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GLOBAL FACTOR: POLICY IMPLICATIONS FROM THE EMERGENCE OF GLOBAL VALUE CHAINS

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P R O C E E D I N G S

MR. TALVI: Okay, good morning. Thank you very much for joining us today. First of all, I would like to express my very deep appreciation to our co-hosts today, the Integration and Trade Sector of the Inter-American Development Bank and very especially to my very good friend and colleague, Antoni Estevadeordal. I don't think this event would have been possible without his support. I also wish to express my appreciation to the panelists, who really made an effort to be here in a very busy week.

I wanted to read to you one paragraph from a very recent article in *The Economist* that says, "When Apple launched the iPhone in 2007, it deployed a state-of-the art global supply chain. Although the pioneering smartphone was designed in America and sold first to consumers there, it arrived in stores from Shenzhen, China. It had been assembled there by Foxconn International from parts made by two firms in Singapore, six in Taiwan, and two in America. Since then, competition in smartphones has intensified thanks to lower-cost rivals such as China's Xiomi.

Now, before we (inaudible) about it, actually, we need to do away with any simplistic analysis of where economic clout lies. In a study last year by the Asian Development Bank found that out of $2 billion of iPhone exports from China, only $73 million of their value was actually added in China."

So today, we are going to be discussing a process that has been three decades in the making that brought about a dramatic change in how firms organize their production processes. They have become increasingly fractionalized into various stages and geographically dispersed plants across the globe in what are known as global value change. And, therefore, this shift toward global value change or synchronized factories as the book edited by Juan Bleid, the very nicely calls, has raised very key and very important questions that we hope to discuss today with the very knowledgeable panel that we have.

For example, how do global value chains affect global trade governance exercised by the WTO? How do global value chains impact the way in which countries formulate their trade integration agendas? How do global value change affect the way we actually measure trade and trade flows? And how do global value chains impact the way we see development and macro policy, among other possible subjects.

So we have a spectacular panel. I mean, the whole world is represented here and a host of institutions: The WTO, the OECD, the Asian Development Bank, the Inter-America Development Bank, and the panel will be moderated by our own Joshua Meltzer, a Fellow at the Global Economy and Development Program.

So Josh, with no further adieu, I'll give you the panel. Thank you very much.

MR. MELTZER: All right, thank you, Ernesto. I'm just going to be brief so we can get into the panel. We have got a lot to talk about today. So, actually, what I'll do is I will introduce the panelists. The panelists are then going to speak for approximately eight to ten minutes. We will have then a moderated discussion up here for a bit, and then we'll open it up to Q&A from the audience.

Let me start with this end of the panel and work my way down. The first panelist is Shang-Jin Wei, who is the Chief Economist and Director General of Economic Research and Regional Cooperation Department of the Asian Development Bank. He's the chief spokesman at the ADB on economic and development trends and leads their Economic and Research Department which publishes, amongst other things, their flagship knowledge products.

Before joining the ADB, Mr. Wei was the N.T. Wang Chair and Director of the Chazen Institute of International Business at Columbia University, and Director of the NBER's working group on the Chinese economy. Prior to Columbia University, he was an Assistant Director and Chief of Division at the IMF. And in 2004 was IMF Chief of Mission to Myanmar. And before that he was Assistant and Associate Professor at Harvard.

Bob Koopman is the Chief Economist and Director, I actually switched sides here, but I'm going to start with -- sorry. I'll go with Raed Safadi, sorry, I had this mixed up, is the Director of, Deputy Director of Trade and Agriculture at the OECD where his work includes supporting the G22 and B20 trade agendas on global value chains . Prior to this, he was a Chief Economist for the government of Dubia where he was responsible for redefining the economic pillar in Dubia's Strategic Plan 2015 and took a key role in helping Emirates navigate the 2009 global economic crisis.

Bob Koopman, Chief Economist and Director of Economic Research and the Statistics Division of the WTO. At the WTO, Bob provides the secretary of the member countries with analysis and information on trade and trade policies role in economic growth and development.

Prior to the WTO, Bob was the Director of Operations and Chief Operating Officer at the United States International Trade Commission where he oversaw the Commissions trade policy research and negotiation assistance on range of issues such as (inaudible) duties and intellectual property investigations. He also served as Chief Economist and Director of the Commission's Office of Economics, and prior to that was at the USDA.

And to my immediate left is Juan Blide who is currently lead economist at the Trade and Integration Sector of the Inter-American Development Bank. At the bank, Juan's area of research is on Trade and (inaudible) productivity, (inaudible) costs and international value chains. And prior to the ADB, Juan worked as an economist at the Congressional Economic and Financial Advisory Office of Venezuela.

I'd like to start. We're going to actually start the panel and then sort of work our way down. So I'd like to ask Juan to start his presentation. Thanks.

MR. BLIDE Thanks Joshua. We'd like to start by expressing apologies from Antoni Estevadeordal, who was supposed to come here. He really wanted to be here but he had to attend to some unexpected urgent matters.

So I'm going to base my initial talks on the prospects of Latin American countries to participate in international global value chains. And I think that I will start by mentioning why we think it is important for Latin American countries to participate in global value chains. Why do we think this topic of global value chains is important for the region.

And if we think about it in terms of development, I will say there are at least two reasons why this topic is particularly important.

The first reason is related to the potential to diversify production. As Ernesto was mentioning, many groups that in the past were produced in just one country from start to finish, and usually developed countries, those groups nowadays are produced in, the production of those groups is spread in plants around the globe, including many plants in developing countries.

So this increasing international fragmentation of production is opening opportunities for production and trade to many developing countries that they didn't have before. So this is obviously an opportunity to diversify production. And this issue is particularly important for Latin American countries. As many of you probably know, Latin American countries (inaudible)) is particularly small. So this is an opportunity to expand that.

The second reason why we think this topic is important for the region has to do with the potential gains in productivity. It has been shown (inaudible) that participation in global value chains can be associated with transfers of technology from these global values, these firms that are formenting production can actually do their suppliers in other countries. And that can ultimately translate into gains in efficiency and ultimately gains in productivity.

And again, this is an issue that is important for Latin America because, as well all know, Latin American countries tend to grow less than other regions in the world and the main reason why they grow less is because of this lower productivity growth. So anything that helps us understand better how to improve productivity is welcome in Latin America.

So this at least in terms of the element why within this topic is particularly important to better understand how Latin America can address this problem.

So (inaudible) we start analyzing this topic, the first thing we wanted to do really was to see really how much Latin American countries participate in global value chains. There were a lot of stories, but mainly there were many key stories, but not really a lot of systematic area of how much Latin American countries participate.

So we produced a set of, a battery of many different indicators or proxies of participation in global value change. And, you know, long story short, is that most of these proxies will tell us a singular story. Will support this general perception that Latin American countries do not participate much in these international supply chains relative to regions like Asia or the OECD.

So once you are confronted with these areas, then the question is why. What is what factors are limiting firms in Latin America to participate more in these international supply chains. And when you think about factors, you can probably group factors in terms of two different factors. Factors are related to the domestic agenda of each country. That means factors, countries can work on those factors without having to wait for cooperation with other countries. They can just do it on their own. And there are obviously other factors that are related to the international agenda.

So because of the time, let me just mention a couple of things, a couple examples. In terms of the domestic agenda, we think that one factor that is very important is the role of logistics and transportation infrastructure. The general argument here is that these global values, these firms that are fragmenting production internationally, they tend to prefer, they tend to prefer and use suppliers that are in locations with good logistics and infrastructure because that will minimize any delay or any disruption in the (inaudible) they are going to be using in their own production process.

Now, we know that the quality of the logistics and transportation infrastructure in Latin America is on average lower than other regions so we wanted to know how much that impacted participation in global value chains. So we have some evidence that we can discuss later if you want that true, if Latin American improved, for instance, the quality of the poor infrastructure, the airport infrastructure, or the telecommunications infrastructure, that could lead to an increase in, for example, foreign direct investment associated to global value chains of around 20 percent which we think is a significant number. So that's one factor that is particularly important in terms of the domestic agenda.

Let me move to the international agenda. And in the international agenda, I think that one issue that is obviously relevant is the issue of regional integration. I think we all know that multinational system will be the one who will achieve the largest efficiency gains in terms of (inaudible), but we cannot deny the concept of pursuing regional integration agreements.

Now, here there is evidence that countries that share trade agreements will share more international production linkages than countries that do not share trade agreements. And the (inaudible) seem to that the impact is larger if those agreements go beyond the simply utilization of the tariff, simple lowering of the tariff, and will go and incorporate all the disciplines that seem to be important for GVCs like, for example, investment rules, utilization of train services, the harmonization of custom procedures, et cetera. So this seems to be an import.

Now, we know that Latin America doesn't have a mega regional deep integration agreement. Doesn't even have a major regional shallow integration agreement. The integration in Latin America has proceeded in small blocks. You have (inaudible), you have (inaudible), you have Central America, and Mexico, et cetera.

That creates another challenge for the region, a challenge to develop regional value chains in Latin America. And the challenge is that you have several different agreements that have rules that are not necessarily compatible with each other. That makes limitations in the way that the value change can be created in the region. So that's the famous problem of the (inaudible). So if the region wants to move forward into trying to develop value chains at least a continental scale, they will have to address this issue of (inaudible), the issue of the convergence. We are talking here about the convergence of trade agreements.

So these are a couple of examples in the agenda. What I think that is clear is that there is no one, unique factor that (inaudible) participation. France and Latin America, too, participate in global value chains. There are many different factors and I just mentioned a couple of them. So that means that there is not a magic bullet in terms of policies. There is not like they GVC policy. If (inaudible) want to participate more, wants their firms to participate more in this international supply chain, they will have to see this as a set of complimentary polices in order to move forward.

I think I will leave it like that for now.

MR. KOOPMAN: Thanks Joshua and Ernesto. We appreciate the opportunity to come and try to contribute positively to this panel. You know, being at the WTO and dealing with global value chains, particularly when you see that there are very strong regional value chains, at the same time, there are extensive discussions going on regional integration agreements, there's often a question, you know, GVCs and the WTO, and the question, I think, the Brookings folks put together is how do GVCs affect global governments exercised by the WTO, and I think I would argue that the WTO helps create a set of common rules , improve certainty around factors important to GVC development, as well as lowering tariffs and other trade costs. And low tariffs and trade costs are very important in this global fragmentation, understanding that. So I think GVCs in general provide a pretty strong rationale for many of the things that the World Trade Organization is supposed to provide on a multilateral basis. So these multilateral rules and commitments turn out to be pretty darn important.

Now, GVC's require clear, transparent rules. They also lack certainty. So to go into a little bit more about how WTO agreements can help with that, Bound Tariffs help provide certainty, okay, so that's a pretty clear and obvious area. Dispute resolution, mechanisms, commitments in the services and investment in intellectual property areas all help articular a set of principles or rules that provide some global governance to operations in global value chains.

Most recently, the Trade Facilitation Agreement, which is very much focused on trying to reduce trade costs, helps significantly and it's focused very precisely on lowering non tariff border-related costs, all of which we know are very important from a large number of research efforts on important attributes and contributors to the development of global value chains.

So we have this nice, multilateral foundation, but we also have a number of regional preferential trade agreements under negotiation that tend to go beyond that and that, I think, is because many of the firms that participate in global value chains want even more certainty, more clarity, than the multilateral agreements provide at this point.

But many elements in some of these deeper regional integration agreements are potentially multilateralizable. So commitments on standards and some regulatory coherence, investment, tend to be things that you can't apply on a discriminatory basis. So we tend to see some of those things as helping at the multilateral level even if they're not negotiated at the World Trade Organization.

Now, another very important aspect is the role that the WTO has in transparency and monitoring. So countries have a responsibility to report changes in trade policy under certain aspects of the WTO agreements, and we regularly provide trade, let's see, what is it, that TPRM, Trade Policy Review Mechanism, where countries come in and we do an in-depth assessment of the trade policy environment for those countries, all of which allows other countries to ask questions about the operating environment, the commercial environment that they have questions about in terms of the country under review, and it allows the country under review to make a case as to what it says or what it thinks it's doing with its trade policies.

This kind of transparency and monitoring, as I indicated, I think is very important to global value change because if you're going to integrate into the global economy, if you're going to get FDI, if you're going to get these investments, and if you're going to join those supply chains, this notion of transparency and certainty are extraordinarily important.

Now, I want to talk about one last aspect here. And that's GVCs and economic growth. There's been, and Raed and I have had a number of discussions about this with some of our colleagues at the World Bank and IMF, and there's a big debate right now that the relationship between trade growth and GDP growth has slowed down.

For a number of years, we saw what some people refer to as the trade elasticity. The rate of growth of trade to GDP was well above two. Trade tended to grow about twice as fast as GDP, and it slowed down recently. And a lot of the questions surround whether or not this is cyclical, related to sort of broader macroeconomic factors, or is it structural And a big part of that focus is, is it the fact that maybe GVCs are starting to slow down or peter out?

And we tend to be a little bit sanguine about that. You know, we're less concerned about how much trade grows as we are about making sure that trade continues to positively contribute to growth, and that what trade does occur, it occurs as frictionlessly and as natural as possible.

So China moving up the value chain and importing less imported parts and components because they've developed the capabilities to produce them domestically is just a fine thing. But it does affect the global value chain. Traditional trade data doesn't necessarily allow you to track this as well as GVC data does. So the OECD-WTO TIVA database can provide very significant and deep insights as to the operation, the transparency and the monitoring of global Trade and how it affects economic growth.

So this is an area that I think needs more attention. There is right now a very significant concern about a new mediocre and there's interest to trying to figure out how trade can positively contribute to that. And if you look at trade from gross trade flows, you don't necessarily know just based on gross trade flows how much of that is actually value- added generated in an economy. The TIVA database allows you to do that and it allows you look at the distribution of trades growth to various economies.

I'm sorry, I do have one last point. And this will be my last point. Global value chains are actually an extension of something called domestic value chains. You know, Juan, you were talking about sort of the domestic aspects global value chains. And often I, you know, I'm at the World Trade Organization. I care a lot about a trade. But I think it's pretty important to realize that coming across the border with foreign direct investment and helping to contribute to a country's economic growth from across the border is one way to do it. But recognizing that creating an ecosystem where you develop a strong domestic value chain that's consistent with international rules so that you can dock very well with a global value chain is likely to generate more economic growth than what you get out of a global value chain.

Now, this is not a new insight. But referring to structural reform and domestic policy reform from the concept of a domestic value chain brings about a consistency in how we look at international and domestic behavior. And my old organization, the USITC, has looked at this kind of question from the U.S. perspective and did some, found some very interesting insights there about how smaller, medium-size enterprises in the United States actually export more indirectly by being part of a domestic value chain for multinationals and large firms. The small medium-size enterprises don't necessarily know that they are producing output that's dependent on the global marketplace, but they are dependent indirectly through the larger firms' trade.

So understanding this notion of domestic and global value chains and their complementarity, and having a general set of principles that apply allowing domestic, their own domestic authority, right, each country wants to have its own ability to set its rules and regulations, but making sure that those rules and regulations are at least in some way consistent with global rules then allows you to integrate and tap into external demand more efficiently and effectively.

And I'll close there. Thank you, Joshua.

MR. SAFADI: Thank you. So Bob already alluded to the OECD-WTO TIVA, Trade and Value Added Database. And for us it was very clear. To understand this increasing fragmentation of world productions across sites, across the world, we needed first to measure it before we analyze and then come up with the policy implications.

So that was a major effort by two organizations, the OECD and the WTO, to put together this database. And we started actually looking behind those figures. Ernesto just mentioned, for example, the Apple products in China, and how much domestic value added of these Chinese exports to the United States of just Apple products. And it's a very, very small value added at the domestic level in China.

So what are the implications of such trends or such fragmentation? The first one is, for those of you who paid attention to the China example, is the imbalance story. And it's an important story to tell. So if you look at the gross value added bilateral trade between the U.S. and China, for example, you will find a large discrepancy, large deficit of the United States vis-a-vis China. If you look at the value added components and not the gross statistics, those gross value or the deficit goes down by 30 percent if you take our measure. And if you take Chinese measure, it goes down by 55 percent. That's important at least from a policy perspective in terms of trying to find the right response to the right set of measures.

A second trade policy implication, actually, and straightforward policy implication, Juan alluded to this regional aspect. Now, think about it. No matter how deep those regional integration arrangements go into in terms of standards at the border, behind the border, mutual recognition or what have you, they risk to leave some important countries, who are important in terms of a value chain of some sectors, outside this regional integration.

So even bad regional integration agreements in terms of their concepts and how you go about doing them, it is important to take another look lest you leave some important countries outside those RTAs and end up in a trade divergent type of a thing.

Think about also the trade disputes. What do they mean, the (inaudible) in a world dominated by value chains rather than, you know, gross? There was a very famous case in 2008 and '09 of EU imports of shoes from a certain country. So that ended up with (inaudible) duties against the origin or the supposed origin of those shoes.

It turned out that 70 percent of the value added of those shoes originated in the EU. So impose (inaudible) duty on yourself at the end of it. 70 percent (inaudible), right? That's an important aspect. So you need actually to first, as I said, measure it, then make sure that whatever policy follows actually responds to the underlying problem.

Managing economic shocks. When you look what happened in 2009, all of a sudden, and Bob alluded to this trade growth business, what happened is that in certain regions trade collapsed by 30 percent in the first quarter 2009 with ripple effects across the globe because of this global value chain business. And that is an important aspect to keep in mind.

Now, what happened afterwards is that recovery was, if you look at how countries recovered following the crisis, we found out that those who were open, more open to trade were the ones who recovered fastest from this collapse. So these are critical policy implications that you need to think of.

Now, what does it mean also at the domestic level? Think about it. Today, what does an export promotion policy mean in reality? In reality, it's an import promotion, too. For you to export, you need to import. And that is a clear and important policy implication. Between 30 and 60 percent of G20 countries, exports are intermediate imports. 48 percent of manufacturing exports are services exports, services embedded in manufacturing at the global level. These are statistics from the TIVA database.

What does it mean? What does it means in terms of your competitiveness? Competitiveness of any foreign country? The service sector reform and efficiency is critical to not only services exports and services trade, but also for manufacturing. That is a clear message.

Now imagine, imagine even your garden variety tariffs and non tariff barriers at the border, what do they mean? When an Apple or an iPhone product actually cross China at least eight times between Korea, China, Korea, China, Japan where they add in Japan the Rare Earth business and then back to China, then off to another country, at least seven different times a typical Apple products crosses the Chinese border. Imagine that every time you pay tariffs on this.

So even small low tariffs when you add them up, cumulatively they can rise to a prohibitive level of tax. So that tells you a lot about the importance of tariffs. You know, just your standard, you know, when we thought about, if you looked at the research before this global value chain business, you all would say, will start by saying now average tariffs are low. They're 4 to 5 percent. But they accumulate them, you can get into 35 to 45 percent. So back to the area of Euro (inaudible).

So another thing, and Juan alluded to, is the trade facilitation, what he called logistic which is part of a trade facilitation business. So trade facilitation means what? I mean, everyday an import or an exports gets delayed at the border, means, it means something to your competitiveness. And, therefore, you need actually to streamline those procedures, and you need to take a really good look at what happens so that you will become part of this regional or global value chain.

And let's not forget the services story. The services story is where all the action is. So an industrial policy of today is actually a services industrial policy. And so competitiveness when you think about it, 48 percent of your manufacturing exports are services. So how much of a targeted industry support level or protection level would matter if any one of your services activities, be they logistics, transport, Euro banking insurance, you name it, storage, all these services activities that go into the manufacturing of goods lack efficiencies or trade on the efficiency front. It's a critical aspect of the story.

Now, package it all up. That's a trade policy scenario. What is critical in this whole discussion, and what has become apparent, and what Ernesto and everyone else on the panel this morning said, you're no longer doing a product from A to Z. You're putting part. So now what we're talking about is not trading cars, or trading electronics, but trading tasks. So a task of producing something from imported imports, which is what we call backward integration, processing a bit, adding value, domestic value, sending it to stage number two or number three in another country where another value added, domestic value added, is put in, and then off it does.

So we were able in this TIVA database to go all the way to seven stages and we want to go further. Not only do we want to do that just to get the value added and the trade component. We want to know the investment component. Now, what does it mean we go back to China because Ernesto started with the China example. So if you go back to China and you say, okay, those $73 million worth of exports, the domestic component of those exports of Apple products, who owns them?

Foxconn did it, but who owns the technology? Who is the foreign investor there? How much of the value went to profits? How much of this went to wages? We want to know. And who owns this wealth, intellectual assets or whatever else, and then the profits and whether the profit stays within China or the profits is repatriated to the mother company.

And, of course, if you look at it globally, 95 percent of global trade of this regional global value chains, is conducted by the multinational enterprises.

And this is why, you know, the G20 now is talking about, oh, this is an (inaudible) , right, the transparency issue, the governance issue at the global level, but one thing that has been missing from this action is that the MNEs rest their trade, their production, their production and their trade rests on what, the SME, right, sector., the small medium enterprises.

So the small medium enterprises if you look at them, and we're now trying to actually get the numbers before we start telling anecdotes and stories, how much forward linkages or indirect export, if you will, that they engage in. So mostly you see that their domestic operation of those SMEs but, in fact, these SMEs are responsible for a large chunk of the exports of the MNEs because they feed into the MNEs, and we want to know what those shares are and how much of the internationalization story SME's have.

It is a critical aspect because this is where in some countries in Asia, and we get to hear about it, 80 percent, 80 to 85 percent of the employment is actually the MNE sector. So if you want to talk about trade, to talk about the development, job creation, you want to talk about the policies of the SMEs.

Finally, because I'm told that I have one minutes, think about this global value chain and the policy behind them, it is imperative that you think the whole of supply chain policy package rather than just what I just talked to you, told you told today, the trade policy aspects. There are development aspects. There are aspects cutting across the investment front, the competition front, the IPR front. You name it, it's a developing story. It's not just a trade story.

Thank you very much.

MR.WEI: Good morning. Since people at the back cannot see me so I thought I will stand up. At least you have some (inaudible). I thank the organizers for including me at this panel. I want to add one line since we are (inaudible) to my bio, which is that I was once a Senior Fellow at Brookings Institution holding an endowed chair called New Century Chair in International Economy and Trade. That New Century chair was endowed by a company that's a leading company in global value chain, Toyota Company, Farmer Country, that's one of the major participants from a regional and global value chains, Japan.

And this morning I want to share five thoughts with you. Number one. If you look around the world that there's a very uneven degree of participation in regional and global value chains. By regional value chains, we are talking about the production of a product or service or widget that crosses multiple and national borders. But different countries have very different degree of participation. So Japan, Korea, China, countries in northeast Asia, tend to be major participants in value chain, cross border value chains. Many of the South Asian countries are also in that category, including Singapore, Thailand, and so on.

North America, the United States, Canada, and to some degree Mexico are very heavily involved in regional global value chains. I'm not sure that Europe are very integrated in their ways, too, but there are other countries that are integrated in much less (inaudible) way. Countries in, many countries in South Asia and many countries in Central Asia, for example, and Africa are much less integrated. So there's very big variations in the degree of deepness or shallowness in participation in global value chains. That's first point.

Second point. The degree of participation in global value chains do seem to be very well linked to the extent a country is able to expand its output and job equation that you see strong positive association between these two. The (inaudible) (inaudible) ,, exact causality, additional research need to be pursued. Certainly, when we see that countries that are deeply integrated in either regional or global value chains also tend to grow a bit faster in terms of its DEP, a bit better at creating jobs relative to their peers. In that sense, that probably supports why many, most government (inaudible) that they want to help their firms to be even deeper integrated into regional or global value chains.

Number three. At the same time, you know, it's also worth thinking about could global value chains or regional value chains carry risk. At one particular (inaudible) potential (inaudible) risk, spread of negative shocks of recession and financial shocks by one country to the other through value change.

A concrete example of this, since I started (inaudible) when, the question about when nuclear accident took, happened in Japan, many of the factories around (inaudible) were shut down and people just discovered to some surprise that some of the key inputs, ingredients to global (inaudible) found they're using in Japan, including a particular pigment, or a particular paint, apparently, globally, not just Toyota, but Toyota's Japanese rivals and it's American rivals also used a particular ingredient from the particular part of Japan. So for a few months, globally, you cannot buy, there are no new cars with that particular color for a while. I mean, this is a illustration of the possibility that when you have, especially when you split production stages across national borders, you could also increase vulnerability through shocks far away from you. And because the production stages are so spread out, you don't, you may not even realize where each of the ingredients ultimately comes from. So that's a potential danger. My colleagues at Asian Development Bank looked into how serious this danger is and we concluded that as of now there's no current and no strong evidence that global value chain exacerbates those kind of contingent risks so much that we need to worry about this. Point number one.

Point number two. To the extent there maybe vulnerability associated with dependent on (inaudible) , this could also create opportunities. I previously just said that there's uneven participation in global value chains and many countries in Central Asia and South Asia say they want to be better (inaudible) in regional global value chain so I don't know where to start.

Now, the concern about potential vulnerability with existing chains together with some other concerns like rising labor cost and traditional strong participant in global value chains like China has motivated or incentivized global firms to look for alternative (inaudible), you might want to have multiple chains to be with a bit more robustness or resilience to this.

I used to teach an executive MBA class for Columbia Business School. You see the evolutions of companies we visit and talk to. I'm talking about every country has, every company to have a China (inaudible). Now talk about China (inaudible) motivated by multiple considerations, but one of which is you don't want to have just one chain of intermediate supplies tied to one particular region potentially making yourself too vulnerable to shocks from that one source.

So, in other words, the flip side of that potential vulnerability could also provide opportunities to firms and countries that have so far not been a major participant in global value chains but wish to do so.

Point number four. Once we think about regional global value chains, it could alter our understanding of many thing we might have taken for granted for too long. For example, in this particular city, there has been a long tradition of being obsessed with U.S./China bilateral treaty. That U.S. has too big deficits and have too large a trader surplus. We're on the inside from the global value chain research (inaudible) by people here and others in (inaudible) is to point out point out that you look at trade balance in value added terms. It turns out Chinese surplus against U.S. is much, much smaller than you would think you look at gross trade.

So the confusion behind what I just said is this. Why Chinese gross exports relative to imports seems to be this much bigger. What is the number, roughly? $55 billion?

SPEAKER: (inaudible)

MR. WEI: The gross (inaudible).

SPEAKER: (off mic).

MR. WEI: Okay. All right. All right. So we, you know, some of us really know the number, have to know the number. But let's see (inaudible). What has been pointed out, of course, much of the Chinese exports to U.S. I think is a very good example of this, in fact, are indirect exports coming from Japan, for supply components of smartphones, or auto parts, or others, electronics, and Korea, and Singapore (inaudible). So actually, what it show up on the U.S. data is imports from China. In fact, they are imports of value added from many other countries in Asia.

In contrast, most of the U.S. exports to China truly represent U.S. value added. U.S. exports have much higher domestic value added content. Once you do the adjustment, you will discover that the true bilateral trade in value added term is much smaller than in gross trade terms. And one, and, too, you also discover behind (inaudible) that there's a network of production chains, regional or global, behind it. So that's one example of things that we might have taken under, (inaudible) may have taken for granted, but potentially would ask for new thinking once you think from a global and regional value chain point of view.

The second example is about a (inaudible) . Let me start with example. I've been to many forums sponsored by investment banks. People often were surprised by the fact that in the last year and a half Japanese Yen has depreciated so much. Yet Japanese exports didn't increase as much as previous experience would have suggested. People thought, you know traditionally the way Japanese economy recovery by promoting exports.

And one way to promote exports in Japan's own history was to engineer large Yen depreciation. Now, their part is done. The Yen has depreciated a lot. Japanese exports, on the other hand, didn't rebound very much. There was considered a puzzle. But one possible solution to that puzzle, in fact, is the regional global value chain idea. Nowadays, much of the Japanese exports of value added have to be done indirectly by being bundled, for example, with Chinese value added through factories located in China.

What's noteworthy in that context is in the last few years, Chinese currency has been appreciating very strongly. Chinese country is one of the very few currencies that has been appreciated against U.S. Dollar and, therefore, against most other countries China trades with. And interestingly, in contract with the (inaudible) that this Chinese currency appreciation partially offset the effect of Yen depreciation on Japans ability to export its value added.

Point number five, the last point, is about suppose countries decided they want to better (inaudible) into global or regional value chains, what can they do? So the extensive research done by people at this table and others have provided quite a few insight. Number one, it is important to keep tariff low and predictable. One of the reasons is that, a reason that Mr. Safadi mentioned, that nowadays when you spread production across multiple stages to export iPhone, so many intermediate groups have to cross borders so many times. A given level of tariff will end up having multiply itself before it shows up in the cost of the final goods. In that sense, if you want to attract factories to be willing to produce intermediate goods in your country, you really need to keep your tariff low and predictable.

Number two. More broadly, companies care not just about how much tariff it has to pay, but broadly, how much cost is to move in things in and out. This also means (inaudible), important, but also means broadly defined the logistics cost like quality of the port. The ability for a port to move along things quickly and cheaply. Ability for roads and a railway system to be able to transport goods, intermediate goods and final goods, between factories in a port and other cities., do this cheaply and quickly, will be a key determinant of how a way the country can be successful and partake in the global value chains.

One of the reasons why China has managed to change itself from one of the most closed economies in 1980 to be one of the leading participants in global value chains has a lot to do with its infrastructure progress. Nowadays, everyone now is familiar with the fact, I guess, they travel between New York and D.C. often, that four-hour train if it were in China would have been 40-minutes train. That's an extreme example of the now the difference in the quality of the infrastructure. But all of these were new things, but the quality of the infrastructure and to translate into much lower cost for moving people and goods into (inaudible) enhancing the competitiveness of all the firms in the country, and enhancing the ability of such a country to be a leader in global value chains.

And number three, you know, wanting to insure other (inaudible) will now be become hidden barriers to trade.

Finally, let me conclude the things, you know, these are things country can do, but multinational firms, multinational organizations can also help. The Asian Development Bank is a think-and-do tank so our research arm, of course, think about issue we're talking about, but our other parts of the bank directly involved in helping country to build better infrastructure, better roads, ports, more reliable energy supplies so that firms in those countries can be more competitive participants in global value chains. We also help with trade facilitation, cross border trade facilitations. They all move in that direction. Thank you very much. Let me share this (inaudible) first. Thank you.

MR. MELTZER Thank you. I think we had some excellent presentation there and there's a lot to talk about. I want to pick up on a couple of points that a couple of the panelists made which is this issue about the indirect participation in global value chains and particularly how SMEs are participating through their supplies to MNC's and their engagement being in the global economy.

And what I want to do is talk a little bit about, firstly, the opportunities that there might be for SMEs to participate directly within global value chains not necessarily through their domestic supplies to MMCs. In this context, talk a little about the role of the internet here and the opportunities this might be providing SMEs to participate in global value chains.

And when you answer this question, talk also a little bit more about services. Raed talked about the certification, also the manufacturing sector and the global services more broadly in global value chains and the way that (inaudible) can enable this.

Whoever wants to start.

MR. SAFADI Sorry, I missed what were you saying?

MR. MELTZER: I'll go ahead and --

MR. SAFADI: Okay. Sorry.

MR. KOOPMAN So, you know, the internet provides great opportunities for SMEs to participate, but trade costs are often a challenge for them so the internet can get them noticed and access to the global marketplace, but you still have to worry about, you have to worry about paying customs expenses. They have to know about rules and regulations for various exports. There's been some very good work done based on I think data from eBay and PayPal, and maybe one other on very, very micro detailed transactions data that seems to suggest that things like the internet provide a great opportunity for SMEs.

I often in a internet search looking for a particular product will end up at sort of aggregator sites in China where suppliers for products are looking to connect with, perhaps, purchasers, although those tend to be intermediate kinds of goods. It is a great opportunity. I don't think it's a magic bullet. I don't think it's pixie dust. I don't think it fixes things, but it does help SMEs to access global demand. But there are still significant trade costs. Maybe it helps more with final demand for final goods than it does necessarily help with intermediates and components. But maybe Shang-Jin knows more.

Let me do ask since Shang-Jin, put me on the spot. And I used glue and went to an OECD publication and in 2009 the gross deficit, U.S. deficit return was $190 billion. And the TIVA deficit or the value added deficit was about $125 billion. So --

MR. SAFADI: Sorry, I didn't know that you were actually going for the panel. So on the SME business, right, if you look at the, behind the borders measures, the standards, the regulation or what you call the regulatory interventions, you realize, you know, without even measuring it and we find now to measure their participation, right, this and this, that such measures fall disproportionately, their costs falls disproportionately higher on SMEs than on MNEs.

Hence, their ability to actually deal with all the different standards across countries, be they health standards, technical barriers, technical standards, what have you, right, they have for them vis-a-vis, relative to any multinational corporations their higher costs. And that needs to be looked into.

Now, what is the solution? First, let's find out what the regulations are. If you look at the services sector, any profession or any service delivery, you have two issues to think about. First, the market access (inaudible) and I as a service provider can I first enter this market. I enter the market and then what are the conditions imposed on me as a foreigner to be able to operate in this market.

This is a huge task for an SME. Huge task. And, therefore, they, today, we say, well, they're not internationalize. But hold on a minute. We have no such, no evidence to support that because, as I said, where are these MNEs manufacturing and either outsourcing their inputs, be they goods or services from the local SMEs? We want to know what the, those linkages, and what has been termed within the literature as the indirect exports.

Now, is there anything virtuous about exporting versus sourcing to or selling to a domestic firm? I don't know. Are there higher profit margins to be had? Now, what you think of is the technology transfer, whether they're playing with a local MNE or a cross border MNE? Do they actually acquire higher knowledge, higher technical capacity that they import? And these are the questions that, you know, it's all anecdotal.

And certainly for those economies amongst us, the SME business, we don't have a theory about those SMEs. For me now within the G20 of this year the biggest question for Turkey is how to help SMEs participate more fully into global value chains. The assumption, the automatic assumption is that they are not participating which is highly disputed, at least I would dispute it, to whom are these guys selling. Right? And they're selling to these SMEs and I want to find out. Now, I want to measure this.

Access to finance. Everyone has a problem with access to finance. What do we proposed from a policy perspective? That we lower the financial requirements, or that we help countries tap into international financial, or SMEs tap into international financial markets in a much more straightforward way, as the multinational corporation can actually tap the Euro Dollar, whatever financial markets are there in the world?

These are the types of questions that we want to ask, especially if the origin of tasks comes from a policymaker telling you I went an initiative with the G20, who are meeting this week here in Washington, to try and promote better participation of SMEs in GVCs. A lot of acronyms today, sorry about that, but this is actually -- no, and then someone added the L.C., which is Low Income Countries in GvCs.

MR. JIN: On E-Commerce and Small Median Enterprises, let me say three things. Number one, E-Commerce is increasingly a great force for good for SMEs.

Therefore, indirectly also a great force, potentially, a great force for (inaudible) reduction and inclusive growth in general. Let me give an example. So one of the largest Chinese companies listed in U.S. this year was Alibaba. How many of you have heard about Alibaba? How many of you have never heard about Alibaba?

MR. SAFARI: Not the Ali Baba, the flying king?

MR. JIN: Not the fairy tale, but E-Commerce company. The largest E-Commerce company in China. So what does the Alibaba do for SMEs? So they are (inaudible) in Fujin, tea growers that previously you have to sell tea growers to a monopoly intermediary firm for a very low price. The middleman a mostly (inaudible) but even for local (inaudible). They buy from small size tea growers and the sell to the cities. Most of the profit will go to the middleman. Tea farmers will not have very much.

Now, one of the problems for small firms is actually marketing your product, you are small firm, to ultimate consumers, is extremely expensive on a per kilogram of stuff you sell. Right? E-Commerce helps to solve that problem. It can now be not very costly to see up a virtual shop on Alibaba. And many tea farmers now they do this. And you have, you can (inaudible) so they will say try m tea. If it don't work, send it back to me. You don't have to pay me until you like it. People become very entrepreneurial. They can try various things. Now, they just see lot of newly wealthy farmers who became wealthy by making good use of the new opportunities created by E-Commerce. So that's a very (inaudible)

Similarly, we have seen suitcase makers in (inaudible) Province, (inaudible) , people decided to try, someone had skill in making baskets or suitcases so they discovered there's a market and they can now greatly reduce the cost of marketing, cost of marketing, cost of reaching customers by opening up shops on Alibaba. So these are very concrete examples of things that small firms get helped by internet companies. Point number one.

Point number two. For them to be fully taking advantage of the new opportunities offered by E-Commerce, E-Commerce is not enough. You need other complimentary inputs. For example, you want it for the tea farmers in Fujin, suitcase makers, small suitcase makers in (inaudible) to sell successfully in Shanghai (inaudible) , Beijing, or abroad, one of the things is you have to be able to deliver your stuff, small quantity things relatively inexpensively to your customers.

So, therefore, and, I go to point now, China has so many roads and so many also highly competitive goods delivery companies that can deliver things at relatively, in my view, ridiculously low rate, but anyway, very lower rate also help the complimentary inputs, conditions that allow small firms to take advantage of E-Commerce to its full extent.

Access to finance, Mr. Safadi mentions another important input. So a typical problem, one of the problems faced by small firms, entrepreneurial firms, you have good ideas. You might have some idea that should work, except you need some investment to pay for that. Factory, hire workers, buy material. You go to a bank. You know, typical farmer doesn't really have that much access to start a business. You go to a bank to ask for a loan. Typically, it's not uniquely with China, most developing countries, bank will say no.

Why? Because the only way a classic bank is willing to make a loan is if someone has collateral. And the only thing that qualifies a collateral is something that cannot be moved: a deed to a piece of land, expensive house, factory floors, something that the startup entrepreneur, small firm entrepreneurs, often do not have that's a practical variant for someone to start a business.

Interestingly, you don't have (inaudible) in U.S. Many (inaudible), financial systems have, managed to have (inaudible) to solve their problem partially by allowing banks to treat some of the moveable assets. Raw material is collateralizeable assets. To do that, you have many, you have to be able to register moveable assets, be able to check it, having proper anti-fraud system in place, and so and so forth.

To Asian Development Bank that also works with many, ,many countries on this particular dimension to help set up registration, asset registration system to allow, to facilitate the banks to be able to take moveable assets as collateral and be willing and able to make loans to small firms. It's another complimentary that needs to be put in place in order for small firms to take advantage of that E-Commerce opportunity.

Finally, last thing is when we talk about allowing small firms to sell abroad, then you have this cross border piece. The cross border trading cost cannot be too high. Cross border you have the (inaudible) of the standards, and so on, so forth, and that will require Bob and his colleagues to further push forward on the (inaudible) negotiation side so that (inaudible) facilitation and other costs for (inaudible) together with broadband EDG and so on to make and so to make sure cross border costs for (inaudible) will be sufficiently low so that small firms can be better take advantage of the cross border (inaudible) opportunity also by E-Commerce.

MR. JUAN I think I would just mention very quickly to answer your question in terms of the Mexican example. As we know, Mexican economy participate a lot in international supply chains, but typically it has been on the (inaudible) industry which is the assembly section of the supply chain so there is a (inaudible) from the United States and then (inaudible) . So the dilemma in Mexico is typically how we can add more Mexican value to the supply chains that we already participate so that will be (inaudible) from the domestic economy which is what you're saying they're exporting already.

Now, what we have seen not only in Mexico but in other countries too is that the matching between the supplier and a buyer in a global value chain is very hard because their relationship is very specific. I mean, imagine that I'm producing an engine and I want to offshore the piston of that engine. Well, I need to find a supplier that can produce that piston with the precise characteristics that will work on the engine that will work on my engine that I'm producing.

From the point of view of suppliers, a supplier has to know what those characteristics are. The supplier has to know if he's capable adapt each production process to meet those characteristics, et cetera. So what I'm trying to say is that the amount of information that you need in order to do the matching between the buyer and supplier in a global value chain is typically much higher than the amount of information that you need in order to match between a supplier and a buyer where you're selling a commodity, for example, that the only information that is (inaudible)

So countries tend to do policies in order to facilitate this exchange of information between buyers and suppliers, for example, countries that do (inaudible). So they bring the buyer and they sit down in front of potential suppliers and explain to them what kind of relations that they expect to have with their suppliers, what kind of (inaudible) they expect to have, what kind of certification the supplier should have, what kind of shipping dossiers they have to have, et cetera.

Now, can that be done through the internet? Yes. And that's where the internet comes. I think that internet can facilitate this kind of matching between the supplier and the buyer. So internet can be used to address this issue of the information problem (inaudible) information problem.

In fact, I just do an advertisement at the bank, we have, for example, an initiative. It's called Connect America, which is precisely a website where you have matching between buyers and suppliers. (inaudible), but it's an example of something that internet can do in order to eliminate or at least reduce this information problem.

MR. MELTZER; Thanks. With the remaining time, I think let's open it up to Q&A from the audience. I think we've got a microphone. If you want to ask a question, raise your hand, please. Introduce yourself, please. Make sure that you end with a question mark with questions. You can ask them to the panel specifically or generally. I think we've got one here to start with.

MR. CHANG Thank you very much, the panel. Kevin Chang . I'm from the IMF and actually we've been working on very similar issues that GVC and, in fact, in two weeks on May the 27th, the Asia Department of the IMF will release the Asia (inaudible). And Chapter 2, myself and my coauthor are working on piece of GVC and how GVC, how Asian can utilize GVC and benefit more. And one particular issue that we're g looking to there is how GVC alter the response to the change rate on the competitiveness.

So I want to ask the panels opinion on that. Basically, you see in a GVC, as some of the panelist mentioned, it changes like the relationship. For example, you put like tariff. You're not tariffing your trading partners competitors. You're also tariffing on yourself. Similarly, in exchange rate, you import also the export. So when you depreciate or when you appreciate that might have a different impact on the (inaudible) and that's what we are doing. And I want to hear the panelists' expert opinion first.

MR MELTZER: I'm just going to collect a couple more questions. One at the front here and one at the back there.

SPEAKER: Hi, I'm (inaudible) from SISE I have question for Juan Blide. You talked about the Mexican example and I wanted to know like what you think if Mexico should target like an expansion to other markets rather than the United States one, or like adding more value added to the American market.

MR. MELTZER: Thank you, sir. I think there is one gentleman somewhere, yeah, just with the, yeah.

MR. ALLEN: Hi. My name is Allen. I'm also a second year student at SISE and in the context of developing countries, especially those which are exporters of natural resources, I wonder how they can engage in global value chains given that their currency appreciates or their price of tradeables goes up. Thank you.

MR. MELTZER: Okay. Thanks.

MR. JUAN: I can say something about the tariff issues that Kenny raised. I think that it’s also related to what Rob said about exporting promotion (inaudible). I just want to mention one particular example that we saw in the book. This is a thing from Sweden that produced high-end shoes and that firm wanted to offshore one part of the shoe to a firm in Argentina. The Argentina firm knew it could produce one subcomponent of that part but not the entire component. Not the entire part.
And they couldn’t find another supplier in Argentina that could produce the other subcomponent but they found one in Brazil. And then they used the one in Brazil to produce the entire part and then ship it to the Swedish firm. If there would have been a tariff between Brazil and Argentina on that particular part, then that part would not have been competitive for the firm to be able to stay with the Swedish buyer.

So that’s just one complete example of that. You know, sometimes we want to protect our economies from competition, but we are harming them because this producer is already supplementing whatever they need to do and they finding (inaudible) knowing they’re (inaudible) in other countries so they’re using input from other countries in other to complement their own (inaudible) because normally they don’t have a complete set of (inaudible). So I just want to mention that.

Now, the issue for the Mexican example, I think, well, you raise the issue of Mexico trying to integrate only, we already know that Mexico is already trying to integrate with other countries in the region. For example, we have a Pacific Alliance, et cetera And I will put that, I will answer your question in the context of what a nation before the problem of all these trade agreements that Mexico has two or three agreements, for example.

And so, and let's see what happened. For example, Mexico, I want to give you a complete example. Mexico signed three trade agreements (inaudible). American, one with Nicaragua , one with Honduras, and one with Triangle of (inaudible) , which is El Salvador, with (inaudible) and a third country.

So, sorry, so what that means, but these trade agreements didn't talk to each other. So (inaudible) practices that a firm in Costa Rico producing chocolates, they could produce the chocolates and sell it to Mexico without having to pay tariff. But if they use (inaudible) pays from Honduras to produce that chocolates, they will have to pay tariff if they sell it to Mexico. Something that seems odd because they got (inaudible) from Honduras, they don't have to pay tariffs in Mexico because they have a trade agreement between Honduras and Mexico, too.

The thing is that these trade agreements didn't talk to each other so that fragmented the facility just to do a global (inaudible) between these countries. This guy understood his problems and in 2011, they did what is called accumulation of rule of origins. Basically, what it does, (inaudible) a firm in Costa Rico can use this (inaudible) pays from Honduras and sell the chocolate to Mexico without having to pay tariff in Mexico. That's what, where the issue of the convergence of trade agreements should look like so you will be able to source your (inaudible) wherever the (inaudible) are more competitive not only in the domestic example.

And the last question about natural resources, yes, what we saw were cases that were very interesting because they, I'm gonna give you an example of a firm in Brazil that was producing coffee in the commodity market. I mean, this was like a low quality coffee. This firm is called Aterra . Aterra was producing this low quality coffee and, of course, the price of this, of the coffee is (inaudible) so it goes up and down.

Now, what happened? This firm managed to enter into the supply chain of Ilicafe (phonetic 22:05), Ili is an Italian company that produce coffee. High quality, differentiated coffee. So what happened is that the price of the high quality differentiated coffee doesn't change that much as the low quality. So the firm was able to (inaudible) this evolution through the cycle of their commodity price by inserting Serafina (inaudible) value chain. How they do it? Well, you know, he managed to do it because of the help of Illy Cafe. So it's a long story. But what I'm trying to say is that I guess the one benefit of inserting yourself in international supply chains that if you do that, for example, if you move from the commodity market to the same industry but a high end, differentiated segment of that particular industry, you might be able to escape the natural resource course, I guess.

MR. MELTZER: Any of the other panelists want to join in? Please. And keep it, just keep the remarks brief because we're running out of time.

MR. SAFADI: Just very quickly on Mexico. I mean, if you look at Mexico's gross trade of flat screen, the flat screen t.v., it's the number one in the world. (inaudible) in terms of gross value. Right. In terms of value added, it's less than 6 percent of this. What does that mean? And if you look, you think Mexico has the NAFTA Agreement. They're in the Pacific Alliance. They have a regional integration agreement with a lot of WTO members except for one maybe, Israel.

So does that tell you that it is actually the market access component or is the domestic component that is, the domestic competitiveness that is lacking and where you have to actually raise the level of performance and efficiency? Look at what's happening now, the opportunities, if you're thinking about diversifying markets. You have the TTI, the Trade and, no, no, the TTIP between the United States and the , yeah, Trade and Investment Partnership, TTIPs. Jet lag. Sorry. So TTIP. So, therefore, like within Mexico is a NAFTA, so produces loses its origin once it enters the U.S. and then it can enter into the euro market.

What's the challenge for Mexico? The challenge is to raise its game, it's efficiency so that it will be able to benefit from this and rather than be left out. Of course, Mexico may have teething problems at the beginning of this agreement, but that's in terms of the global environment and regional environment everything is set for it to actually move forward. The problem is, again, its competitiveness at domestic level. And if you look at the service sector, this is where a lot of action needs to be taken, a lot of reforms need to be taken, especially in the transport sector, the domestic distribution sector.

Shang-Jin mentioned the critical importance of a good infrastructure in terms of moving goods in and out quickly and what have you.

So the responsibility, first and foremost, rests within Mexico to (inaudible) its game.

MR. MELTZER: Thirty seconds.

MR. WEI: Kevin Chang's question on global value chain. I don't know. Have you come across my paper with Ju Wang and Nikel Patel ? It's NBR (inaudible) last year. It's called *Global Value Chains in and* Country *Sector Level Exchange Rates* so it lays down a framework about how one can rederive (inaudible) exchange rate take into account both domestic outsourcing and international offshoring so that existing IMF, DIS, Central Banks calculation would be a special case of this. And it's also generalized beyond the two IMF work on this.

SPEAKER: (inaudible) .

MR. WEI: Okay.

SPEAKER: (inaudible)

MR.WEI: Right. Exactly. So we have bunch of formulas like this. On what can exporters and natural resources do to, in order to be better (inaudible) in global value chains, I will add the following remark to what my colleagues, co-panelists have said, which is exactly (inaudible) point out, normally when you are so abundant with natural resources you find it's very hard to develop your manufacturing sector to be competitive. So Brazil has been complaining about this for a long time. Many countries in Central Asia that are exporters of natural gas and oil have faced the same problem. They say we want to diversity. We don't know how to diversify. How can we do that?

Well, when commodity prices are high, exchange rates tend to be high. Domestic manufacturing sectors tend to be not very competitive. That same logic would imply nowadays global commodity prices are so low it may present a good opportunity if you use it well. I mean, it sounds like a bad thing to you if you're commodity exporters, but could be turned to a good thing if you use the opportunity and pressure now that exchange are lower.

Kazakhstan is a leading oil exporters. It's exchange has depreciated by something like 50 percent. And, therefore, suddenly, domestic manufacturing sector can be made more competitive if you choose to do that. So I want to add that note to this question.

MR. MELTZER: Thanks. And, unfortunately, we've run out of time. I think this conversation could continue. Clearly, this a very interesting and important topic and it's only going to get more so over time. I just want to thank the panelists for their presentation. Thank everyone for coming along.

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