

Center for Strategic and International Studies

Online Event

“Strategic Competition and the U.S. Semiconductor Industry”

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FEATURING:

Senator John Cornyn,

Chairman, Senate Finance Subcommittee on International Trade, Customs and Global Competitiveness

Senator Mark Warner,

Member, Senate Finance Subcommittee on International Trade, Customs and Global Competitiveness

CSIS EXPERT:

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James
Andrew
Lewis: Thanks to everyone for joining us today. We have a pretty big audience on the call. It's an important topic, and I think one of the things we're going to do is showcase an important and really precedential bill for the United States in its technology contest with China.

Let me introduce our two speakers.

Senator John Cornyn, Republican of Texas. He's serving his third term, running for a fourth term. Served as the Republican whip between 2013 and 2018. A lot of us know him, of course, from FIRRMA, which was one of the great improvements of recent times. He currently serves on Senate Finance, Intelligence, and Judiciary. Prior to the Senate, he practiced law, was a district judge, was on the Texas Supreme Court, and became the first Republican to be elected attorney general in Texas since the Reconstruction. So impressive background, right, for this stuff.

Joining him will be Senator Mark Warner, my former governor. And I guess you're my current senator since I live in Virginia; I forgot. (Laughs.) Senator Warner is currently serving his second term. He serves on Senate Finance, Banking, Budget, and Rules, and is the vice chairman of the Select Committee on Intelligence. Prior to joining the Senate, Senator Warner was a businessman and an entrepreneur, and an earlier investor in cellular telecommunications – great background for this stuff – and invested in hundreds of startups. So Senator Warner, as I mentioned, was governor of Virginia from 2002 to 2006.

So welcome to both of you. Thank you for doing this. I think this is an important moment for the country. I hope your legislation is putting us on a new path, because we are in a contest, may not like it. Let me open with a question for Senator Cornyn. The pandemic has shown some of the vulnerabilities that arise from the supply chain we have now that's both dependent on China and it's not particularly secure. This has been a focus of yours, not only with semiconductors but with 5G. Can you talk about why this is so important? Can you tell the audience why you've decided to focus on this?

Senator
John
Cornyn: Well, thank you, Jim, and to everyone else at CSIS, for having me and my good friend – and I don't say that lightly – Mark Warner, who has been my indispensable partner on a lot of this important legislation. I had a chance to speak last year at CSIS about U.S. energy policy. And so I appreciate the great work you do, and the information that you bring to bear for policymakers to hopefully make better decisions. But, yeah, the virus I think is teaching us all sorts of lessons.

But one of the most important is the vulnerability of our supply chains, whether it's personal protective equipment, medication, medical equipment generally. You know, we've had this idea that if it could be made cheaper that it would be better for consumers. But we haven't given enough attention, I think, to some of the national security and long-term economic implications of everything being made in China.

And semiconductors are something that, you know, I'm not an expert in, but my crack staff pointed out to me that everything that turns off and on probably involves a semiconductor. But I became increasingly concerned when I learned that there was a sole source in Taiwan for some of our most sophisticated semiconductors. And while

we design semiconductors in the United States and these fabulous entities, the foundries that are so important are not largely being built here in the United States, haven't been.

Now, that's started to change because the administration, particularly Secretary Ross at Commerce, Secretary Pompeo at State, they've been negotiating with the Taiwan semiconductor company for a placement of a fab in Arizona. And once I began to understand how vulnerable we were to this supply chain stretched across the ocean, and what had happened to us with the pandemic, we – it really was brought home to me.

And as you point out, Mark and I serve not only on the Finance Committee together, we serve on the Senate Intelligence Committee. So we hear a lot about what China is doing, some of which we can't talk about publicly. But I think we all understand that China has moved up the list to the number-one rival of the United States, not only economically but they're also acting very aggressively in their intelligence functions and in places like the South China Sea.

So China has been a major supplier of most of these products that we have become dependent on, but particularly when it comes to semiconductors and integrated circuit chips. Demand has skyrocketed as we've gotten much more technically oriented. We carry around these computers in our pocket, and we just – it's become part of our – a very important part of our everyday lives. But the U.S. companies – U.S.-based companies create 47 percent of the global market share of these integrated circuit chips. But when it comes to manufacturing, we've dropped from roughly a quarter of the manufacturing facilities to only 12 percent.

And not surprisingly, as our number has come down, China's has gone up. China has gone from manufacturing zero chips to now 16 percent of the world's supply. And they are aggressively investing and planned investment of over \$1.4 trillion in semiconductor technology. So we've lost ground to our global competitors, and our number-one competitor when it comes to semiconductors. And unless we take action, it's estimated that by 2030 83 percent of the global semiconductor manufacturing will be in Asia. That's precisely the type of trend China has been hoping to achieve through its Made in China 2025 initiative, which it seeks to achieve in high-tech manufacturing.

So as Attorney General Bill Barr noted recently in a speech, he said it's clear that the PRC seeks not only to join the ranks of other advanced industrial economies, but to replace them altogether. Frankly, allowing that to happen would spell disaster for the United States. We need to bring these manufacturing jobs back onshore. So it's not anymore just a talking point. This is really urgent and important, which has led us to this important collaboration.

Fortunately, we were able to work with the Senate Armed Services Committee and get this – at least a beachhead established toward our funding these new foundries, starting in Arizona, but it's broadly available. As Mark made a point of telling me, it's important we make this available not just to foreign semiconductor manufacturers who want to build these foundries in America, but to our existing semiconductor manufacturers.

So other governments are investing not only in China but South Korea, Taiwan, Singapore, and Germany. And if we're going to regain lost ground, we need to make a strategic investment from the federal government. This is a little bit uncomfortable to some of us who were raised to believe in free markets and it would all work itself out. But we all know now that the world is very different from perhaps those days and that if America is going to maintain our preeminence, not only from a national-security perspective but economically, a federal incentive program through the Department of Commerce to encourage semiconductor manufacturing is very important.

So let me give another quick shout-out, not only to Senator Warner, who's been my partner in this effort, but also the great contribution of Senator Tom Cotton and Senator Chuck Schumer. There's not many things that happen in the Senate that actually get done. There's nothing gets done that's not bipartisan. And this, thankfully, has not fallen prey to some of the dysfunction that we've seen in the past.

We were able to pass this amendment to the defense authorization bill with a vote of 96 senators to four. That's an overwhelming vote, obviously, and will help enable us to bring this manufacturing back onshore. We want our advanced technologies to run on made-on-America semiconductors for all the reasons I said. And this is a critical first step to getting us there.

Thanks.

James Great. Thank you, Senator.
Andrew

Lewis: Senator Warner, let me turn to you. You know, you probably don't remember, but you and I talked about some of these issues more than a year ago. And at that point, you know, the odds for Congress actually in producing subsidies and industrial policy seemed a little remote. What's changed? Why do you think we need industrial policy now when it comes to the competition with China that Senator Cornyn was talking about?

Senator Well, Jim, let me echo what John said. Thank you and CSIS. In all the programs I've
Mark done with you guys over the years, they're always thoughtful and I think well-timed.
Warner:

Let me also thank my good friend John Cornyn. I mean, he started this effort. I was happy to be his wingman. You know, we kind of reversed roles on 5G, where I took the lead and he was my wingman. And we have this collaboration, particularly out of the Intelligence Committee, that I think gives us a broader view across a whole series of jurisdictional areas, and technology being one.

And John made the comment that our colleagues on this were, you know, Chuck Schumer and Tom Cotton. And when you can start with Chuck Schumer and Tom Cotton agreeing on something, that's – Cornyn and Warner working together is occasionally, I think it does happen fairly often. You know, Cotton and Schumer was a little more interesting. But I think it goes a little bit to your question, Jim, of something that was potentially viewed as out there a year ago. Why is this happening now?

And I would argue that it's – I think we've all learned that the rules that China is playing by are really different than what we expected when we invited China into the WTO, when – I used to say I was – you know, I was in the Hank Paulson camp, that the more we bring China into the global economy, you know, the better it will be for all.

And I think, in many ways, we were wrong, not because China – I'm not anti-China. I'm not anti-Chinese. Obviously, I think we have to be very careful when we talk about China not to impugn Chinese Americans. But the Communist Party in China – (inaudible) – Xi Jinping has a very different model than some of the previous Chinese regimes. And I do think they have a(n) economic model that on one hand is market-driven, but you go a little bit below the surface, it is not market-driven at all. I frankly think that many of the great Chinese tech companies – the Huaweis, the Alibabas, the Baidus, the Tencents – at the end of the day, most of these companies are driven at the end of the day by the needs of the Communist Party of China, not by their shareholders or by their executives.

And I would almost argue we partially got to where we got to on semiconductors so quickly because of what happened – and John made mention of this – what happened in 5G. Over the last couple of years we've seen the emergence of Huawei. And in 5G – I was an old telecom guy – in 5G, we're seeing an area where for the first time I would almost argue since Sputnik we have China both with the leading company and setting the rules, the procedures, the protocols around a new technology development area, that being 5G. And for so long, even if it was not invented in America, we by the – our size, by our academic institutions, set the rules of procedure. You see this in satellites. You see this in my old industry, telecommunications. You see it in the internet. 5G was the first time when, in many ways, at the – at the standard-setting bodies, China flooded the zones in these international bodies to set the standards.

Then they have a model where they have some level of ferocious competition for their domestic market until a national champion emerges. And Huawei emerged as the national champion on 5G. By having the Chinese domestic market, that gets you about 30 percent of the overall global market. So if you start with that advantage and then China comes behind you, backing a company – again, let's stay with 5G – Huawei, with a \$100 billion line of credit, there is no way any American or Korean or Indian or French company can compete against that model, where they give out their domestic market first and then exponentially back their chosen enterprise around the world.

And I think we're making some progress now, again, I think partially due to COVID, where people thought, gosh, when China did not come fully clean about the virus to start with and not let others in, do you really want to be dependent upon a sole-source Chinese provider, I think has kind of awakened a lot of – awakened policymakers in America, but also policymakers around the world that there may need to be a Western rule-based law, market-based alternative to Chinese investment policy.

And under John's leadership, I think what's happened with semiconductors is we've been hearing this story for the last decade, and China is still chasing us on semiconductors. But when we had the opportunity with TSMC, clearly one of the leading fabs in the world, it combined that with kind of our great American companies like Intel and Micron, Qualcomm and others, there is a – there was a real opportunity

here to move aggressively. And in many ways, you could – you know, if you look back to American investment in DARPA, it helped create the internet. Or if you look back at American investment on the defense side, I think about \$4 billion back in the '70s and '80s on GPS. You know, we did quasi industrial policy 30, 40, 50 years ago and it benefited us for decades afterwards.

I think there is a new competitor in town, as John has indicated, with China. They are playing a different set of rules. I think we, America, and we, the West – I include, obviously, the Japans and Koreas and Australias and Indias in that category, along with our European friends – have to offer a different alternative. And I think our legislation is that first step, and it is about – it is about the foundries. It is about, also, the packaging component. One of the things John and I worked on together was recognizing that that was a part of the process around semiconductors that we also needed to take a lead on. We've now got to make sure that the – you know, that behind this amendment we put the kind of resources that are going to be needed.

And I would argue – just last point – is that we're going to have to do this in semiconductors. I think there is a recognition we have to do it in 5G. I'm increasingly worried that when we look at artificial intelligence and quantum computing and hypersonics there may be a series of areas where either America or America in conjunction with a coalition of the willing are going to have to have an alternative economic model, because China has got a plan. And if there's anything that we should have all learned is we should not underestimate the determination of the Chinese Communist Party to execute on these plans and to bring a host of both human resources and financial resources to the table.

James Thank you.

Andrew

Lewis: You both touched on a point that maybe I can ask both of you, which is that China's got an advantage in their willingness to spend money. You know, it helps not to have to go to the voters. But the bill, when I first saw it –

Senator That said, Jim – that said, Jim, the two of us were trying to get rehired – (off mic).

Mark

Warner:

James (Laughs.) When I saw the bill, I was a little shocked because I thought, this is real money. How did you end up coming up with a great incentive package? How did you end up coming thinking about the money you'd spend and how you'd spend it? So, Andrew Senator Cornyn, I don't know if you want to start, but it's an impressive bill just in that regard alone.

Senator Well, let me back up a little bit. As I mentioned, there have been some negotiations John from the – from the administration, State and Commerce, with the Taiwanese Cornyn: semiconductor manufacturer.

James Right.

Andrew

Lewis:

Senator John Cornyn: And so that was – that was really brought to me through – actually through a contact I had with the President’s Intelligence Advisory Board, who had been sort of assigned or volunteered to work this issue. But they didn’t – he didn’t know how to get any legislation passed. I said, well, that’s our bailiwick; let me – let me see what we can do. And so I first reached out to Mark because we have worked so well together on so many issues relating to national security and intelligence, and he was quick to say, yeah, let’s do this.

So we tried to figure out what’s the appropriate funding mechanism for this incentive package. We knew, for example, the state of Arizona had theirs. But in order to make it commercially feasible for them to build a foundry here, we know the cost of operation in the United States and constructing this was greater than it would be if it was done over in Asia. And so this made me and a number of us do things that maybe we wouldn’t have done before.

But I kind of like the way Mark described, you know, our competition. They’re not bound by any rules. They don’t follow any rules. They steal all our technology and they are investing huge amounts of money in this cutting-edge technology in hopes of dominating the world economy, and in the process knock America down a tier or two when it comes to our national security capabilities.

So we looked at different ways to do this and came up with this tax-incentive model, which is – we’re working with the Senate Finance Committee that Mark and I sit on as well. Secretary Mnuchin’s got some other ideas. He said maybe if there’s some money left over in the – some of the COVID-19 relief package that hasn’t been able to be used for other purposes that maybe we could just use that money. We haven’t worked out those details yet, but that’s why we had to break this essentially into two packages. And we hope and expect we’ll be able to do the second part of it in the – in the COVID-19 bill which we will – we will pass, I believe, in the next two-and-a-half weeks.

James Andrew Lewis: Great. Thank you.

Lewis: Senator Warner?

Senator Mark Warner: Well, let me, first of all, you know, begin giving a shout out to John Cornyn because, as you said, Jim, this is real money. I mean, this was not a study. This was not a, you know, kind of a tentative foot in the water. Because I think John recognized and I recognized that, you know, this – we are not going to win with the status quo, you know, when China’s willing to throw incredible resources, when China’s got the ability to kind of choose who’s going to dominate their domestic market. I mean, our – if we basically said we’re going to keep the rest of the world out of our domestic market, our companies would start enormous advantage, they’d travel around the world, whereas sometimes our companies have turned a – they’ve been so anxious to try to get bits and pieces of the Chinese market they’ve turned a blind eye to Chinese bad behavior, whether it’s the treatment of the Uighurs and the treatment of the people of Hong Kong, or just the fact that, as John pointed out earlier, the theft of intellectual property.

One of the projects that John and I have been working on as well over the last literally two and a half years is we've done a series of what we call road shows. We did one in Austin, that was really enlightening, where we bring in – have brought in the venture community, the telecom community, the banking community, BRT, academia. And we give them a couple of hours of classified briefs on the challenges that are presented by China.

So I think John recognized and I recognized that this was not a time to be timid. That we needed to make a statement that in the long run these dollars, while they've got billions attached to them, are small compared to the economic value that will be created with these fab facilities. I've got one in Virginia that Micron owns. I mean, it's always needing to be refreshed and renewed. These are great jobs. But as important, if not important, the jobs are going to be, you know, a supply chain component that we want, you know, these chips, which are at the heart of virtually all the technological innovation that's going to take place, as they get smaller, and smaller, and smaller. We want to keep that building capacity and intellectual capacity here in the United States.

This is core to our national security, as well as our economic security. And I'm glad we bit the bullet. And I would only add as well – and you don't often hear me that many times complimentary of the Trump administration. But in this case, they have been great partners. And my friend Steve Mnuchin – we may not fully agree with Steve on how we get there, but I think he's committed to getting us there as well. We've got a little more sausage making to do.

James
Andrew
Lewis: Well, that's good news. But let me pick on something that you both raised, and it's something that's in the bill. How do you see the private sector working with this? What do you – what do you want to get from them? What can they do to help? You've got incentives. You've got tax bill parts, legislation perhaps. What's the role of the private sector in this? How do we coordinate that? This is a different kind of industrial policy, so –

Senator
Mark
Warner: Let me start with that.

James
Andrew
Lewis: OK.

Senator
Mark
Warner: And I think that's going to be something that – I think we're still feeling through. We want the private sector to have skin in the game. We want them – you know, I do think we're going to have to think about – you know, when we – when we help with a fab it may be different than some of the other investment. But we may need to think about, you know, the intellectual property that's created. Is it going to be exclusively for one company, or is it going to be for a variety of American companies? We want to make sure that, particularly when we're making these kind of investments, that they build this in America. We don't want them to go off and for a nickel less, you know, locate the next facility abroad. Although, one last comment, coming back to John,

though I do think this model around technology innovation – you know, this may be the framework for the new alliances of the 21st century.

You know, we've had military alliances. We've had economic alliances. I think increasingly, particularly when we see China with such an organized plan with the China 2025 document, I think we may have technology-based alliances. I know we've had conversations with our allies around the world about what a Western alternative to Huawei would look like on 5G. So there may even be even more innovation coming where we might have, you know, a Five Eyes, or a NATO plus Japan and Korea on some of these opportunities. I think there's a great chance to partner. John and I are both co-chairs of the India Caucus. There's great chances to partner with India on a lot of this technology innovation.

So, you know, we're kind of making it up as we go along in terms of the specific role of the private sector, but they've got to play a big role. This is not we're going to write you a check, and then trust you to go spend it, and – you know. There will be strings attached.

James
Andrew
Lewis: When we could travel, I was in Brussels and a commissioner told me – a European Union commissioner said: We're on the same path as you when it comes to China. We're a few years behind, but we now see the risk. Not universally shared, but there are some opportunities there. And of course, you've got the European private sector as well. But, Senator Cornyn, I don't know what you wanted to say on this, so.

Senator
John
Cornyn: Well, you know, the government's not very good at innovating.

James
Andrew
Lewis: (Laughs.) Really?

Senator
John
Cornyn: (Laughs.) And so that's the – that's the essential role of the private sector, to create this intellectual property, the processes, to come up with new ideas to meet the need. But I would argue that this COVID-19 crisis, this pandemic, sort of kind of pushed us over the edge. Certainly, I think it contributed a lot to my decision to support something like this, because this is – again, it's not entirely comfortable to a free-market kind of guy. But as Mark points out, our rivals are not free-market kind of guys either, and we know that China is investing huge amounts of money into all the things that Mark mentioned, from semiconductors to 5G to artificial intelligence, just to mention a few.

And, you know, we're either going to compete or we're not going to compete. And frankly, I don't want us to be number two. And so, yes, we're having to adjust and adapt to the new reality. But I think, because China is not a rules-based country and we are, we're going to have to adapt to the new rules, which are sort of the de facto reality that we either compete or we fall behind.

James
Andrew

Thank you.

Lewis: For both of you again, what does doing business with China look like in the next few years? I was at a DoD event where an official told me there are no safe end users in China. That might be a little over the top, but where do you think we're going? We hear about decoupling. This might be more wearing your intelligence hats. But what does the business relationship, the commercial relationship, the tech relationship with China look like in the next few years?

Senator
John
Cornyn:

I'd love to hear what Mark has to say. (Laughter.)

Senator
Mark
Warner:

Well, let me –

James
Andrew
Lewis:

Give me a sign if I ask one you don't want me to ask.

Senator
Mark
Warner:

No, no, no. I'd say this is – we've seen, I think, out of the Communist Party in China, their ability to kind of – their ability to frankly manipulate their technology companies to create an almost Orwellian surveillance state. You know, I think that is the antithesis of kind of American values and, you know, democratic values – not just American, but amongst many in the West writ large.

And I think there's going to have to be a real recognition amongst so many of the American businesses that rushed to China because they thought this was such a big market that they couldn't let it pass by. And I – at least I think if you had a confidential survey with businesses, American business or Western business in China, you'd find some that say things have done great and they're doing fine, usually on the lower end of the supply chain, lower end of kind of consumer.

But if you've got a high-value product, I know many, many corporate 500s that, you know, have invested in China. China stole their intellectual property. They had a partnership. They then built a facility that copied all their activities. And the sacrifices they made on intellectual property or the sacrifice they just made on values, the fact that a lot of the Western airlines can't put Taiwan on their maps if they fly into China and their – you know, look at our friends at the NBA who, when somebody had the audacity to mention the Uighurs, you know, China brought the rulings up.

I do think this goes to how we're going to do business and how we're going to do business and still represent our values. I mean, our country right now is going through a, I think, healthy reflection on our own history, what we did right and wrong about race and other issues. You know, and I commend American companies who are rethinking that.

I get a little bit frustrated if those same companies who espouse kind of our values are willing to then go to China and turn a completely blind eye to what the Chinese

government has done, not just to the Uighurs, but I stand with the people of Hong Kong. I know John does as well. And I think this, how we calibrate about how we do business with China and I don't want us to get into the kind of a – back to a 20th century bipolar model, and gosh knows a huge amount of innovation/intellectual capital coming out of China. We've got to figure this out. But it's got to be a two-way street.

And I think, candidly, the Chinese government has played us – Americans off the Europeans off the Japanese in a brilliant fashion, you know, over the last 25 years. And I think we need to all agree we have a lot more common alignment, not to gang up on China but to kind of basically say if you want to be part of the world order, you actually – as John said, you've got to play by the rules.

Senator John Cornyn: Well, Jim, the – you mentioned FIRRMA, which is the reforms to the Committee on Foreign Investment in the United States that we were able to get through. Actually, kind of using this same model on the defense authorization bill, we were able to get a lot of cooperation and recognition that China was being very creative when it came to their foreign investments in the United States, particularly in startups and dual-use technology. And not only could they get the intellectual property; they could get the know-how that would make it a lot easier for them to do what they are – have said they are going to do and are doing under Made in China 2025.

But I think one of the challenges that we had when we took up the FIRRMA legislation, to reform the Committee on Foreign Investment, is a number of American businesses kind of acted like, well, this isn't their problem. This is, you know – and I wanted to ask, you don't think national security is your problem? And, of course, nobody would say – nobody would admit to that. But the fact is they've got fiduciary duties to shareholders and a bottom line they've got to meet. They've got to run a company. And, of course, this just adds another layer of complexity, unwelcome layer of complexity, to their ability to run their business and satisfy their shareholders.

But I think perhaps this new, as you call it, industrial policy, this – and we're just doing this – you know, this is one step at a time. But I don't see why, as Mark indicated, this wouldn't apply to 5G and some of these other areas where we're in a rivalry with China. We're going to have to figure out, you know, how to come up with the money. But it may be a win-win because we can – you know, companies can come to the United States. They can hire our workforce. They can help our economy and maintain our preeminence when it comes to national security and economically.

So maybe this is a little bit of a shift. We'll see. This is important for its own sake, even if this is the only thing we do. But it's easy to see other applications. And 5G is perhaps the most obvious one.

Senator Mark Warner: And let me just, Jim, add to what John said; a couple of other quick points.

Warner: We do have legislation that we got also into NDAA that started down the path to have a small \$750 million goal for a fund on kind of O-RAN, Open Radio Access Network, that's moved behind where Huawei's got the advantage.

But I remember – and John’s leadership on FIRRMA was important – we had a session in Austin, in a classified setting. And I remember two distinct things that came out of it, because I don’t think the American government had been very good about informing, other than large corporates, some of this challenge.

I remember one startup guy, I remember, and he was talking about his company. And I think it was in quantum. And he was saying, as we went through this whole presentation – we had ODNI and FBI and other appropriate, CIA there and stuff, and it was a young guy. But he goes, “gosh, I was wondering why the Chinese-backed venture firm was offering three times more than anybody else.”

And then another one, that was a college president, said, “oh, my gosh, you’re saying some of these students are – could be spying for China? I thought when you – when the American government gave them a student visa that you’ve done a full security check on them.”

And it was – and I think, you know, so we have to do a better job of informing. And I actually think most of American industry – and I’ve seen a dramatic change over the last few years – starting to get the one area – and I know there may be some on the call or line here who will be offended at this – private equity has been the one sector of our economy that I don’t think has wanted to hear this story, because so much of them have made such incredibly valuable investment in some of these Chinese tech companies that they don’t want to hear the other half of the story.

And I think we’re – I don’t know about you, John – John is higher in the food chain than I am – but my caucus is calling me and saying they’re going to close the vote if I don’t go vote on this last bill.

Senator John Cornyn: I’m getting the same indication.

James Andrew Lewis: So we’re technically – we’ve got about 10 minutes. Let me see if there are any questions from the –

Senator Mark Warner: I actually –

James Andrew Lewis: You’ve got to run.

Senator Mark Warner: I can run and come back if – you know, I don’t know if you want to –

James Do you want me to give it a try?
Andrew
Lewis:

Senator I'll run –
Mark
Warner:

Senator Mark, why don't you go vote and come back, and then I'll go vote.
John
Cornyn:

Senator Yes –
Mark
Warner:

James That sounds great, because we did get – we actually got a question from a VC and
Andrew from one of the big chip companies. So we'll come back to that.
Lewis:

But let me – let me start by asking you, Senator, now that he's gone – (laughter) – what were the sticky points in the bill? Because I think this is a precedent in many ways. It's certainly groundbreaking. Where were the sticky points?

Senator Well, I would say, you know, how to pay for it remains a sticking point. And we've
John tried to come up with a way to provide a tax incentive. You know, obviously, a lot of
Cornyn: states use various incentives to attract investment in their states, but the federal government, by and large we've sort of viewed that as crossing a line and figured, well, if the economics didn't work out well enough for the business, then, you know, why would we subsidize that. But again, this is where the national security interest is preeminent.

And I just think, again, I'll come back to my earlier statement. I think – I think the pandemic has awakened a lot of us to our vulnerabilities. And it's – can you imagine if for some reason we weren't able to import these high-end semiconductors what would happen to some of our biggest companies, things like Apple and others, just to mention one, but even more importantly than that what it would do to our technological advantage when it comes to our weapons systems and our – and our national defense. That's always been our comparative advantage, is in technology front. But it's easy to see if China can't steal it, then they are going to – they're going to out-invest and, ultimately, bypass us. And so this has been a – is the culmination of things happening which caused this realization that we really I don't think have any other choice.

And I think it's a – it is a precedent. We're still at the early stages of it, but I wouldn't be surprised to see it applied in other areas as well.

James That's great.

Andrew

Lewis: Let me combine two questions we got from – one from one of the big chipmakers and one from the Semiconductor Industry Association. They both asked something kind of similar. What are the biggest obstacles to getting this bill across the finish line? That's one question. What can they do to help? And in particular, how can they help you reinsert the funding levels you had when we first saw this bill? So how can they help you get this to the finish line at the right level?

Senator It's only a – it's just a question of money. It's pretty easy.

John

Cornyn:

James Yeah.

Andrew

Lewis:

Senator And to be honest, what we – the way we tried to do this is to move it as quickly as we could using moving legislative vehicles. And thankfully, Senator Inhofe, chairman of the Armed Services Committee, Jack Reed, the ranking member, were willing to work with us because they saw the national security implications. But because of the web of jurisdictions – different jurisdictional – of committees in the – in the Senate, we really didn't have time to get this all done now. And really there would have been, perhaps, some – even some jurisdictional objections to doing all of this in the NDAA. But we know that we are going to pass another COVID bill in the next two-and-a-half weeks, and we looked at this – you know, how can we break it down, break it in two, and get it in – the rest of it done in that bill.

So what people can do to help is to continue to advocate for funding that will allow this to be successful. And you know, if we don't get it all done at one time, we'll come back and do some more later. But this does seem like an unusually opportune time to be able to get the funding done either through the tax credit or through funds that were available as a result of the appropriations Congress has already passed for the COVID-19 response.

James Welcome back, Senator Warner.

Andrew

Lewis: Thank you, Senator Cornyn.

The question that Senator Cornyn was answering was –

Senator John, they're flipping out on the – OK, great. Sorry. (Laughs.)

Mark

Warner:

James There he goes, yeah. (Laughs.)

Andrew

Lewis: What are the biggest obstacles? How can industry help you get it across the finish line? What can they do to help you get the funding levels back up to what they were before? So it's fairly basic stuff.

Senator Thanks, Jim.

Mark

Warner:

I think, you know, as John was saying, a lot of the reasons we don't get stuff done up here is many times actually less about Democrat-Republic and more about committee jurisdictions, as you know. And so there are moments on must-pass bills, like NDAA or COVID, where, you know, regular order might never get us there. I think this is one of those times. And we have alignment. We have alignment with the administration. You know, we've got – (inaudible) – the Democratic leader – (inaudible) – we got the, you know, former whip. You know, we kind of got the right players aligned.

And I think we need to bump these numbers up. I think there will be the normal – you know, the idea Mnuchin has of using already-appropriated funds if we can't get the tax credit is – I think is a valid one, because – and I say this with great affection for my friends who are appropriators – but they are kind of like the third party and the third leg of the stool. And, you know, this size number as a new initiative would probably never go through a traditional appropriations process. Again, why COVID or an NDAA makes sense.

I would also make the pitch – and we got some of this in, frankly, without enough money on 5G and O-RAN, you know. I would argue – and, again, I'm a little bit biased as a former telecom guy – that the 5G competition is as important as the – you know, as the semiconductor competition. And, you know, we don't even have an American horse in that fight at this point – you know, basically Huawei, Nokia, Ericsson, and Samsung. But if we move towards a more software-based system with O-RAN, you know, American companies and other Western companies can compete, and it's more secure. So, you know, we're looking at about a billion and a half where we both have this domestic fund and international collaboration fund. Smaller numbers, but we need help on that as well.

And I think we really are going to need industry to be actively engaged, you know, kind of across the technology menu front. And because, you know, I firmly believe that we will have similar – and they're not – you know, semiconductors and telecom are – both are anchored by, you know, single large, usually, entities. But we could have the same issue in AI, and quantum, and, again, so many of these other areas. And we're going to – we're going to really need shoulder to the wheel, and we're going to – you know, back to the earlier point, we're going to need industry to have skin in the game. The idea that we're just going to write checks on this and then say, go forth and prosper, it isn't going to be the case.

And we're not going to want to micromanage by any means, but we are going to want to make sure, you know, industrial policy is called industrial policy because it means you're advancing the interest of a nation-state. And in this case it may not just be – and this is one of the things I'm excited about – not just an American industrial policy but, again, this coalition of the willing idea around a suite of technologies.

James
Andrew
Lewis:

Yeah. I think it's seen as pushing some of that. And we have a little program like that too.

You touched on something that there was another – we’re getting questions from the audience now – someone else raised from an investment group. What do you think the role of foreign companies should be, friendly foreign companies, in this industrial policy and strengthening U.S. and key industries? And this touches on 5G as well.

Senator Mark Warner: I think – yeah, I think there is an absolutely critical role. You know, this is not an American-only enterprise. This needs to be a – you know, again, coalition of the willing. And even in the semiconductor world, we’re talking about TSMC as kind of the anchor tenet coming across, in addition to our great American companies. So we went through this recently on the – in the COVID debate in terms of, you know, who was going to benefit or not, when we were looking at some of the business support systems. And I’m a big believer that if, you know, it’s a Germany company, if it’s a Indian company, if it’s a Korean company, you know, as long as they’re going to play by our rules, and we’re going to have rules in the law that, you know, we cannot do this – you know, I am not – I am not a build a wall kind of guy around our economy.

So I think there’s an incredibly important role. Now, it’s a lot more – you know, one of the things, as we were talking about on 5G, you know, if we thought about a series of governments investment in a Western-based competitor to Huawei, which has been – you know, I think there are stories kicked around about that for a while. You know, the complexity of that is made more difficult. But I don’t think you can rule anything out because, I mean, I just keep coming back to my initial comment.

If, in most of these areas, the Chinese domestic market alone is going to equate to between 20 and 30 percent of the growth in the world market, and if you figure there’s always going to be a Chinese champion starting with that much heft, and just the profit margin that comes out of the Chinese domestic market. And then you have a government that’s willing to spend, you know, with very few limits, and they’re willing to use their industrial policy and economic aid, you know, it really is a 21st – the Chinese are doing a 21st century version of what the British did in the 19th century and probably we did post-World War II, in terms of semi-economic imperialism. But they’ve held it to a new level.

James Andrew Lewis: Well, we’re coming close to the end of our time. And I think I’ve hit most of the questions from the audience, at least all the ones I can get. Let me close with a final one that hopefully won’t be too long to answer for you. And if Senator Cornyn makes it back, I don’t think he will. But some people talk about a new Cold War with China. Do you think this is Cold War? Why is it different?

Senator Mark Warner: My hope is that it does not default to – you know, I have enormous respect for China, for the Chinese people, for their innovation. And I also think, you know, the – for their actual thirst for democracy. And I think we see that play out right now with the people of Hong Kong. So that would be the worst default position.

But to simply – and I would argue that this was a bit of the pattern under both President Bush and President Obama. We were so anxious for this collaboration that we turned a – we continued to turn a blind eye to where there was intellectual property theft or there was cybersecurity theft. I mean, the fact that we have, you know, on published reports, not from my – I mean, not from anything I would say, but

from published reports, the fact that evidence of, you know, China hacking into OPM or the host of other Chinese hacks. And almost arguably for years China and Russia were able to punch us with impunity because we feared, you know, cyber escalation.

So I think there has been this recognition that – and it's not just in America; I think it is around the world, exacerbated by COVID – that, you know – we want China to be an active participant in the world economy. They are a much bigger participant economically than the Soviet Union ever was. But the idea that they can pick and choose which set of rules they want to follow when it's convenient to them and when they want to not even any more pay lip service to any notions of, you know, privacy or democracy, intellectual property having independent value, they just can't play that – that is not a fair – that is not a fair way to operate. And this is where, again, I think there is such an opportunity.

And where I've been disappointed so much with the Trump administration, there was this moment in time when I think the world would so welcome strong American values-based alliance in this field of technology development. And while I think there's conflict in the administration, some in the administration reject that kind of multilateral cooperation when I actually think it is the future for our country and for the world.

James Great. Thank you. Great answer.
Andrew

Lewis: We've come to the end of our time. Let me note that we will make a recording of this interview – this discussion available. As I told Senator Warner before, that usually means we'll get a good turnout in China, but it'll be in 12 hours. Something to look forward to.

Senator Cornyn sends his regrets. He says thank you.

But let me thank both of you. You're two of my favorite senators and you've done great work with this bill. So thank you very much for this event.

Senator Well, Jim, thank you, and thanks to CSIS.
Mark
Warner:

James Thank you.
Andrew
Lewis:

Senator These kind of discussions are so important. Thank you so much.
Mark
Warner:

James Thank you, and goodbye to everyone.
Andrew
Lewis: