government and governance.

When it comes to trade, we must be responsive and creative to address challenges and harness opportunities.

There is no doubt Congress, citizens, and businesses must support and defend the economic security of the United States of America.

I look forward to hearing from our witnesses and discussing potential responses, which, in my view, should include the required disclosure of these types of requests to the appropriate Federal entities, and trade rules that prevent free-riding from non-market economies.

PREPARED STATEMENT OF HON. JOHN CORNYN, A U.S. SENATOR FROM TEXAS

I want to welcome my colleagues, the witnesses joining us here today in person and virtually, and those who are tuned in to hear about the important and pressing topic of "Censorship as a Non-tariff Barrier to Trade." This subcommittee continues its work in exploring the unfair trade practices of foreign governments—and especially China and Russia.

The topic of censorship in China is commonplace in the news because of its growing effect on American businesses and culture. In the fall of last year, the National Basketball Association (NBA) had its market access blocked in China because a single American citizen (using a media platform not even allowed in China) expressed their political opinion.

Now the topic has become much more important. The lack of timely, accurate information about the spread of COVID-19 due to Chinese censorship has contributed to the havoc wreaked on our economy and health.

This story is nothing new for some joining us today. Chinese censorship has long had a growing, negative effect on people around the world, such as those in Tibet or the Uyghurs in China's Xinjiang province.

First, I want to set the scene for what "censorship" actually is. A simple look at the dictionary states it is "the suppression or prohibition of any parts of media that are considered (1) obscene, (2) politically unacceptable, or (3) a threat to security."

Today, we will focus on how the use of censorship has become a barrier to global trade.

When the World Trade Organization was founded, two exceptions to the principles of national treatment and most-favored nation were created. These are for public morals and national security. Notably, there is no exception for a country to restrict trade because it deems something "politically unacceptable."

With discussions over reforming the WTO, multilateral talks on e-commerce, and the prospect of a Phase Two bilateral deal with China progressing, the subcommittee is uniquely positioned to inform Congress, the public, and the executive branch on the use of censorship as a non-tariff barrier to trade.

We will help determine if the suppression of information, data, goods, and services via digital media by countries such as China constitutes a trade barrier in violation of WTO, multilateral, and bilateral agreements and practices. If so, we will look to determine the economic damage caused; the human, cultural, business, and political ramifications; and what remedies are currently available or should be created to combat the unfair trade practice.

On a bilateral basis, what is clear is the lack of reciprocity between countries like China or Russia and the U.S. The Chinese Government spends billions of dollars to promote its propaganda overseas, a form of offensive censorship. For years, Russia has broadcast its state propaganda in the U.S. and, as a result, the President required it to register as a foreign agent. The lack of reciprocity takes advantage of our system of free expression to promote these countries' agendas online, in media, entertainment, and our education system.

Meanwhile, China and Russia do not grant the U.S. the same access to their markets or media. Instead, China is expelling our media, having kicked out three *Wall Street Journal* and other reporters earlier this year over Chinese censorship of COVID-19.

For centuries, countries blocked trade through physically restricting access to their ports. Today, the same happens with firewalls, filters, and outright restrictions to access. In fact, nearly 100 percent of global Internet traffic travels through a crisscrossing network of undersea cables that forms the backbone of global digital trade. These cables are another front in the global technology race, with companies like Huawei Marine rapidly moving to control the media by which content and trade are censored.

In the era of information, where data is the new gold, the blocking or filtering of that traffic by nation-states is growing. This censorship is fragmenting our markets, culture, and understanding of one another.

The Internet itself is becoming less global. Countries like China and Russia are not only building their own infrastructure to cut themselves off from the world, but exporting their authoritarian model to other nation-states through efforts such as the Digital Silk Road.

It is imperative that Congress support our Nation in meeting this challenge. That's why I am working with my colleagues this week to include parts of the CHIPS for America Act in the National Defense Authorization. If we are forced to rely on China to build our networks and technology, the world we know will be much less freer and open to express opinions and do business.

This bill will help us create our own domestic production capacity for semiconductors that underpin the technology we use in our daily lives. It will also help the U.S. remain a global leader in promoting the free trade of goods, information, and speech.

Finally, I look forward to discussing what remedies are available to address the abuse of censorship as a non-tariff barrier to trade.

Last fall, a Chinese-American constituent in Texas reported that he was censored here on American soil by the Chinese Government. His American WeChat account was shut down for supporting protests in Hong Kong. His response was, "If you have censorship in China, that's fine, but in this country? I'm a Republican, but I suffer the same as Democrats. We are all censored."

I look forward to exploring this topic in the same bipartisan fashion in which censorship affects us all. It is time that Congress ask the hard questions, and that is why we called our panel of four experts here today to discuss this issue.

PREPARED STATEMENT OF NIGEL CORY, ASSOCIATE DIRECTOR, TRADE POLICY, INFORMATION TECHNOLOGY AND INNOVATION FOUNDATION

Good afternoon, Senator Grassley, Senator Cornyn, and members of the committee; thank you for inviting me to testify. I am Nigel Cory, associate director, trade policy, with the Information Technology and Innovation Foundation (ITIF). ITIF is the world's top-ranked think tank for science and technology policy. We advocate for policies that accelerate innovation and boost productivity in order to spur growth, opportunity, and progress. As part of that mission, my area of focus encompasses barriers to digital and high- tech trade with China and other countries around the world.

OVERVIEW: CENSORSHIP AS A NON-TARIFF BARRIER TO TRADE

The U.S. lead in the digital economy is under threat as a growing number of countries enact overly restrictive and discriminatory laws and regulations around digital content they identify as illegal in ways that becomes barriers to trade. Explicit content review processes are the most visible aspect, but it also includes content distribution, Internet, and connectivity services as these play a crucial role in managing and controlling information, especially online. China is by far the worst offender. U.S. firms have lost significant revenue by being blocked or inhibited from accessing and operating in the Chinese market. The impact has been especially damaging given that for many companies' their market access has been denied during a critical, formative period of economic growth in China. This has not only reduced U.S. company global market share but provided Chinese competitors with a protected market from which to launch competitive challenges in other regions, such as South America, the rest of Asia, and Africa. Alongside China's other protectionist measures, this also means that a generation of Chinese consumers have grown up without knowing that their Internet and consumer experience is completely different than what is available in most other countries. They have little or no idea about Google, Twitter, Facebook, or other U.S. firms and their products, even as Chinese government officials and party "apparatchiks" use these platforms to spread propaganda in the United States.¹

The economic impact is not trivial. A host of U.S. industries and firms, in sectors ranging from Internet services to cloud computing, video games, and movies, have likely lost hundreds of billions of dollars in revenues due to Chinese censorship and related market restrictions. Importantly, these revenues would have supported innovation and job creation in the United States, while limiting Chinese firms' ability to grow and capture global market share. While it is not possible to calculate an exact figure, ITIF conservatively estimates (based on market-share comparisons) that Google, which withdrew from the Chinese market in 2010, subsequently lost \$32.5 billion in search revenue from 2013 to 2019, while Amazon and Microsoft's cloud services (IaaS, which is restricted in China) lost a combined \$1.6 billion over the 2-year period from 2017 to 2018. As the China market continues to rapidly grow, these losses will also grow significantly. And it is important to remember that this was all during a time when China was already running significant trade surpluses with the United States.

U.S. firms and their increasingly digital goods and services are susceptible to nontariff barriers in the form of both at-the-border and behind-the-border laws and regulations. The Great Firewall of China represents a rare case where U.S. digital exports face a barrier at the border. Meanwhile, behind this clear market access barrier, U.S. firms face a complicated, opaque, and changing regulatory framework tied to content moderation and information control that together makes for a very difficult and different business environment. Moreover, in many cases, China's approach to censorship is unwritten, with enforcement often being arbitrary and delegated to private firms. This is in large part a conscious decision to avoid WTO sanctions which would be much easier to put in place if the rules are on paper. Ever changing political sensitivities in China make it even more challenging to figure out what is expected of foreign firms. As we recently saw when China blocked NBA games, the Chinese Communist Party (CCP) is also increasingly assertive in punishing foreign firms for actions or speech that occurs outside of China. Censorship is obviously a major factor in China's decision to prohibit foreign firms from operating in key sectors (for example, by not giving them licenses or allowing foreign equity stakes in local firms) and through onerous, unpredictable, and discriminatory

¹Li Yuan, "A Generation Grows Up in China Without Google, Facebook or Twitter," New York Times, August 6, 2018, https://www.nytimes.com/2018/08/06/technology/china-generation-blocked-internet.html.

content-review processes, such as for video games and movies. Taken together, China's approach to censorship is clearly restrictive and discriminatory towards foreign firms and their goods and services.

Because China (and other countries) rely on a range of legitimate public policy goals to provide a justification for their approach to censorship—such as public safe-ty, morals, cybersecurity and national security—the United States and other governwhen the set of the se ship. While the primary motivation for censorship may be political, by making life hard or simply keeping U.S. firms out of China, the government gets the added benefit of supporting China's innovation mercantilism strategy by protecting local firms from foreign competition. Over time, this has greatly re-shaped trade and market dynamics in China to the detriment of U.S. firms and the U.S. economy.

Whatever the stated motivation for its approach to censorship, China sees it as essential to achieving the most important goal of all—regime stability. But the im-plications go far from China's domestic politics. Chinese President Xi Jinping has outlined his vision for "cyber sovereignty," a concept in which each country is free to set its own rules and exercise absolute control of the Internet within its own bor-ders.² Thus far, the United States and other countries that support an open and when baced global digital economy have found to rearrand to the cituation in China rules-based global digital economy have failed to respond to the situation in China where it has enacted a censorship system that acts (whether intentionally or inadvertently) as a non-tariff barrier to trade (as in China). Other countries view the "China model" of digital development as a success and one they want to replicate, in part, because it has used censorship for political and economic ends. At the multi-lateral level, the trade rules of the global economy (as under various World Trade Organization (WTO) agreements) allow countries to enact restrictions based on a range of broad exceptions for public morals, public order, privacy, and national secu-rity. But when those are used as disguised barriers to trade, as is clearly the case in China, then trade rules at the WTO and elsewhere should provide a clear path for exercising the misune of these successing. for countries to challenge the misuse of these exceptions.

Some U.S. policymakers exacerbate the impact of Chinese censorship and mer-cantilism by calling for U.S. firms to leave or stay out of China by saying that it's immoral to do business there.³ In many companies' case, they rightly say that the U.S. companies would have to comply with Chinese censorship rules. But while telling companies like Google to stay out China might allow advocates to assert moral authority, it would have no actual beneficial effect on free speech and human rights: China's Internet users would still face a censored Internet. Yet it would give companies like Baidu (the main Chinese search engine company) the vast Chinese market, and they would use those revenues to continue innovating and expanding into markets all around the world, ultimately taking market share and jobs from American technology companies.

There should be no doubt that it is in America's long-term economic and security interests that U.S. companies sell as many goods and services to China as possible. Every dollar's worth of digital and physical exports from the United States to China is a dollar that Chinese firms do not make—and it is a dollar American firms can use to reinvest in R&D and support employment in the United States. We should be encouraging, rather than berating, U.S. firms to engage in the Chinese market (not including, obviously, selling directly to the Chinese military) for we are locked in a critical competition for global technology leadership with them. Walking away from the China market only gives China a leg up in that competition. It is time that our policy vis-à-vis U.S. information services and digital content exports to China be based on national interest, not national moralizing

None of this means that the U.S. Government shouldn't continue supporting human rights, free speech, and democracy around the world—it most clearly should. Congressional representatives, U.S. Government agencies, and successive U.S. administrations have dedicated funds and attention to how censorship affects these

²For example: Chinese President Xi Jinping's speech to the National Propaganda and Ideology Work Conference, August 2013, "Western anti-China forces have constantly and vainly tried to exploit the Internet to 'topple China.'... Whether we can stand our ground and win this battle over the Internet has a direct bearing on our country's ideological and political security." Quote taken from: James Griffiths, *The Great Firewall of China: How to Build and Control an Alter-native Version of the Internet* (London: Zed Books, 2019). ³Wesley Rahn, "Is Google selling out for access to China's massive tech market?", *Deutsche Welle*, October 19, 2018, https://www.dw.com/en/is-google-selling-out-for-access-to-chinas-mas-sive-tech-market/a-45961894.

issues over the last decade. Whether this is the State Department's global Internet freedom programs, U.S. Government advocacy on Internet governance at the International Telecommunications Union, or U.S. Government membership of the Freedom Online Coalition of like-minded countries, all these ensure that U.S. values are being promoted.⁴ The point here is that the onus should be on the U.S. government to keep leading the case to promote U.S. values around the world.

This testimony provides a detailed analysis of censorship in China, including how it uses the Great Firewall and other censorship-related restrictions to prohibit market access and trade. I will explain how this censorship is a significant and growing non-tariff barrier to U.S. trade, how it has negatively affected a number of leading U.S. firms and sectors, and by extension how it impacts U.S. jobs and the U.S. economy. I will then provide a conservative estimate as to the large and growing impact censorship has had on search (Google) and cloud (Amazon), and the limited utility of trade law to challenge Chinese censorship. It then provides recommendations for U.S. policymakers to pressure China to revise its approach to censorship, even if it doesn't cease the practice, so that it doesn't act as a model of digital protectionism that other countries try and replicate, and so that it provides meaningful market access to U.S. firms.

CHINA'S USE OF CENSORSHIP: BROAD, COMPLICATED, AND OPAQUE

China's Communist Party has centralized, strengthened, and expanded the censorship mechanisms it uses in an attempt to protect itself at home and abroad.⁵ In recent years, this has been driven by a broader political crackdown under Chinese President Xi Jinping. It is one part of President Xi goal for China to become a "cyber superpower," which includes being free and independent from foreign technology (which has obvious trade implications) and objectionable content that may threaten his and the CPP's control of China. But the implications extend internationally— China wants to (re)write the rules for global cyber governance.⁶ China's model is at odds with those of many other countries that recognize the value provided by an open, innovative, and global digital economy.⁷ In essence, China is pushing an alternative to the current mostly open Internet.⁸ While there are most definitely economic and commercial considerations, ultimately—China's Internet management system is about control and the goal of maintaining order. However, the focus of this testimony will be on the trade and economic impact on U.S. firms and the U.S. economy.

Censorship in China is a broad, complicated, and opaque system involving a range of actors, laws and regulations, and social, economic, and political interests. At the individual level, these come together and result in considerable self-censorship given people realize the potential negative consequences of crossing the many unclear lines on what may or may not be allowed. In this way, China's pursuit for censorship has resulted in significant societal changes.

⁴Summarized: Patricia Moloney Figliola, "Internet Freedom in China: U.S. Government Activity, Private Sector Initiatives, and Issues of Congressional Interest" (Congressional Research Service, May 18, 2018), https://www.hsdl.org/?view&did=811017. It is important to also ensure that the U.S. State Department should use a dispassionate analysis and pursue true violations of Internet freedom, such as political persecution: Robert D. Atkinson and Michael McLaughlin, "Freedom Is Not Free License: Freedom House's Flawed Measurement of 'Internet Freedom'" (The Information Technology and Innovation Foundation, June 8, 2020), https://itif.org/publications/2020/06/08/freedom-not-free-license-freedom-houses-flawed-measurement-internet.

⁵Matthew D. Johnson, "Safeguarding socialism: The origins, evolution and expansion of China's total security paradigm" (Sinopsis, a joint project between AcaMedia z.ú. and the Department of Sinology at Charles University in Prague, June 11, 2020), https://sinopsis.cz/en/johnson-safeguarding-socialism/.

Son-safeguarding-socialism/.
6Samm Sacks, "Beijing Wants to Rewrite the Rules of the Internet," *The Atlantic*, June 18, 2018, https://www.theatlantic.com/international/archive/2018/06/zte-huawei-china-trump-trade-cyber/563033/; (translation) 'Xi Jinping: Accelerating the Independent Innovation of Network Information Technology and Making Unremitting Efforts Towards the Goal of Building a Network Power," Xinhua, October 9, 2016, http://www.xinhuanet.com/politics/2016-10/09/ c1119682204.htm.

 ¹ C 1119682204.htm.
 ⁷ Nigel Cory, "Why China Should Be Disqualified From Participating in WTO Negotiations on Digital Trade Rules" (The Information Technology and Innovation Foundation, May 9, 2019), https://itif.org/publications/2019/05/09/why-china-should-be-disqualified-participating-wto-negotiations-digital.
 ⁸ Michael McLaughlin Daniel Castro, "The Case for a Mostly Open Internet" (The Information

⁸Michael McLaughlin Daniel Castro, "The Case for a Mostly Open Internet" (The Information Technology and Innovation Foundation, December 16, 2019), https://itif.org/publications/2019/ 12/16/case-mostly-open-internet.

As to the formal structure of censorship, the State Internet Information Office (es-tablished in 2011) is reportedly responsible for Internet censorship.⁹ However, cen-sorship is a much broader endeavor. The United States Trade Representative (USTR) states that Chinese government officials from as many as 12 separate agencies are involved in monitoring and filtering Internet traffic that enters China, focusing primarily on the content that they deem objectionable on political, social, religious, or other grounds.¹⁰

While it is only one part of China's broader censorship machine, the Great Fire-wall is central. Typically, China says that a firm has used "illegal content"—a catch-all explanation for censorship. Attempts to access a blocked site from China typically results in a connection error as the Chinese nameservers-address books that match up website names to their digital locations-is unable to correctly retrieve the IP address of the requested website. This form of nameserver corruption has been often used by the Chinese government to block platforms.¹¹ There are reportedly over 10,000 websites blocked in China.¹² In the first half of 2018 alone, China's regulator the Cyber Administration of China (CAC) said it had shut down or revoked the licenses of more than 3,000 websites.¹⁸

While state agencies obviously play a key role, Chinese private firms play a cru-cial role. Government agencies rely on the state control of the main telecommuni-cation companies (China Telecom, China Unicom and China Mobile) to enforce blocks and other censorship and information control measures. Another crucial group of firms are the members of China's Cross-border Data Telecommunications Industry Alliance, which sets out common self-discipline measures for firms involved in managing cross-border data traffic.¹⁴ However, the implementation of censorship is decentralized to a much broader range of private firms who act as crucial intermediaries.

Tech firms, especially China's "big three" Internet firms Baidu, Alibaba, and Tencent, are critical intermediaries in enacting censorship in Chins. These firms do so, in part, as they have to manage content as part of their license to operate.¹⁵ China's new counter-terrorism law also requires companies to monitor user behavior to ensure public safety.¹⁶ Another law on "mobile Internet application programs" requires app providers to monitor online content and keep records of user violations and report them to the relevant government authorities.¹⁷ In many areas, this role is strictly limited to Chinese firms as China prohibits foreign investment in "Inter-net publishing" (providing the public with publications through the Internet).¹⁸ Chi-

www.chinadaily.com.cn/china/2011-05/04/content 12440782.htm.
 ¹⁰United States Trade Representative (USTR), 2018 Report to Congress on China's WTO Compliance (Washington, DC: USTR, February 2019), https://ustr.gov/sites/default/files/2018-USTR-Report-to-Congress-on-China%27s-WTO-Compliance.pdf.
 ¹¹Yuan Yang, "China blocks Bing access in curb on last foreign search engine," FT, January 24, 2019, https://www.ft.com/content/714ac466-1f64-11e9-b126-46fc3ad87c65.
 ¹²Gerry Shih, "China adds Washington Post, Guardian to 'Great Firewall' blacklist," The Washington Post, June 8, 2019, https://www.washingtonpost.com/world/china-adds-washington-post-guardian-to-great-firewall-blacklist/2019/06/08/5ae4fb76-8a56-11e9-b1a8-716c9f3332ce story.html.
 ¹³Condine Censorshin in China." GreatFire org. https://en.greatfire.org/analyzer: Yuan "A

 ⁷¹⁶Cey3332ce story.html.
 ¹³ "Online Censorship in China," GreatFire.org, https://en.greatfire.org/analyzer; Yuan, "A Generation Grows Up in China Without Google, Facebook or Twitter."
 ¹⁴ "Notice on Invitation to Membership and Overseas Observers of China Cross-border Data Telecommunications Industry Alliance," China Academy of Information and Communication Technology, September, 2018, http://www.caict.ac.cn/english/news/201809/t20180920_271372. html.

¹⁵State Council, Telecommunications Regulations of the People's Republic of China. Decree of the State Council of the People's Republic of China No. 291, September 25, 2000. ¹⁶Standing Committee of the National People's Congress, Counter-terrorism Law of the Peo-

¹⁶Standing Committee of the National People's Congress, Counter-terrorism Law of the People's Republic of China, Order of the President of the People's Republic of China No. 36, December 27, 2015.
 ¹⁷Cyberspace Administration of China (CAC), Administrative Provisions on Information Services of Mobile Internet Application Programs, June 28, 2016; Library of Congress, China: CAC Releases New Rules on Mobile Apps, July 26, 2016.
 ¹⁸State Administration of Press, Publication, Radio, Film and Television (SAPPRFT) and Ministry of Industry and Information Technology (MIIT), Administrative Regulations for Online Publishing Services ("Online Publishing Regulations"), February 14, 2016; Heather Timmons and Zheping Huang, "Beijing is banning all foreign media from publishing online in China," *Quartz, February* 18, 2016, https://gz.com/620076/beijing-is-banning-all-foreign-media-from-publishing in China: Foreign Capital Prohibited," Haynes and Boone website, March 30, 2016, https://www.haynesboone.com/Alerts/new-regulations-on-internet-publishing-in-china.

⁹ "China sets up State Internet information office," Xinhua, May 4, 2011, at http://www.chinadaily.com.cn/china/2011-05/04/content_12440782.htm.

nese laws also prohibit people and firms from developing or hosting tools that could be used to circumvent its data and content control measures.¹

Chinese tech firms often have thousands of content moderators to remove censored content. These moderators look for code words or slang that people use to try and get around censorships as well as memes that deal with subjects that the government doesn't want people to access.²⁰ There are also censorship "factories" in China that fulfil these duties for firms. For example, one such firm is Beyondsoft, which has a service (called Rainbow Shield) that has compiled over 100,000 basic sensitive words and over three million derivative words, with about one-third related to political content, followed by words related to pornography, prostitution, gambling, and knives.²

China's censorship system, and the criteria it uses, are opaque and unpredictable, which together create considerable market and policy uncertainty. China's regulatory authorities frequently take actions that appear to be arbitrary, rarely issue lists of banned search terms or banned sites, and provide little or no justification or means of appeal when they block access to all or part of a website. Furthermore, while non-state actors often take explicit guidance from government authorities, they also take an educated guess to block services and material that they think the government would consider offensive or sensitive. China's online crackdowns are often cyclical, especially in the lead-up to key CCP meetings. The unclear and imperfect application of censorship means that firms and content moderators face the challenge of adapting to Chinese users reverting to slang words and memes when communicating on Chinese social media apps like Weibo, QQ, and WeChat. In many ways, the opaque, evolving, and decentralized nature of censorship is one of the factors that makes it easier for China to avoid a legal challenge at the WTO as many parts of its censorship model is through informal administrative guidance or unguided intermediary action.²²

CENSORSHIP IN CHINA IS A SIGNIFICANT AND GROWING NON-TARIFF BARRIER TO U.S. TRADE

China's use of censorship affects both market entry and operations in China and the provision of digital services and products from overseas. This section outlines how China's use of censorship acts as a significant barrier to trade for many U.S. firms and their goods and services, while also showing how a smaller subset of U.S. tech firms have successfully managed to enter and compete.

In analyzing the trade and economic impact of censorship in China it's important to note that even if China was fully open to U.S. firms and their goods and services that they would not necessarily be able to gain the market share they have in the United Štates and elsewhere around the world. Chinese firms are robust competitors. But U.S. firms may be better than local firms in some areas, in part, as they're able to draw on their experience and technologies developed and used elsewhere around the world that Chinese firms have not yet developed. But the point is that U.S. firms should have market access and clear, predictable, and consistent rules around illegal material so that they could at least compete on level terms in China.

Drawn by the world's largest smartphone market and an increasingly wealthy population deeply intrigued by new technologies, just about every American tech company has taken a shot at China. But outside of LinkedIn, AirBnb, Apple, and a group of older companies like IBM, Microsoft, and Intel, few have a major pres-

 ¹⁹ "Ninth Amendment to the Criminal Law," China Law Translate, July 7, 2015, http://www.chinalawtranslate.com/criminallawam92/?lang=en.
 ²⁰ Javier C. Hernández, "Chinese Citizens Evade Internet Censors to Remember Liu Xiaobo,"

New York Times, July 14, 2017, https://www.nytimes.com/2017/07/14/world/asia/china-liu-2009/03/12/world/asia/12beast.html.

²¹Li Yuan, "Learning China's Forbidden History, So They Can Censor It," New York Times,

January 2, 2019, https://www.nytimes.com/2019/01/02/business/china-internet-censor.html. ²²Martina F. Ferracane and Hosuk Lee-Makiyama, "China's technology protectionism and its non-negotiable rationales" (The European Centre for International Political Economy, 2017), https://ecipe.org/wp-content/uploads/2017/06/DTE_China_TWP_REVIEWED.pdf.

ence in the country today.²³ While U.S. firms may not hold the same market shares as they do in the United States and other foreign markets, it's not hard to expect that a greater number and range of U.S. firms would have some, probably sizable, market share in China if there was better market access.

However, success is far from assured. It's also getting more challenging to achieve, in part, as President Xi and CPP have become even more sensitive to content and action that they deem offensive or illegal. Foreign firms understand that doing business in China is contingent on the firm doing its best to not offend the CCP, both in words and deeds in China and elsewhere around the world. The economic and trade tradeoff with censorship is increasingly clear with an assertive CCP: entering China means you get access to a huge and dynamic market, but the government gets to hold you accountable for offending it. When there are few or no legal limits (whether domestic or trade law-related) to the Chinese government's reaction, then foreign firms are obviously at a major disadvantage.

Censorship in China is much broader than website blocking. It no doubt plays a role in China's decision to prohibit wholly or partially owned foreign firms from key sectors. For example, China uses licenses to strictly control who can offer valueadded telecommunication services, such as voice-over-Internet protocol calls, online database storing and searching, electronic data exchange, online data processing and transactions processing, domestic multiparty communication services, virtual private network (VPN) services, and video teleconferencing and who can interconnect these services with public telecommunication networks.²⁴ Similarly, foreign ownership in basic telecommunication services (fixed line, mobile, and broadband) is capped at 49 percent.²⁵

As it relates to blocking, most of the foreign online services, apps or inter-mediaries that China blocks are rarely revised and lifted (as the list above shows). Firms that have their web services temporarily blocked typically find that this is simply a prelude to a total and permanent block. The impact of being blocked is cumulative in its trade impact as for many services that are already blocked, if they add innovative new services and products, the block is automatically extended. For example, China's initial blocking of foreign search engines has expanded to encom-pass many email, cloud storage, and other services. This shows that even if there was a specific politically or socially offensive article to prompt a block, the extension of this block to new services makes it much more impactful from a trade and economic perspective.

The status of a range of key U.S. and foreign firms and services blocked or throttled in China.

Amazon

- Twitch (a live video streaming service) has been blocked since September 2018.26
- Local marketplace Amazon.cn shut down in 2019, due to a small market share (not due to being blocked). Amazon focuses on "cross-border commerce."27 China is among the small number of countries where Amazon Prime Video is not available.²⁸
- Box.com
 - · There appears to be a soft block on Box's cloud and sync services. Users who have Box pre-installed (e.g., travelers) can generally use the service,

²³ Paul Mozur and Carolyn Zhang, "Silicon Valley Giants Confront New Walls in China," New York Times, July 22, 2017, https://www.nytimes.com/2017/07/22/technology/in-china-silicon-

York Times, July 22, 2017, https://www.nytimes.com/2017/07/22/technology/in-china-silicon-valley-giants-confront-new-walls.html.
 ²⁴ United States Trade Agreements (Washington, DC: USTR, 2015), https://ustr.gov/sites/de-fault/files/2015-Section-1377-Report FINAL.pdf.
 ²⁵ State Council, Provisions on Administration of Foreign-Invested Telecommunications Enterprises. Decree of the State Council of the People's Republic China No. 333, December 11, 2001.
 ²⁶ Shannon Liao, "Twitch is now blocked in China." The Verge, September 20, 2018, https://www.theverge.com/2018/9/20/17883736/twitch-china-block-app-store.
 ²⁷ Arjun Kharpal, "Amazon is shutting down its China marketplace business. Here's why it has struggled," CNBC, April 18, 2019, https://www.cnbc.com/2019/04/18/amazon-china-marketplace-closing-down-heres-why.html.
 ²⁸ Patrick Frater, "Why China Is Absent From Amazon Prime Video's Global Rollout," Variety, December 14, 2016, https://variety.com/2016/digital/asia/why-china-is-absent-from-amazon-prime-videos-global-rollout-1201941851/.

or through a China-specific link. Box appears to work best for those who are visiting rather than long-term residents.29

- Drophox
 - First blocked in May 2010.³⁰ Temporarily restored in February 2014, but then blocked again in June 2014.3
- Facebook (further details below)
 - · Main Facebook website was blocked in 2009. Instagram was blocked in September 2014. WhatsApp was blocked in September 2017.³²
 - Operates an online advertising unit for Chinese customers to target foreign markets. In 2018, China was the second-largest source of foreign revenue for ad spend on Facebook. 33
- Google (further details below)
 - Temporarily blocked in 2002, but was later re-opened. However, Google decided to withdraw its search engine from China in 2010 and direct all traffic to google.com.hk (which is blocked in China).³⁴ Google also operates an online advertising unit in China.
 - YouTube was blocked on and off in the late 2000s before being permanently blocked in March 2009.
 - Also blocked: Gmail, Google Drive, Google Docs, Google Play, Google Translate, Google Calendar, Google Picasa, Google Groups, Google Keep, Google Voice, Google Wallet, Google Earth, Google Earth, Google Chrome homepage, Google Code, Google Blogspot, and Google Feedburner.³⁵
- Microsoft (further details below)
 - Microsoft OneDrive was blocked in 2014.36 Bing was the last major U.S. search engine blocked in China in January 2019.37
- News services
 - The Washington Post, The Guardian, Bloomberg, The New York Times, Reuters. The Wall Street Journal, BBC Chinese, Chosun Chinese, and Google News are all blocked in China.³⁸
- Other search engines
 - · DuckDuckGo, Baidu Japan, Baidu Brazil, Yahoo Hong Kong, and Yahoo Taiwan are all blocked in China.³⁹

TechCrunch, February 17, 2014, https://techcrunch.com/2014/02/17/dropbox-now-accessible-for-the-first-time-in-china-since-2010/; Michael Kan, "China cuts access to Dropbox," PC World, June 19, 2014, https://www.pcworld.com/article/2365540/china-cuts-access-to-dropbox.html. ³²Hannah Kuchler, "WhatsApp blocked in China ahead of Communist Party Congress in Oc-tober," FT, September 25, 2017, https://www.ft.com/content/685b02c6-4f37-3d69-97f1-

 ³³George P. Slefo, "Report: China, despite ban, is Facebook's second-largest ad market," AdAge, May 15, 2018, https://adage.com/article/digital/china-facebook-s-largest-market/ AdAge, 313524.

³⁴ https://www.google.com.hk is 100 percent blocked in China, GreatFire.org website, https://

en.greatfire.org/https/www.google.com.hk. ³⁵ "Google disrupted prior to Tiananmen anniversary; Mirror sites enable uncensored access to information," GreatFire.org website, June 2, 2014, https://en.greatfire.org/blog/2014/jun/

to information," Greathre.org Website, June 2, 2014, https://en.greathre.org/000g/2014/jun/ google-disrupted-prior-tiananmen-anniversary-mirror-sites-enable-uncensored-access. ³⁶Kaylene Hong, "Little trouble in big China: Flickr, OneDrive, Line and Kakao Talk suffer accessibility issues," TheNextWeb, July 4, 2014, https://thenextweb.com/asia/2014/07/04/little-trouble-in-big-china-flickr-onedrive-line-and-kakao-suffer-downtime/#.tnw_FFQ06QZk.

³⁷Yuan Yang, "China blocks Bing access in curb on last foreign search engine," FT, January 24, 2019, https://www.ft.com/content/714ac466-1f64-1169-b126-46fc3ad87c65.
 ³⁸For example: Shih, "China adds Washington Post, Guardian to 'Great Firewall' blacklist," The Washington Post.

³⁹ Paige Leskin, "Here are all the major U.S. tech companies blocked behind China's 'Great Firewall," *Business Insider*, October 10, 2019, *https://www.businessinsider.com/major-us-tech*companies-blocked-from-operating-in-china-2019-5#duckduckgo-18.

²⁹ "Accessing Box From China," Box Community website, May 18, 2018, https://commu-

Accessing Box From China, Box Community Website, May 16, 2016, https://commu-nity.box.com/t5/Archive-Forum/Accessing-Box-from-China/td-p/56552.
 ³⁰Matthew Humpries, "China has blocked Dropbox," Geek.com, May 11, 2010, https:// www.geek.com/news/china-has-blocked-dropbox-1235291/.
 ³¹Catherine Shu, "Dropbox Now Accessible for the First Time in China Since 2010,"

- Pinterest
 - Blocked in 2017.40
- Reddit
 - Blocked in August 2018.⁴¹
- Slack
 - Access has been inconsistent for years, despite not being completely blocked.⁴² China, along with a number of countries have recently blocked certain online services, including AWS, which hosts Slack, making it very difficult for such services to access those markets.43
- Snapchat
 - Unclear when first blocked, but Snap has a small research office in China despite the block.44
- Twitter
 - Blocked in June 2009.⁴⁵

The impact of China's censorship and blocking of U.S. firms varies along a spectrum: from a minor, periodic constraint on service access to a severely degraded connection that essentially makes it unviable from an operational or commercial perspective to a complete block. China has gradually been ratcheting up the restrictions so that it is more often at the restrictive end of the spectrum. Frequent blocking and unlocking of websites (and VPNs) can make it hard for firms to have confidence they will have the communication services they need for day-to-day operations and international trade.⁴⁶ U.S. firms also report that pushing all traffic through the Great Firewall adds transmission delays that can significantly degrade the quality of the service, to the point where it's commercially or operationally unacceptable (thus cutting off market access).⁴⁷ In a similar way, China has "throttled" access to foreign websites in order to make them so slow as to be unusable. Throttling is often a precursor to being blocked completely. For example, before Google got fully blocked, it was throttled for a long time, which had the effect of making it appear as if Google's search engine was slow and buggy. Furthermore, in 2007, China temporarily re-directed all China-based requests for Google, Yahoo, and Microsoft to Baidu.48

The case of Microsoft's Bing is typical. When it was blocked in January 2019, Bing was the only major foreign search engine left in China. News reports quote anony-mous sources that stated that China Unicom, one of China's major state-owned telecoms companies, had received an order from the government to block Bing for "illegal content."⁴⁹ Attempts to access cn.bing.com from China resulted in a (nameserver) connection error. As of December 2018, Bing held a 2-percent market

⁴⁰ Sherisse Pham, "China adds Pinterest to list of banned sites," CNN Business, March 17, 2017, https://money.cnn.com/2017/03/17/technology/pinterest-banned-china/.

 ⁴¹Alice Truong, "Users in China found Reddit blocked over the weekend," *Quartz*, August 13, 2018, https://qz.com/1354441/china-blocked-reddit-but-access-is-returning-for-some-users/.
 ⁴² "@SlackHQ: While we do not block Slack in China from our end, we do know that our con-

tent delivery network is very often blocked in China, and so accessing Slack there is somewhat inconsistent," Twitter, February 27, 2018, https://twitter.com/slackhq/status/968526959213 936640?lang=en.

⁴³ "Slack Technologies filing to the United States Securities and Exchange Commission (SEC)," WEC website, May 31, 2019, https://www.sec.gov/Archives/edgar/data/1764925/000162828019007428/slacks-1a3.htm.

⁴⁴Leskin, "Here are all the major U.S. tech companies blocked behind China's 'Great Fire-wall'"; Sherisse Pham, "Why Snapchat's owner is hiring in China," *CNN Business*, December 21, 2016, https://money.cnn.com/2016/12/21/technology/snapchat-china-spectacles-shenzhen-

office/. ⁴⁵ Paul Mozur, "Twitter Users in China Face Detention and Threats in New Beijing Crack-down," New York Times, January 10, 2019, https://www.nytimes.com/2019/01/10/business/ china-twitter-censorship-online.html. ⁴⁶United States Trade Representative (USTR), 2018 Report to Congress on China's WTO Com-

pliance.

⁴⁷ Ihid

⁴⁸ Victoria Ho, "China accused of rerouting search traffic to Baidu," CNET, October 22, 2007,

https://www.cnet.com/news/china-accused-of-rerouting-search-traffic-to-baild/.
⁴⁹Yuan Yang, "China blocks Bing access in curb on last foreign search engine," FT, January 24, 2019, https://www.ft.com/content/714ac466-1f64-11e9-b126-46fc3ad87c65.

share in China (far behind Chinese industry leader Baidu, with 70 percent), but it enjoyed a niche market for English-language searches.⁵

Google has been one of the major casualties of China's approach to censorship and digital protectionism. It entered China in 2006 with a local search engine, under an arrangement with the government that required it to purge search results on banned topics.⁵¹ In a first for Chinese users, Google placed a notice that content had been removed when users searched for it, but this apparently wasn't popular with regulators.⁵² From 2006 to 2010, Google China fought skirmishes with the Chinese government over content restrictions.⁵³ Google struggled to comply with ever-tightening censorship requirements and a far-reaching hacking attack (known as Operation Aurora) that targeted everything from Google's intellectual property to the Gmail accounts of Chinese human rights activists.⁵⁴ So, in 2010, Google shut down its search engine. China's state-controlled media quoted a State Council Information Office official saying that "Google has violated its written promise it made when entering the Chinese market by stopping filtering its search service and blaming China in insinuation for alleged hacker attacks."58

At this time, Google trailed its main Chinese rival, *Baidu.com*, with 33 percent market share to Baidu's 63 percent.⁵⁶ China has since blocked the full suite of Google services (as listed above). In August 2018, media reports suggested that Google was working on a secret prototype of a new, censored Chinese search engine, called Project Dragonfly.⁵⁷ In mid-December 2018, Google suspended its development efforts, in part due to political opposition in the United States.⁵⁸ China has gone so far as to block Google Scholar, a benjon search engine for academic lit-erature that many researchers rely upon. Lack of access to this service clearly inhib-its China's broader innovation goals.⁵⁹ Media reports stated that Google Scholar was on a priority list to be allowed back through the Great Firewall, but this hasn't happened.60

Since 2010, Google has maintained only limited connections and entry points into China. It has an active business distributing online ads for desktop computers and mobile applications, and Chinese makers of smartphones use its Android mobile device software. Google has setup a research center that focuses on artificial intelligence (AI), but the focus will be on developing AI for global products.⁶¹ In 2018, Google's revenue in Greater China (which includes mainland China as well as Hong Kong, Macau, and Taiwan) grew more than 60 percent to more than \$3 billion.⁶ In 2018, Google indirectly accessed China via a \$550 million investment in prominent Chinese online retailer JD.com. As part of this, Google and JD.com formed a strategic partnership where the latter connects its supply chain and logistics expertise with the Google Shopping platform.⁶³ JD.com also setup a Google Express site

⁵⁴ Kim Zetter, "Google Hack Attack Was Ultra Sophisticated, New Details Show," Wired, January 14, 2010, https://www.wired.com/2010/01/operation-aurora/.
⁵⁵ Helft and Barboza, "Google Shuts China Site in Dispute Over Censorship."

⁵⁶Ibid.

⁵⁷ Ryan Gallagher, "Google's Secret China Project 'Effectively Ended' After Internal Confronta-The Intercept, December 17, 2018, https://theintercept.com/2018/12/17/google-chination," censored-search-engine-2/. 58 Ibid.

⁵⁹Dennis Normile, "Science suffers as China's Internet censors plug holes in Great Firewall," Science, August 30, 2017, https://www.sciencemag.org/news/2017/08/science-suffers-china-s-internet-censors-plug-holes-great-firewall.

 $^{^{50}}Ibid.$

⁵¹ Miguel Helft and David Barboza, "Google Shuts China Site in Dispute Over Censorship," New York Times, March 22, 2010, https://www.nytimes.com/2010/03/23/technology/23google. html.

⁵²Matt Sheehan, "How Google took on China—and lost," *Technology Review*, December 19, 2018, https://www.technologyreview.com/s/612601/how-google-took-on-china-and-lost/. 53 Íbid.

⁶⁰Nectar Gan, "Is Google another step closer to being unblocked in China?", South China Morning Post, March 12, 2017, https://www.scmp.com/news/china/policies-politics/article/ 2078173/google-another-step-closer-being-unblocked-china.

⁶¹Carlos Tejada, "Google, Looking to Tiptoe Back Into China, Announces A.I. Center," New York Times, December 13, 2017, https://www.nytimes.com/2017/12/13/business/google-aichina.html.

⁶²Yunan Zhang and Juro Osawa, "Google's Ad Sales From China Are Booming," The Informa-tion, February 27, 2019, https://www.theinformation.com/articles/googles-ad-sales-from-china-

 ¹¹⁰¹, Forland, J., 2012, and archooming.
 ⁶³Karim Temsamani, "A strategic partnership with JD.com," Google in Asia Blogpost, June 18, 2018, https://www.blog.google/topics/google-asia/partnering-jdcom/.

in March, 2019.64 Together, the partners aim to compete with Amazon and Alibaba, especially in fast-growing south east Asian markets.⁶⁵ However, the Google Shopping portal is blocked in China.

Facebook's main social network site was blocked in 2009, followed by Instagram in 2014, and Whatsapp in 2017. But this has not stopped Facebook from repeated attempts to access the market.⁶⁶ In 2016, Facebook started developing software tools for third parties to use to abide by censorship laws as it relates to stories and topics that may appear on the social network.⁶⁷ In 2017, Facebook developed a photo-sharing app called "Colorful Balloons" that was released through a separate local company (without carrying the firm's name).⁶⁸ In 2018, there were media reports that Facebook had gained approval to open a subsidiary in the Chinese province of Zhejiang, which Facebook said it would use for research. But then the registration disappeared and references to the subsidiary were partly censored in Chinese media. Media report state that the approval was rescinded after a disagree-ment between officials in Zhejiang and the Cyberspace Administration of China, which was angry that it had not been consulted more closely.69 This incident underscores how much of a challenge it is for Facebook-a global social network- to get into China in any meaningful way. It also highlights how U.S. firms seeking to enter the market must navigate multiple, often opaque rules and laws within a system in which cities, provinces, and national government agencies all vie for influence and can make key decisions.

Facebook is now limited in how it can operate in China. Facebook has setup an experience center through a Chinese advertising partner (Meet Social), where potential customers learn how to advertise on Facebook to access customers elsewhere around the world. In 2019, Meet Social reportedly expected \$1 billion to \$2 billion in ad sales on Facebook and Instagram.⁷⁰ In total, Facebook's revenue from Chinese-based advertisers reached an estimated \$5 billion in 2018, or about 10 percent of its total sales.71

Apple has major operations in China. In the 2019 financial year, Apple made \$44bn of revenues in Greater China during, mostly from selling iPhones.⁷² However, to do so it had to agree to Chinese user data in the country and to remove offensive apps, such as news and VPN apps, from its app store. Apple removed 805 apps in China from 2018 to 2019.⁷³ Most recently, Apple removed the app game "Plague" following the coronavirus outbreak.⁷⁴

While standard iPhone services like iMessage work in China, many paid offerings that help Apple generate revenue from services related to its devices aren't available in China. Only 6 months after launching in China, Apple closed the iTunes Store

⁶⁴Josh Horwitz, "Chinese e-commerce company JD.Com launches store on Google shopping site," Reuters, March 5, 2019, https://www.reuters.com/article/us.jd-com-google/chinese-e-com-merce-company-jd-com-launches-store-on-google-shopping-site-idUSKCN1QM13Y. ⁶⁵Krystal Hu, "How Google is revamping its e-commerce business with JD.com's help," Yahoo Finance, August 9, 2019, https://funace.yahoo.com/news/how-google-is-revamping-its-ecommerce-business-with-j-dcoms-help-183825490.html. ⁶⁶Paul Mozur, "In China, Facebook Tests the Waters With a Stealth App," New York Times, August 11, 2017, https://www.nytimes.com/2017/08/11/technology/facebook-china-moments-colorful-balloons.html. ⁶⁷Mike Isaac, "Facebook Said to Create Censorship Tool to Get Back Into China," New York Times, November 22, 2016, https://www.nytimes.com/2016/11/22/technology/facebook-censor-

Times, November 22, 2016, https://www.nytimes.com/2016/11/22/technology/facebook-censor-

 ⁶⁹ Paul Mozur, "China Said to Quickly Withdraw Approval for New Facebook Venture," New York Times, July 25, 2018, https://www.nytimes.com/2018/07/25/business/facebook-bing.html. china.html

⁷⁰Paul Mozur and Lin Qiqing, "How Facebook's Tiny China Sales Floor Helps Generate Big Ad Money," New York Times, February 7, 2019, https://www.nytimes.com/2019/02/07/tech-nology/facebook-china-internet.html. ⁷¹Ibid.

 ⁷¹*Ibid.* ⁷² "Apple's Chinese troubles," *The Economist,* February 20, 2020, *https://www.economist.com/business/2020/02/20/apples-chinese-troubles.* ⁷³ Masha Borak, "Apple removed 805 apps in China from 2018 to 2019," *Abacus News,* January 29, 2020, *https://www.abacusnews.com/tech/apple-removed-805-apps-china-2018-2019/article/3047325;* Nick Statt, "Apple's iCloud partner in China will store user data on servers of state-run telecom," *The Verge,* July 18, 2018, *https://www.theverge.com/2018/7/18/17587304/apple-icloud-china-user-data-state-run-telecom-privacy-security.* ⁷⁴ Jay Peters, "Plague Inc. pulled from the App Store in China amid coronavirus outbreak," *The Verge,* February 27, 2020, *https://www.theverge.com/2020/2/27/21156162/plague-inc-pulled-china-ios-app-store-coronavirus.*

(Apple Books, Apple TV, Apple News, and iTunes Movies) in April of 2016.75 While the Chinese Government initially approved Apple's introduction of the services, for whatever reason, this changed a few months later when the State Administration of Press, Publication, Radio, Film and Television demanded it be closed.⁷⁶ China's blocking extends to newer services like Apple TV+ video streaming, the Apple Card, Apple Arcade, and the News+ subscription.⁷⁷ While China is a huge market for Apple and its smart devices, its ability to earn from associated services is severely constrained. This puts a sort of cap on its current and future profitability.78

LinkedIn is among the few prominent foreign tech platforms that are legally allowed in China and that have been successful in the market. In 2014, LinkedIn agreed to censor content when it decided to enter China.⁷⁹ In 2019, LinkedIn's transparency report shows that it received two requests for member data from China's government (this contrasts with 663 for the United States in the same time period) and 17 requests for content removal (of which it took action on 14).80 Part of LinkedIn's success is that it formed a partnership with two influential Chinese venture capital investment funds to create a separate China operation, who were also able to build a good relationship and communication channel with the Chinese government.81 It also focused on the specific characteristics of the Chinese market. It hired local staff who, in part, created a stand- alone app to bring LinkedIn, a service built around email and computers, to China's smartphone-dependent population.82 But even here, it has to adapt to the fact that Chinese users rely on messaging apps and not email, thereby pitching it against WeChat and other larger social networks. LinkedIn isn't trying to compete against the "super apps" like WeChat, but to grow as a career development platform.⁸³ Despite all these challenges, it has found a market with tens of millions of users (reported at 47 million in 2019).84 While its success may be modest, it is indicative of what should be possible for other U.S. firms if given the chance to enter and compete in China.

While Airbnb (the home sharing site) is not directly involved in censorship related activities and content, it's indirect involvement and compliance and cooperation with local laws and government agencies has contributed to its success in China. It's among the few clear examples where a foreign technology firm can be successful when given the opportunity to compete on fair terms. For Airbnb, China is a critical source of both outbound customers (Chinese tourists traveling overseas) and local hosts for domestic and foreign tourists. As of October 2016, more than 3.5 million Chinese travelers used Airbnb listings around the world.⁸⁵ Airbnb faces stiff competition from Chinese rivals, such as Tujia.com and Xiaozhu.com, which also comply with the same requirements as Airbnb. Airbnb used these outbound Chinese tourists and its global network (which it's local competitors don't have) to build up its domestic operations in China. In 2018, Airbnb reported that 91 percent of total

⁷⁵Paul Mozur and Jane Perlez, "Apple no longer immune to China's scrutiny of US tech firms," *The New York Times*, April 22, 2016, *https://www.cnbc.com/2016/04/22/apple-itunes-movies-ibooks-store-shut-down-in-china.html*. ⁷⁶ Ihid

⁷⁷ Yoni Heisler, "Some of Apple's most ambitious services still aren't available in China," BGR, November 7, 2019, https://bgr.com/2019/11/07/apple-services-china-apple-tv-plus-arcade-not-

November 7, 2019, https://bgr.com/2019/11/07/apple-services-china-apple-tv-plus-arcade-not-available/.
 ⁷⁸Ibid; Mark Gurman, "iPhones Are Big in China, But Apple's Services Play Gets Mired in Censorship," Bloomberg, November 7, 2019, https://www.bloomberg.com/news/articles/2019-11-07/apple-tv-apple-arcade-other-apple-services-blocked-in-china.
 ⁷⁹Derek Shen, "Introducing LinkedIn's Simplified Chinese Beta Site," LinkedIn Official Blog, February 24, 2014, https://blog.linkedin.com/2014/02/24/introducing-linkedins-simplified-chinese-beta-site; Paul Mozur and Vindu Goel, "To Reach China, LinkedIn Plays by Local Rules," Navy York Times Outpoor 5, 2014, https://10/06/itca.paga. New York Times, October 5, 2014, https://www.nytimes.com/2014/10/06/technology/to-reach-china-linkedin-plays-by-local-rules.html.

⁸⁰ "Government Requests Report," LinkedIn Transparency website, https://about.linkedin.com /transparency/government-requests-report. ⁸¹Paul Mozur and Vindu Goel, "To Reach China, LinkedIn Plays by Local Rules," New York

 ⁸¹ Paul Mozur and Vindu Goel, "To Reach China, LinkedIn Plays by Local Rules," New York Times, October 5, 2014, https://www.nytimes.com/2014/10/06/technology/to-reach-china-linkedin-plays-by-local-rules.html.
 ⁸² Mozur and Carolyn Zhang, "Silicon Valley Giants Confront New Walls in China."
 ⁸³ Zhang Erchi and David Kirton, "LinkedIn's China President Wants to Make Better Use of Career Site's Global Reach," June 24, 2019, https://www.caixinglobal.com/2019-06-24/ linkedins-china-president-wants-to-make-better-use-of-career-sites-global-reach-101430839.html.
 ⁸⁴ Ibid; and Mozur and Carolyn Zhang, "Silicon Valley Giants Confront New Walls in China."
 ⁸⁵ Supporting our community in China," Airbnb website, https://blog.atairbnb.com/sup-porting-our-community-in-china/.

nights booked within China were booked by locals.86 Airbnb has also introduced premium services and expanded into many second and third-tier cities.

Airbnb set up local operations to both abide by local laws and to ensure its services were tailored to the market. In 2016, Airbnb setup a new business entity to manage operations in China. It has moved to store its data in China and has canceled bookings during politically sensitive events (such as China's National People's Congress).⁸⁷ In March 2018, Airbnb stated that it will comply send customer details to Chinese government authorities to abide by local regulations that require foreigners to register their accommodation with police (hotels have done this for a long time).88 Listings and non-China operations are not affected by these requirements. In November 2019, Airbnb's China president Tao Peng highlighted that localizing its platform is the key to success in China. It has changed its local name (to Aibiying in Chinese) and doubled its staff (to 500) in Beijing, in part, to build a customized version of its platform to better suit local preferences, such as the use of WeChat Pay and Alipay.⁸⁹ Airbnb wants to find a home in the notoriously difficult and cloistered market, and thus far, it has done a pretty good job of doing so.90

Both Airbnb and LinkedIn (among other cases above) shows that foreign firms can successfully compete against Chinese competitors even when there are local requirements related to data and content that are significantly different to other major markets. They've found an equilibrium between the laws of their home market and Chinese laws, while still being successful. These experiences provide a blueprint, and perhaps a cautionary lesson, for other foreign tech firms wanting to enter China, but also to policymakers in recognizing what approach is most effective in regard to both trade and human rights.91

CASE STUDY: ZOOM AND CENSORSHIP IN CHINA

Zoom-the video-chat service that operates in more than 80 countries-recently tripped two major landmines that demonstrate how U.S. companies need to establish clear boundaries between operations involving China and other markets given how censorship requests in the former can quickly spillover to the later. No doubt, Zoom has made mistakes, but it has admitted and addressed many of these in an effort to operate by local laws in China and elsewhere.⁹² It made these challenging adjustments while expanding from 10 million meetings a day in December 2019 to doing 200 million meetings a day in March 2020.⁹³ Its experience provides useful lessons for other U.S. firms and policymakers.

Zoom is headquartered in San Jose, CA and is listed on the NASDAQ. It has over 2,500 employees, with about 1,400 in the United States, with the remainder overseas, including about 700 at subsidiaries in China (doing research and development

⁹⁰ Jessi Hempel, "Airbnb Wants to Find a Home in China," Wired, August 21, 2010, https:// www.wired.com/story/airbnb-china-market/. ⁹¹Mozur and Goel, "To Reach China, LinkedIn Plays by Local Rules

⁸⁶Tyler Sonnemaker, "An Airbnb cofounder explained the strategy behind its success in China, a market where most U.S. companies have failed," Business Insider, June 14, 2018, https://www.businessinsider.com/airbnb-cofounder-china-strategy-success-focused-outboundtravel-2020-2.

⁸⁷ Pei Li and Cate Cadell, "Airbnb to start sharing Chinese host information with govern-ment," Airbnb, March 28, 2018, https://www.reuters.com/article/us-airbnb-china/airbnb-to-start-sharing-chinese-host-information-with-government-idUSKBN1H41JJ; Tara Francis Chan, "Airbah has removed listings in Beijing and canceled bookings during China's annual par-liament because it wants to be 'good neighbors,'" Business Insider, March 5, 2018, https:// www.businessinsider.com/airbnb-removed-china-listings-during-national-peoples-congress-2018-3.

⁸⁸ "What do I need to know in order to sign up for an Airbnb account as a resident of China, or if I change my residence to China?", Airbnb website, https://www.airbnb.com/help/article/ 1035/what-do-i-need-to-know-in-order-to-sign-up-for-an-airbnb-account-as-a-resident-of-china-or-

¹⁰⁰*J*¹⁰*i i i change-my-residence-to-china*. ⁸⁹Sam Shead, "Airbnb China president: Localization is key if we want to be successful in the country," CNBC, November 19, 2019, *https://www.cnbc.com/2019/11/19/airbnb-china-presi*dent-localization-abiyang.html.

 ⁹¹ Mozur and Goel, "To Reach China, LinkedIn Plays by Local Rules."
 ⁹² Bill Marczak and John Scott-Railton, "Move Fast and Roll Your Own Crypto: A Quick Look at the Confidentiality of Zoom Meetings," The Citizen Lab, University of Toronto, April 3, 2020, https://citizenlab.ca/2020/04/move-fast-roll-your-own-crypto-a-quick-look-at-the-confidentiality-of-zoom-meetings/; Eric Yuan, "A Message to Our Users," Zoom blog post, April 1, 2020, https://blog.zoom.us/wordpress/2020/04/01/a-message-to-our-users/.
 ⁹³ Ibid.

work).94 While not every mid-sized U.S. technology company uses China-based research and development, hundreds of multinational firms have R&D centers in China.⁹⁵ The main zoom website (zoom.us) and international app appear blocked in China, but there are reportedly several third-party services that allow access in China (e.g., zoom.cn, zoomvip.cn, zoomcloud.cn).⁹⁶ Zoom's local service and app (https://zoom.com.cn) has reportedly been (generally) reliable and popular for users in calls between China and the outside world, including in reaction to COVID-19.97

In April 2020, Zoom encountered significant public scrutiny when the University of Toronto's Citizen Lab released a report that showed that Zoom meeting encryption keys were sent via China-based servers and that it used non-industry standard cryptographic techniques that may mean calls could be intercepted (which raised concerns about China's laws concerning encryption key disclosure).98 Zoom's CEO responded, stating that the firm added sever capacity in China as part of its efforts to rapidly scale capacity in response to COVID-19-related demand, during which it failed to fully implement geo-fencing best practices.⁹⁹ As a result, certain non-China related meetings may have been routed through these servers in China, when they otherwise would not have. Zoom has removed these servers from the list of backup servers for users outside of China. It also enacted new safeguards and internal controls to prevent unauthorized access to data, including by staff, regardless of where data gets routed. Most recently, it updated its encryption protocols and that it will introduce end-to-end encryption for all calls (for both free and paid services, but it will be an optional feature as it limits some meeting functionality).¹⁰⁰ Zoom services generally store data in the United States, though it stores data locally where required or when customers choose to have their data stored outside of the U.S. (in their geographic vicinity).¹⁰¹

Zoom encountered another major issue when it briefly blocked, and then restored, accounts of Chinese human rights activists (including Zhou Fengsuo) who wanted to use the platform to organize a public commemoration of the 1989 Tiananmen Square crackdown.¹⁰² Mr. Fengsuo is an American who lives in the United States. China asked Zoom to terminate four meetings scheduled to be hosted on Zoom and three accounts (one in Hong Kong and two in the United States) hosting the calls. Zoom canceled the three meetings that involved participants from mainland China.¹⁰³ It reportedly did this mid-event. U.S.-based staff reviewed meeting metadata (such as IP addresses) to determine which meetings had China-based participants. Zoom terminated the meetings as (at that time) it did not have the ability to remove specific participants from a meeting or block participants from a certain

⁹⁴ "Form 10-K: Zoom Video Communications, Inc. Annual Report to the Securities and Exchange Commission (for the year ending January 31, 2020)," Zoom website, https://inves-tors.zoom.us/static-files/09a01665-5f33-4007-8e90-de02219886aa. ⁹⁵ Capucine Cogné, "Is Zoom crazy to count on Chinese R&D?", TechNode, April 13, 2020, https://technode.com/2020/04/13/is-zoom-crazy-to-count-on-chinese-rd/. ⁹⁶ "[Translation] Zoom suspended in China," Sohu, September 9, 2019, https://www. sohu.com/a/339796981 115035. ⁹⁷ Karen Chu, "Why are people in China using Zoom?", South China Morning Post, June 18, 2020 https://www.sohu.com/abacus/tech/article/3089667/why-are-people-china_using-zoom:

^{2020,} https://www.scmp.com/abacus/tech/article/3089667/why-are-people-china-using-zoom; Emma Lee, "China's Zoom users switch to local version after blockage," TechNode, September 19, 2019, https://technode.com/2019/09/19/chinas-zoom-users-switch-to-local-version-afterblockage/.

 ⁹⁸Marczak and Scott-Railton, "Move Fast and Roll Your Own Crypto: A Quick Look at the Confidentiality of Zoom Meetings"; Rogier Creemers, Paul Triolo, and Graham Webster, "Translation: Cybersecurity Law of the People's Republic of China," New America blog post, June 1, 2017, https://www.newamerica.org/cybersecurity-initiative/digichina/blog/translation-cybersecurity-law-peoples-republic-china/.
 ⁹⁹Eric Yuan, "Response to Research From University of Toronto's Citizen Lab," Zoom blog post, April 3, 2020, https://blog.zoom.us/wordpress/2020/04/03/response-to-research-from-university-of-torontos-citizen-lab/.
 ¹⁰⁰Kari Paul. "Zoom will provide end-to-end encryption to all users after privacy backlash."

 ¹⁰⁰Kari Paul, "Zoom will provide end-to-end encryption to all users after privacy backlash," *Guardian*, June 17, 2020, https://www.theguardian.com/technology/2020/jun/17/zoom-encryption-free-calls; https://blog.zoom.us/end-to-end-encryption-updatel.
 ¹⁰¹[Archived] "Zoom: Privacy Policy," March 29, 2020, http://archive.fo/5gKKh#selection-2299.271-2299.426.
 ¹⁰²Paul Mozur, "Zoom Blocks Activist in U.S. After China Objects to Tiananmen Vigil," New Varh. Times. 11, 2020, https://www.netimes.com/2020/06/11/techology/zoom.china

York Times, June 11, 2020, https://www.nytimes.com/2020/06/11/technology/zoom-chinatiananmen-square.html

¹⁰³ "Improving Our Policies as We Continue to Enable Global Collaboration," Zoom blog, June 11, 2020, https://blog.zoom.us/wordpress/2020/06/11/improving-our-policies-as-we-continue-to-enable-global-collaboration/.

country from joining a meeting. It states it did not provide any user information or meeting content to the Chinese government.104

While reactive and incomplete, Zoom's response and approach is the right one in that it wants to manage operations so that they abide by laws in each jurisdiction. This approach is comparable to every other multinational firm in the world-just because a firm is foreign owned does not make it immune from local laws, even if those laws are ones that most Americans would disagree with. The degree and type of segregation obviously depends on the nature of local laws, which in the case of Internet-related firms in China, is becoming significant. Firms are enacting admin-istrative and technical firewalls between China and non-China operations. This is the case for U.S. and other foreign firms in China, but also Chinese firms that operate overseas. For example, Chinese tech firm Bytedance separates its two key serv-ices (Douyin inside of China and TikTok outside of China) to minimize cross-border interaction on either platform. It recently implemented restrictions on China-based employees from accessing the code bases for overseas products.¹⁰⁵ Zoom rightly committed to "not allow requests from the Chinese government to impact anyone out-side of mainland China."¹⁰⁶ It has developed technology to remove or block partici-pants based on their country, which will allow the firm to take a much more granular action in response to requests from local authorities when they determine that certain activity on the platform is illegal in that country.

Zoom has also committed to release a transparency report that details information related to requests for data, records, or content.¹⁰⁷ As you'd expect, given the need to follow local laws, U.S. technology companies frequently turn over private information requested by home and foreign governments, including those in the United States. Businesses other than Zoom routinely submit to Chinese government censorship demands in China, though there have been few public, high-profile cases involving cross-border issues like this one (besides Yahoo in 2005).¹⁰⁸

The onus should be on the United States government and like-minded countries that value and advocate for human rights—not firms like Zoom—in China, whether by engagement, negotiation, or confrontation. As Zoom stated: "It is not in Zoom's power to change the laws of governments opposed to free speech. However, Zoom is committed to modifying its processes to further protect its users from those who wish to stifle their communications."¹⁰⁹ The time has long since passed, if it ever existed, where an individual U.S. firm could change Chinese government policy through such a public challenge or withdrawal.

For those policymakers and advocates that want Zoom to leave China or cut off services on moral grounds, they also need to recognize that there are clear negative tradeoffs: Zoom is currently a rare channel of relatively low-friction communication through the Great Firewall and the myriad barriers to in-person meetings. The company, and everyone else, should weigh the importance of that connectivity in deciding how to best deal with the underlying challenge that is China's approach to human rights.¹¹⁰

CENSORSHIP'S IMPACT ON MARKET ACCESS FOR U.S. CONTENT CREATORS

U.S. content creators face major market access and operational issues that are directly and indirectly related to censorship. The explicit censorship review process is just the tip of the iceberg in terms of market restrictions U.S. content creators face in China. Indicative of this, the International Intellectual Property Alliance reported that the ability of U.S. producers to compete in the Chinese marketplace for all audiovisual content was even more drastically curtailed during 2019, with licensing

¹⁰⁴*Ibid*.

¹⁰⁵Chen Du, "Exclusive: ByteDance Cuts Domestic Engineers' Data Access to TikTok, Other Overseas Products," *PingWest*, June 7, 2020, *https://en.pingwest.com/a/6875*. ¹⁰⁶ "Improving Our Policies as We Continue to Enable Global Collaboration," Zoom blog. ¹⁰⁷ Zoom's privacy policy notes that: "In certain limited circumstances, courts, law enforcement

agencies, regulatory agencies, or security authorities in those other countries may be entitled

agencies, regulatory agencies, or security authorities in those other countries may be entitled to access your personal data." ¹⁰⁸ "Chinese journalist Shi Tao, jailed for 8 years after Yahoo gave up his identity, gets early release," Reuters, September 9, 2013, https://www.scmp.com/news/china/article/1306818/chi-nese-journalist-shi-tao-jailed-eight-years-after-yahoo-gave-his. ¹⁰⁹ Gerry Shih, "Zoom censors video talks on Hong Kong and Tiananmen, drawing criticism," Washington Post, June 11, 2020, https://www.washingtonpost.com/world/asia pacific/zoom-censors-video-talks-on-hong-kong-and-tiananmen-drawing-criticism/2020/06/11/0197dc94-ab90-11ea-a43b-be9f649487d_stry.html. ¹¹⁰ As raised by Graham Webster in: "China's Zoom Bomb: A ChinaFile Conversation," China File, June 16, 2020, https://www.chinafile.com/conversation/chinas-zoom-bomb.

opportunities on all distribution platforms significantly hampered, through opaque regulations, obscure content review processes, and a "soft ban" on new or never released U.S. imports.¹¹¹ This has effectively prevented access by U.S. content creators and distributors to one of the largest consumer markets in the world.

The formal content review process that every movie and television show goes through in China is based on vague and non-transparent criteria, which are applied inconsistently, which together create an unpredictable and burdensome market access restriction.¹¹² Reviewers may require various changes, such as edits in the script, obfuscated translation, and title changes. Sometimes the censors simply don't respond, thus denying access. Furthermore, U.S. content creators have to submit full seasons of television shows (rather than as episodes are developed), which also delays distribution, instead of allowing advance registration and rolling approval for content as it's finalized. U.S. films are also often locked out from prime release dates.

The discriminatory and restrictive conditions that U.S. content creators face in China are similar to other sectors in that this review mechanism is combined with other restrictions that exclude them (but not domestic firms) from key services in the Chinese market. The State Administration of Press, Publication, Radio, Film and Television (SAPPRFT) and other Chinese regulatory authorities have taken actions to prevent the cross- border supply of online video services (no doubt, they'd inevitably cite some censorship-related rationale if pressed), which may implicate China's WTO commitments relating to video distribution.¹¹³ SAPPRFT also requires that video platforms all be state-owned, thus preventing foreign suppliers from qualifying for a license to distribute content. At the same time, several Chinese companies (including Alibaba) appear exempt from some requirements.¹¹⁴ Furthermore, China also doesn't allow foreign firms to hold a majority share in entities engaged in the production and publication of audiovisual content.

China uses explicit quotas to limit U.S. market access to their theatrical film sector. Since 1994, China has placed a quota (at that time it was 10) on the number of foreign films that can be shown in Chinese theatres. In 2002, the quota increased to 20. In 2009, the United States won a WTO trade dispute challenging China's restrictions on foreign films (that they only be imported through a few government-designated intermediaries) at the WTO.¹¹⁵ In 2012, the United States and China negotiated an increase in the quota from 20 to 34.116 The 2012 agreement also allows foreign movie makers to keep a bigger share of the box office takings, increasing from 13 percent to 25 percent. A rate that is significantly lower than in marketbased economies. This quota mainly affects the major U.S. studios. A few dozen foreign independent films also get approved for release each year. Both sides agreed to re-negotiate the quota 5 years after this 2012 revision, but there hasn't been any further progress as the issue got rolled into the broader U.S.-China trade war.¹¹⁷ The formal quota comes on top of an unofficial policy of manipulating the market to ensure Chinese movies account for a 60-percent box office share.¹¹⁸ On top of all of this, studios have had problems getting paid for what they are allowed to distribute in China. For example, a Motion Pictures Association-requested audit of the Chinese box office in 2016 showed that Chinese cinemas underreported box office

^{111 &}quot;China: 2020 Special 301 Report on Copyright Protection and Enforcement," The International Intellectual Property Alliance, February 6, 2020, https://www.iipa.org/files/uploads/ 2020/02/2020SPEC301CHINA.pdf.

¹¹²United States Trade Representative (USTR), 2018 Report to Congress on China's WTO Compliance. ¹¹³ United States Trade Representative (USTR), 2018 Report to Congress on China's WTO

Compliance. 114 Ibid.

¹¹⁵Keith Bradsher, "WTO Rules Against China's Limits on Imports," New York Times, August 12, 2009, https://www.nytimes.com/2009/08/13/business/global/13trade.html.

¹¹⁶Rogier Creemers, "China increases foreign movie quota, so what does it solve?", China Copyright and Media blog, April 23, 2012, https://chinacopyrightandmedia.wordpress.com/2012/02/20/china-increases-foreign-movie-quota-but-what-does-that-mean/.

¹¹⁷Pei Li and Michael Martina, "Hollywood's China dreams get tangled in trade talks," Reu-ters, May 19, 2018, https://www.reuters.com/article/us-usa-trade-china-movies/hollywoods-china-dreams-get-tangled-in-trade-talks-idUSKCN1IKOWO.
 ¹¹⁸Patrick Frater, "U.S. and China Struggle Over Film Quotas," Variety, February 9, 2017, https://variety.com/2017/biz/asia/u-s-and-china-struggle-over-film-quotas-1201979720/.

numbers by 9 percent, which given the revenue sharing arrangement, meant U.S. studios were underpaid by about \$40 million.¹¹⁹

The impact of China's censorship and market restrictions on U.S. movie exports has grown more costly over time. Before COVID-19 hit, China was on track to over-take the United States as the world's largest movie market in 2020.¹²⁰ While U.S. movie-ticket sales (pre-COVID) are relatively flat, China's have more than tripled since 2011.¹²¹ China has become an important market delivering profits that support Hollywood's blockbuster franchise offerings. Overseas box office revenue is what often turns somewhat new and ambitious films (like Interstellar or Life of Pi) into blockbusters. The Hollywood releases that break out in China are generally the same ones that succeed globally.¹²² While China cannot be counted upon to ball out big-budget movies that bomb in the United States, U.S. content producers wants to (at least) be able to count on potential revenue to justify the budgets that keeps the industry growing.

In a similar way, the State Administration of Press and Publication's (SAPP) opaque, unpredictable, and restrictive Chinese censorship has affected the approval and distribution of video games. In 2018, China scopped all game license reviews, which severely affected both domestic and foreign firms and game distributors (due to a restructuring of departments and new rules for video game oversight).¹²³ While the actual content being censored is often not political (such as intimacy, pornography, and violence), the criteria is often vague and unevenly enforced. For example, "anything that harms public ethics or China's culture and traditions" and "anything that violates China's constitution" are both prohibited in Chinese videogames. Once SAPP started reviewing game licenses again after a nine-month hiatus, it quickly approved nearly 1,000 games, which included 30 foreign games.¹²⁴

An anomaly in China's restrictive approach to video game censorship is Steam (wind by Valve, an American video game developer), which remains accessible (without a VPN) to Chinese users. With Steam, only community features like fo-rums and adult games on the platform are blocked.¹²⁵ Indicative of the opportunity for foreign firms if they're able to abide by Chinese law and operate in these censored sectors, it's become incredibly valuable for Steam: it has an estimated 40 million Chinese players and hundreds of game developers. Indicative of how local Chinese developers can benefit from working with global platforms like Steam, many local games have been very successful.¹²⁶ In 2018, Valve announced that it was going to partner with a local firm and develop a China-specific Steam platform.¹²⁷

Having clear and predictable access to China's video game market is a huge issue as China overtook the United States as the world's largest video-game market in 2016_{128}^{128} As an industry, video games are now worth three times as movies globally.¹²⁹ However, China is a daunting market for foreign firms—93 percent of total spend on Apple's iOS mobile operating system in China is spent on Chinese games,

October 10, 2011, https://www.chinatabolog.com/2017/10/china-60x-office-auait-results-are-in-now-uhat.html.
 ¹²⁰ "Strong revenue growth continues in China's cinema market," PWC China, June 17, 2019, https://www.pwccn.com/en/press-room/press-releases/pr-170619.html?mod=article inline.
 ¹²¹ Erich Schwartzel, "Hollywood's New Script: You Can't Make Movies Without China," Wall Street Journal, April 18, 2017, https://www.wsj.com/articles/hollywoods-new-script-you-cant-make-movies-without-china-1492525636?mod=article inline.

make-movies-without-china-1492525636?mod=article inline. ¹²² Scott Mendelson, "Box Office: 'Wolf Warrior 2's \$600M+ Success Should Terrify Holly-wood," Forbes, August 10, 2017, https://www.forbes.com/sites/scottmendelson/2017/08/10/as-wolf-warrior-2-tops-600m-what-chinas-box-office-blockbuster-means-to-hollywood/#17981d101f61. ¹²³ Rick Lane, "China freezes all game license approvals," PC Gamer, August 15, 2018, https://www.pcgamer.com/china-freezes-all-game-license-approvals/; Shannon Liao, "Apple blames revenue loss on China censoring video games," The Verge, January 29, 2019, https:// www.theverge.com/2019/1/29/18202812/chinese-censorship-hurt-apples-bottom-line. ¹²⁴ "Nearly 1,000 games have received a license since the restart of game approvals in China."

¹²⁴ "Nearly 1,000 games have received a license since the restart of game approvals in China," Niko Partners, 2019, https://nikopartners.com/nearly-1000-games-have-received-a-license-since-

Niko Partners, 2019, https://nikopartners.com/nearly-1000-games-have-received-a-ticense-since-the-restart-of-game-approvals-in-china/.
 ¹²⁵ Andy Chalk, "Steam Community access has been blocked in China," PC Gamer, December 19, 2017, https://www.pcgamer.com/steam-community-access-has-been-blocked-in-china/.
 ¹²⁶ "The rise of Chinese games on Steam," ResetEra, January 18, 2019, https://www.resetera.com/threads/the-rise-of-chinese-games-on-steam.94371/.
 ¹²⁷ Chris Tapsell, "Valve talks Steam China, curation and exclusivity," EuroGamer, August 21, 2019, https://www.eurogamer.net/articles/2019-08-21-valve-talks-steam-china-curation-exclusivity.

sivity. 128 "Europe Meets China—How the Games Industry Is Evolving," Atomico, June 1, 2017, https://www.atomico.com/europe-meets-china/. ¹²⁹Ibid.

¹¹⁹Matthew Dresden, "China Box Office Audit Results Are In—Now What?", China Law Blog, October 10, 2017, https://www.chinalawblog.com/2017/10/china-box-office-audit-results-are-in-

which is more localized than any other country, including Japan or South Korea.¹³⁰ This shows that even without restrictions, U.S. firms would have their work cut out given local preferences, complex distribution systems, and how successful Chinese game developers and platforms have been, but they (again) should have the opportunity to compete on the same terms as local developers.

CASE STUDY: GITHUB: WHERE CHINA'S CENSORSHIP FOUND A LIMIT AND MODEL FOR MODERATION AND ENGAGEMENT

GitHub—the largest public code repository in the world that allows developers to collaborate on projects-presents an interesting case as to the potential limits of censorship given how it affects China's broader digital development goals. GitHub (owned by Microsoft) is a U.S.-based global company that provides hosting for software development. It's known as a critical repository for open source code, providing the vital digital infrastructure on which much of the multibillion-dollar software business depends. While Microsoft does not publish GitHub's financial information, if the number of developers is a guide, China is its second most important market after America, and one of the fastest growing.¹³¹

On January 21, 2013, GitHub was blocked in China due to DNS hijacking. The blocking of GitHub gained greater attention in the country after the former head of Google's China operations, Kai-Fu Lee, posted about it on Sina Weibo (China's version of Twitter), where it was re-tweeted over 80,000 times.¹³² He made the case version of Twitter), where it was re-tweeted over 80,000 times.¹³² He made the case that "blocking GitHub is unjustifiable, and will only derail the nation's program-mers from the world, while bringing about a loss in competitiveness and insight."¹³³ The block was lifted on January 23, 2013. However, access to GitHub from China can still be slow and unreliable. More recently, Chinese programmers have used GitHub to complain about working conditions in China's tech sector.¹³⁴ It also re-mains a popular platform for creating and sharing anti-censorship software tools within China.¹³⁵ However, in this case, China did not block GitHub. This placed Microsoft, which has extensive operations in China, in a potentially difficult situa-tion given it has introduced a tailored version of Microsoft Office for Chinese govern-ment use. Microsoft also owns LinkedIn.¹³⁶ GitHub has already received notices from China's government to remove content. In 2019 it received five notices from from China's government to remove content. In 2019 it received five notices from China's Ministry of Public Security to take down content related to Falun Gong (a religious group).137

Similar to other U.S. firms, GitHub is looking to open a subsidiary in China. In December 2019, media reports stated that GitHub was moving to setup an office in China.¹³⁸ In response to a question about China, GitHub CEO Nat Friedman reportedly said that "on net," the company's approach "is that we want to lean towards more access to GitHub for every developer, even in countries that aren't democratic, even in teams that are doing things that we might disagree with."¹³⁹ While a GitHub subsidiary in China will make it easier for it to censor individual projects, such as Great Fire products, it would probably provide greater regulatory and market certainty for the firm.

CHINA'S PURSUIT OF CENSORSHIP AND INFORMATION CONTROL RESTRICTS BUSINESS CONNECTIVITY TO THE GLOBAL INTERNET

China's censorship and information control efforts extend to restrictions over all forms of connectivity, including how U.S. firms use virtual private networks (VPNs)

¹³⁰*Ibid*.

¹³¹ "Microsoft's GitHub mulls expansion in China," The Economist, December 6, 2019, https://

www.economist.com/business/2019/12/06/microsofts-github-mulls-expansion-in-china. ¹³²Michael Kan, "GitHub unblocked in China after former Google head slams its censorship," ComputerWorld, January 23, 2013, https://www.computerworld.com/article/2493478/githubunblocked-in-china-after-former-google-head-slams-its-censorship.html. ¹³³ Ibid.

 ¹³⁵ Ibid.
 ¹³⁴ Yuan Yang, "China tech worker protest against long working hours goes viral," FT, April 3, 2019, https://www.ft.com/content/72754638-55d1-11e9-91f9-b6515a54c5b1.
 ¹³⁵ Emily Feng, "GitHub Has Become a Haven for China's Censored Internet Users," NPR, April 10, 2019, https://www.npr.org/2019/04/10/709490855/github-has-become-a-haven-for-

April 10, 2019, https://www.hpr.org/2019/04/10/709490855/github-has-become-a-haven-por-chinas-censored-internet-users.
 ¹³⁶ Mozur and Goel, "To Reach China, LinkedIn Plays by Local Rules."
 ¹³⁷ Yuan Yang, "GitHub keen to open subsidiary in China," FT, December 9, 2019, https:// www.ft.com/content/4c1f2d1c-1a63-11ea-97df-cc63de1d73f4.
 ¹³⁸ "Microsoft's GitHub mulls expansion in China."
 ¹³⁹ Colin Lecher, "GitHub CEO discussed 'evolving' position on China in private all-hands meeting." The Verge October 10, 2019, https://www.theorem.com/2019/10/10/20908713/

meeting," The Verge, October 10, 2019, https://www.theverge.com/2019/10/10/20908713/ github-ceo-china-transcript-leak-microsoft.

to allow intra-firm networks and operations and cross-border sales and service. In the last few years, China has tightened regulations and restrictions around these VPNs, which seriously affects the reliability and quality of connections to the global Internet for China-based U.S. firms and their staff

China has a track record of targeting individuals (consumers) wanting to use VPNs (such as by shutting down Chinese VPN providers). As mentioned, China targets the development and distribution of these services, often via intermediaries such as app stores and cloud storage providers.¹⁴⁰ Interestingly, periodic clamp-downs on VPNs (which are relaxed afterwards) show that Chinese authorities realize that there is some need for balance in how they restrict VPNs as they are used by generating efficience academics, and others as a lifeting for must by government officials, academics, researchers, and others as a lifeline for musthave global services (such as allowing Chinese government officials to access and use Twitter or for researchers to access academic literature).

Restrictions on VPNs are also a barrier to the cross-border sale, development, service, and use of software. U.S. software firms are reportedly finding it increasingly difficult to license and sell software to users in China (or existing customers) that want to use the same software when setting up in China, such as multi-nationals) that rely on VPNs as these connections are increasingly poor and unreliable. Similarly, some U.S. venture capital firms and software developers are report-edly avoiding China-based investments or partners as poor connectivity with the global Internet makes it uncertain whether the firm would be able to scale globally even if their software product is valuable.

Many U.S. and foreign firms use VPNs for corporate purposes to connect locations and services inside of China with the rest of the world and to protect their communications from hacking and government surveillance.¹⁴¹ These firms typically use their own global VPN infrastructure to connect users and business units around the world (such as via Multiprotocol Label Switching (MPLS)). In 2018, China started managing and limiting the connections that U.S. firms use so that they maintain oversight of this connectivity. It enacted new regulations that forced firms to buy and use expensive licensed VPN services, which are from one of China's three stateown telecommunication firms: China Telecom, China Unicom, and China Mobile.¹⁴² The Ministry of Industry and Information Technology said these restrictions are in accordance with goals and provisions set out by the government created Cross-border Data Telecommunications Industry Alliance.¹⁴³

These restrictions were especially disruptive to businesses that depended on their VPNs for access to cloud services and data security. They can also be more expensive and unreliable, while exposing communications to government surveillance. Indicative of this, the Financial Times reported that an American non-profit group and a British company told them that their company-built VPNs had been blocked, disrupting their ability to do business.¹⁴⁴ It also reported another representative from an American Fortune 500 company as saying that it had become increasingly difficult to access blocked websites from their Beijing office, which similarly uses a corporate VPN.¹⁴⁵

¹⁴⁰ Paul Mozur, "Apple Removes Apps From China Store That Help Internet Users Evade Censorship," New York Times, July 30, 2017, https://www.nytimes.com/2017/07/29/tech-nology/china-apple-censorhip.html; "@Star_VPN: We just received notice that @Apple removing all the @VPN apps from the @China app store," Twitter, July 29, 2017, https://twitter.com/ star upn/status/891191888547651584; Paul Mozur, "Joining Apple, Amazon's China Cloud Service Bows to Censors," New York Times, August 1, 2017, https://www.nytimes.com/2017/ 08/01/business/amazon-china-internet-censors-apple.html. ¹⁴¹ United States Trade Representative (USTR), 2018 Report to Congress on China's WTO Compliance

Compliance. ¹⁴²Yuan Yang and Lucy Hornby, "China disrupts global companies' web access as censorship bites," *FT*, January 16, 2018, *https://www.ft.com/content/80650a6c-fa8a-11e7-9b32-d7d59aace 167*; Linda Musthaler, "An SD–WAN service that gets around the Great Firewall of China le-gally," *Network World*, November 3, 2019, *https://www.networkworld.com/article/3451384/a* gally, "Network World, November 3, 2019, https://www.networkworld.com/article/3451384/a-vpn-service-that-gets-around-the-great-firewall-of-china-legally.html; (English translation) "Notice of the Ministry of Industry and Information Technology on Cleaning Up and Regulating the Internet Network Access Service Market," Ministry of Industry and Information Technology of the People's Republic of China, January 22, 2017, accessed via the Wayback Machine Internet Archive, https://web.archive.org/web/20190203073845/http://www.miit.gov.cn/n1146290/n43 88791/c5471946/content.html. ¹⁴³ "Notice on Invitation to Membership and Overseas Observers of China Cross-border Data Technology

Technology.

¹⁴⁴Yang and Hornby, "China disrupts global companies' web access as censorship bites."

¹⁴⁵ Ibid.

With these restrictions in place, U.S. firms have a few options to maintain connectivity with the rest of the Internet—each with their own disadvantages. Firms can use a managed IPSec VPN (one of two common VPN protocols) from one of the Chinese telecommunication firms. But this means that all outbound traffic is forced through the Great Firewall. This allows the provider to block restricted traffic (which of course is hardly ideal for firms) and causes connectivity perform-ance issues (*i.e.*, delays in websites loading).¹⁴⁶ Where firms setup private connections (such as private leased VPN lines). Chinese regulations state that "the basic telecom operators shall establish a centralized user archive and specify that the lines are leased for the purpose of internal office use only and shall not be used to connect data centers or service platforms at home or abroad for telecommunication services."14

Otherwise, a foreign firm may use an authorized MLPS circuit from within China to outside (such as to Hong Kong or Singapore) where it then connects into the firm's existing VPN network. However, this is very expensive, takes a long time to deliver, and is bandwidth-constrained. A typical Chinese MPLS circuit is somewhere south of 20 MB of bandwidth, and it could cost \$15,000 to \$20,000 for a single cir-cuit.¹⁴⁸ Similarly, "where multinational companies lease international private lines to build their own office networks, qualified third parties (including enterprises with licenses for domestic IP-VPN services and fixed-network domestic data transmission services) may be entrusted to provide outsourcing services such as system integration and maintenance and management."¹⁴⁹ Some providers have recently developed a software defined wide-area network (WAN) that is supposedly compliant with China's new regulation, which provides supposedly seamless and high-speed access be-tween intra-China and international networks.¹⁵⁰ But these still provide the Chinese government with access and oversight over these data transfers.¹⁵¹

At the heart of these restrictions is the Chinese government's drive to control content it deems illegal. It tries to create a very narrow and controlled lane for business-specific connections, while strictly prohibiting the potential use of these connections for broader dissemination to the public. Beyond the examples above, this approach extends to those few, limited, and restricted U.S. cloud providers in China. China restricts and manages how cloud service operators connect their China-based cloud service platform servers with the overseas network, which must be done through the international Internet service portal approved by the Ministry of Industry and Information Technology (MIIT), rather than private lines, VPNs or other channels.¹⁵² No matter the connection, the Chinese government wants to have visibility of the network and the data.

These restrictions give Chinese authorities the capability to oversee and control flows of commercial information and data, but it does not mean that they're necessarily examining company traffic (if there's no specific reason for China's government to be focusing on a firm's communications). Obviously, firms with sensitive intellectual property may have legitimate fears about how these rules raise the risk of inadvertent disclosures given China's aggressive and comprehensive cyber theft of trade secrets. There are other ways and tools for U.S. firms to mitigate this risk, such as encryption. However, the U.S. government and firms should be concerned as China's restrictions over commercial connectivity services that are needed for day-to-day trade and business operations are unique, complicated, and act as yet an-

¹⁴⁶Musthaler, "An SD-WAN service that gets around the Great Firewall of China legally." ¹⁴⁷ "Annex 1 (Word Document) of Notice on Invitation to Membership and Overseas Observers

of China Cross-border Data Telecommunications Industry Alliance," China Academy of Informa-tion and Communication Technology, http://www.caict.ac.cn/english/news/201809/P0201809 20452814498554.doc. ¹⁴⁸ "Annex 1 (Word Document) of Notice on Invitation to Membership and Overseas Observers

of China Cross-border Data Telecommunications Industry Alliance." ¹⁴⁹ "Annex 1 (Word Document) of Notice on Invitation to Membership and Overseas Observers

of China Cross-border Data Telecommunications Industry Alliance.

of China Cross-border Data Telecommunications Industry Alliance." ¹⁵⁰ "Annex 1 (Word Document) of Notice on Invitation to Membership and Overseas Observers of China Cross-border Data Telecommunications Industry Alliance"; "SD–WAN Service for China," Teridion website, *https://www.teridion.com/china*; Teridion, "Teridion Introduces In-dustry's First Compliant Cloud-Based Global SD–WAN Service to Mainland China Delivering High-Performance and Cost-Effective Access," news release, October 24, 2019, *https:// www.businesswire.com/news/home/20191024005256/en/Teridion-Introduces-Industry%E2%80* %99s-Compliant-Cloud-Based-Global-SD-WAN. ¹⁵¹ "Annex 1 (Word Document) of Notice on Invitation to Membership and Overseas Observers of China Cross-border Data Telecommunications Industry Alliance."

of China Cross-border Data Telecommunications Industry Alliance. ¹⁵²*Ibid.*

other regulatory hurdle for U.S. firms to clear in seeking to simply enter and operate in China

THE COST OF CHINESE CENSORSHIP TO U.S. SEARCH AND CLOUD SERVICES

U.S. firms have lost significant revenue by being blocked or inhibited in accessing the Chinese market, especially during such a transformative stage of growth in Chi-na's economy. In 2019, China had nearly 800 million Internet users (an increase of 25 million from 2018). The average download speed of mobile broadband has in-creased six times in the last 5 years.¹⁵³ The OECD's (narrow) definition of the dig-ital economy estimates it represents 6 percent of GDP in China as compared to 8 to 10 percent in South Korea and Japan.¹⁵⁴

While China's overall digitalization still lags advanced economies, China has emerged as a global leader in key new digital industries. In e-commerce China ac-counts for over 40 percent of global transactions, and the penetration of e-commerce (in percent of total retail sales) stands now at 15 percent, compared to 10 percent in the United States. On fintech, Chinese companies account for more than 70 percent of the total global valuations. The value of China's consumption-related mobile payments by individuals totaled US\$790 billion in 2016, 11 times that of the United States. On cloud computing, Alibaba cloud computing has set up 14 data centers globally, with overseas cloud computing revenues growing at 400 percent.¹⁵⁵

There have been few attempts to quantify the trade impact of China's censorship in part because any estimate is fraught with difficulties and assumptions. For example, China's digital ecosystem—with key "super apps" providing a single portal for a range of integrated services—has evolved in a way that is very different to the United States. This evolution has largely taken place since Google and other major U.S. firms were blocked, so it's impossible to know how market share would be divided if Google were able to remain. In many regards, China is one of the most competitive places for consumer services and technology. So the factors that affect a U.S. firm's market share are beyond the impact that censorship has on U.S. firms' market access and operations.

To develop an estimate of the economic impact of China's censorship on U.S. firms, ITIF chose South Korea as a comparator market for U.S. search firms (Google), while the Asia Pacific region was used for estimating revenues and market share for cloud service providers (Amazon and Microsoft). See the appendix for data. South Korea was chosen as its digital economy has evolved in a way that is some-what similar to China, while obviously being substantially different to that of the United States. Like other Asia Pacific countries, users in Korea access the Internet primarily through their mobile phones (mobile first culture). This meant that app and service developers had to find a way to provide a variety of services in the sim-plest way possible, which led to the development of "super apps." While super apps exist in the United States, the single aggregation of features never took center stage the same way as in China and Asia, such as with WeChat.¹⁵⁶

In search, South Korea's local search service Naver had 77-percent market share in 2007, while Google had only 1.7-percent. At this stage Google did not have as much Korean language content to refine its search services.¹⁵⁷ Another data source (comScore) from 2009 gives Naver 62 percent and Google 7.3 percent.¹⁵⁸ However, over time Google seized greater market share. However, we realize that other sources give Google and Naver very different market shares. Nielson's KoreanClick 2018 gives Naver around 39 percent of mobile search market share, compared to 29

¹⁵³ Xiaoxia, "China has 854 mln Internet users: report," Xinhua Net, August 30, 2019, http://

 ¹⁵³ XlaOXla, China has 654 min Internet users, report, Alma iver, August 50, 2019, http:// www.xinhuanet.com/english/2019-08/30/c 138351278.htm.
 ¹⁵⁴ Longmei Zhang and Sally Chen, "China's Digital Economy: Opportunities and Risks" (Washington, DC: The International Monetary Fund, January 17, 2019, https://www.imf.org/ en/Publications/WP/Issues/2019/01/17/Chinas-Digital-Economy-Opportunities-and-Risks-46459.

¹⁵⁵ Ihid

 ¹⁵⁵ Ibid.
 ¹⁵⁶ Julber Osio, "China Leads Rise of Mobile 'Super Apps,'" S&P Global Market Intelligence, August 9, 2019, https://www.spglobal.com/marketintelligence/en/news-insights/blog/china-leads-rise-of-mobile-super-apps; Coco Liu, "Super apps: WeChat, Go-Jek and rivals battle to do it all in Asia," Nikkei Asian Review, September 2, 2019, https://asia.nikkei.com/Business/Industry-in-focus/Super-apps WeChat-Go-Jek-and-rivals-battle-to-do-it-all-in-Asia.
 ¹⁵⁷ Barry Schwartz, "Naver, the Google of South Korea," Search Engine Land, July 5, 2007, https://searchengineland.com/naver-the-google-of-south-korea-11627.
 ¹⁵⁸ Bearch engine market share around the world updated August 2009," Chandler Nguyen blog, August 1, 2009, http://www.chandlernguyen.com/blog/2009/08/01/search-engine-market-share-around-the-world-updated-aug-2009/.

percent for Google.¹⁵⁹ However, Nielson relies on unique user counts while Stat Counter utilizes total page views, with page views serving as a much better proxy for ad revenue, and suggesting that Korean Google users are significantly more active than Naver users.

Google's main revenue source is advertising through Google sites and its network, such as Google Search and Google Maps. Revenue comes via from ads served through its advertising programs, such as AdSense for example. Assuming revenue is a proportionate measure for search volume (and ad revenue), if Google's search market share hadn't fallen from the 37 percent it held in 2010, it would have made a total of 32.5 billion more in the period 2013 to 2019 (Appendix A).¹⁶⁰ If it had mirrored South Korea, where it held a similar market share to China (39 percent) and trailed the domestic firm Naver in 2010, but later became dominant, Google would have made \$61.3 billion more over the same period.¹⁶¹ These estimates suggest that without Chinese interference, Google would have earned between \$7.7 and 517.2 billion more in search revenue in 2019 alone, a 5 to 11 percent increase of Alphabet's \$162 billion 2019 global revenue.¹⁶²

In the cloud service sector, we focused on Infrastructure as a Service (IaaS) and used the Asia Pacific as the comparator. IaaS is a form of cloud computing that provides virtualized computing resources over the Internet. IaaS is highly scalable and allows businesses to purchase resources on-demand and as-needed instead of having to buy hardware outright. Amazon Web Services (AWS), Cisco Metacloud, DigitalOcean, Google Cloud, Microsoft Azure, and Rackspace are popular IaaS providers around the world.

Just using a simple direct estimation, if Amazon and Microsoft had the market share in China for IaaS that they did in the Asia Pacific region overall, they would have made \$516 million and \$140 million more, respectively, in 2017 and 2018 (Appendix B).¹⁶³ It's easier to do a direct comparison for IaaS as it is a neutral service platform and is not affected by different cultural and design preferences. Of course, China makes up half of the region's spending on IaaS, so just using their market shares in the rest of Asia Pacific, suggests that these two firms they would have earned \$1.03 billion and \$571 million more, respectively.

Collectively, ITIF's estimates losses for the search and cloud sectors suggest that these companies would have made \$5.8 to \$10.6 billion more in 2017 and \$7.5 to \$14.3 billion more in 2018 (Appendix C).¹⁶⁴

¹⁵⁹*Ibid*.

¹⁶⁰ For Search: Google's current revenue is estimated by multiplying its market share of Chinese search engines with the total revenue of search engine companies in China for each year. As comparisons, we assume that total search engine revenue is unchanged and repeat the cal-

Cutations for Google maintaining its 2010 market share of 37 percent and experiencing the same market share growth as it experienced in South Korea. ¹⁶¹iReasearch, "Revenue of Search Engine Companies in China 2013–2020," April 1, 2019, http://www.iresearchchina.com/content/details7 53447.html; statscounter, Search Market Share (China and South Korea, 2010–2019), accessed February 27, 2020, https:// gs.statcounter.com/. ¹⁶²#Uhpehot. Powers.

¹⁶² "Alphabet Revenue 2006–2019 GOOG," https://www.macrotrends.net/stocks/charts/

GOOG/alphabet/revenue. ¹⁶³For cloud services: Amazon's and Microsoft's Infrastructure as a Service (IaaS) market shares in China are compared to their market shares in the overall Asia Pacific region, esti-mating the revenues each company would earn if they held their regional market share within China. Additionally, the Chinese market is subtracted from the Asia Pacific region to estimate China. Additionally, the Chinese market is subtracted from the Asia Pacific region to estimate the market share each company holds in the rest of the region, which are once again substituted for the Chinese market shares; China Internet Watch, "Alibaba Cloud owns 43 percent China's public cloud market in 2018," February 12, 2019, https://www.chinainternetwatch.com/28150/ public-cloud-h1-2018/; China Internet Watch, "China public cloud (IaaS) to reach US\$6.21 bn in 2018; Amazon fastest growth," October 10, 2018, https://www.chinainternetwatch.com/ 26900/public-cloud-iaas-2018/; Business Wire, "Alibaba Cloud Ranked First in Asia Pacific(*) by Gartner Market Share: IT Services in IaaS and IUS," April 24, 2019, https:// www.businesswire.com/news/home/20190424005371/en/; IDC, "New IDC Forecast Reveals Asia/Pacific* Spending on Public Cloud Services to Reach USD 76.1 Billion by 2023," August 7, 2019. https://www.idc.com/getdoc.isp?containerId=prAP45431219.

^{7, 2019,} https://www.idc.com/getdoc.jsp?containerId=prAP45431219. ¹⁶⁴The tables in the appendix summarize the results estimating the revenues of U.S. cloud and search companies in China in different scenarios and provide estimates of cumulative losses. The high and low assumptions for each are different. For search, we assume Google maintained a consistent market share and then assume they beat out Baidu like they beat out Naver in Korea. For cloud, we assume cloud companies receive the market share equivalent to the average in the Asia Pacific region including China, and then receiving the market share equivalent to the regional average excluding China.

U.S. FIRMS SHOULD BE ALLOWED, AND ENCOURAGED, TO OPERATE INSIDE A CENSORED CHINA

The trade and economic implications of the Great Firewall and Chinese censorship more broadly, combined with other digital protectionism, undermines U.S. firms and the U.S. economy overall. This is problematic for America's position as the world's leading innovator. Most technology-based industries have high barriers to entry. In sectors that rely on AI, for example, firms spend hundreds of millions, and years of effort, developing ever more sophisticated technical capabilities. The initial investment can be quite high. While fixed costs are extremely high, marginal costs are low as firms can deploy their services over the Internet to many markets around the world.

If U.S. innovation industries lose market share to unfairly competing firms supported by their innovation mercantilist governments, it means two things. First, sales fall. This is true because global sales are largely fixed, and if a mercantilistsupported competitor (unfairly) gains market share, the market-based competitor loses share. Second, because profits decline more than sales, it is now more difficult for the market-based innovator to reinvest revenues in the next generation of products or services, meaning that the mercantilist-supported entrant has an advantage in creating the next generation of products. Also, to the extent the United States continues to lose technological capabilities to China, U.S. technological advantage in defense over China will diminish, if not evaporate, as U.S. capabilities whither and Chinese ones strengthen.

U.S. policymakers are obviously well within their rights to protest against China's approach to human rights, such as freedom of expression, which is affected by cen-sorship. This can, and should, continue to be done directly by the U.S. government Sump. In Stan, but shows and shows and in relevant international forums. The United States has benefited tremendously from a global trading system that allows firms and people from all political systems and belief systems to improve their standard of living through greater trade and innovation. However, with limited exceptions (such as facilitating genocide, war crimes, or some other heinous international crime), unilaterally holding U.S. firms accountable for the values of the country they operate in is not what has defined U.S. trade and foreign policy. Moreover, it works against U.S. economic interests, especially the goal of leading China technologically and economically

As Google stated in a blog from when it withdrew in 2010, "filtering our search results clearly compromises our mission" but, as it added, "failing to offer Google search at all to a fifth of the world's population, however, does so far more severely."¹⁶⁵ This is a fair assessment of the tradeoff. Obviously, U.S. firms have the right to decide whether to enter or stay out of China for whatever reason. People talk about the decision about whether U.S. firms should enter (or reenter) the world's largest, and one of its fastest growing digital markets, and whether they will have to compromise the principles and values of the United States. While firms like Google may or may not have had more leverage to negotiate a better deal back in 2010 (as compared to today), the situation in relation to governance intention and capability has clearly changed and solidified around censorship and the control of information in China and between China and the rest of the world. Under any rational business calculation, it would be impractical to expect one of the world's largest Internet companies to stay out of the world's largest digital economy, especially when U.S. firms have shown that they can operate under the Chinese government's intrusive rules. 166

A realistic approach should recognize that it is far more constructive to recognize a government's right to regulate content online and debate about how these content moderation frameworks, even if for political speech purposes, are designed and en-forced. This should be a legitimate part of the political and economic response in ensuring that rules are clear, provide sufficient time for action, build in notification processes, are no more onerous than necessary, and are as precise as possible.

A key, and fair, concern is that changes U.S. firms make to abide by Chinese censorship laws affect their actions and the goods and services they provide in other markets around the world. Recent cases with the NBA being penalized in China for

¹⁶⁵Andrew McLaughlin, "Google in China," January 27, 2006, https://googleblog.blogspot.com

 ¹⁰⁰ Andrew McLaughin, 'Google in China,' January 21, 2006, https://googleotog.blogspot.com /2006/01/google-in-china.html.
 ¹⁶⁶ Farhad Manjoo, 'Google Tried to Change China. China May End Up Changing Google," New York Times, https://www.nytimes.com/2018/08/22/technology/google-china-conven-tionality.html.

remarks from one coach in the United States is not only evidence of China's sensitive and punitive nature, but its extra territorial application of censorship in selectively targeting people and firms for what they say and do in the United States. However, this is extraterritorial application of domestic law is not unique to China. Privacy regulators in Europe have tried to dictate what information U.S. firms make available to people in Europe, but also the rest of the world, through their "right to be forgotten" requirement that gives European Union citizens the power to demand that data and information about them be deleted. Germany requires social networks to remove Nazi symbols. In 2017, the Supreme Court of Canada upheld orders for Google to "de-index" a website, and asserted the jurisdiction of Canada's courts over Internet intermediaries in other countries. The United States should focus on ensuring that U.S. firms only apply these rules in local jurisdictions and come up with other tools to counteract its spillover into the United States.

OVERLY BROAD CENSORSHIP AND TRADE LAW: APPLICABLE, BUT LARGELY UNTESTED

Trade law allows countries to enact censorship for a range of reasons, such as pornography, gambling, and faith-based objections, but these must be necessary and proportionate. This raises the prospect for a WTO dispute case based on the claim that China's approach to censorship is overly broad, restrictive, and discriminatory as it can unfairly restrict the domestic and cross-border supply of a service.

For as long as there has been international trade rules, there have been exceptions, including for countries to enact measures to protect public morals. Back in 2006, academics like Tim Wu from Colombia University realized that countries were not considering the trade law implications of overly broad online censorship.¹⁶⁷ A 2009 WTO trade dispute (initiated by the United States) represents the clearest ex-ample of how trade law can address issues like censorship. This case involved trading rights and distribution services for audiovisual entertainment products. China sought to justify restrictions on foreign firms involved in importing and distributing books, movies, and other "culturally sensitive" materials because it wanted to protect public morals and control content. China claimed that control of cultural content is a matter of fundamental importance, which was recognized as legitimate by the WTO dispute panel.¹⁶⁸ However, the panel's overall verdict showed how China's desire to control online content does not enable it to ignore WTO rules.¹⁶⁹

The European Center for International Political Economy (ECIPE) report Protectionism Online: Internet Censorship and International Trade Law presents a de-tailed and convincing case that a WTO dispute panel might rule that China's permanent blocks on search engines, photo-sharing applications, and other services are inconsistent with the General Agreement on Trade in Services (GATS) provisions, even with the exceptions for morals and security.¹⁷⁰ Less resourceful countries, without means of filtering more selectively, and with a censorship system based on moral and religious grounds, are more likely to be able to defend broader censorship blocks in the WTO. But the exceptions do not offer a blanket cover for the arbitrary and disproportionate censorship that still occurs despite the availability to the censoring government of selective filtering.

Article XX of General Agreement on Tariffs and Trade (GATT) and article XIV of GATS contain many relevant rules that govern the potential use of censorship. GATT permits governments to take measures "necessary to protect public morals." GATS permits measures "necessary to protect public morals or to maintain public order." However, Article XX of GATTs outlines that, "subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade.'

¹⁶⁷Tim Wu, "The World Trade Law of Internet Filtering," Columbia University Law School,

 ¹⁶⁷Tim Wu, "The World Trade Law of Internet Filtering," Columbia University Law School, May 3, 2006, http://dx.doi.org/10.2139/ssrn.882459.
 ¹⁶⁸ "DS363: China—Measures affecting trading rights and distribution services for certain publications and audiovisual entertainment products," World Trade Organization website, https://www.wto.org/english/tratop e/dispu_e/cases e/ds363 e.htm.
 ¹⁶⁹ Ibid.; "Testimony: Commercial Espionage and Barriers to Digital Trade in China," Matt Schruers, Computer and Communications Industry Association, June 15, 2015, https:// www.uscc.gov/sites/default/files/Schruers%20Testimony.pdf.
 ¹⁷⁰ Fredrik Erixon, Brian Hindley, and Hosuk Lee-Makiyama, "Protectionism Online: Internet Censorship and International Trade Law" (The European Center for International Political Economy, 2009). https://ecine.org/wn-content/uploads/2014/12/protectionism-online-internet

Economy, 2009), https://ecipe.org/wp-content/uploads/2014/12/protectionism-online-internet-censorship-and-international-trade-law.pdf.

However, as ECIPE explains, trade law sets limits to a country's use of censorship for moral reasons. The conditions under which these provisions can be applied tend to be quite strictly applied.¹⁷¹ GATS article XIV is even annotated by a footnote stating that the paragraph may only be invoked where a "genuine and sufficiently serious threat is posed" to a "fundamental interest" of society.¹⁷² They need to be deemed "necessary" when evaluated under a factor-based test. Such factors include: the relative importance of the objective pursued by the measure; the contribution of the measure to that objective; the trade-restrictiveness of the measure; and the existence of "reasonably available" alternative measures.¹⁷³

Given it has never been tested in a WTO dispute, it is unclear how the necessity test relates to the footnote under article XIV. This would be an extremely difficult question for a WTO dispute panel to answer once faced with questions about how to assess and respond to the threat from certain online content.¹⁷⁴ As it relates to proportionality, a WTO dispute panel would take into consideration the capabilities of the state in considering whether a measure was reasonable and whether there is a genuine alternative for the desired level of protection. The burden of proof is on the complainant to prove such a measure actually exists.¹⁷⁵ On this factor alone, it seems clear that active filtering is far less trade restrictive than a total, permanent ban of a site and service. There's also the related aspect of proportionality and discrimination in that censors in China tend to block entire foreign websites, while a domestic site may simply be asked to remove individual pages.

The growing importance of digital content to trade makes it important to chal-lenge and (hopefully) rectify China's overly expansive use of censorship as an NTB. A case brought before the WTO over censorship would inevitably prompt a debate about sovereignty and the scope of trade-related issues under the WTO, but it's a about soveregnty and the scope of trade-related issues under the WIO, but it's a fair debate given the original negotiators of GATT and GATS envisaged limits to how countries could use public morals and other exceptions as disguised forms of protectionism. There needs to be a debate about where and how to draw the lines against disproportionate, arbitrary, and opaque censorship. As ECIPE notes in con-clusion, although the dispute settlement mechanism of neither the WTO nor other trade instruments could be used to eliminate Internet censorship, they might limit the use of its more commercially demaging forms ¹⁷⁶ the use of its more commercially damaging forms.¹⁷⁶

RECOMMENDATIONS

On March 8, 2000, former U.S. President Bill Clinton gave a speech that touched on China's accession to the WTO, the Internet, and censorship in China:

Membership in the WTO, of course, will not create a free society in China I believe it will move China faster and further in the right direction, and certainly will do that more than rejection would. . . . Now there's no question China has been trying to crack down on the Internet. Good luck! That's sort of like trying to nail jello to the wall. But I would argue to you that their effort to do that just proves how real these changes are and how much they threaten the status quo.177

The United States would be ill served to simply wait and hope China realizes the futility of its approach to censorship; the 20 years shows that this is extremely un-

¹⁷¹*Ibid*.

¹⁷² *Ibid*.

¹⁷²*Ibid.* ¹⁷³*See e.g.*, Appellate Body Report, EC—Seal Products, para. 5.169; Columbia—Textiles (AB), para. 5.74. ("As we have noted, in most cases, a panel must then compare the challenged meas-ure and possible alternative measures that achieve the same level of protection while being less trade restrictive. The Appellate Body has explained that an alternative measure may be found not to be 'reasonably available' where 'it is merely theoretical in nature,' for instance, where the responding member is not capable of taking it, or where the measure imposes an undue bur-den on that member, such as prohibitive costs or substantial technical difficulties"). "WTO Ana-lytical Index: Jurisprudence: Article XX," World Trade Organization, https://www.wto.org/ english/res_e/publications e/ai17 e/gatt1994 art20 jur.pdf. ¹⁷⁴Erixon, Hindley, and Lee-Makiyama, "Protectionism Online: Internet Censorship and International Trade Law." ¹⁷⁵Asbestos and audiovisuals cases: "WTO Analytical Index: Jurisprudence: Article XX,"

¹⁷⁶Asbestos and audiovisuals cases: "WTO Analytical Index: Jurisprudence: Article XX," World Trade Organization, *https://www.wto.org/english/res_e/publications_e/ai17_e/gatt1994*

World Trade Organization, https://ten.org/ art20/jur.pdf.
 ¹⁷⁶ Erixon, Hindley, and Lee-Makiyama, "Protectionism Online: Internet Censorship and International Trade Law."
 ¹⁷⁷ "Full Text of Clinton's Speech on China Trade Bill," New York Times, March 9, 2000,
 ¹⁷⁷ "Full Text of Clinton's Speech on China Trade Bill," New York Times, March 9, 2000, ml?mcubz=2.

likely. The United States will need to double down and keep pushing for it as the track record shows limited and uneven progress. Meanwhile, the stakes for U.S. firms and the broader economy only increase given China's economic growth. Given this, it's worth pursuing a fresh assessment of the issue and options to develop a targeted, detailed, and broader strategy to that (at least) U.S. firms can enter and operate on level terms in China. In line with this, there are a number actions Congress and the administration can take to reduce the economic impact of censorship on the U.S. economy. In addition to the below, ITIF has called for a broader range of institutional and policy changes to better respond to Chinese innovation mercantilism, such as in the reports Constructive, Alliance-Backed Confrontation: How the Trump Administration Can Stop Chinese Innovation Mercantilism and Why and How to Mount a Strong, Trilateral Response to China's Innovation Mercantilism.¹⁷⁸

CONGRESS SHOULD ASK THE UNITED STATES INTERNATIONAL TRADE COMMISSION FOR A DETAILED STUDY INTO THE TRADE IMPACT OF CENSORSHIP

For such a significant trade issue, there is a surprising lack of data and research done on the impact of censorship in China and elsewhere on U.S. firms. To help fill this gap, the Senate Finance Committee should ask the United States International Trade Commission (ITC). The ITC has done and continues to do valuable research on global digital trade and barriers to U.S. firms.¹⁷⁹ Congress should ask ITC to author an in-depth investigation into the trade implications of censorship around the world, with a specific focus on China. This analysis should include more detailed modeling estimates about the trade impact of China's overly broad, onerous, and restrictive approach to censorship.

PUSH USTR TO DEVELOP NEW TRADE LAW PROVISIONS TO TARGET THE COUNTRIES USE OF CENSORSHIP FOR PROTECTIONISM

The United States should develop a digital trade policy response to China's use of censorship as a barrier to trade. USTR addresses some components in the United States-Mexico-Canada trade agreement and the "Digital Two Dozen" which formed the basis for U.S. negotiations in the Trans-Pacific Partnership.¹⁸⁰ However, USTR and other U.S. Government agencies (such as the Department of Commerce) need to ensure that U.S. trade policy addresses the individual elements as part of a holis-tic and breader glabel digital tic and broader global digital economy agenda. USTR's recently released 2020 Trade Policy Agenda and 2019 Annual Report details individual digital provisions that relate to censorship, but without a broader context or strategy to address the use of censorship and other non-tariff barriers to digital trade as part of the growing trend towards world.¹⁸¹ 'digital sovereignty" in China, Europe, India, and elsewhere around the

The United States should prioritize these digital and censorship issues as part of Phase Two trade talks with China. Thus far, China has not made substantive or enforceable commitments on e-commerce or digital trade as part of its trade agreements. China sees e-commerce through the lens of traditional trade, where e-com-

¹⁷⁸Nigel Cory and Robert D. Atkinson, "Why and How to Mount a Strong, Trilateral Response to China's Innovation Mercantilism" (The Information Technology and Innovation Foundation, January 13, 2020), https://itif.org/publications/2020/01/13/why-and-how-mount-strong-tri-*Lateral-response-chinas-innovation-mercantilism;* Nigel Cory, Robert D. Atkinson, and Stephen Ezell, "Stopping China's Mercantilism: A Doctrine of Constructive, Alliance-Backed Confronta-tion" (The Information Technology and Innovation Foundation, March, 2017), http:// www2.itif.org/2017-stopping-china-mercantilism.pdf. 179*USITC: Ongoing 332 Investigations," United States International Trade Commission

website, https://www.usitc.gov/research and analysis/what we are working on.htm; Nigel Cory, "Post-Hearing Written Submission: Investigations Global Digital Trade 1 (No. 332-563)" and Global Digital Trade 2 (No. 332-563)" (The Information Technology and Innovation Founda-tion, March 29, 2018), http://www2.itif.org/2018-testimony-global-digital-trade.pdf; United States International Trade Commission (USITC), Global Digital Trade I: Market Opportunities and Key Foreign Trade Restrictions, USITC Publication 4716, (Washington, D.C.: USITC), https://www.usitc.gov/publications/industry_econ_analysis_332/2017/global_digital_trade_1_ market onportunities and htm

https://www.usite.gov/publications/industry_econ_analysis_332/2017/global_digital_trade_1_market opportunities and.htm.
 ¹⁸⁰Nigel Cory and Stephen Ezell, "Comments to the U.S. International Trade Commission Regarding the United States-Mexico-Canada Agreement" (The Information Technology and Innovation Foundation, December 17, 2018), https://itif.org/publications/2018/12/17/comments-us-international-trade-commission-regarding-united-states-mexico; "The Digital 2 Dozen," Office of the United States Trade Representative, https://ustr.gov/about-us/policy-offices/press-office/reports-and-publications/2016/digital-2-dozen.
 ¹⁸¹United States Trade Representative (USTR), 2020 Trade Policy Agenda and 2019 Annual Report (Washington, DC: USTR, February 28, 2020), https://ustr.gov/sites/default/files/2020_Trade_Policy_Agenda_and_2019_Annual_Report.pdf.

merce platforms sell physical goods that need facilitation through customs, while the United States, Japan, and many other nations see it much broader, encompassing both purely digital products and the digitally enabled delivery of goods and services.¹⁸² However, in the event that China refuses to change its restrictive approach to data governance and digital trade, the United States should focus its efforts on enacting ambitious news rules at the WTO's e-commerce negotiations to ensure that data localization does not become the norm around the world.

SEND A CLEAR MESSAGE THAT U.S. TECHNOLOGY FIRMS SHOULD BE ENCOURAGED TO ENTER CHINESE MARKETS

All too often policymakers have sent clear messages to U.S. technology companies that entering the Chinese market is greedy, immoral, and un-American. The fact that U.S. firms operate in China now does not mean that they support the CCP, just as it doesn't imply that U.S. firms working in other authoritarian countries support those regimes.¹⁸³ Pressuring U.S. companies to not serve the Chinese market may feel good as a virtue signal, but not only will it do nothing to improve the situation, it will hurt the interests of the United States as it will cut off technology services exports.

Forcing U.S. companies to not serve that market will do nothing to change the situation on the ground in China. China is not a small country that would be susceptible to boycotts. Furthermore, it's impossible, and unrealistic, to expect U.S. firms to stand up to the Chinese Government. It should be clear by now that foreign firms are not going to change China's censorship regime. Even if foreign firms responded as a group, it'd be unlikely to change Chinese Government policy. If they left, it'd likely just create further space for increasingly competitive Chinese firms to fill. This obviously doesn't prevent firms from deciding to not operate in China, as they're free to do. The basis for action lies with the U.S. Government, and its like-minded partners, to advocate for their human rights values in China.

Over the long term, not supporting U.S. firms in China risks losing the crucial ability to develop and shape the technologies that'll form the basis of economic competitiveness. U.S. innovation thrives when its firms are able to enter and compete in as many markets as possible. Arthur Kroeber, the managing director of Gavekal Dragonomics (a research firm in Beijing) makes this clear in a *New Yorker* article: "Total revenue of U.S. companies and affiliates in China in 2017, for 1 year, was \$544 billion. What's the chance these numbers can go down 80 or 90 percent? Almost no chance. We can remove a few of those tangles, but the cost to the U.S. economy of removing them all would be unacceptably high."¹⁸⁴

CONCLUSION

In recent years, Chinese officials have not only continued to defend China's approach to censorship and "Internet sovereignty" but called it a successful model that other countries should adopt. Beyond the political, there are clear economic and trade implications as many other countries would no doubt be attracted to China's censorship model, in part, as it protects local firms from U.S. competitors. In this way, China's model plays into other countries strategies for local digital protectionism (just like in China) or even as the European Union has recently proposed, "digital sovereignty" (to protect EU firms against both Chinese and U.S. technology firms). The Unites States needs to develop a better response to counter China's use of censorship as an NTB, as well as its use in other countries that may seek to replicate it. U.S. firms shouldn't (again) have to sit out critical formative stages of digital development in mature or emerging markets, only to watch local firms gain an unfair advantage and a protected home market to use as a launch point to compete in third- country markets and in the United States.

¹⁸² Nigel Cory, "Why China Should Be Disqualified From Participating in WTO Negotiations on Digital Trade Rules" (The Information Technology and Innovation Foundation, May 9, 2019), https://itif.org/publications/2019/05/09/why-china-should-be-disqualified-participating-wtonegotiations-digital. ¹⁸³ Alice Su, "The question of 'patriotism' in U.S.-China tech collaboration," Los Angeles Times,

¹⁸³ Alice Su, "The question of 'patriotism' in U.S.-China tech collaboration," Los Angeles Times, August 13, 2019, https://www.latimes.com/world-nation/story/2019-08-12/china-us-tech-patriotism-ethics-ai.

otism-ethics-ai. ¹⁸⁴ Evan Osnos, "The Future of America's Contest With China," The New Yorker, January 6, 2020, https://www.newyorker.com/magazine/2020/01/13/the-future-of-americas-contest-withchina.
APPENDIX A: SEARCH

Google's current revenue is estimated by multiplying its market share of Chinese search engines with the total revenue of search engine companies in China for each year. As comparisons, the estimate assumes that total search engine revenue is un-changed and repeat the calculations for Google maintaining its 2010 market share of 37 percent and experiencing the same market share growth as it experienced in South Korea.

	China Revenue	China Baidu	China Google	Korea Naver	Korea Google	Est Google	Static Share	Korea Share		Est Google Static Share Ko		Korea Share
	(B RMB)	Market Share	Market Share	Market Share	Market Share	Revenue	Revenue	Revenue		Revenue	Revenue	Revenue
2010		61%	37%	48%	39%							
2011		65%	31%	53%	37%							
2012		65%	27%	12%	76%							
2013	39.46	66%	10%	29%	62%	3.79	14.8	24.36		\$0.53	\$2.07	\$3.41
2014	59.96	62%	6%	39%	54%	3.79	22.4	32.59		\$0.53	\$3.14	\$4.56
2015	80.76	79%	2%	36%	57%	1.59	30.2	46.36		\$0.22	\$4.23	\$6.49
2016	86.87	77%	2%	25%	68%	2.08	32.5	58.87		\$0.29	\$4.55	\$8.24
2017	112.41	77%	2%	24%	66%	1.92	42.1	74.72		\$0.27	\$5.89	\$10.46
2018	135.76	69%	2%	20%	69%	2.48	50.8	94.27		\$0.35	\$7.12	\$13.20
2019	158.08	70%	3%	14%	80%	4.38	59.2	126.92		\$0.61	\$8.29	\$17.77
									Total	\$2.80	\$35.29	\$64.13
									Difference		\$32.49	\$61.33

Sources:

- iReasearch, "Revenue of Search Engine Companies in China 2013-2020," April
- Inclustering in Comparison on Data and South Lingue Comparison in Comma 2015–2020, April 1, 2019, http://www.iresearchchina.com/content/details7 53447.html.
 statscounter, Search Market Share (China and South Korea, 2010–2019), accessed February 27, 2020, https://gs.statcounter.com/.

APPENDIX B: CLOUD SERVICES

For cloud services: Amazon's and Microsoft's Infrastructure as a Service (IaaS) market shares in China are compared to their market shares in the overall Asia Pacific region, estimating the revenues each company would earn if they held their regional market share within China. Additionally, the Chinese market is subtracted from the Asia Pacific region to estimate the market share each company holds in the rest of the region, which are once again substituted for the Chinese market shares.

Asia	Pacific laaS	Market Share		China laaS F	Revenue		Est. Revenue		Asia Pacific Share Reven		
	Amazon	Microsoft		(\$B)			Amazon	Microsoft	Amazon	Microsoft	
2017	11.2%	7.0%		2017	2.68		0.14	0.13	0.30	0.19	
2018	11.0%	8.0%		2018	8.78		0.61	0.33	0.97	0.70	
						Total	0.75	0.46	1.27	0.89	
C	hina laaS Ma	rket Share									
Amazon Microsoft							2017 and 2018 D	ifference			
2017	5.4%	5.0%				Amazon	0.52	2			
2018 H1	6.9%	3.7%				Microsoft	0.14	L I			
						Total	0.66	3			
Non CN	l Asia Pacific	Market Share		Est. Revenu	e	Asia Pacific	Share Revenue				
	Amazon	Microsoft		Amazon	Microsoft	Amazon	Microsoft				
2017	17.0%	9.0%		0.14	0.13	0.46	0.24				
2018	15.1%	12.3%		0.61	0.33	1.33	1.08				
			Total	0.75	0.46	1.78	1.32				
				2017 and 201	8 Difference						
			Amazon	1.03							
			Microsoft	0.57							
			Total	1.60							

Sources:

- China Internet Watch, "Alibaba Cloud owns 43 percent China's public cloud market in 2018," February 12, 2019, https://www.chinainternetwatch.com/ 28150/public-cloud-h1-2018/
- China Internet Watch, "China public cloud (IaaS) to reach US\$6.21 bn in 2018; Amazon fastest growth," October 10, 2018, https://www.chinainternet watch.com/26900/public-cloud-iaas-2018/.
- Business Wire, "Alibaba Cloud Ranked First in Asia Pacific(*) by Gartner Mar-ket Share: IT Services in IaaS and IUS," April 24, 2019, https://www. businesswire.com/news/home/20190424005371/en/.

• IDC, "New IDC Forecast Reveals Asia/Pacific* Spending on Public Cloud Services to Reach USD 76.1 Billion by 2023," August 7, 2019, https://www.idc.com/getdoc.jsp?containerId=prAP45431219.

APPENDIX C: AGGREGATE IMPACT

This table summarizes the results estimating the revenues of U.S. cloud and search companies in China in different scenarios and provide estimates of cumulative losses. The high and low assumptions for each are different. For search, the estimate assumes Google maintained a consistent market share and then assume they beat out Baidu like they beat out Naver in Korea. For cloud, the estimate assumes cloud companies receive the market share equivalent to the average in the Asia Pacific region including China, and then receiving the market share equivalent to the regional average excluding China.

Estimates of Google Ad Revenue in China (\$B)					Estimates of Cloud Revenue in China (\$B)				Lost Cloud and Search Revenue in China (\$B)			
	Real Market		South Korean		Real Market	Asia Pacific	Rest of Asia Pacific					
	Share	Market Share	Market Share		Share	Market Share	Market Share	Company	Low Estimate	e High Estimate		
2013	\$0.53	\$2.07	\$3.41	Amazon				Google (2013-19)	\$32.49	\$61.33		
2014	\$0.53	\$3.14	\$4.56	2017	\$0.14	\$0.30	\$0.46	Amazon (2017-18)	\$0.52	\$1.03		
2015	\$0.22	\$4.23	\$6.49	2018	\$0.61	\$0.97	\$1.33	Microsoft (2017-18)	\$0.43	\$0.86		
2016	\$0.29	\$4.55	\$8.24	Microsoft								
2017	\$0.27	\$5.89	\$10.46	2017	\$0.13	\$0.19	\$0.24					
2018	\$0.35	\$7.12	\$13.20	2018	\$0.33	\$0.70	\$1.08					
2019	\$0.61	\$8.29	\$17.77									

QUESTIONS SUBMITTED FOR THE RECORD TO NIGEL CORY

QUESTIONS SUBMITTED BY HON. JOHN CORNYN

Question. Our Nation's technology companies are increasingly being blocked from access to the Chinese market. Meanwhile, the Chinese Government is subsidizing its own technology development through companies such as Huawei. Some technology companies are censored entirely out of the market. This has caused billions of dollars in damage to our economy and contributed to our Nation's outsized trade deficit with China. The cost has to be much more.

What kind of barriers do tech companies face in entering the Chinese market and what are the short- and long-term costs?

What should we be focusing on to ensure censorship is removed as a barrier to digital trade as talks on a Phase Two deal progress?

Answer. China is the leader in digital protectionism. The impact on U.S. firms can be categorized as either direct or indirect:

- The direct blocking of market access via the Great Firewall, restrictive and discriminatory licensing arrangements, and other market access restrictions.
- The direct blocking of digital content (movies, TV shows, and video games) via opaque, restrictive, and/or discriminatory content-review processes.
- The indirect impact on how U.S. firms can operate and compete in China by forcing all Internet traffic through the Great Firewall, which degrades or cuts off data connectivity with the global Internet. For example, this hinders the cross-border sale and service of software.
- The direct impact on how U.S. firms can use corporate virtual private networks (VPN) to connect to intra-firm networks outside of China, which can undermine connectivity, be expensive, and potentially expose corporate communications to Chinese government agencies.
- At the macro level, there is the direct impact of U.S. firms being excluded from China during a formative period of rapid growth in China's digital economy. This leads to the indirect and long- term impact that Chinese firms use their protected domestic market to grow and become competitive, before taking market share from U.S. and other foreign firms in third-country markets.

The Great Firewall of China represents a rare case where U.S. digital exports face a barrier at the border. Most of the foreign online services, apps, or intermediaries that China blocks are rarely revised and lifted (as the list above shows). Firms that have their web services temporarily blocked typically find that this is simply a prelude to a total and permanent block. The impact of being blocked is cumulative in its trade impact, as for many services that are already blocked, if they add innovative new services and products, the block is automatically extended. For example, China's initial blocking of foreign search engines has expanded to encompass many email, cloud storage, and other services. This shows that even if there was a specific politically or socially offensive article to prompt a block, the extension of this block to new services makes it much more impactful from a trade and economic perspective. ITIF's Senate testimony outlines the long list of major U.S. tech firms that have been blocked by the Great Firewall over the last 2 decades.

The trade impact of censorship in China is much broader than website blocking via the Great Firewall of China. Behind this clear market access barrier, U.S. firms face a complicated, opaque, and changing regulatory framework tied to content moderation and information control. China's use of censorship affects both market entry and operations in China and the provision of digital services and products from overseas.

Moreover, in many cases, China's approach to censorship is unwritten, with enforcement often being arbitrary and delegated to private firms. This is in large part a conscious decision to avoid disputes at the World Trade Organization, which would be much easier to put in place if the rules were on paper.

The trade-related impact of censorship no doubt plays a role in China's decision to prohibit wholly or partially owned foreign firms from key digital sectors. For example, China uses licenses to strictly control which parties can offer value-added telecommunication services, such as voice-over-Internet protocol (VOIP) calls, online database storing and searching, electronic data exchange, online data processing and transactions processing, domestic multiparty communication services, VPN services, and video teleconferencing and as well as limiting what parties can interconnect these services with public telecommunication networks.¹ Similarly, foreign ownership in basic telecommunication services (fixed line, mobile, and broadband) is capped at 49 percent.²

In terms of how China's approach to censorship and protectionism affects how U.S. firms operate (in terms of connectivity) in China, it varies along a spectrum: from a minor, periodic constraint on service access to a severely degraded connection that essentially makes it unviable from an operational or commercial perspective to a complete block. Frequent blocking and unlocking of websites (and VPNs) can make it hard for firms to have confidence they will have the communication services they need for day-to-day operations and international trade.³ U.S. firms also report that pushing all traffic through the Great Firewall adds transmission delays that can significantly degrade the quality of the service, to the point where it's commercially or operationally unacceptable (thus cutting off market access).⁴ In a similar way, China has "throttled" access to foreign websites in order to make them so slow as to be unusable. Throttling is also often a precursor to being blocked completely. For example, before Google was fully blocked in 2010, it was throttled for a long time, which had the effect of making it appear as if Google's search engine was slow and buggy.

The economic impact of being kept out of China due to censorship and protectionism is significant. A generation of Chinese consumers have grown up without knowing that their Internet and consumer experience is completely different than what's available in most other countries. They have little or no idea about Google, Twitter, Facebook, or other U.S. firms and their products, even as Chinese Government officials and party "apparatchiks" use these platforms to spread propaganda in the United States.⁵

As detailed in ITIF's written testimony, a host of U.S. industries and firms, in sectors ranging from Internet services to cloud computing, video games, and movies, have likely lost hundreds of billions of dollars in revenues due to Chinese censorship

¹United States Trade Representative (USTR), Section 1377 Review on Compliance With Telecommunications Trade Agreements (Washington, DC: USTR, 2015), https://ustr.gov/sites/default/files/2015-Section-1377-Report_FINAL.pdf.

 ²State Council, Provisions on Administration of Foreign-Invested Telecommunications Enterprises. Decree of the State Council of the People's Republic China No. 333, December 11, 2001.
 ³United States Trade Representative (USTR), 2018 Report to Congress on China's WTO Compliance (Washington, DC: USTR, 2019), (Washington, DC: USTR, 2015).

⁵Li Yuan, "A Generation Grows Up in China Without Google, Facebook or Twitter," New York Times, August 6, 2018, https://www.nytimes.com/2018/08/06/technology/china-generationblocked-internet.html.

and related market restrictions.⁶ Importantly, these revenues would have supported innovation and job creation in the United States, while limiting Chinese firms' abil-ity to grow and capture global market share. While it is not possible to calculate an exact figure, ITIF conservatively estimates (based on market-share comparisons) that Google, which withdrew from the Chinese market in 2010, subsequently lost \$32.5 billion in search revenue from 2013 to 2019, while Amazon and Microsoft's cloud services (IaaS, which is restricted in China) lost a combined \$1.6 billion over the 2-year period from 2017 to 2018. As the China market continues to rapidly grow, these losses will also grow significantly. Beyond this more-immediate impact, the longer-term, indirect impact is that is has provided Chinese competitors with a protected market from which to launch competitive challenges in other regions, such as South America, the rest of Asia, and Africa. This cost will only grow as the global digital economy grows.

The United States needs to prioritize and seek as part of bilateral negotiations with China: clear, meaningful, and enforceable commitments on market access for a range of Internet services; fair, transparent, and predictable digital content review processes for movies, TV shows, and video games; and rules to protect the free flow of data and digital goods. The United States has the model trade law provisions to use for these issues (such as its other modern trade agreements, including the U.S.-Mexico-Canada (USMCA) free trade agreement). The main thing is that the United States needs to prioritize these tech and digital issues as they are of far greater size and significance (in terms of economic productivity, innovation, and competitiveness) as compared to agricultural and commodity exports.

The United States also needs to develop new trade rules to ensure China does not seek to apply its censorship laws and regulations extra-territorially. It's one thing for U.S. firms to abide by local laws and regulations around censorship and content moderation in China, but it's completely different—and unacceptable—for them to change their operations or content outside of China. Alongside this, the United States should explore new domestic transparency and policy tools to identify, track, and respond to cases where China seeks to enforce its censorship on U.S. firms outside of China (detailed below in response to Senator Grassley's question).

Question. The ongoing pandemic has accelerated the vulnerability of America's ability to produce its own critical equipment and supplies. One area of special focus is the semiconductor space. It underpins everything in the digital trade space—from 5G to the equipment we use to work from home. I recently introduced the CHIPS for America act that incentivizes the production of semiconductors back home. This will not only help us be prepared for the future but allow the U.S. to remain the global defender of free speech online.

Can you talk about the global Internet landscape today and where you see it going in the future?

Specifically, I am concerned about China's export of its authoritarian model of a closed off Internet to the world. What are China and other countries doing to support authoritarian regimes via digital trade and infrastructure?

Answer. There are three major models for digital governance in the world today. Along a sliding scale of restrictiveness (from low to high), there's the United States and the Asia-Pacific Economic Cooperation's Cross-Border Privacy Rules (CBPR) risk-based approach to data regulations; the European Union's (EU's) onerous and (GDPR) and emerging restrictions around artificial intelligence; and finally, China's sovereignty-based model of digital control and protectionism."

China provides a master class in how to enact behind-the-border barriers to digital trade in order to give local firms and products an unfair advantage, especially

⁶Nigel Cory, "Testimony: Censorship as a Non-Tariff Barrier to Trade" (The Information Technology and Innovation Foundation, June 30, 2020), https://itif.org/publications/2020/06/30/ testimony-us-senate-subcommittee-trade-regarding-censorship-non-tariff. "Nigel Cory, "Cross-Border Data Flows: Where Are the Barriers, and What Do They Cost?" (The Information Technology and Innovation Foundation, May 1, 2017), https://itif.org/publica-tions/2017/05/01/cross-border-data-flows-where-are-barriers-and-what-do-they-cost; Nigel Cory, "China and the United States: Digital Protectionism vs. Digital Free Trade" (The Information Technology and Innovation Foundation, October 18, 2019), https://itif.org/publications/2019/ 10/18/china-and-united-states-digital-protectionism-vs-digital-free-trade; Nigel Cory, "Why China Should Be Disqualified From Participating in WTO Negotiations on Digital Trade Rules" (The Information Technology and Innovation Foundation, May 9, 2019), https://itif.org/publica-tions/2017/05/01/cross-digital-protectionism-vs-digital-free-trade; Nigel Cory, "Why China Should Be Disqualified From Participating in WTO Negotiations on Digital Trade Rules" (The Information Technology and Innovation Foundation, May 9, 2019), https://itif.org/publica-tions/2019/05/09/why-china-should-be-disqualified-participating-wto-negotiations-digital.

as it relates to digital products, cross-border data flows, and the intellectual property (IP) closely associated with digital trade (such as protections for source code and algorithms).⁸ In contrast to the United States and many others, China treats local data storage as the norm and data flows as the exception, asserting that data privacy and cybersecurity are associated with location and control.⁹ Data localiza-tion is a central theme of China's data governance framework. For example, China's cybersecurity law requires personal data and "important data"—a vague term en-compassing data related to China's national security, economy, and other public in-terests—held by key information communications and technology (ICT) operators to be stored within China. This is in addition to existing data localization measures for health, mapping, and financial data and other data-restrictive policies.¹⁰ Against this backdrop, China has made few substantive commitments on digital governance in its trade agreements, especially on data flows. Nor has it signed on to other international data transfer mechanisms, such as the CBPR.11

In separating itself from the global Internet over the last 2 decades, China is a major contributor to the fragmentation of the global Internet, but its impact is much broader as it provides a poor model of governance—in terms of technology and policies-for other countries to emulate. China's success in exporting its model of digital control is most evident in similarly authoritarian countries, such as Iran, Russia, Venezuela Vietnam, and elsewhere.

These countries' eager embrace of China's model is sad evidence that the global Internet is increasingly fragmented as countries—across every stage of develop-ment—have erected barriers to a seamless global digital economy. This includes en-acting data-residency requirements that confine data within a country's borders, a concept known as "data localization."¹² It also includes requiring only local firms to manage certain types of data and using arbitrary app or content review processes to ban foreign providers and content.

China's overall approach of restricting and controlling the Internet has also no doubt provided some sort of permissions structure that countries use when enacting broad and arbitrary restrictions on their countries' use and connection to the global Internet. For example, in 2018 alone, at least 25 nations throttled down users' bandwidth, shut off their mobile or broadband Internet services altogether, or blocked access to mainstream Internet sites or applications.¹³

Many countries like China's model of digital protectionism as they like how it has kept out leading U.S. tech companies and led to the emergence of local tech firms, like Alibaba and Baidu. This makes it easy for China to export its restrictive model and the key technologies that facilitate it. However, enacting China's full range of restrictions is beyond the capacity of most nations, so many developing countries (but also parts of the EU) pick and choose parts of China's model when it suits them to either allow control over digital content or tilt the local market in favor of domestic firms. This is especially the case in India, but Brazil, Indonesia, Nigeria, Viet-

⁸ Cory, "Why China Should Be Disqualified From Participating in WTO Negotiations on Dig-

⁸Cory, "Why China Should Be Disqualified From Participating in WTO Negotiations on Dig-ital Trade Rules"; Cory, "Cross-Border Data Flows: Where Are the Barriers, and What Do They Cost?"; Stephen Ezell, "ITIF Filing to USTR on Section 301 Investigation of China's Policies and Practices Related to Tech Transfer, IP, and Innovation" (The Information Technology and Inno-vation Foundation, October 25, 2017), https://itif.org/publications/2017/10/25/itif-filing-ustr-section-301-investigation-chinas-policies-and-practices. ⁹Cory, "Why China Should Be Disqualified From Participating in WTO Negotiations on Dig-ital Trade Rules." ¹⁰Cory, "Cross-Border Data Flows"; Nigel Cory, "The Ten Worst Digital Protectionism and In-novation Mercantilist Policies of 2018," Information Technology and Innovation Foundation, January 28, 2019, https://itif.org/publications/2019/01/28/ten-worst-digital-protectionism and-innovation-mercantilist-policies-2018, Nigel Cory, "The Worst Innovation Mercantilist Poli-cies of 2017," Information Technology and Innovation Foundation, January 22, 2019, https:// itif org/publications/2018/01/22/worst-innovation Tecnnolity-policies-2017; Robert Atkinson and Nigel Cory, "Comments: Circular of the State Internet Information Office on the Public Con-sultation on the Measures for the Assessment of Personal Information, May 11, 2017, http:// www2.itif.org/2017-china-handling-data.pdf; Martina F. Ferracane and Erik van der Marel, "Patterns of Trade Restrictiveness in Online Platforms: A First Look" (European Center for International Political Economy, January 2019), https://ecipe.org/publications/pat-terns-of-trade-restrictiveness/.

¹¹Cory, "Why China Should Be Disqualified From Participating in WTO Negotiations on Dig-ital Trade Rules."

 ¹² Cory, "Cross-Border Data Flows: Where Are the Barriers, and What Do They Cost?".
 ¹³ Berhan Taye, "The State of Internet Shutdowns Around the World" (Access Now, J 2019), https://www.accessnow.org/cms/assets/uploads/2019/07/KeepItOn-2018-Report.pdf. July

nam, Russia, and others have also sought at times to emulate parts of China's approach.

However, it's important to note that China is not the only model that contributes to the fragmentation of the global Internet. The EU's GDPR is problematic because it pushes for harmonization and tries to make foreign countries responsible for enforcing European data privacy standards instead of using domestic regulations to hold companies responsible for breaches of European data privacy laws. The GDPR imposes a general prohibition on transfers of EU personal data to all but a small group of foreign countries it has determined (as part of an opaque and ad hoc proc-ess) provide an "adequate" level of protection equal to data protection at home. A critical flaw in the European Union's approach is the mistaken logic that this country-by-country assessment approach is effective in promoting better data privacy and protection by companies that manage personal data.14

Furthermore, the EU's top-down approach is ultimately untenable, as differences in social, cultural, and political values, norms, and institutions are behind countries not regulating privacy the same way. For example, given the country's approach to data protection and privacy, it is inconceivable China would ever be deemed "adequate³ from a European perspective. Yet, the fact that Europe has not applied to China the same standards it applies to the United States with regard to EU personal data highlights the arbitrary nature of its approach.¹⁵

Ultimately, success will depend on whether the United States and like-minded Utimately, success will depend on whether the United States and like-minded digital trade allies can work with, and convince, the many undecided countries in the middle—those that have not yet chosen which model they want to follow—that theirs is the best approach from both an economic and regulatory perspective. The United States and its like-minded trading partners—Australia, Canada, Chile, Japan, Mexico, New Zealand, Singapore, the United Kingdom, and others—which want global norms around new technology to reflect their values and trading practices, need to proactively engage with each other and the many undecided countries regarding their preferred model. New digital trade rules are definitely needed to prohibit and roll back the growing range of barriers to digital trade, but these are insufficient on their own to create frameworks that allow firms to engage in seam-less digital trade and data-driven innovation across borders.¹⁶ The United States also needs to use its trade agreements and economic statecraft (resources and programs managed by the U.S. Agency for International Development (USAID), the State Department, the Department of Commerce, and others) to help build new norms and rules around data and digital trade.

The United States also needs to do a better job of articulating and advocating for its preferred model of risk-based, permission-less innovation. The U.S. model should be based on the fact that modern technology, especially the Internet and cloud data storage and processing, means that each country's domestic regulatory regime for data (such as for privacy) needs to be globally interoperable given that each country faces the same challenge in applying its laws to firms that may transfer data be-tween jurisdictions.¹⁷ An interoperable system would focus on "global protections through local accountability." The principle idea is that a country can enforce its rules on any foreign or domestic organization with legal nexus. Moreover, a country

¹⁴See Robert Atkinson, "Don't Just Fix Safe Harbor, Fix the Data Protection Regulation," Euractiv, December 18, 2015, https://www.euractiv.com/section/digital/opinion/don-t-just-fix-

Euractice, December 18, 2013, https://www.euractice.com/section/algital/opinion/alon-t-just-just-safe-harbour-fix-the-data-protection-regulation/. ¹⁵For example, a report for the European Parliament on data protection in China states that there is "no common ground . . . found between two fundamentally different systems both in their wording and in their raison d'etre." The report takes a relativist approach by saying Chi-na's culture and approach to human rights means the European Union should treat China dif-ferently when it comes to trade and privacy issues, despite the fact that "China does not have a convert data protection exist." ferently when it comes to trade and privacy issues, despite the fact that "China does not have a general data protection act but traces of data protection may be found in a multitude of sector-specific legal instruments." Paul de Hert and Vagelis Papakonstantinou, "The Data Protection Regime in China" (Brussels: report for the European Parliament's Policy Department for Citi-zens' Rights and Constitutional Affairs, October 2015), http://www.europarl.europa.eu/ RegData/etudes/IDAN/2015/536472/IPOL_IDA(2015)536472 EN.pdf. ¹⁶Cory, "Testimony: Censorship as a Non-Tariff Barrier to Trade"; Cory, "Cross-Border Data Flows: Where Are the Barriers, and What Do They Cost?"; Nigel Cory, "Response to the Public Consultation for the European Commission's White Paper on a European Approach to Artificial Intelligence" (The Information Technology and Innovation Foundation, June 12, 2020), https:// itif.org/publications/2020/06/12/response-public-consultation.european-commissions-white-

itif.org/publications/2020/06/12/response-public-consultation-european-commissions-white

paper european. ¹⁷ Nigel Cory, Robert Atkinson, and Daniel Castro, "Principles and Policies for 'Data Free Flow With Trust'" (The Information Technology and Innovation Foundation, May 27, 2019), https://itif.org/publications/2019/05/27/principles-and-policies-data-free-flow-trust.

can enforce its rules on these organizations based on how they handle the data they collect, even if that data handling occurs abroad or with a third party. This accountability-based approach is shared by most nations, after all, including for data privacy, including the United States. For example, foreign companies operating in the United States must comply with the privacy provisions of the Health Insurance Portability and Accountability Act (HIPAA), which regulates U.S. citizens' privacy rights for health data—even if they move data outside the United States. And, if a foreign company's affiliates overseas violate HIPAA, then U.S. regulators can bring legal action against the foreign company's operations in the United States.

The United States has already embedded the rules that support this model in its trade agreements, such as the USMCA and the United States-Japan digital trade agreement. But the country needs to be far more proactive in advocating for its preferred model.

One idea to do this would be to negotiate an ambitious digital trade agreement with its "Five Eyes" partners (Australia, Canada, New Zealand, and the United Kingdom). Just as the United States works with them on intelligence sharing and to standardize operating practices and technical specifications for defense equipment and operations, it should seek to build out a trade and innovation framework, doing the same for digital trade. It should seek to do likewise with other similarly ambitious partners such as Chile, Japan, and Singapore. An easy way for the United States to engage with a broader range of ambitious countries would be to join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).

CHINA'S EFFORTS TO EXPORT ITS RESTRICTIVE APPROACH TO STANDARDS

China's model is not just censorship and restrictions on data. China is increasingly trying to export its own restrictive standards as part of an effort to unfairly influence international standards-setting organizations, potentially giving its firms an advantage in gaining global market share and influence in new and emerging technologies. This involves international technical standards for AI, robotics, selfdriving vehicles, the Internet of Things, and other new technologies. Standards are one part of Chinese President Xi Jinping's plans for China to become a "cyber superpower."¹⁸

Standards are an important (but often overlooked) component of global trade, as they foster economies of scale by making it relatively easy for firms to produce a good or service to a mutually accepted standard across markets. China pursues indigenous (*i.e.*, China-specific) technology standards (both at home and internationally) because it believes it will advantage China's domestic producers while blocking foreign competitors and reducing the royalties Chinese firms pay for foreign technologies.¹⁹

At home, China provides a clear example of how country-specific standards can be used to act as a barrier to trade for high-tech goods and services.²⁰ As ITIF's report "The Middle Kingdom Galapagos Island Syndrome: The Cul-De-Sac of Chinese Technology Standards" argues, China has made the development of indigenous technology standards, particularly for ICT products, a core component of its indus-

¹⁸ For example, the CCP's "Office of the Central Cyberspace Affairs Commission" depicted China's tech giants' growing global market share, the spread of Chinese standards, and increasing influence on discourse and legal norms as part of the same effort. Thomas Eder, Rebecca Arcesati, and Jacob Mardell, "Networking the 'Belt and Road'—The future is digital" (The Mercator Institute for China Studies, August 28, 2019), *https://www.merics.org/en/bri-tracker/networking-the-belt-and-road;* (translation) "In-depth implementation of General Secretary Xi Jinping's strategic thinking of network power, solidly promote network security and informationization," Central Information Office network theory study group, September 15, 2017, *http://www.gstheory.cn/dukan/qs/2017-09/15/c_1121647633.htm;* Elsa Kania et. al, "China's Strategic Thinking on Building Power in Cyberspace" (New America, September 25, 2017), *https://www.newamerica.org/cybersecurity-initiative/blog/chinas-strategic-thinkingbuilding-power-cyberspace/*.

¹⁹Stephen J. Ezell and Robert D. Atkinson, "The Middle Kingdom Galapagos Island Syndrome" (The Information Technology and Innovation Foundation, December 15, 2014), https:// itif.org/publications/2014/12/15/middle-kingdom-galapagos-island-syndrome-cul-de-sac-chinese-technology.

²⁰ Office of the United States Trade Representative (USTR), "2018 National Trade Estimate Report on Foreign Trade Barriers" (Washington, DC: USTR, 2018), https://ustr.gov/sites/default/files/files/Press/Reports/2018%20National%20Trade%20Estimate%20Report.pdf.

trial development strategy.²¹ Most recently, in 2018, China introduced a new standardization law that will likely favor local firms and their goods and services, as it references "indigenous innovation" while failing to reference either its WTO commitments (thereby raising questions about WTO compliance) or its acceptance of existing international standards (approved by the various standards-development organizations (SDOs)).²² Indicative of China's approach, a report by the German think tank, the Mercator Institute for China Studies (MERICS), shows that Chinese standards for basic smart manufacturing correlate with about 70 percent of relevant international standards, and to 0 percent for standards relating to cloud computing, industrial software, and big data.²³

The United States needs to pay greater attention to China's efforts to export its restrictive domestic standards as part of efforts to influence SDOs. Thus far, China's approach to international standards—focusing on a large number of submissions, often of relatively poor quality—has not been overly successful, indicating SDOs are largely working as intended. However, as the MERICs report explained, "The ongoing reform of [China's] standardization system and the revision of the standardization law point to a liberalization and internationalization."²⁴ This transition, from inward-looking protectionism to outward-facing ambition, represents both an opportunity and a threat. There is an opportunity to better integrate the Chinese market with the rest of the world through unified, globally standardized technologies and equipment. However, there is also evidence China has and will attempt to unfairly influence international standards-setting bodies to ensure Chinese technology is at the heart of (*i.e.*, considered essential to) the international standard.

For example, the United States needs to monitor where China's government and its firms use their own restrictive domestic standards as the basis for efforts to influence standards in third countries via government-to-government engagement, foreign investment projects, and commercial contracts (such as those associated with its "Belt and Road Initiative" (BRI)). One of the three main motivations of the "Digital Silk Road" (the digital component of BRI) is to leverage the strength of China's ICT sector to spread its domestic standards.²⁵

The United States also needs to be vigilant for where China tries to unfairly coerce its own and foreign firms (such as those relying on financing from China for projects) in supporting votes on standards that favor its local companies and their standards, rather than supporting the best technological solution, such as for 5G technology standards. In particular, the United States should remain wary of attempts by the Chinese government to direct Chinese firms to support a particular proposal for key technologies. The Chinese state media report "Lenovo 5G Incident Shows Need for Chinese Companies to Cease Mindless Competition" is indicative of this scenario, wherein Lenovo was forced to make a public apology after supporting U.S. firm Qualcomm's proposal, rather than Huawei's, for a key coding method for 5G data transmissions.²⁶

China is also seeking to export its model through state-supported or privatesector-led foreign investment projects. China could potentially use commercial contracts and operations as part of a "bottom-up" strategy to build acceptance and use of restrictive Chinese standards for new and emerging technologies in markets around the world. China's government and firms follow provisions that stipulate projects must use Chinese standards and equipment, thereby "socializing" them in foreign markets and standards agencies. China has used this approach most exten-

²¹Stephen J. Ezell and Robert D. Atkinson, "The Middle Kingdom Galapagos Island Syndrome: The Cul-De-Sac of Chinese Technology Standards" (Information Technology and Innovation Foundation, December 2014), https://itif.org/publications/2014/12/15/middle-kingdomgalapagos-island-syndrome-cul-de-sac-chinese-technology. ²²Cory, "The Ten Worst Digital Protectionism and Innovation Mercantlist Policies of 2018."

²² Cory, "The Ten Worst Digital Protectionism and Innovation Mercantilist Policies of 2018," ²³ Bjorn Conrad, Jaqueline Ives, Mirjam Meissner, Jost Wübbeke, and Max Zenglein, "Made in China 2025" (MERICS, August 12, 2016), https://merics.org/en/report/made-china-2025. ²⁴ Ibid.

 ²⁵Thomas Eder, Rebecca Arcesati, and Jacob Mardell, "Networking the 'Belt and Road'" (MERICS, August 28, 2019), https://merics.org/en/analysis/networking-belt-and-road-future-digital.

⁽MERICS, August 20, 2019), https://merice.org/cir/analysic/merice.org/cir/analysic/merice.org/cir/analysic/merice.org/analysic/merice.org/cir/analysic/merice.org/anal

sively for projects involving heavy industry (*e.g.*, oil, gas, and infrastructure), but is expected to take a similar approach with ICT-related projects.

China complements this with top-down efforts by the government as part of engagements with specific countries and regions on digital-economy issues. For example, in 2017, standards were part of China's Digital Economy International Cooperation Initiative, which it launched as part of its BRI engagement with Egypt, Laos, Saudi Arabia, Serbia, Thailand, Turkey, and the United Arab Emirates.²⁷ In other words, Lenovo decided it was in its interest to support the Qualcomm standard, but the Chinese Government overruled it.

SEMICONDUCTORS: SUPPORTING THE TECHNOLOGY AT THE HEART OF THE GLOBAL DIGITAL ECONOMY

The United States needs to do much more to develop and advocate for its preferred model in terms of building an open, rules-based, and innovative digital economy. But it's much more than digital trade and data governance. Ensuring continued American leadership in the world's most important industry—semiconductors is a critical component.²⁸ Put simply, a country's leadership in the global digital economy starts with its leadership in semiconductors. American leadership in semiconductors is not pre-ordained, and others crave it—especially China, whose \$150 billion National Integrated Circuit strategy seeks to dispossess the United States of its world-leading position, while ideally eliminating all imports of U.S. semiconductors by 2035.²⁹

The Creating Helpful Incentives to Produce Semiconductors ("CHIPS") for America Act introduced by Senators John Cornyn (R–TX) and Mark Warner (D–VA) and the American Foundries Act of 2020 introduced by Senators Tom Cotton (R–AR) and Chuck Schumer (D–NY) go a long way toward ensuring this. Between them, the proposed legislation would expand Federal investment in semiconductor research and technology development, introduce incentives to locate semiconductor manufacturing facilities in the United States, and provide expanded tax credits for investment in the sector. ITIF strongly supports the legislation, which has since been merged as part of the National Defense Authorization Act (NDAA) process, and encourages Congress to fully appropriate funding in the legislation to the maximum extent envisioned. As important as any of this, the CHIPS Act also represents congressional and bipartisan recognition that the United States is engaged in a fierce contest for leadership in technologies of the future—from biotech and clean energy, to 5G, AI, quantum, and semiconductors—and that effective government policy—innovation policy, not industrial policy—can empower and enable America's private sector to continue to lead in this critical industry.

Some of the important proposals of the CHIPS Act include its commitment to a total of \$12 billion for semiconductor research, including \$3 billion for a new National Semiconductor Technology Center to research and prototype advanced semiconductors, and its proposal to create a new Manufacturing USA Institute for Semiconductor Manufacturing. It will encourage both U.S. and foreign semiconductor manufacturers to locate new fabs here, with a \$10 billion Federal matching grant for State/local incentives to attract manufacturers. This will help level the playing field with other nations' incentives, and—unlike China's practices—would be entirely WTO-consistent.

While national, including U.S., policies to spur semiconductor R&D and production are important, it's also important to recognize that self-sufficiency cannot and should not be the goal. The increasing expense, complexity, and scale required to innovate and manufacture semiconductors means that no single nation can afford to go it alone. ITIF's recent report "An Allied Approach to Semiconductor Leadership," outlines why the United States needs to work with a like-minded set of na

²⁷Guo Yiming, "Digital economy cooperation to empower Belt, Road," China News, December 4, 2017, http://www.china.org.cn/world/2017-12/04/content_50083923.htm.

²⁸ Stephen Ezell, "New legislation required to secure U.S. semiconductor leadership," *The Hill*, June 30, 2020, *https://thehill.com/opinion/technology/505054-new-legislation-required-to-se-cure-us-semiconductor-leadership*.

²⁹ John VerWey, "Chinese Seniconductor Industrial Policy: Past and Present" (United States International Trade Commission, July 2019), https://www.usitc.gov/publications/332/journals/ chinese_semiconductor_industrial_policy_past_and_present_jice_july_2019.pdf.

tions committed to open trade and fair economic competition to collaborate in ways that collectively empower the competitiveness of their semiconductor industries.³⁴

QUESTIONS SUBMITTED BY HON. CHUCK GRASSLEY

Question. Critics charge that U.S. businesses should simply not do business in China because of Chinese Government censorship. The problem I have with that is that it doesn't change the fact that the Chinese Government is still going to impose censorship on its people regardless of whether we do business there or not. If we're not there, the Chinese people would simply have to resort to buying goods and services from Chinese firms that are likely more inclined to accept censorship. I'm interested in figuring out how to protect American businesses.

What steps should American companies take when entering the Chinese market to minimize the risk that they'll fall prey to Chinese Government censorship practices?

OVERVIEW

Answer. The United States and its firms should do four key things to minimize the impact of censorship in China: ensure U.S. firms take reasonable steps to separate operations in China from others around the world; the U.S. Government-not U.S. firms-should lead the effort to advocate for free speech and democracy in China; the U.S. should develop tools to identify and counteract any "spillover" whereby Chinese censorships impacts U.S. firms, goods, and services in the United States (as well as extra-territorial access to data); and the United States should work with like-minded, value-sharing partners to develop new trade and economic arrangements as part of broader efforts to develop a better, alternative model for digital governance.

ENSURE U.S. FIRMS ENACT ADMINISTRATIVE AND TECHNICAL FIREWALLS BETWEEN CHINA AND NON-CHINA OPERATIONS

If WTO rules and global norms around international trade and commerce fully applied in China, U.S. and other foreign firms would be able to operate in China and other markets in a fairly seamless manner. Sadly, the last 2 decades show that China simply decides to ignore or breach the many rules that otherwise create a clear and fair framework for international trade and investment. It means that U.S. and other foreign firms have to enact clear administrative and technical firewalls between China and non-China operations in order to minimize the growing risks that they'll be accused of breaking local laws. The degree and type of segregation obviously depends on the nature of local laws, which, in the case of Internet-related firms in China, is becoming major risk for many firms.

The U.S. Government should expect, and respect, when U.S. firms do this to abide by legitimate local laws, such as data privacy and censorship (even if the U.S. Government dislikes the laws themselves). Firms do this as it shows that they're committed to following the laws of the country in which they operate, while minimizing potential risks in other countries, including back in the United States. Advocating for U.S. firms to ignore local laws in China is to essentially support anarchy. U.S. policymakers expect Chinese firms to do the same in the United States. Until the United States can negotiate new and improved commitments for its firms in China, U.S. policymaker should not be surprised when U.S. firms segregate their oper-ations to help, in part, ensure that Chinese censorship is contained to China. However, this expectation obviously should not extend to U.S. firms abiding by activities that breach U.S. and international laws around egregious human rights issues, such as playing a role in, or benefiting from, the mass detention camps China operates for ethnic minorities in Xinjiang.³¹

Take Apple, Airbnb, and Zoom as examples. Apple has major operations in China. In the 2019 financial year, Apple made \$44 billion of revenues in Greater China,

³⁰ Stephen Ezell, "An Allied Approach to Semiconductor Leadership" (Information Technology

Stephen Ezen, An Anted Apploach to Semiconductor Leadership (information recinology and Innovation Foundation, September 17, 2020), https://itif.org/publications/2020/09/17/al-lied-approach-semiconductor-leadership.
 ³¹Austin Ramzy and Chris Buckley, "'Absolutely No Mercy': Leaked Files Expose How China Organized Mass Detentions of Muslims," New York Times, November 16, 2019, https://www.nytimes.com/interactive/2019/11/16/world/asia/china-xinjiang-documents.html.

mostly from selling iPhones.³² However, to do so it had to agree to host Chinese user data rules in the country and to remove offensive apps (as requested by government authorities), such as news and VPN apps, from its Chinese app store. Apple removed 805 apps in China from 2018 to 2019.³³

Airbnb setup local operations to both abide by local laws and to ensure its services were tailored to the market. In 2016, Airbnb setup a new business entity to manage operations in China. It has moved to store its data in China and has canceled bookings during politically sensitive events (such as China's National People's Con-gress).³⁴ In March 2018, Airbnb stated that it will send customer details to Chinese Government authorities to abide by local regulations that require foreigners to reg-ister their accommodations with police (hotels have done this for a long time).³⁵ Listings and non-China operations are not affected by these requirements. In November 2019, Airbnb's China president Tao Peng highlighted that localizing its platform is the key to the company's success in China

Zoom provides a case study in why (and how) U.S. firms need to separate and contain their operations in China from the rest of the world. It (rightly) faced considerable criticism in how it was dealing with Chinese users and user data. In April 2020, Zoom encountered significant public scrutiny when the University of Toronto's Citizen Lab released a report that showed that Zoom meeting encryption keys were sent via China-based servers and that it used non-industry standard cryptographic techniques that may mean calls could be intercepted (which raised concerns about China's laws concerning encryption key disclosure).³⁶ Zoom responded, removing these servers from the list of backup servers for users outside of China. It also enacted new safeguards and internal controls to prevent unauthorized access to data, including by staff, regardless of where data gets routed. Most recently, it updated its encryption protocols and said that it will introduce end-to-end encryption for all calls (for both free and paid services, but it will be an optional feature as it limits some meeting functionality).3'

Zoom encountered another major issue when it briefly blocked, and then restored, the accounts of Chinese human rights activists (including Zhou Fengsuo) who wanted to use the platform to organize a public commemoration of the 1989 Tiananmen Square crackdown.³⁸ Mr. Fengsuo is an American who lives in the United States. China asked Zoom to terminate four meetings scheduled to be hosted on Zoom and three accounts (one in Hong Kong and two in the United States) hosting the calls. Zoom canceled the three meetings that involved participants from mainland China.³⁹ Zoom rightly committed to "not allow requests from the Chinese Govern-

³² "Apple's Chinese troubles," The Economist, February 20, 2020, https://www.economist.com/

asy 29, 2020, https://www.abacusnews.com/tech/apple-removed-805-apps-china-2018-2019/arti-ary 29, 2020, https://www.abacusnews.com/tech/apple-removed-805-apps-china-2018-2019/arti-

start-sharing-chinese-host-information-with-government-idUSKBN1H41JJ; Tara Francis Chan, "Airbnb has removed listings in Beijing and canceled bookings during China's annual par-liament because it wants to be 'good neighbors,'" Business Insider, March 5, 2018, https:// www.businessinsider.com/airbnb-removed-china-listings-during-national-peoples-congress-2018-

^{3.} ³⁵ "What do I need to know in order to sign up for an Airbnb account as a resident of China, or if I change my residence to China?", Airbnb website, https://www.airbnb.com/help/article/ 1035/what-do-i-need-to-know-in-order-to-sign-up-for-an-airbnb-account-as-a-resident-of-china-or-

^{1033/}what-do-t-need-to-know-in-order-to-sign-up-for-an-airbnb-account-as-a-resident-of-china-or-if-ic-hange-my-residence-to-china. ³⁶Marczak and Scott-Railton, "Move Fast and Roll Your Own Crypto: A Quick Look at the Confidentiality of Zoom Meetings"; Rogier Creemers, Paul Triolo, and Graham Webster, "Trans-lation: Cybersecurity Law of the People's Republic of China," New America blog post, June 1, 2017, https://www.newamerica.org/cybersecurity-initiative/digichina/blog/translation-cyberse-

 ²⁰¹¹, https://www.netwamer.uco.gr/you/security-languardian.com/technology/10/seturity-longuardian, June 17, 2020, https://www.theguardian.com/technology/2020/jun/17/zoom-encryption-free-calls; https://blog.zoom.us/end-to-end-encryption-update/.
 ³⁸Paul Mozur, "Zoom Blocks Activist in U.S. After China Objects to Tiananmen Vigil," New York Times, June 11, 2020, https://www.nytimes.com/2020/06/11/technology/zoom-china-timerenews.public/lineuroparticle/lineuroparti

tiananmen-square.html

³⁹ "Improving Our Policies as We Continue to Enable Global Collaboration," Zoom blog, June 11, 2020, https://blog.zoom.us/wordpress/2020/06/11/improving-our-policies-as-we-continue-to-enable-global-collaboration/.

ment to impact anyone outside of mainland China."40 It has developed technology to remove or block participants based on their country, which will allow the firm to take a much more granular action in response to requests from local authorities when they determine that certain activity on the platform is illegal in that country.

DEVELOP MECHANISMS TO IDENTIFY, AND RESPOND TO, CASES OF EXTRA-TERRITORIAL CENSORSHIP (AND ACCESS TO DATA) BY CHINA

The U.S. Government should focus on ensuring that U.S. firms only apply local laws—like those for censorship and government requests for data—in local jurisdic-tions and come up with tools to counteract it if it spills over into the United States. Recent cases with the NBA being penalized in China for remarks from one coach in the United States is not only evidence of China's sensitive and punitive nature, but also its extra-territorial application of censorship in selectively targeting people and firms for what they say and do in the United States. This is unacceptable. However, there are few mechanisms and details about the true extent of the issue and few tools for the United States to use in response. As a first step, the U.S. Congress should discuss the issue of extra-territoriality in today's global digital economy and enact transparency arrangements to better understand the extent of the key issues (censorship and access to data).

The new national security law in Hong Kong is the latest and clearest example of the challenge that U.S. policymakers need to respond to, as it targets content re-moval and access to data on a potentially global basis.⁴¹ While observers don't yet know how China will use the new law (Macau has had a similar law in place for 11 years and there have been no enforcement cases), there's the potential for it to be used on a global basis as it applies to offences committed outside Hong Kong and it allows authorities to ask the publisher, platform, host, or network service provider to remove or restrict access to "illegal content" or produce information about a user.⁴² Furthermore, investigations into national security crimes can be deemed a state secret, any trials may be heard in closed court, and tech companies may be forbidden from disclosing what the police ask them for.

Hong Kong is important to U.S. tech companies, in part, as it's often their base for marketing their global advertising services to customers in mainland China. In 2019, Hong Kong's government made just over 5,500 requests for user data and just over 4,400 requests for removal of content.⁴³ Microsoft, Facebook, Telegram, Twitter, LinkedIn, and Zoom have suspended processing of requests for data from Hong Kong government authorities. While admirable, this does not absolve them of complying with the law.44 The Hong Kong and Chinese government would surely retaliate against these firms if they did this.

The potential extraterritorial application of domestic law for Internet-related issues is not unique to China. Privacy regulators in Europe have tried to dictate what information U.S. firms make available to people in Europe, but also to the rest of the world, through their "right to be forgotten" requirement that gives European Union citizens the power to demand that data and information about them be deleted. Germany requires social networks to remove Nazi symbols. In 2017, the Supreme Court of Canada upheld orders for Google to "de-index" a website, and asserted the jurisdiction of Canada's courts over Internet intermediaries in other countries.

The United States needs to identify and respond to cases where China (and other governments) try to enforce censorship (as well as access to data) overseas. Some of these cases (like the NBA case) are easy to identify, but there may well be others. There is a lack of transparency about the extra-territorial application of Chinese censorship and requests for data. Some recent draft legislation in the U.S. Congress provides some ideas for analysis and potential action.

⁴⁰ "Improving Our Policies as We Continue to Enable Global Collaboration," Zoom blog. ⁴¹ "Silicon Valley weighs whether to leave Hong Kong," *FT*, July 8, 2020, *https://www.ft.com/ content/9c06e9df-0ca2-485b-8afe-98e51f529373*; Bill Bishop, "One country, one Internet?; TikTok; Gaokao; Floods in China; U.S. FBI head on China." Sinocism, July 7, 2020, *https://*

 ⁴² Articles 38 and 43.
 ⁴³ "Council question: Requests made to information and communication technology companies for disclosure and removal of information." May 6, 2020, https://www.charlesmok.hk/legco/council-question-requests-made-to-information-and-communication-technology-companies-for-disc-losure and removal of information.

closure-and-removal-of-information/. ⁴⁴ Newley Purnell, "Google, Facebook and Twitter Suspend Review of Hong Kong Requests for User Data," Wall Street Journal, https://www.wsj.com/articles/whatsapp-to-suspend-proc-essing-law-enforcement-requests-for-user-data-in-hong-kong-11594034580.

For example, it's misguided to force firms to publicly disclose where their data is stored, such as in China, (as Congressman Jeff Duncan's (R–SC) TELL Act does) as labeling and treating all firms from China as guilty does not address the underlying question about countries respecting each other's sovereignty.45 It's one thing for these firms to be held accountable for any breach of U.S. laws in the United States, but it's another to assume (without evidence) that Chinese firms (and U.S. firms with operations in China) are automatically breaching U.S. law. Using such a broad brush could also easily be reused by China or other nations to discriminate against U.S. firms given the Snowden revelations. The same applies to Congressman Adam Kinzinger's (R-IL) Internet Application Integrity and Disclosure Act's requirement for websites or apps owned by the Chinese Communist Party or any Chi-nese firm to be made clear.⁴⁶

There is a potential policy path ahead. Senator Cory Gardner (R–CO) and Senator Jeff Merkley's (D–OR) bill (S. 2743) establishes the China Censorship Monitor and Action Group (an interagency taskforce) to develop and maintain a public database describing all punitive actions taken by the People's Republic of China toward U.S. companies that involve economic or diplomatic retaliation for the exercise of free speech by those companies.⁴⁷ It would meet and report to Congress periodically, including an annual report.

There are some ways this bill could be improved:

- Focus on the extra-territorial enforcement of censorship and requests for data: It should not seek to punish U.S. firms for having to abide by censorship laws in China.
- Bring transparency to the vagueness of China's laws: At the heart of the issue is the lack of transparency about how China applies its laws extraterritorially in both seeking to remove content and access data stored in another jurisdiction. The transparency mechanism is a good idea, but it should include coverage of both issues.
- Broad open source research, (voluntary) firm engagement, and cross-checking of details: U.S. agencies should use both public and confidential sources to gather information about relevant cases. However, reporting by firms should be voluntary and confidential (in order to protect U.S. firms from retaliation in China). Any cases should be verified to avoid companies submitting anecdotal stories about other firms (like their competitors) that may not be correct and otherwise smear their reputation. Sensitive reporting could be covered in unidentified general, aggregated analysis.
- Cover cases involving U.S. trading partners: Any U.S. reporting mechanism should use publicly available information to detail cases of extra-territoriality involving firms in U.S. trading partners.

DO MORE WITH VALUE-SHARING, DIGITAL FREE TRADE PARTNERS: "DATO" AND "FIVE EYES" TRADE NEGOTIATIONS

China's approach to human rights is abhorrent. Its use of digital protectionism runs counter to U.S. interests and values. The U.S. government should directly make the case to the Chinese Communist Party that it improve its approach to both issues and to also highlight them in international forums as part of broader efforts to build international pressure on China to change its policies. However, the United States needs to be putting similar energy and attention into developing an alter-native model of trade that better reflects its values.

On April 4, 1949, compelled by the threat of Soviet military aggression, the United States and 11 other nations formed the North Atlantic Treaty Organization (NATO), a security pact holding that an attack against any of the signatories would be considered an attack against them all. Today, Chinese economic aggression re-quires that the United States and its allies form a NATO for trade.⁴⁸ In many ways,

 ⁴⁵ "Duncan Introduces the "TELL' Act," Press Release, May 26, 2020, https:// jeffduncan.house.gov/media/press-releases/duncan.introduces-tell-act.
 ⁴⁶ "H.R. 6942 (IH)—Internet Application Integrity and Disclosure Act," https:// www.govinfo.gov/app/details/BILLS-116hr6942ih.
 ⁴⁷ "S. 2743—A bill to establish the China Censorship Monitor and Action Group, and for other purposes," https://www.congress.gov/bill/116th-congress/senate-bill/2743/text.
 ⁴⁸ Robert Atkinson and Clyde Prestowitz, "China's reaction to the pandemic shows why the U.S. and its allies need a NATO for trade," The Washington Post, May 20, 2020, https:// Continued Continued

this would be an extension of the "Five Eyes"-based model detailed above, given that Australia, Canada, New Zealand, and the United Kingdom also share similar political, economic, and social values. However, it could obviously be expanded beyond this to the many other trading partners that are also finding themselves in China's cross-hairs for economic retaliation due to cases whereby China thinks it's been "unfairly" singled out over action they've taken against China.

The campaigns of intimidation usually begin with claims of victimhood and accusations that any criticism smacks of racism or of efforts to deflect attention away from the critics' domestic failures. But if that fails to produce the desired obsequious result, China quickly moves to direct economic threats. Australian Prime Minister Scott Morrison found this out when he did nothing more than call for a formal inquiry into China's actions at the outset of the pandemic. In response, Beijing threatened a boycott of Australian universities and tourist operators as well as trade sanc-tions against Australian beef and wine.⁴⁹ Likewise, when Sweden supported human rights victims in China, Beijing's ambassador responded, "For our enemies, we have shotguns." The ambassador threatened that China would restrict Swedish exports. When Germany considered banning procurement of 5G gear from the Chinese telecom giant Huawei due to security concerns, China's ambassador in Berlin abandoned any pretext of global trade rules, asking: "Could German cars be deemed unsafe by Chinese authorities?"50

Such an organization would be broader than just new digital trade rules. It could become a new approach under which democratic, rule-of-law nations agree to come to each other's economic aid against an outside adversary. This new organization-call it the Democratically Allied Trade Organization (DATO)—should be governed by a council of participating countries, and if any member is threatened or attacked unjustly with trade measures that inflict economic harm, DATO would quickly convene and consider whether to take joint action to defend the member nation. Success would depend upon DATO members not engaging in economic aggression against each other, as the Trump administration regrettably did in 2018 when it imposed tariffs on Canadian and European steel products.

DATO nations should cooperate to deter individual episodes of Chinese economic aggression against individual members and to provide a mutual defense umbrella against broad Chinese policies that harm all nations—particularly mercantilist poli-cies such as the "Made in China 2025" initiative, which is crafted with a goal of achieving global dominance in strategically important technologies. Given the United States' still-indispensable role in defending freedom globally, only it can lead in establishing a DATO. The next administration, whether it be Republican or Democratic, should embrace the idea. Any democratic government, including Taiwan, should be welcome to join, but all must be prepared to take the steps necessary to enact a DATO decision, or lose the right to membership.

QUESTIONS SUBMITTED BY HON. TODD YOUNG

Question. As noted in your testimony, China has currently blocked over 10,000 websites and has shut down another 3,000 websites in 2018. I see a troubling nexus between a booming tech sector and an inability—or severely restricted ability—to access the Chinese market. In my home State of Indiana, we have seen multiple tech companies choose us to open business, which creates jobs and opportunity for families in need. These exciting trends have also led to career pathways and better business collaboration and partnership that is truly engrained in our communities. Because of brazen censorship in China, much uncertainty faces the tech sector when trying to predict access to international markets. This has an impact on entrepreneurship and job creation.

What do barriers like the Great Firewall mean for the future of the digital economy? More specifically, how could these barriers impact job creation?

www.washingtonpost.com/opinions/2020/05/20/chinas-reaction-pandemic-shows-why-us-its-al-

www.washingtonpost.com/optitions/2020/05/20/childs/eaction-paratemic-shows any active at lies-need-nato-trade/.
 ⁴⁹Gerry Shih, "Bristling at calls for coronavirus inquiry, China cuts Australian beef imports," The Washington Post, May 12, 2020, https://www.washingtonpost.com/world/asia_pacific/bristling-at-calls-for-coronavirus-inquiry-china-fires-trade-salvo-at-australia/2020/05/12/29c53058-93/g-11ea-87a3-22d324235636 story.html.
 ⁵⁰Joseph de Weck, "China's COVID-19 Diplomacy Is Backfiring in Europe," Foreign Policy Personal Institute April 2) 2020 https://www.foreign/article/2020/04/chinas-couid-19-diplo-

Research Institute, April 21, 2020, https://www.fpri.org/article/2020/04/chinas-covid-19-diplomacy-is-backfiring-in-europe /.

Answer. As per the response to question 2 from Senator Cornyn (above), China represents one of the biggest threats—both in terms of its digital protectionism, but also its broad use of censorship and surveillance—to the U.S. goal for an open, rules-based, and innovative global digital economy. Its approach at home is obvi-ously problematic for U.S. firms (and runs counter to U.S. values), but the broader risk is that it represents a model that other countries want to emulate. As countries grapple with the challenge of adapting local laws and regulations to the Internet and other new digital technologies to address (in many cases, legitimate) concerns over data privacy, security, and other issues, they're looking for models to follow.

Policymakers in some countries are simply misguided in inadvertently considering or enacting restrictive policies like data localization. This is understandable to an extent, given there is no one way to address many of these issues, and these issues can be complicated. However, policymakers in many countries are using debates around legitimate policy objectives (like privacy and cybersecurity) as cover to pursue other China-like political or economic objectives, such as digital protectionism and censorship.

The challenge for the United States and other value-sharing, free tradesupporting partners is to both demonstrate the best approach at home and to work together in advocating in third-party countries how they should follow their policy model-and not China's. This is a complicated and challenging task given the constantly changing nature of technology and given that it involves a broad range of government agencies, but it'll be essential if the United States wants to build a global digital economy around its human rights and trade values.

Ultimately, if the United States does not lead the charge in advocating and helping other countries adopt its preferred policy model, it'll undermine the major role that global markets play in supporting job creation in firms across the country, as data and digital technologies become central to their ability to compete and innovate. As ITIF's report "Cross-Border Data Flows Enable Growth in All Industries highlights, the global Internet matters greatly to agriculture, manufacturing, retail, services, and every other sector of the economy.⁵¹ If these companies' ability to enter and operate across markets becomes restricted, it would restrict their ability to support well-paying jobs back in the United States.

Indeed, the economic evidence shows the importance of foreign operations and sales to the U.S. economy. Dartmouth University Professor Matt Slaughter has found that "investment at U.S. parents and foreign affiliates also tend to com-plement each other." He cites research that finds that "a 10-percent increase in foreign-affiliate employee compensation causes an average response of a 3.7-percent increase in that affiliate's U.S. parent employee compensation. Growth in affiliates tends to bring growth in parents as well."⁵² In other words, preventing American companies in China from using Chinese apps or Internet platforms to gain access to Chinese customers will directly hurt U.S. workers back home.

THE GLOBAL DIGITAL ECONOMY AND AMERICAN COMPETITIVENESS

Question. How can market access for the digital economy improve America's glob-al competitiveness? If we continue to see Chinese actions that escalate and uphold censorship practices, how can Congress and the administration work with American firms to ensure we retain a competitive advantage?

Answer. The openness of the global Internet has been instrumental in helping U.S. firms become leaders in the global idigital economy. Open market access pro-vides critical economies of scale for U.S. firms to use the Internet to access more customers via a relatively small investment footprint (*e.g.*, a single global ICT system), thus earning them revenues they can use to support U.S. jobs, R&D, and other investments.

In no small part due to China, the nearly default openness of the Internet has been shrinking bit-by-bit over the last 20 years as countries realize that the digital economy is central to the battle for technological and economic competitiveness and that they can use non-tariff barriers to favor local firms and products over foreign ones. The EU and countries like China realize that current trade rules at the WTO

⁵¹Daniel Castro and Alan McQuinn, "Cross-Border Data Flows Enable Growth in All Indus-

⁵² Daniel Clastro and Alan McGulini, Closs-Border Data Flows Enlands Chown in Ali muts-tries" (Information Technology and Innovation Foundation, February 24, 2015), https://itif.org/ publications/2015/02/24/cross-border-data-flows-enable-growth-all-industries. ⁵² Matthew Slaughter, "How U.S. Multinational Companies Strengthen the U.S. Economy" (Business Roundtable and The United States Council Foundation, 2009), https://www. uscib.org/docs/foundation_multinationals.pdf.

are non-existent, woefully out-of-date, and/or not enforced as it relates to the digital economy, so they can get away with enacting barriers at home, while still allowing their local firms to take advantage of countries that remain committed to the rulesbased global trading system.

U.S. firms have long championed new digital trade rules to provide protected, enforceable market access. The United States has enacted, and continues to pursue, digital trade rules in new bilateral trade negotiations and as part of e-commerce ne-gotiations at the WTO. But it's incumbent upon firms and the U.S. Congress and government to continuously revise and update digital trade objectives given the changing nature of technology and the barriers trade partners are enacting. For example, U.S. digital trade strategy is currently based on USMCA, but this is based in large part on the discussions that immediately followed the Trade Promotion Authority as provided by the Bipartisan Congressional Trade Priorities and Account-ability Act of 2015. USTR and the U.S. International Trade Commission hold invesfrom broader, higher level direction and discussion. The U.S. Congress needs to conintously push for new hearings about the latest state of digital trade and new ideas for U.S. trade and economic policy.

For example, Congress could go further by holding hearings about what the United States should be doing (in terms of a holistic strategy) to support its overall model of digital trade and development. As China and the EU's own models have evolved, so too has the need for the United States to develop a more-comprehensive response to better push back on those parts that don't align with U.S. values and interests (whether this is censorship, data-driven innovation, and digital free trade).

However, a more comprehensive U.S. strategy for an open, rules-based, and innovative global digital economy won't mean as much without a supportive domestic innovation agenda, including in advanced-industry production. For many decades after WWII, the United States could afford its ad hoc innovation strategy which mostly worked by throwing massive amounts of money at defense and space spending (in the early 1960s, the U.S. Federal Government invested more in R&D than all other nations', public and business funding, combined). But after 3 decades of declining government support for R&D as a share of GDP, the U.S. strategy of winning innovation through overwhelming "force" can no longer work.

The United States needs to be strategic. Thankfully there is a growing consensus from both Democrats and Republicans that the Federal Government needs to play a stronger role in that process. First, as ITIF has long argued, the United States needs to recognize the nature of the challenge and the need for a detailed response. One place to start would be to pass the Senate Global Economic Security Strategy One place to start would be to pass the Senate Global Economic Security Strategy Act of 2019, introduced by Senators Young (R–IN), Merkley (D–OR), Rubio (R–FL), and Coons (D–DE).⁵³ Further, ITIF's report "The Case for a National Industrial Strategy to Counter China's Technological Rise" provides the "why, what, and how" of a national industrial strategy—explaining why advanced industrial competitive-ness is important, particularly vis-à-vis China; what is the nature of the U.S. ad-vanced industry competitiveness challenge and why markets acting alone are not enough to address the challenge; what a strategy should look like, both institution-ally and substantively, and how policymakers should approach developing one; and finally, why common objections to such a strategy are misguided.⁵⁴

America needs a national strategy that fortifies traded-sector technology indus-tries that are "too critical to fail," such as advanced machinery, aerospace, bio-pharma, electrical equipment, semiconductors and computing, software, transpor-tation, and more.⁵⁵ To develop and implement a national industrial strategy, the Federal Government will need to significantly strengthen its institutional capabilities to conduct thorough sectoral analysis. This is because when it comes to industrial strategy, America's institutional structures are holdovers from the Cold War era while our thinking remains stuck in the 1990s' free- market, globalist-based Washington Consensus. Congress should also act in four key areas: support for R&D targeted to key technologies, tax incentives for key building blocks of advanced pro-

⁵³Robert Atkinson, "How the U.S. Government Falters on Support for Innovation," Innovation Files Post, August 28, 2019, https://itif.org/publications/2019/08/28/how-us-government-fal-ters-support-innovation. ⁵⁴Robert Atkinson, "The Case for a National Industrial Strategy to Counter China's Techno-logical Rise" (Information Technology and Innovation Foundation, April 13, 2020), https:// itif.org/publications/2020/04/13/case-national-industrial-strategy-counter-chinas-technologicalrise. ⁵⁵Ibid.

duction, financing for domestic production scaleup, and adding a competitiveness screen for regulation. Congress should task the administration with creating a national advanced industry strategy, as Senators Chris Coons (D–DE), Jeff Merkley (D–OR), Marco Rubio (R–FL), and Todd Young (R–IN) have proposed.

Question. In examining Chinese strategies to insert censorship, the use of the social credit system should not be overlooked. China has developed a systemized process for determining how much or how little a business adheres to governmentsanctioned ideals and principles. The social credit system then rewards or punishes a business by increasing or restricting market access. This seems obvious that the Chinese Government is simply picking winners and losers, which is not what we, as Americans, believe to be the role of the Federal Government. Adhering to the Chinese Government's rules has its benefits—ability to conduct business and secure market access. But, companies who secure market access are not guaranteed it, and can lose it at any time as we have seen in numerous circumstances.

In your opinion, how should American businesses consider the implications of participating in the social credit system when trying to secure access to the Chinese market? Does the social credit system provide meaningful stability or certainty to businesses that are simply trying to expand on a global playing field?

How should American companies be more vigilant in evaluating the risks associated with entering the Chinese market and participating in this governmentsponsored ranking system?

Answer. ITIF has not commented on the impact of China's social credit system.

Question. Adverse action taken against American enterprise can impact our relationship with other countries as well. In fact, China has imposed the same censorship retaliation on other countries for adhering to our rules or aligning with free speech and free market principles. Chinese influence also transcends into other international markets; other nations have taken proactive action by using censorship as a regulation tool for e-commerce and digital markets.

How can the United States proactively work with other international partners on e-commerce regulation, particularly by not using censorship as a default strategy to protect domestic enterprises?

How should Congress think about the broader effects of Chinese censorship on the U.S. relationships with other international countries when designing trade policy?

Answer. As per the answers to questions from Senator Cornyn and the question from Senator Grassley, the United States will need to develop new censorshiprelated trade rules to ask for in its negotiations for a Phase Two deal with China, to embed these in its other trade agreements (thus building defenses against the spread of China's use of censorship for protectionism), and to advocate for like-minded trading partners to do the same (thus helping build a new global norm). As a world leader in the global digital economy, U.S. firms have faced the brunt of China's use of censorship for protectionism. However, they're far from alone. But, thus far, other countries have not prioritized the issue and developed a plan and policies to respond to it (both in China and elsewhere around the world).

Given that censorship may relate to legitimate content moderation concerns online (whether related to inciting violence and terrorism, fraud, intellectual property theft, or other valid issues), the United States should work with value-sharing trade partners and international organizations (such as the Organisation for Economic Cooperation and Development (OECD)) on how to build a policy framework that balances these objectives alongside free speech and other related values, while also including clear guidance and a fair legal process for both firms and users to navigate what can be a tricky issue.

This is important as the United States needs to be able to present an alternative set of policies for countries to use to address their legitimate concerns about illegal material online so that they don't feel they have to resort to overly broad censorship policies, like in China. Having a better, alternative framework to account for legitimate content moderation concerns would make it harder for countries to misuse censorship or content moderation as a disguised trade barrier given there is a clear alternative that is non or least trade restrictive.

PREPARED STATEMENT OF RICHARD GERE, CHAIRMAN, INTERNATIONAL CAMPAIGN FOR TIBET

Chairman Cornyn, Ranking Member Casey, members of this committee, thank you for your introduction and for inviting me to testify today. I think it's been 35 years since I first testified in Congress—first, on behalf of our Central American brothers and sisters, and then of course, on Tibet and China for the last 30 years.

Tibet is the compass that orients me and navigates me through the world and through Washington and through life.

I have always had enormous respect and admiration for so many of the Senators I have met and worked with over these years, many of whom have wholeheartedly supported this cause in which I've been deeply involved, and which the American people certainly care do about, in particular, the well-being of His Holiness the Dalai Lama and the Tibetan people and their extraordinary culture. I do thank you for that. And the American people thank you for that.

This is the first time I've testified since I last met with one of your greatest colleagues. Allow me for a moment, to pay homage to Senator John McCain. He was a good man and a good friend of His Holiness and of the Tibetan people. We spoke deeply of their plight. I respected him enormously and want to remember him for his principled leadership against authoritarianism, corruption, and short-sighted ignorance here and around the world. His was a life of bravery, integrity and dignity throughout . . . until the very end.

He was the best of us.

Like John McCain—and many of you—I hope that our government can deliver at its best, not only for the American people, but also for the millions all over the world who have looked to the United States—and its democracy—as a source of inspiration and refuge, while they live under oppression and violence. American leadership is at its best when it sets its view beyond the horizon, and looks with balanced confidence to the challenges and opportunities that lie ahead. We can help others and help ourselves. That's what we do. That's why we've been loved and admired. We can inspire again.

But the rise of China in the world today is not something far off. It is not beyond our horizon. It is right here in front of us, and affects our daily lives, our workplaces, our freedoms, our privacy, our health, our elections and will certainly shape the future of our world. China's 100-year marathon to world dominance is almost complete and certainly well-ahead of schedule.

So, when I received the invitation from Senators Cornyn and Casey, I was pleased to see that this issue is now taken seriously not only by committees that deal with foreign policy or human rights—which is where I have traditionally testified—but by the Finance Committee, and by others.

After looking at the work this committee has done over the last few years, reflecting strategically and profoundly on what the Chinese Government has been planning to do since 1949—that is, to replace the U.S. on the world stage and advance its authoritarian model everywhere—I thought I would offer my experience and whatever contribution I can make to this existentially important conversation.

The conversation about the future of our relationship with China, as well as our past missteps, is crucial not only for the United States—and frankly, we have been tragically naive for a very long time, under both Republican and Democratic administrations—but it is equally crucial for our democratic allies all over the world to understand this. It is crucial for India and Japan, for central Asian democracies like Mongolia or fragile democracies like Nepal and Bhutan, for all of Europe, for African countries, Australia and South America, where Chinese influence has been growing exponentially, while ours diminishes and recedes.

And please believe me that unless we join forces with our democratic friends and allies all over the world, unless we cherish and strengthen them, and their democratic visions, China's very patient and opportunistic strategy to divide and conquer will continue and most certainly prevail.

As you know, I have been involved in supporting Tibet, the people of Tibet, and the vision of His Holiness the Dalai Lama for peaceful coexistence with the Chinese Communist Party for almost 40 years now. When it comes to China, we Tibet supporters have been in for the long haul. We knew what was happening in Tibet would not stop there, and that China's authoritarian influence would expand well beyond Tibet, well beyond the Uyghurs in Xinjiang, well-beyond the people of Hong Kong, beyond its borders with Mongolia, Nepal, India, Bhutan, Myanmar-the whole world.

We have no quarrel with the Chinese people. We wish them to enjoy the same development and quality-of-life improvements that we have here. Of course, they deserve that. What I fear is a model of development led by the Chinese Communist Party that denies their own people their basic freedoms and is predicated on control, dominance and violence. Chinese leaders have often quoted an old Chinese proverb in private: "Wai ru, nei fa"—"On the outside, be benevolent. On the inside, be ruthless."

I recall vividly in the 1990s, when a strong bipartisan coalition of members of Congress called on the White House many times—both Democrat and Republican administrations—to condition China's most-favored nation status for trade relations, on clear criteria and benchmarks that would protect the rule of law and human rights. But that coalition was defeated, frankly, by powerful interests with short-sighted financial goals and a naive understanding of China's 100-year plan.

The conventional wisdom was then—and some important people still feel this way now, although they are clearly in the minority—that by opening our markets to China, this would somehow and by itself—thanks to the rise of a vast Chinese middle class—produce meaningful political and social reforms in China. As we know, the opposite has proven to be true, with more restrictions imposed, Communist Party control of religion, mass incarceration, crackdowns on all forms of dissent, and freethinking, including—and this is just the latest example—concealing critical information about the spread of the coronavirus. We have also had the unanimous proclamation of Xi Jinping as Chairman for life by the Chinese Communist Party the new Emperor. We see the Chinese Government increasingly using its economic policies to prey on weaker countries in every part of the world, through the dangerous Belt and Road Initiative, their long-term plan to control natural resources, supply chains, trade, ports, and sea lanes.

The point I'd like to make is that those rule of law reforms, those environmental, human rights, and workers' rights reforms that we advocated for in China in the 1990s would have also protected the larger economic interests of the United States and our allies if they had been made part of those deals. Instead, China won and gave up nothing in return.

Let me give you an example. The United States has largely opened its doors to Chinese products and investment, but also to various forms of Chinese cultural influence, including their state media. We've even allowed State-sponsored Confucius Institutes to gain a foothold in our universities. As I speak, the Chinese company Huawei has already spent a huge amount of money on lobbying here in the United States so that it can enter the American market, with the economic and security dangers that you are all aware of. But as you know, China does not reciprocate. It limits access to its markets in key sectors, and does not allow any American media to broadcast within China. This lack of reciprocity, fueled by an Orwellian system of state censorship—far beyond what Orwell imagined—limits both the freedom of access to information by the Chinese people, and the right of American and other foreign media companies to engage one of the largest media markets in the world. Surveillance and managed information are the Party imperative.

China has repeatedly insisted that major U.S. tech companies accept strict censorship to be allowed access. How can we continue to accept this as normal? How is this sustainable? How is it in our interest or ultimately, in the interest of a growing Chinese middle class completely dominated and controlled by the Chinese Communist Party?

Another example is freedom of movement. Americans have a strong interest and appreciation for the Tibetan people, their unique Buddhist culture and their beautiful, fragile land; it is the roof of our world. It is the Third Pole. It is the greatest source of the world's fresh water.

But here's what happens in Tibet: the Chinese Government highly restricts access to Tibet, especially for American citizens. This includes diplomats, journalists, politicians—like no other areas of China—while Chinese citizens face no such limitations when they visit the United States. Journalist friends have told me it is easier for them to get into North Korea than Tibet.

This complete lack of reciprocity in U.S.-China relations, one that is not limited to economic issues, as the current administration has rightly pointed out, but one that extends to key civil liberties and human rights, and unfairly targets legitimate U.S. interests.

Congress recently took action and passed the Reciprocal Access to Tibet Act with strong bipartisan support, a bill that requires the State Department to target Chinese officials who are responsible for blocking Americans from having access to Tibet. This is a good systematic response, these are smart sanctions, and we hope the State Department will implement it soon as required by law.

As an actor, I know you are interested in hearing more about my experience in the entertainment industry and the growing Chinese influence there. While I cannot say that my speaking out for human rights in China has directly affected my career—I may well be an unusual case (we'll speak of that later)—there is no doubt that the combination of Chinese Government censorship coupled with the desire of American studios to have access to China's market—soon to be the largest movie market in the world—and vast Chinese financing possibilities, can lead to selfcensorship and to not engaging social issues that great American films and American studios once addressed. Imagine Martin Scorsese's "Kundun" or my own film, "Red Corner," being made today. It simply would not happen.

I urge the United States, along with its true friends and allies, to continue to engage with China while standing strongly on the fundamental issues of reciprocity, basic human rights, freedom of expression, and freedom of religion.

As I conclude my remarks, I would like to bring your attention to two bills that are before the Senate right now and ask for your serious consideration and support. The first bill—sponsored by Senators Cardin, Casey, Cornyn, Rubio, and Wyden, among others—passed the House with overwhelming support in January. It is the Tibetan Policy and Support Act and overall strengthens U.S. policy on Tibet, while addressing in particular one key issue: the selection of the next Dalai Lama which, cannot be allowed to be controlled by the Chinese Communist Party, but only by Tibetan Buddhists. I am sure you all support this basic principle, and the fact that we even have to pass legislation about this speaks volumes about the approach of the Chinese Government toward Tibet and its people—and its lack of respect for religion in general.

I want to thank those who have already signed on and for those who have not yet, I am asking you to cosponsor this bill and raise it with Senate leadership for a swift passage.

The second bill is the Mongolia Third Neighbor Trade Act, which would grant a democratic and independent Mongolia better access to the U.S. market for cashmere products manufactured in Mongolia and would not displace one American job. Today, our Nation imports its cashmere almost exclusively from China—although it's mostly Mongolian. This will greatly diversify the Mongolian economy, deepen trade ties between our two countries, create countless jobs for Mongolian women and reinforce its democratic institutions. The bill is a concrete way to strengthen democracy, workers' rights and free market capitalism in the region at a most critical time in the Indo-Pacific.

I applaud Senators Cardin and Sullivan for authoring this bill, as well as Ranking Member Wyden and Majority Whip Thune for being cosponsors.

Entirely surrounded by Russia and China, this legislation is the strongest tool Washington has to help Mongolia remain an independent democracy. I ask this committee and the full Senate to support this bill as soon as possible.

Thank you each for your attention and the opportunity to testify. I look forward to your questions.

QUESTIONS SUBMITTED FOR THE RECORD TO RICHARD GERE

QUESTIONS SUBMITTED BY HON. BENJAMIN L. CARDIN

Question. The Third Neighbor Trade Act proposes improved economic and trade ties between the United States and Mongolia, chiefly by lowering barriers on the import of Mongolian cashmere.

What other initiatives can the United States take to expand bilateral economic ties for mutual benefit?

What other opportunities exist for Mongolia to diversify its economy sustainably and break away from over reliance on extractive industries?

Answer. Mongolia is perhaps the last chance to have a successful, working democracy in Central Asia—and is likely the only impediment to China's expansionist designs in the entire region. You are well-aware of the extraordinary pressures the Mongolians deal with every day as they continue to defy geopolitical odds and actively try to forge strong relationships with the West, and most especially the United States.

In President Battulga, the United States may be seeing the last opportunity to give priority to a significant democratic point of view, and create a genuine partner in an area that the United States has invested little energy thus far. These are extremely important questions you ask which require much more study and discussion. I hope they will also be posed to the witnesses I testified alongside.

The United States could adopt a three-tiered approach to produce tangible results in expanding bilateral economic ties.

In the short-term, passing the Third Neighbor Trade Act would be a huge gesture toward Mongolia. The economic impact of the bill will be significant for Mongolia with little, if any, impact on the United States. It will not only help the Mongolian people remain economically independent, it will send a strong signal to China. I think any expertise and or guidance the United States might be able to lend to Mongolia's development of a legislative framework to support greater foreign investment would also be of benefit to both short and long term health of the country.

In the mid-term, the U.S. International Development Finance Corporation (DFC) might consider investing in Mongolia's nascent industries like its blossoming information technology industry, AI and new types of financial services as well as its banking and capital markets. Unlike other countries in the region involved in China's Belt and Road Initiative, Mongolia is the strongest democracy in the belt and eager to cooperate with American companies because of our high standards and accountability. If we can demonstrate our commitment to advancing democratic governance, this will empower Mongolia's vibrant civil society and not only help keep the national discourse focused on an arc toward greater accountability but will increase resiliency against Chinese-funded corruption and interference.

In the long-term, it might be prudent for the United States to sign a Free Trade Agreement (FTA) with Mongolia as the only functioning democracy in the Asia-Pacific region and as an active contributor of troops in NATO operations. The strategic and symbolic importance of an FTA would ensure that China does not succeed in isolating or economically marginalizing Mongolia while simultaneously helping Mongolia rebalance its power and remain a critical counter to Chinese Government influence in the region.

PREPARED STATEMENT OF CLETE R. WILLEMS, PARTNER, AKIN, GUMP, STRAUSS, HAUER, AND FELD LLP

Chairman Cornyn, Ranking Member Casey, distinguished members of the committee, thank you for the opportunity to appear before you today to discuss "Censorship as a Non-Tariff Barrier to Trade." Your attention to this issue is warranted. China continues to expand the use of censorship to promote national interests, with adverse implications for the United States, other countries, and Chinese citizens themselves. This has recently been driven home by the global impact of China's suppression of information related to the coronavirus. While that issue remains critical, it is also worthwhile to consider the role of censorship in the context of international trade. To date, international trade rules, negotiations, and policy responses have largely focused on other issues, making a thorough discussion of this matter long overdue.

At the outset, I would like to clarify that I am appearing before you today in my personal capacity. Although I served in the White House from April 2017 until April 2019, including in the role of Deputy Assistant to the President for International Economics, Deputy Director of the National Economic Council, and as one of the negotiators on the U.S.-China Phase One trade deal, my testimony does not represent the administration's position. It also does not necessarily align with the positions of Akin Gump's many clients. Indeed, the views I am sharing are solely my own.

In my opening remarks, I will focus on three issues: (1) the scope of the problem, as exemplified by the many types of Chinese censorship; (2) applicable international

trade rules, which are somewhat non-specific and untested; and (3) potential ideas to help begin addressing the serious problems caused by censorship.

THE SCOPE OF CHINA'S "EXPLICIT" AND "IMPLICIT" CENSORSHIP

China is far from the only country to use censorship to achieve government objectives. Pervasive censorship is a serious problem in Cuba, Iran, North Korea, and many other countries. But the economic and geopolitical impact of China's practices stand alone. We are also at a critical moment with respect to the U.S.-China relationship. The Trump administration's willingness to take tough trade action on China has completely changed the dynamic between our two countries. I was proud to be part of the team that helped shape a much more clear-eyed and realistic policy toward China's economic aggression over the past few years, and I am glad that con-gressional policymakers are now focusing on multiple aspects of China's many un-fair trade practices. To help better inform this effort, my testimony centers almost entirely on China.

Censorship is one of many tools that China uses to make it more difficult for U.S. companies to access its market. China also restricts market access through tools like tariffs, equity caps, and onerous licensing requirements. And it heavily subsidizes favored companies to create national champions in industries it deems strategic, including technology and the Internet. As a result, addressing censorship alone will not solve all of our market access problems with China. But it is an area that has not been adequately prioritized and is ripe for additional policymaking.

China's censorship activities manifest themselves in many ways, both explicitly and implicitly. China imposes explicit censorship through laws and other actions that restrict free speech on the Internet. China's "Great Firewall" utilizes a variety of techniques to block access to websites and content deemed objectionable. According to USTR's 2019 Report to Congress on China's WTO Compliance, "China currently blocks most of the largest global sites ... and more than 10,000 sites are blocked, affecting billions of dollars in business, including communications, net-working, app stores, news and other sites."¹ The report goes on to state that "[e]ven when sites are not permanently blocked, the often arbitrary implementation of blocking, and the performance-degrading effect of filtering all traffic into and out-side of China, significantly impair the supply of many cross-border services, often to the point of making them unviable."²

Additionally, China controls the major press instruments in China-both on- and off-line-and suppresses views inconsistent with the Party's objectives. The leading news agencies in China are unambiguous instruments of the government. As a result, the U.S. State Department's recent decision to treat these agencies as foreign government functionaries, subject to similar rules as diplomats stationed in the United States, is entirely appropriate.³ Predictably, China's response was not to provide the news agencies with more freedom, but to expel journalists from The Washington Post, The New York Times, and The Wall Street Journal from China, thereby further limiting the number of free voices in the country.

This is just one recent example of China's decision to double down on policies of suppression and control. The latest U.S. China Economic and Security Review Commission Report highlighted China's growing censorship of economic news, noting that "[i]n the past year, Beijing has directed media outlets to avoid stories on declining consumer confidence, local government debt risks, and other unwelcome eco-nomic news."⁴ In December, China promulgated a new Internet censorship law prohibiting online content providers from making, reproducing, or publishing information that could harm the nation's honor and interests, disseminate rumors, or insult

¹Office of the United States Trade Representative, 2019 Report to Congress on China's WTO Compliance, March 2020, p. 50, available at: https://ustr.gov/sites/default/files/2019_Report_ on_China%E2%80%99s_WTO_Compliance.pdf. ²Id at 50. ³US Department of State, "Script State Department Officials on the Office of Evening Mis-

³ U.S. Department of State, "Senior State Department Officials on the Office of Foreign Mis-sion's Designation of Chinese Media Entities as Foreign Missions," Special Briefing, February 18, 2020, available at: https://www.state.gov/senior-state-department-officials-on-the-office-of-foreign-missions-designation-of-chinese-media-entities-as-foreign-missions/. U.S. Department of State, "Designation of Additional Chinese Media Entities as Foreign Missions," press statement, June 22, 2020, available at: https://www.state.gov/designation-of-additional-chinese-media-enti-

ties-as-foreign-missions/. ⁴U.S.-China Economic and Security Review Commission, "2019 Report to Congress," November 2019, p. 50, available at: https://www.uscc.gov/sites/default/files/2019-11/2019%20Annual %20Report%20to%20Congress.pdf.

others, among other vaguely defined terms.⁵ And of course, too many sources to count have highlighted China's suppression of information related to the coronavirus.6

China's implicit censorship efforts are equally troubling, with an impact beyond China's borders. The best example is perhaps last summer's NBA Twitter con-troversy. After Daryl Morey, general manager of the Houston Rockets, tweeted an image with the slogan "Fight for Freedom, Stand with Hong Kong," China ceased its cooperation with the Rockets, suspended the broadcast of NBA games, and pres-sured the NBA to fire Mr. Morey.⁷ To put it another way, in retaliation for a single tweet by a single individual associated with a single NBA team, China prohibited the broadcast of all games by all teams in China. And it sought retaliation against an individual who simply shared an opinion widely held in the United States. Clearly, China did not intend its response to be proportional, but sought to intimidate izing a Chinese business interest. Undoubtedly, China's tactics have worked and other U.S. executives with China exposure have since refrained from expressing their opinion in the United States out of fear of repercussions in China.

Unfortunately, this may be just the tip of the iceberg. China is in the process of implementing another form of "implicit" censorship through its social credit scoring system for individuals and corporations. The details of the system for corporations is not well understood, but it appears to be a state-run data-sharing and algorithmic scoring mechanism that enables regulators to comprehensively monitor and influence corporate behavior in real-time across China's business ecosystem.8 Good ratings are expected to lead to better tax rates, lower inspection rates, and better access to public procurement opportunities, while bad ratings could make it more difficult to get loans, buy real estate, or even lead to blacklisting. And among the many criteria is certain to be whether a company and its employees pay fealty to the Communist party line. Equally troubling are recent reports that China may start moni-toring U.S. companies operating internationally, and in particular, within the Belt and Road Initiative countries.

The economic impact of these many forms of censorship is impossible to quantify, but the greatest impact to date is likely on lost market share in China for U.S. tech-nology companies that provide Internet or mobile device services, such as search, social networking, and communications. Some U.S. companies have tried to navigate China's pervasive set of laws, while others have abandoned the market completely. In this regard, it is worth observing that some of the Chinese national champions that have benefited from a ban on U.S. competition, such as Baidu, had revenues of roughly \$15 billion in 2018,⁹ despite offering a much narrower set of products than would be competitors. Clearly, U.S. companies should be and could be reaping this type of benefit if allowed to compete fairly.

WTO PROVISIONS ADDRESSING CENSORSHIP

The WTO does not have explicit rules governing censorship per se, but there are at least some rules that may be applicable. However, these rules are untested with respect to issues like censorship on the Internet, which adds uncertainty to any challenge.

⁵State Internet Information Office, "Provisions on the Governance of the Online Information Content Ecosystem," Chapter I, Article 6, December 15, 2019, English translation available at: https://www.chinalawtranslate.com/en/provisions-on-the-governance-of-the-online-informationcontent-ecosystem /

content-ecosystem /. 6E.g., Foreign Affairs, "China's Coronavirus Information Offensive," April 22, 2020, available at: https://www.foreignaffairs.com/articles/china/2020-04-22/chinas-coronavirus-informationa. https://www.joreignal/ars.com/articles/chinas/2020-04-22/chinas-chioinduras-https/mathub-offensive, NPR, "Critics Say China Has Suppressed and Censored Information in Coronavirus Outbreak," February 8, 2020, available at: https://www.npr.org/sections/goatsandsoda/2020/ 02/08/803766743/critics-say-china-has-suppressed-and-censored-information-in-coronavirus-outbrea; Wall Street Journal, "China's Virus and Propaganda Draw Backlash," February 25, 2020, available at: https://www.usj.com/articles/chinas-virus-censorship-and-propaganda draw-backlash-11582632006.

⁷E.g., New York Times, "NBA Commissioner: China Asked Us to Fire Daryl Morey," October 17, 2019, available at: https://www.nytimes.com/2019/10/17/sports/basketball/nba-china-adam-silver.html.

^{adam-suber.nmi}. ⁸European Chamber of Commerce in China and Sinolytics, "The Digital Hand: How China's Corporate Social Credit System Conditions Market Actors," August 28, 2019, available at: https://www.europeanchamber.com.cn/en/publications-corporate-social-credit-system. ⁹ Macrotrends, "Baidu Revenue 2006–2019," available at: https://www.macrotrends.net/stocks/charts/BIDU/baidu/revenue.

The most likely avenue for a WTO claim against China's restrictions on U.S. Internet services providers is under the General Agreement on Trade in Services (GATS). In particular, the United States could allege that China violates prohibitions on market access (because it bans U.S. service providers from conducting cer-tain activities)¹⁰ and non-discrimination (because it treats China-based Internet service providers different than foreign-based providers),¹¹ among other potential complaints. The nature of China's activities clearly lend themselves to these claims.

One complication could arise from the fact that many of the specific types of services China prohibits on the Internet did not exist at the time that the GATS agreement was negotiated, which could allow China to argue that its behavior with re-spect to these activities falls outside WTO rules. The United States made a similar argument in defense of its regulation of online gambling in its WTO dispute with Antigua and Barbuda and lost,¹² which suggests that the United States should win this threshold question here. However, there is some risk for the U.S. position in light of the WTO's lack of precedent and U.S. complaints that the decision in the U.S.—Gambling dispute was a clear case of WTO overreach.

If the United States prevails on its fundamental GATS claim, China could still seek to defend its behavior by relying on certain WTO exceptions. The GATS public morals exception permits members to deviate from WTO commitments where such action is "necessary for public morals or to maintain public order"13 and the measure taken is not more trade restrictive than necessary to achieve that goal, taking certain factors into account. China sought to defend restrictions on the distribution of foreign films in the *China—Publications and Audiovisual Products* dispute on this basis and lost, but that decision was predicated on the determination that Chi-na's measure was an ineffective means of achieving its goal.¹⁴ It may be somewhat more difficult to make such a determination with respect to a policy that clearly does permit the Chinese Government to promote its party's objectives by sup-pressing contrary views. That said, the United States could argue that China's policy is more restrictive than needed, which would help defeat this defense

If China loses on the public morals exemption, it could also theoretically invoke national security as a defense.¹⁵ Unlike the public morals defense, the United States consistently argues that the national security exception is self-judging,¹⁶ which could allow China's assertion to go unchallenged. While such an argument might seem like a stretch, China increasingly equates any threat to the government's poli-cies and Communist party control writ large as threats to national security.

Therefore, while a WTO dispute has serious merit, existing rules may be ambiguous enough to give the United States pause. The United States would also be rightly concerned that for political reasons, the WTO may be hesitant to issue an "explosive" ruling that declares a core tenet of China's government policies in breach of WTO rules, especially in the absence of more explicit direction from WTO members on the topic.

RECOMMENDATIONS FOR MOVING FORWARD

In light of the foregoing, what is the best way to begin to deal with this difficult and under-developed trade issue? This is something we all need to further consider, but as a starting point, I would like to share a few ideas to help start the conversation.

First, the U.S. Government must consistently highlight the pervasive nature of China's activities and make clear that this behavior is unacceptable and inconsistent with global norms. This means that both the administration and Congress should forcefully denounce all forms of Chinese censorship—explicit, implicit, and in-between—at every opportunity and at the highest levels. Governments are better

¹⁰ WTO General Agreement on Trade in Services (GATS), Art. XVI.

¹¹GATS Art. XVII.

¹² Appellate Body report, United States—Measures Affecting the Cross-Border Supply of Gam-bling and Betting Services (Antigua and Barbuda), WT/DS285/AB/R, adopted April 20, 2005. ¹³ GATS Art. XIV(a).

¹⁴ Appellate Body report, China—Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products (United States), WT/DS363/ AB/R, adopted January 19, 2010.

 ¹⁵GATS Art. XIV bis.
 ¹⁶See, e.g., First Written Submission of the United States of America, United States—Certain Measures on Steel and Aluminum Products (China), WT/DS544, June 12, 2019 (making this argument with respect to a similar national security exception under the General Agreement on Tariffs and Trade (GATT)).

positioned by virtue of their size and role in society to push back against intimidation than individual companies who fear damaging retaliation. China may complain, noting that the United States is interfering in its internal affairs. But as China increasingly seeks to impose its model of censorship on American companies and export it to the rest of the world, the United States is justified in advocating for a clear alternative.

Second, the U.S. Government should strongly encourage key U.S. allies to do the same. Countries that share U.S. values on free speech, such as the European Union (EU) member states, must not equivocate on this topic, and must not hedge their bets with respect to the type of world that they want their citizens to live in. China will find it more difficult to ignore critiques of its behavior or stir up anti-U.S. nationalism to excuse it if other major countries stand by theU.S. side. At the same time, the EU and others must also be very careful not to adopt Internet policies, such as data localization and other forms of Internet control, that drift closer to the Chinese model, thereby sending the wrong signal to China's policymakers about what is acceptable. A recent report from the EU Parliament that advocates for a European Firewall and glowingly speaks of China's efforts to promote innovation through its own firewall is particularly disconcerting.¹⁷

Third, this same advice goes for the United States. As we seek to counter the economic threat posed by China, we must be very careful not to adopt the very same policies we are condemning. Policies that stifle free speech in the United States or increase market access barriers through tariffs or discrimination would directly contravene the policies that made American democracy and the American economy the envy of the world in the first place. These policies will not only backfire on us economically, but they will also cause us to lose the moral high ground that is so important to building an international coalition to effectively push back on China.

Fourth, the U.S. government should consider how to better address these issues at the WTO as part of a much broader reform initiative. In particular, if USTR's lawyers do not believe that the current rules support a winning dispute on censorship-related issues, they should advocate for explicit rules on this topic in the context of the e-commerce negotiations. The United States should also seek to include new rules on forced technology transfer, industrial subsidies, and intellectual property theft, require China to classify itself as a developed country that must commit to the same rules as the United States, and improve the dispute settlement system so it can be used more effectively by the United States to challenge China's bad behavior. To be clear, the WTO is not meeting our expectations at the moment, but abandoning the system that we (not China) helped create will not solve our problems. In fact it may be exactly what China desires. After all, a reformed rules-based international trading system that paints China as an international outlier remains the most promising way for us to pressure China to change its behavior, and China would like nothing more than to see the U.S.-created system evaporate.

Fifth, the United States should also expand its efforts to include provisions banning censorship in a broad range of FTAs, especially with countries on China's periphery. The United States has begun moving in this direction with the United States-Mexico-Canada Agreement (USMCA) digital trade chapter and U.S.-Japan Digital Trade Agreement, but these provisions could be strengthened and new negotiating partners identified. In this regard, the United States should seek more explicit anti-censorship provisions in the context of the U.S.-EU-Japan trilateral, negotiate enhanced digital trade agreements with existing FTA partners, consider an FTA with Taiwan, and begin negotiating the terms of its reentry into the Trans-Pacific Partnership (TPP). Putting politics aside, the longer the United States ignores the TPP, the longer it ignores an opportunity to encircle China with policies that oppose its economic model. The United States should immediately state that it will seek to renegotiate the terms of reentry and condition this reentry on the inclusion of provisions banning censorship, stronger provisions governing additional pernicious Chinese practices, and other changes the United States deems necessary.

Sixth, the United States must find better ways to help protect the interests of U.S. companies that want to access a market of over one billion people, but have been pressured into censoring their activities or have been retaliated against for voicing their opinion. One idea that has been floated by members of Congress is leg-

¹⁷ "New Developments in Digital Services," European Parliament, study prepared for the IMCO Committee by the Policy Department for Economic, Scientific and Quality of Life Policies, May 2020, available at: https://www.europarl.europa.eu/RegData/etudes/STUD/2020/6487 84/IPOL_STU(2020)648784_EN.pdf.

islation to protect employees from being terminated for voicing opinions about for-eign governments.¹⁸ Another idea that has been discussed is to prohibit companies from complying with certain Chinese laws or requests for censorship, at the very least with respect to their activities in our jurisdiction. A related idea is to require U.S. companies to disclose any pressure received from the Chinese government to censor their activities.¹⁹ This last idea, which could also theoretically be applied to other pressures like forced technology transfer, could help insulate U.S. companies from specific retaliation by focusing the blame on U.S. law. Ideas like this deserve debate, but the full implications on U.S. business interests should be considered before they are adopted.

Finally, we must be very careful in our policymaking efforts with respect to both censorship issues and China more broadly not to draw a false equivalence between the Chinese Government and its people. Many good Chinese citizens have suffered for years under these troubling policies, and their views and interests should in no way be equated with that of the Chinese Government. Indeed, many Chinese people voices muffled. A Chinese commentary briefly posted online before being deleted stated: "These days, everyone's saying the openness of information is the best vaccine. Blocked ears and eyes are also a contagious disease, and no one can escape.²⁰ And in the words of Dr. Li, the late Chinese doctor who was reprimanded by police for raising early awareness of the disease, "I believe a healthy society should not have just one voice.²¹ We need to be clear that our concern is with the unfair practices of the Chinese Government, not the Chinese people, and do everything we can to empower reformers in Chinese society to improve the country that they live in.

QUESTIONS SUBMITTED FOR THE RECORD TO CLETE R. WILLEMS

QUESTIONS SUBMITTED BY HON. JOHN CORNYN

Question. The World Trade Organization has two core principles. The first is national treatment, which requires a country to treat domestic and international products the same. The second is most-favored nation that requires a nation to treat all countries under the WTO equally. There are two exceptions to these principles for public morals and national security. These exceptions, intentionally or not, align well with the definition of censorship which allows for the blocking of media due to obscenity or security. The third piece in that definition is content deemed "politi-cally unacceptable." The WTO does not provide for an exception to that one.

Can you discuss these concepts and how they apply to the practice of censorship in conjunction with our trade laws?

Answer. As the question notes, the WTO agreements most relevant to censor-ship—include exceptions to normal WTO disciplines for measures "necessary to pro-tect public morals"¹ or "necessary for the protection of [a member's] essential secu-rity interests."² Theoretically, either or both of these exceptions could be invoked by China in a WTO dispute involving its censorship practices.

With respect to the public morals exception, past WTO panel and Appellate Body decisions have indicated that this exception is not unfettered and the same logic used in those disputes could be used to undermine a defense by China. More specifically, past reports have noted that this exception cannot be used to justify an other-wise WTO-inconsistent measure if that measure is either not "necessary" to achieve the WTO member's goal of protecting public morals, is applied in a manner that constitutes "a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail," or is "a disguised restriction on international trade."³ Many factors go into the legal analysis of these various requirements, but one key one is to examine whether the measure is more trade restrictive than nec-

¹⁸H.R. 5830, "Preventing Foreign Censorship in America Act," introduced February 10, 2020. ¹⁹S. 2743, "To establish the China Censorship Monitor and Action Group, and for other pur-poses," introduced October 30, 2019. ²⁰The Wall Street Journal, "China's Virus and Propaganda Draw Backlash," February 25,

²⁰²⁰ $^{21}Id.$

¹Article XIV(a) of the GATS; Article XX(a) of the GATT 1994. ²Article XV of the GATS; Article XXI of the GATT 1994. ³E.g., Appellate Body report, China—Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products (United States), WT/ DS363/AB/R, adopted January 19, 2010.

essary to achieve its intended goal and whether there are other less trade-restrictive alternatives that would suffice. In this instance, the United States would have a strong argument that China's broad ban on all different types of free speech and outright prohibitions on certain applications and communications tools is much more restrictive than necessary to achieve its goal.

The exception for "essential security interests" presents a more challenging situa-tion. The United States has consistently argued that this exception is self-judging and not subject to WTO scrutiny. Therefore, unless the United States changed this longstanding view, such a defense by China would be fatal to the U.S. claim. Other countries, however, have argued that WTO adjudicators should actually examine essential security claims, and a WTO panel in a recent dispute involving Russia and Ukraine agreed. In that dispute, the panel examined whether there was an "emer-gency in international relations," whether the action was taken "at the time of" that emergency," and whether there was a plausible relationship between the measures and the emergency, among other factors.⁴ It is easy to see how the WTO might actually decide against China if it applied the same logic given that these measures were not adopted in response to any sort of emergency in international relations. But even going down this path is risky given the sensitivity of the issue for China and longstanding U.S. views on the justicability of "essential security interest" issues in the first place.

With respect to the question of political acceptability, it is accurate that there is no relevant exception under WTO rules. Presumably, China would invoke one of the two aforementioned examples, if not both, and defend its measures on those grounds instead. In such a dispute, the United States could argue that China's invocation of "public morals" is not its true objective, but rather that it is a question of "polit-ical acceptability," which is not subject to an exception. However, the United States has historically been hesitant to have an international adjudicator question the motives of a particular member so may not believe that making such an argument is in its institutional interests.

Question. What should be done as conversations on e-commerce and WTO reform progress to ensure censorship is not used as a trade barrier in the future?

Answer. In a negotiation involving China, such as the current e-commerce negotiations, it may be difficult to gain consensus on rules prohibiting censorship per se as China would clearly see such rules as being targeted at its practices. As an alternative, the United States and other like-minded members could instead pursue disciplines that guarantee market access for mobile applications or other types of digital services that China currently bans or prohibit discrimination with respect to such services.

Another option that the United States should consider is to more explicitly ban censorship in negotiations that do not involve China. This could help create a global standard on censorship that others eventually try to multi-lateralize, putting China in a very defensive position where it is either seen as an international outlier by other countries, forced to compromise, or forced to make concessions on other issues as a trade-off.

QUESTION SUBMITTED BY HON. CHUCK GRASSLEY

Question. China's censorship regime is just one more way that the Chinese econ-omy profoundly differs from other WTO members. China refuses to accept the rules that govern a free-market because they threaten a closed society.

Are there WTO rules that could potentially reign in some of China's censorship practices? If not, what type of rules could we negotiate to tackle this issue?

Answer. It may be possible to conceive a challenge to China's censorship practices using existing WTO rules. For example, as noted in my testimony, the United States could allege that China violates prohibitions on market access (because it bans U.S. service providers from conducting certain activities)⁵ and non-discrimination (because it treats China-based Internet service providers different than foreign-based

⁴See panel report, Russia—Measures Concerning Traffic in Transit (Ukraine), WT/DS/512/R, adopted April 26, 2019. ⁵ WTO General Agreement on Trade in Services (GATS), Art. XVI.

providers),⁶ among many other potential complaints. As also noted, however, these claims could be difficult to sustain because the services rules under which the United States would be challenging China were negotiated in advance of the Internet age, which has significantly altered the primary means through which China exercises censorship, as well as issues with potential WTO exceptions. Thus, to avoid these problems, new rules could be negotiated that are much more explicit on prohibiting censorship outright, or at very least, that clearly apply to discrimination and market access when it comes to the use of the Internet or other products that China censors.

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⁶GATS Art. XVII.

COMMUNICATION

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Statement of Michael Bindner

Chairman Cornyn and Ranking Member Casey, thank you for the opportunity to submit these comments, which will put this matter into long-term context.

Limiting information is the most important element of restraining free markets and competition. When western capitalists do this, it is called public relations. When Chinese state capitalists and the Communist Party of China do it, it is called censorship. In both environments, it is a difference in intensity, but not in kind.

Product faults, wage and salary conditions, internal security matters (both, whether law enforcement is involved or a part of the conspiracy), product pricing and other "trade secrets" show that Capitalism is toxic everywhere it is tried.

The question of Tibet and the Yugurs, the treatment of families on our southern border, workers in the fields and food plants (and their children) whether documented or not, in congressional offices and on the casting couch all show how rampant censoring reality can be.

The sad fact of the matter is that while there are some owners and executives who are not aware of what is behind the veil, it is more common that executives and co-workers know what is happening in their organizations, companies and societies, as well as those of their competition (both corporate and international). It is only the public that is in the dark, or worse, who look the other way.

What keeps all of this in play is shame. It is cultural in China and Asia, but it is also so in all parts of America. With shame as a societal agreement, censorship is self-enforcing. This is why progressives embrace diversity and openness. With these, shame and censorship are impossible.

Economic empowerment makes shame easier to defeat, although workers and their organizers can be co-opted. It is part of the human condition.

The best disinfectant is empowering the individual, from whistleblowers in the Intelligence Community to a protestor challenging a tank in Tiananmen Square. Individuals change cultures. With the conviction of Harvey Weinstein, we know that the darkness can never win.

Another inevitable development is more democracy and ownership in the American workplace. Mutual empowerment leads to open information, the end of both shame and the cover that shame brings. What starts here must spread.

To protect themselves from job loss from their own supply chain and subsidiaries, employee-owned firms and cooperatives will assure that overseas workers have the same standard of living and workplace democracy that they enjoy, thus subverting authoritarianism in the Global South and East. Change in American companies cannot come from governmental action.

While there will always be organizations that hide their dirty linen, this usually comes from less democracy, not more.

American workers must seek the change they want but are afraid to ask for. The existing cooperative and employee-owned sector is the best place to start, but it will only come from below. Management never likes change. As Frederick Douglass once

said, "Power concedes nothing without a struggle." It is courage which ends both shame and censorship.

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Thank you for the opportunity to comment. As always, we are available to answer questions from members and staff and to provide direct testimony.