

THE BROOKINGS INSTITUTION

NATIONAL PRESS CLUB

A CONVERSATION WITH AGUSTÍN CARSTENS, GOVERNOR OF THE BANK OF MEXICO

WASHINGTON, D.C.

THURSDAY, APRIL 20, 2017

PARTICIPANTS:

Introduction and moderator:

DAVID WESSEL
Director, Hutchins Center on Fiscal and Monetary Policy
Senior Fellow, Economic Studies
The Brookings Institution

Remarks:

AGUSTÍN CARSTENS
Governor
Bank of Mexico

* * * * *

PROCEEDINGS

MR. WESSEL: Good morning, thank you all for coming and finding your way through the rabbit warren of getting to this building on such a rainy day. We're glad to have you.

I'm David Wessel director of the Hutchins Center on fiscal and monetary policy of Brookings. Our mission is to improve the quality of fiscal and monetary policy and public understanding of it. We do not propose to be graded on performance, just on effort. And we take no responsibility for either the fiscal the monetary policy of the United States government.

But we're extremely glad to have with us Augustín Carstens, who's the governor of the Bank of Mexico, for at least three reasons. One is that Mexico is, in case you haven't noticed, a pretty big place: 120 million people, third largest trading partner after China and Canada for the U.S., sends 80 percent of its exports to the United States, a huge source of people for the United States, and a relationship that has waxed and waned over the years but is central to the functioning of our North American economy and our political freedom. Governor Carstens has an extraordinarily interesting and long resume which I will not read.

He first went to work at the Bank of Mexico when he was 22 years old. He later earned a Ph.D. at the University of Chicago where as a former Little League star he played first base and was a pitcher. He became a fan of the Chicago Cubs, so, congratulations. It was a long wait but it was worth it. Governor Carstens has been among other things an executive director at the IMF, deputy finance minister of Mexico, deputy managing director the IMF, minister of finance in Mexico, chairman of the World Bank-IMF development committee, governor of the Bank of Mexico, one of the finalists for the job of managing director of the IMF when Dominique Strauss-Kahn resigned, and is currently chairman of the international monetary and financial committee of the high level oversight of the IMF. So we're glad to have him as a representative as Mexico has one of the world's leading and most accomplished economic technocrats. Unlike some other people in Washington we see value in technocrats. But third, his jobs in Mexico's been a bit of a challenge and that's prevented or delayed Governor Carstens from taking up his next role, an important one, as general manager of the Bank for International Settlements, a group really -- it's a place where the 60 leading central bankers of the world get together six times a year and have an unusual ability to have dialogue and to coordinate on international financial and economic issues without all the hoopla of the IMF and World Bank meetings, but perhaps more impact. Governor Carstens was supposed to go there on October 1st but Mexico suffered what the governor's called a hurricane. That

would be Hurricane Donald and that's led -- he was so important to Mexico's stability that he's delayed his departure until December 1st. The governor is going to speak for some time and he has some slides which we've posted on our website as well. There are people watching online and we welcome them as well. After the governor speaks I'm going to ask him some questions on stage and then we'll have time for questions for all of you.

So with that, Governor Carstens, welcome.

GOV. CARSTENS: Well thank you, David, very much, for first of all for having invited me to this event. It's great to be here in an event organized by the Hutchins Center on Fiscal and Monetary Policy at Brookings. Of course and thank you all of you for being here today.

I would say that during the last several years, the discussion or the debate on monetary policy has centered, and I think rightly so, on the monetary policies applied by advanced economies. I mean the term that they have been pursuing, "unconventional monetary policies," it's the use of the word unconventional tells everything you know that it's a real limitation for all of us to get dragged into that debate. And of course that was the right thing to do by my colleagues because of the situation that the world faced after the global financial crisis really required a very decisive action by central banks.

So for a while the emerging markets we have been sort of boring territory in terms of monetary policy. By and large we all have been able to keep conventional and hopefully we can continue doing that. But that has not been a good -- that has implied that there are not important challenges present. And that some important debates have been appearing and many of them have to do so with the influence of the rest of the world economy, to the impact on emerging markets, and how should we respond from our own national perspective.

Let me move to this slide. I would say that what most emerging markets do -- not all, of course, but most -- as a monetary framework a basically we follow what's well known. Its inflation targeting schemes pretty much they all have the same characteristics. The key issue here is basically to say this is my inflation target. Don't ask me a lot. How will we get there? I will get there. And of course the real challenge is to build the credibility for markets to believe that you will get there and you'll gain credibility through your actions and delivering.

And this has also been combined and it has basically worked with pretty much floating exchange rate regimes. And here basically the idea with the floating exchange rate regime is that in principle you

have money monetary independence. So basically the exchange rate is there to a more than anything absorb shocks, no? Therefore the real exchange rate becomes a very efficient shock absorber. And this works well when it is backed by your consistent macroeconomic framework and a very important part of the macro framework is, of course, monetary policy and monetary policy therefore is sort of, is anchoring the nominal variables to through inflation targeting. Now from this combination of inflation targeting, and a free-floating exchange rate, many researchers and observers have come to the conclusion that central banks by and large should not mind so much the development of exchange rates. Exchange rates, as I say they are floating exchange rate should be pretty much have a role of shock absorber. Therefore most movement in the exchange rate should be in relative price changes, in that sense a once-and-for-all adjustment in relative prices. And of course you will not fall into what is inflation, which is a generalized and sustained increase in prices.

But things are not as simple as that. I mean we would hope that that would be that that would be the case. I would say under normal conditions it works that way, but in the world we cannot say that we're living under normal conditions. As I said at the outset there has been a lot of unconventional monetary policies out there that have spillover effects into the rest of the economy. It obviously affects capital flows and so on. That affects exchange rate dynamics and therefore it also affects the considerations that go into making a credible inflation targeting regime. Therefore, I mean, some researchers I would say have said, well if you mind too much the exchange rate dynamics operating under the inflation targeting regime you can be coming to an exchange rate targeter. And I think that is taking it too far. You still can remain and I would say most central banks remain being an inflation targeter. If the movement in the exchange rate is an important component into the price formation of your economy you have to take into account the dynamics of the exchange rate. Some others say, well if you mind too much the exchange rate, it might be that you're suffering from a syndrome which they have called the fear of free-fall, which means that you know the exchange rate moves a little bit you might be expecting a real cataclysm. But that's also not the case. The argument goes from the line that if you respond too much to the exchange rate through monetary policy, that might mean that your inflation targeting regime is not credible enough. Which I don't think is right. As a matter of fact at some point you have to react to exchange rate movements to make your inflation target regime credible.

You know, at the end of the day the exchange rate measures the relative value of your currency. And if you don't mind the value of your currency, it's also a very, very difficult not to incur inflation. I mean there are some large advanced economies that they have gained through the years a lot of credibility. They have very particular circumstances that many emerging markets do not share, and that that allows them to pretty much disregard the impact of the exchange rate on their monetary policy making. But for most emerging markets that's not the case. Mostly because we have also, many of us, come from situations where we were subject for many years after the Bretton Woods arrangement of fixed exchange rate regimes and most of us have made the transition to flexible exchange rate regime in a way that not always have been easy or has been smooth. And therefore I think that this is a very important difference between an advanced and emerging market economies.

So let me sort of go through the recent experience of Mexico, just to show why the exchange rate plays an important role in monetary policymaking. Without this meaning that through an inflation targeting regime is not credible and at the same time without this mean that you are in exchange rate targeter. And I also would say that this is an important debate because I would say by and large for many of the last years, the unconventional monetary policies have plagued by advanced economies in a broad sense have implied a tailwind for emerging markets in the sense of the search for ideal capital allocation. I mean precisely due to very low interest rates in the advanced economies have provided a lot of support to our exchange rates and in that way has also helped us keep inflation low.

But this might change in the future. I mean, this is not news for any of us in this room. And therefore the changing in that environment will be very important in the years to come for the advanced – sorry, for emerging market economies.

Now in this chart I present to you the history of Mexico, a recent history. Our inflation target is 3 percent. And I will focus in the last from 2014 on. As you see especially at the end of 2014, we have an important deviation. Let me be precise – it's three percent plus or minus 1 percent. But what is important is that inflation declined substantially during '15. And then it started creeping up and now it's really high, it's way above the ceiling of our interval.

What has caught the attention of many analysts is the fact that we started raising interest rates when our inflation was pretty much at its lowest point, at least in the chart that I'm presenting. And that was in December of 2015. And that was when the Fed started increasing interest rates. So here's where

the Banco de México was criticized. Why are you increasing interest rates when you have the lowest inflation? Now of course, something that we know is that monetary policy doesn't have an immediate impact on inflation, and therefore you have to take into account the lag in which monetary policy operates. And therefore you have to anticipate yourself and precisely what you're trying to do is to anchor expectations.

So basically the fact that the inflation has moved out of our interval has been the result of two major issues. One is the behavior of gasoline prices, which in Mexico they have a very important weight in our CPI. And the other is the behavior of the nominal exchange rate.

Let me very quickly mention a comment about gasoline prices. For many, many years, or pretty much for their recent history in Mexico gasoline prices were controlled by the government. That generates all types of problems from the point of view that it can deviate from international prices. In particular, you can see that during 2016, the fact that gasoline prices were fixed or even fall a little bit, that helped us with inflation. Deviating substantially from international prices. So there was some form of repressed inflation. And finally in January of this year, as part of all the structural reforms that Mexico has been conducting, the Mexican government decided to finally liberalize the price of gas. So of course there was a convergence to the relevant international preference that clearly said once and for all, sure. And therefore that should not effect in the medium term the dynamics of inflation. Basically we have to treat it as a relative price change. It's not a generalized increase in prices. Pretty much our roll at the central bank is to prevent precisely that relative price change to be generalized. That I think has been achieved to a large extent; I will show you because you can see very clearly in the behavior of inflation expectations.

Now you can see also that the peso has been depreciating quite a bit and this obviously has been more dramatic since the result of the U.S. election. Of course there also has been a very important correction. So there is a sense of that there was an overshooting after the result of the U.S. election was known. But it's important for us to go very briefly to what determined the movement of the peso. And here I should have marked this better in the graph. I apologize for this.

Basically we have three main periods. One is the one that started at the end of 2014, which basically is when the price of oil went from above \$100 to \$40 per barrel. So that was a very important shock; that's termed a trade shock. That is again basically there the real exchange rate has to depreciate

when the trade worsens and therefore again monetary policy should sort of let it happen because it should not generate a generalized increase in prices. And that's pretty much what we did.

Then the second important period I would say is the one at the end of 2015, early 2016. There we had two shocks at the same time. First was a very sharp decrease in the price of oil, which went all the way down to \$18 a barrel. Of course that starts having some impact on a on the fiscal side. It requires a very important fiscal adjustment. But also sort of diluted some of the animal spirits of the excitement about something that Mexico has been trying very hard to get which was energy reform. And at the same time the Fed started a normalization of its monetary policy. Even though it was very well handled, there was plenty of forward guidance that started to generate some portfolio adjustments. And at that time precisely, the combination of having some form of repressed inflation through gasoline, with the price of oil falling and at the same time with capital adjustments due to the increase in the federal funds rate we decided that it was important for Banco de México to send the signal that we heard about the value of our currency and that that was consistent with keeping nominal stability in the economy.

For the third period, is the one that I would say started pretty much at the meat of last year, which was when the election process was at full speed in the U.S. and where there was of course the fear about a result that could distort in an important way the bilateral relationship between the U.S. and Mexico. And given that the U.S. is the destination of 50 percent of our exports that had the potential of affecting the Mexican economy. Once the result was known, as you can see in the chart, there was a very sharp depreciation. The peso went from 18.60, around 18.70, to around 22 pesos and now we're back at 18.70 as of a few minutes ago here. Eric can tell us where the peso is; Eric is from Bloomberg.

So I mean basically there is a sense that there was an overshooting. Of course Banco de México responded to that, and more than anything not to anchor the exchange rate but to anchor inflationary expectations.

So let me then go looking forward. Why the exchange rate is still important, especially keeping in mind that to conduct monetary policy, you have to react to the pressures that will come sometime in the future, precisely because of the lag in the transmission of monetary policy for it to work through the economy and that the affects the dynamics of inflation.

In this chart basically we show what expectations have been doing and we have expectations of four different periods in time. We have the expectations for the end of 2017 and that's in the green line. From 2018 is the black line. Then we have for the next three to eight years and then we have the long-term expectations which are basically derived from markets, which is making the difference between CPI index bonds and 10 year bonds and adjust through the inflation premium. And here you can see that basically we have a whopping expectations. Because the long term expectations are in Banco de México's range; they're not quite at 3 percent, but certainly are in the area of between 3 and 4 percent. You see a slight upward trend both in the long term, in the three to eight years into 2018. But by and large I think that we have been successful in stabilizing inflation expectations.

Now of course it's important to see what is happening in 2017 and this can be seen here. Here basically what we do is through surveys we ask analysts what is the inflation expectations for the next 12 months. So it's sort of rolling inflation expectations. And you can see here very clearly and that expectations jumped quite dramatically in December -- in January, sorry -- when the gasoline price increases was known by the market. But then you'll see that at the beginning of next year, there is also a very sharp decrease in inflationary expectations. So basically that means that the market really is thinking that this was once and for all adjustment and that subsequently it will not affect the dynamics of inflation. And that is very important for us because it tells us that it's a real relative price change and the market by and large expects that not to contaminate the rest of price formation in Mexico.

But then the other thing that is a little bit more -- well, it's an additional consideration that we have to take is that we see how the expectations for 2017 how they increased from October to December. And there is the U.S. election that there is the behavior of the exchange rate. And then you'll see that for 2018 the expectation is 3.82. That's the figure there. So that means that the market is expecting for the gasoline price to basically vanish from the inflation dynamics. But still there is something there where they don't feel quite comfortable that will lead us to the convergence to 3 percent, which is a basically our objective.

So let's go through the main determinants of inflation and see forward if they're giving off signals that there might be some more inflationary pressures. Obviously a very important a very important determinant inflation is the balance between observed and potential growth. And here basically we show that we will have probably slightly negative output gap. Therefore it's very unlikely that we will be facing

inflationary pressures through aggregate demand. So that's not probably something that we should not probably worry that much right now.

Then the other factor of this that has been very important through time is the price of oil. The price of oil of course has fallen dramatically and it has recovered. There is a lot of volatility. Something that is quite remarkable is the forward curve is quite flat. Now the oil price basically works through the Mexican economy and it can induce inflationary pressures if there is a feel that the fiscal position would be weakened or if it might generate pressures in the current account.

Now something that is also quite remarkable is that the fiscal authority has made a very important fiscal adjustment. In this chart you see how for this year a quite sizable primary surplus is expected, and also for 2018. So it's a first time from 2009 to 2016 where we're moving back to primary surplus. Also this implies that public debt as a share of GDP will also start falling this year. So my sense is that fiscal policy and concerns about the fiscal position for Mexico is not a fact that is present there.

Then you'll see the trade balance and the current account. You can decompose the trade balance between oil and non-oil. And Mexico has become the [inaudible] country in that balance because now we import more gasoline than we export. Of course that has pressured recently the current account. But the other thing which is important, and that's why the adjustment in the exchange rate is important, the decrease in the price of gas and this change in the balance between imports and exports in Mexico that requires a real [inaudible]. Why? To do what? Well precisely to promote non-oil exports, and non-oil exports really have increased. And as you can see we now have a surplus in non-oil exports and that has kept the current account deficit in line. As a matter of fact it has improved in the margin, so therefore it do precisely of allowing the market to let the exchange rate to do its work. We have managed to prevent the development of the price of oil to become a major issue in terms of generating problems in the long term or pressures in the long term in inflation.

Now let's move to another potential source, which is the capital account portfolio adjustments and how that would affect the nominal exchange rate. We all know that the Fed has started already the process of normalizing. If you graph the unemployment gap, as they have defined it, and the inflation gap, it tells you very clearly that it has started and it will continue. Markets are clearly expecting an upward adjustment in rates. So that potentially can affect the allocation of resources.

Now one of the reasons why I think for Mexico this is not an issue is that we have taken a lot of lead from the Fed. I mean if you see here how our policy rate has been adjusted in relationship with the U.S., we have moved very, very quickly. We have really adjusted our interest rate very fast on to 2016 and 2017. Basically this has meant that in a risk-adjusted basis the interest differential is such that it has become very attractive to keep resources in Mexico. And as a matter of fact this is has been one of the very important factors that has also stabilized the exchange rate, and through that also the inflation expectations. Now in the right hand side chart you'll see how interest rate differential, adjusted by risk with respect to other emerging markets, have moved quite substantially in favor of Mexican assets.

When your tightening is credible, what you expect is that the curve will basically flatten and if you increase the short term rates long term, if it really is anchoring expectations, it would remain the same or even fall. And that's what we see in this graph. The left hand side chart shows the development of rates at different levels at different maturities. You'll see very clearly that even the 10-year-rate has fallen more recently. Of course in these rates you can see the very sharp increase that they registered once there was a result known of the U.S. election.

And the other thing that is very, very interesting is that even the interest rate differential in the longer term between U.S. and Mexican assets have decreased, which means that there is quite the confidence in long term assets in Mexico, there is confidence in the anchoring of inflation in the medium and long term. This has helped the performance of the peso vis-à-vis other emerging market currencies. Of course after depreciating with respect to all the others for quite some years the peso has depreciated very, very sharply. And part of that it has been because we have kept the interest of foreign investors and local investors in our peso-denominated assets as is shown in the right hand side chart.

Now going back to the issue why inflation expectations are, for 2018 especially, are close to the top boundary of the margin that the Banco de México has defined, it's because the exchange rate expectations haven't really adjusted fully to the behavior of the market rate that we have seen. Here it's very, very interesting to see how, with respect to before the U.S. election, the peso went above the expectations of the exchange rate but, there was the belief that it was going to return. Therefore in the short term, it was expected that the markets were [inaudible], and that at some point it was going to appreciate again because from a fundamental point of view the peso was already undervalued. More recently, expectations of the exchange rate have been, I would say, far more sticky. And there is the

perception that the appreciation that we have seen might not hold. Of course that's not our expectation from the central Bank of Mexico's point of view. And I think that that's also why we have been acting through our exchange rate and also by allowing, offering some hedge opportunities through nondeliverable forwards.

But I think part of the reason is precisely because there is quite a lot of uncertainty in the market about important factors. One of these will be, how will the bilateral relationship between Mexico and the U.S. evolve? So far I think it has evolved quite favorably. I certainly expect that to continue to be the case and therefore together with the conduct of fiscal policy which has been strengthened, of monetary policy which has been strengthened, and also the efforts to reach a mutually beneficial arrangement with the U.S. we'll finally make the expectations to converge more clearly to where we consider to be an appropriate value of the peso. I mean we still believe that the peso of these level is quite undervalued and that this is not reflecting fully the fundamentals of Mexico.

So of course this is a factor that we will keep in mind in conducting monetary policy. Here in this final chart, in the more intense red areas you'll see the value of what our models are telling us, which is lower of where market expectations are. Therefore we still have a little bit of convincing to do with the market that inflation will be well-anchored. But I think that we have been taking all the all the necessary steps to anchor expectations. I think that there is a very strong commitment of Banco de México of reaching that 3 percent convergence. And we have been in this task helped by a very supportive, very strong fiscal policy plus structural reforms. And we also have seen, a, you know, a positive development in the discussions with the U.S.

So to bring this back to my starting point, my final considerations are: for an inflation targeting regime, what is very important is to anchor inflation expectations. Exchange rate dynamics as we have seen can affect inflation expectations. Therefore we cannot as central bankers disregard the dynamic of the exchange rate as you conduct monetary policy. Now the fact that you are mindful of what the exchange rate is doing doesn't mean that you don't trust your inflation targeting regime, and it also doesn't mean that we are pursuing a specific level of exchange rate. But something that the central bank signaled that the central bank has to give, and I think is consistent with anchoring inflation, is that you mind and you really pay attention to the value of your currency and there cannot be a divorce between those two variables of expected inflation and the value of your own currency.

So with this I'll finish, thank you very much.

MR. WESSEL: Thank you very much Governor Carstens. I think you provided us with a very good window into how a central banker in Mexico makes decisions and how you weigh the challenges. I couldn't help but think how remarkable it was to be sitting here in 2017 and reflecting when I was a younger reporter in Washington in 1994 and what people were saying about Mexico and how far you've come in managing fiscal and monetary policies in no small measure. I think your contribution to that is significant, so congratulations and that's the only nice thing I'm going to say from here on it in.

So you've referred a number of times to the election of Donald Trump and the tensions in the relationship. You suggested that the hurricane has kind of abated. Where are the remaining uncertainties about this? Because as you pointed out they will have a huge impact on trade and on the political climate.

GOV. CARSTENS: I mean something that had remained silent had been left in peace for 23 years was precisely NAFTA, and suddenly it has been questioned. Now it's something that has been left 23 years in peace, in 23 years of many, many things having happened, I think for sure justifies that some of the parties might say well let's take a look again at the thing that has been with us for 23 years, especially in 23 years that many things have happened.

I mean the other day I was in the audience in a debate that Carla Hills, Jaime Serra, and Wilson from Canada had about negotiating NAFTA, and Jaime Serra was saying--just to illustrate how things how much things have changed since then--that they would communicate, his team with President Salinas, through a fax machine. And so they would send the fax and they also would have to call to see if they had received the fax. So you know you can see how cumbersome communications were. Of course now you know we can communicate through e-mail some plea and so on and so forth. I mean just if you take into account the telecomm reform there has been major change. You take for example the energy sector. The energy sector was completely put aside in NAFTA.

We have now a very important player in the world economy which is China that was not there in 1993 when NAFTA was finalized. Which is China has joined WTO, joined globalization. It's a new player. So the position that Mexico has and that's why I think that in a way slowly I think that this is what is being reflected, is that we look forward to the renegotiation of NAFTA, especially because even the changes that have taken place in those 23 years in which many think as you said, you said your only kind words,

which is that a lot has changed in Mexico between '94 and today. That's why we believe that there is a win-win possibility in looking into NAFTA.

MR. WESSEL: It seems to me there's a tension between - you're suggesting that if the administration decides we're not going to tear up NAFTA but we're going to modify it, after all Mexico has already made some concessions on NAFTA as part of the ill-fated TPP negotiations. So, that's if the technocrats can negotiate modifications to NAFTA that both sides agree with, we can all live happily ever after. It seems to me there's on the other side there's the tension of the ever-present possibility that the president of the United States tweets something that disrupts things. And how do you prepare for that when you can see what effect that would have on the markets, on the peso, on the confidence in Mexico and in the bilateral relationship.

GOV. CARSTENS: Well I mean you probably are better-prepared to answer that than I do.

MR. WESSEL: I think we've learned to ignore the tweets here but I'm not sure that the financial markets or the Mexicans are there yet.

GOV. CARSTENS: I think what you have to do what you have to do is basically to look in to the trend and the trend is positive. There is a constructive engagement between the two administrations, including Canada, I would say. And I think that is what is the core and the core tells us that things are moving forward. Of course there will be tensions in the process of negotiating NAFTA. But if there is a constructive engagement as there is today, I think that that will prove to be a win-win situation both for the U.S. and Mexico.

MR. WESSEL: You spoke a little bit about the speed at which you've raised interest rates in Mexico. Three and a quarter percentage points since the beginning of 2016. The peso has returned almost to where it was before the elections in the United States. Is this, do you see the end of the tightening cycle in Mexico, are we near that?

GOV. CARSTENS: We had a sequence of adjustments that were steps of 50 basis points. More recently we decreased it 25 basis points. Now of course I cannot say what the board will do in subsequent meetings, because first, I'm one of five votes and they clearly can overrule me or overvote me.

But at the end of the day, I think that we're happy with what we have achieved, but there are still some issues that need to be taken care of. It's more I would say, the gap between where we want to be and where we are has been decreasing.

MR. WESSEL: And that's an inflation expectations and exchange rates. Because you said the output gap is pretty much [inaudible].

GOV. CARSTENS: So that certainly would play a role and we will see. I mean we are also data-dependent as many of my fellow central bankers take their decisions.

MR. WESSEL: You spoke quite a bit about the inflation target regime and I think you made the case that it's been successful for Mexico. As you know in the United States, there's occasionally some fear that setting a 2 percent inflation target, which made sense when they set it may no longer be appropriate in an era in which we expect -- to the extent that we know what to expect -- the natural rate of interest, the rate that will prevail in normal times to be very low, inflation seems to be relatively low compared to history, so there's concern the 2 percent is too low for the U.S. Do you -- what's your view on that? Do you think we've made a mistake by setting such a low inflation target?

GOV. CARSTENS: I would be very patient about taking that decision. And I'm not judging that. The 2 percent was established in thinking very long, long database going back in history and so on. Something that we economists learn in school is that after you have a very important shock many, many of the parameters in your models change. It's called the Lucas Critique. I'm from Chicago, I took classes with Robert Lucas, so I have that very clear in our mind. The U.S. has been under tremendous, has suffered a tremendous shock, and basically even going back to the terms that are used, we're in the process of normalizing. So that means that the full cycle is not over. So I think that we need to wait until the end of the cycle to see if that 2 percent is the right figure or not.

Of course the real rate of interest which really makes a difference is affected by your other factors, demographic factors, savings patterns, fiscal policy. So what I would say is I would be very prudent and probably I would wait more into, probably having a more advanced situation in this monetary policy cycle.

MR. WESSEL: That makes sense.

So the effects the spillover effects from U.S. monetary policy in emerging markets are much discussed and well-documented. We had the famous taper tantrum. I think that the Fed has tried, and Stan Fischer spoke about this yesterday, to do everything they can in communication to minimize the spillovers of unanticipated moves both in short term rates and they're clearly doing a lot of talking about the balance sheet. Do you think that they've done enough to minimize the risk with spillovers or is there still more that they could do to take emerging markets into account as they make their decisions?

GOV. CARSTENS: I'm very happy with what the Fed has been doing. As a matter of fact I recognize, I put here again, I recognize how they handled the adjustment in rates earlier this year. I think it was very well handled. And certainly it went very, very smoothly in the market. So I don't have any complaints at all.

MR. WESSEL: Wow. So there will be one set of people in Washington who are happy today that you're here. No complaints about the Federal Reserve.

You know a few years ago, and I think not so long ago, people tended to think of populism and nationalism as very much emerging market phenomena and that was clearly wrong. So I wonder if you see some risk to the global economic order, to the institutions we've built by the rise of populism and nationalism here, in the U.K., and in Europe? Do you have any sense any advice for the advanced economies about how to deal with this given the experience you've had in Mexico?

GOV. CARSTENS: What I would say is the following: after you have a very strong cataclysm, which is what we have observed in the world economy since 2008 and 2009, there are many consequences. And many consequences that probably through the whole process take some time to build up and to become apparent.

The other the other consideration I would say is that once you have a crisis in your hands, as policymakers you tend to pay attention to the urgent and probably put in second place what is important. And I think that the combination of those two factors is what has made today be a part of the reality where of course there have been some casualties from this cataclysm that has not probably been taken into account and therefore I think now with the, first with the benefit of hindsight you would say well we probably should have taken care of both of the urgent matters which is to stabilize the financial markets to apply the appropriate monetary policy to reform the financial system to, from a very macro point of view, get the economy going, to fiscal policy. But then there are some distributional effects with some impacts

on different sectors of the population that probably were not considered on a timely basis, and that now are being manifested in different markets. And that tells us very loudly that we should take care of them, but we have to take care of them in a way that a) doesn't destroy what you have achieved and second that is done in such a way that it doesn't destroy your capacity to increase potential GDP. So I mean I think that there is an assignment, a very important assignment that is there for us, for many policymakers, in many parts of the world, and that is to take care of those sectors of the population that has been affected. Of course there are many other factors that are playing into it. There is this is very, very important tendency of technological process to play a very important role in the structure of the economy. That by itself under normal conditions would be difficult to handle the resource allocations and match the capacities of the population with what the reality of the world is demanding. It is even more difficult to handle it when you are still stabilizing an economy after an economic shock.

So I think that these are warning signs that we need to take very seriously.

MR. WESSEL: So as you look ahead to taking over at the Bank for International Settlements, which has a very important role an international standard-setting, in banking and finance, you take over at a time when the rhetoric in the U.S. and in from Europe is very much, you know, very nationalistic, threatens to question the value of financial globalization. Do you see a risk to the whole process, the international cooperation on financial regulation, the Basel III stuff from this from all this, and how do you address that in the context of so much upset about the distributional consequences?

GOV. CARSTENS: I think what is very important and I think there is a lot of benefit still to be reaped, I think that there is, I mean there might be some aspects here and there, where the reforms would be fine-tuned. And actually many of them have more to do with the decisions that national authorities have taken, that are basically -- what the Basel agreements do is establish a floor. Now countries can deviate from that floor. I will tell you many of the concerns have more to do with what has been built on top of the Basel agreements. And now that this is a domestic discussion that has to take place, but by and large I think that -- we had a major crisis. We have a huge crisis and therefore adjustments to the regulatory and supervisory framework I think are necessary and responsible. I think really the final step that we need to take is just to wrap it all up. And in that way also eliminate let's put it this way the regulatory uncertainty that many intermediaries have. I think what the industry is demanding

is, just tell us what it is and we will work with it. And I think that final step is something that we haven't been able to get. And I think that that is something we should concentrate on.

MR. WESSEL: How do you sell to angry voters in France and the U.K. and the U.S. the virtues of Basel III-type coordination done by unelected officials without clear legitimacy of treaties behind closed doors? That whole approach to governance seems to be under attack. How do you explain to people why it's in their interest, which I assume you believe it is?

GOV. CARSTENS: Because in many of these countries they have seen the consequences of the crisis. Basically the industry needs to be better regulated and I think people, once you explain it to them, will understand it very, very clearly. I mean also I would say here we go back again at the populism. I think that the people on the street they don't have the capacity to say, if you ask somebody in the street what is Basel III, they don't even know where Basel is. I mean in my family when I say I'm going to Basel, they don't even know in which country it was, you know? Far less asking what the Basel II is, they look at you like what are you talking about? No I think it is a combination of all the policymaking and the capacity to generate growth and better these people to grow. But what I think is it's a real challenge that we face. But I think that what has been done in the regulatory environment has been I think it has been sensible.

Second, I think that it has a lot of merit because in the very short period of time we managed to do a huge overhaul in the regulation and supervision of the international financial system that is needed. I think we would be seen in history as tremendously irresponsible if after the magnitude of the crisis we faced, we didn't tighten bolts of the financial sector. So I think that job is done, we need to say we are done with it. Let's make the financial intermediaries do its job. And I think that also will manifest itself into better intermediation, more credit, and that will also -- the population will start feeling it because financial intermediation will help the economic activity.

MR. WESSEL: We have time for a few questions. There's a mic, think. There's a gentleman right here, if you could wait for the mic so the video can pick you up. Tell us who you are and try to keep your questions short because we only have a little bit of time.

QUESTION: Sure. Guillermo Alborta, independent consultant for the IMF, World Bank, and IDB. Going back to the issue of monetary policy and the experience of the central bank in Mexico, I would like to hear your opinion and you're probably brainstorming about currency swaps. You haven't touched the

issue in your presentation but certainly currency swaps becomes a kind of way or instrument to anchor, to take words, to anchored expectations for the exchange rates.

MR. WESSEL: Are you referring to the maneuvers that the Bank of Mexico did?

GOV. CARSTENS: I mean you mean the [inaudible] program that we offer?

QUESTION: [off-mic]

GOV. CARSTENS: Ah, I see. Well, I mean, basically we have moved in the direction of let's say enhancing our, I would say that our availability of resources, a contingent of available resources in Mexico, but we haven't gone through the avenue currency swaps with other central banks but we have been using, I would say, a very successful, a very appropriate program that the IMF is offering which is a flexible credit line. Which is basically the only program that the Fund has available where it is basically gives availability of resources to countries which are good performers. And Mexico has been a strong performer and that's why the IMF has been giving access to that instrument. That is 88 billion dollars, 85-88 depending on what the [inaudible] has been doing.

MR. WESSEL: That gentlemen over here. I think I'm going to take two or three questions and give the governor a chance to answer which one he wants.

QUESTION: So my name is Filippo [inaudible] I'm with pro-Mexico here in D.C. and I don't know how familiarize you with cryptocurrencies. But I just wanted to ask what are your thoughts on Bitcoin and all these cryptocurrencies? And the second question is if you think that the governments should regulate this kind of cryptocurrencies.

MR. WESSEL: This gentleman here.

QUESTION: Anirban-Pal, independent consultant, wanted a take out from your slide on non-oil exports. The implication was that as the Fed raises rates, the peso drops, non-oil exports would go up so it would probably be an export-led strategy. If you could compare and contrast that with further liberalization of the Mexican economy to allow foreign inflow into more sectors which would be not a non-export strategy.

MR. WESSEL: Okay do we have one more? Why don't you answer both those, Bitcoin and your export strategy?

GOV. CARSTENS: Bitcoin: I mean it's a reality. Cryptocurrencies are out there. Now for them to really work, at the end of the day, you need to have the ability to transform them into traditional

currencies. And when you do that, you really have regulate them. Financial innovation without the legal framework will not work. And I think that that's a challenge that we as a national authorities have for the near future.

And now with respect to your question, I mean in a way, the non-oil exports have recovered not as a response to the Fed policy, but what precisely it was par -- I mentioned it in the context of in terms of trade shock that we received in the oil sector. The decrease in the price of the oil is what generated the adjustment in the exchange rate and that is what has, by and large, generated the recovery of non-oil exports. So it's a real phenomenon, it's not tied to the Fed action.

MR. WESSEL: Okay with that – Harriet, do you have one last question?

QUESTION: Harriet Torry with the Wall Street Journal. I just wanted to ask him the question about the exchange rate. We saw earlier this week that the peso took quite a hit from comments that Trump made about NAFTA and you did discuss that brief in your remarks. But I was I just wanted to ask you if there are any other risks to the peso that you see ahead?

MR. WESSEL: What are the risks of the peso, other than Donald Trump?

GOV. CARSTENS: Well first of all, the peso adjustment took place in the context of a very, very sharp appreciation. It's very difficult to point out exactly what the market correction is the result of. I mean, in general we saw yesterday the price of oil fell over 2 percent. So that's a factor that contributed too. And there is some form of I would say it generalized uncertainty about for example the French elections that are this weekend. So I wouldn't point necessarily the adjustment to the comments made by President Trump. I would put more than anything that the main challenge for us and that's what we're working very hard on is -- I will finish with this: we're in a period of heightened uncertainty and what is the responsibility then of authorities including Banco de México is to a reduce the uncertainty from our side. We have to have a predictable, credible monetary policy which I think we have; we need to have a credible fiscal policy, which I think that we have, and we have to move towards stimulating the economy mostly through structural changes and the fact that the Mexican government keeps moving forward structural reforms is another very important element and that should anchor the expectations in Mexico. So that is our challenges and that reflect into a strong stable place.

MR. WESSEL: Thank you very much. Please join me in thanking the governor.

* * * * *