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### A CONVERSATION WITH ECB CHIEF ECONOMIST PHILIP LANE

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PARTICIPANTS:

### Introduction and moderator:

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### **Remarks:**

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#### PROCEEDINGS

MR. WESSEL: Good morning. I'm David Wessel. I'm director of the Hutchins Center here at Brookings. There's a lot going on in Washington this week with the meetings of the International Monetary Fund and The World Bank. But fortunately, unlike last night's presidential debate, we don't have to compete with the Washington Nationals Game.

I do want to say that in a town where every day seems to bring more doom, gloom and outrage, it was kind of a bit of joy to see the Nats win last night. So I hope we can keep that going, and maybe some of that luck will spread to Europe and you'll have an easier job, Mr. Lane.

And you all know the ECB is just 20 years' old. It's an unusual central bank, manages monetary policy for a currency shared by 19 countries, each one has its own national government, its own fiscal policy, and its own ideas about what the ECB should be doing anyhow.

There are some experts in this town, probably some in this room, who thought that the euro and the ECB was doomed to fail. I think what's clear that the ECB played a pivotal role during the global financial crisis, during the euro crisis that followed, and in trying to straighten out the European banking system, I think it's fair to say that the ECB and the euro are here to stay, but that doesn't mean that the ECB is without enormous challenges, not the least of which is, to quote a summary of its last policy meeting, "A protracted slowdown in the euro area economy, persistent downside risks, and an inflation outlook that continue to fall short of its aim of close to but below 2 percent."

So, Philip Lane's job is to fix all that. Since June he's been a member of the ECB's sixmember Executive Board, and is chief economist, which is always an important role at the ECB, that's the person who presents the monetary policy options to the full committee. It's perhaps more important now with the appointment of Christine Lagarde, a lawyer by training, as the ECB's next president.

Mr. Lane was from 2015 to 2019 governor of the Bank of Ireland, and as a member of the ECB Governing Council, its equivalent of the FOMC, and followed the distinguished career as an academic, much of it at Trinity College Dublin.

We are very pleased to welcome him to the Hutchings Center and to Brookings. He's going to speak, he has some slides, there are people watching online, so don't fall asleep. And afterwards I'll come up and ask him some questions, and invite some question from you.

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So with that, Philip Lane. (Applause)

MR. LANE: Good morning. And thank you for the invitation to speak here this morning. So, I think my plan is, in these opening remarks, is really to provide you with a compressed overview of the situation in Europe, and the monetary policy situation, and explain to you why we made the decisions we made at our last monetary policy meeting. And then after that I think it's probably more productive to see what questions you have.

So, my focus is really going to be on the conjunctural near-term situation. As David noted, that we've had a -- you know, a lot this year, of a 20-year retrospective of the longer perspective on the ECB and the euro area. And I'm also happy to talk about that in the Q&A. But here I'll say, I'm more focus on the monetary policy issue.

And essentially, of course, when we talk about monetary policy, especially when our mandate is basically price stability, the first chart to show is, well, what's happening with inflation.

And what this graph shows you is, the blue line is headline inflation, and the yellow line is its core. And essentially the grand narrative of the ECB is in the first 10 years headline inflation averaged pretty close to the targets, it hovered around 1.92

So, if you'd like, if you'd go back to tenure-year assessments of the ECB there was a high degree of satisfaction that the inflation objectives were satisfied. And of course it wouldn't be too surprising during the crisis or -- especially the second double-dip sovereign crisis in Europe that there was some downward drift in inflation. But in 2014 especially, there was gathering concern that there was a central momentum driving inflation maybe at -- towards zero or even negative.

So the big shift in ECB was in 2014 where the assessment was that the risk of deflation, the risk of too low inflation meant that the ECB had to adopt the phrase of non-conventional monetary policies. And essentially I joined, as David said, the Governing Council in 2015 maybe a-year-and-a-half after this intellectual decision was made, and 2015 through 2018, I think there was a high degree of satisfaction that essentially the strategy was working.

Given the severity of the negative shocks and so on that was definitely a patient outlook that only over time would we return to the inflation targets, but the momentum was there. We had a -inflation moved away from the zero deflationary area, moving up there to around 1 percent and with

enough momentum that our forward projections had inflation returning close to the targets.

So there was a high degree of satisfaction that the decision to adopt more accommodative monetary policies from 2014 onwards did map into more stimulus, and lower financial conditions, more rapid recovery in Europe. So, for example, unemployment which was double digits is now around 7.5. And this big recovery in the European economy, of course there are other drivers but, in part, could be attributed to the decision to make monetary policy more accommodative.

And what's happened essentially this year is there's been a reassessment of the outlook, both for output and inflation, and in response to that reassessment we decided we needed to do a recalibration of the monetary strategy to really reinforce the accommodation.

So if you like, usually we talk about the forecast which is a point estimate, but it's important also to think about risk management, and what this graph shows is what the options markets are telling us about what investors believe might be the future for inflation.

And the bottom color, I'm not really good with colors, so I'm going to call that our orange, is you can see the bottom color is the probability mass on deflation. And in 2015 that was spiking upwards, 2014/2015 spiking upwards to around 30 percent. So investors put a significant weight that Europe would go into a deflation environment.

That was then, essentially more or less eliminated by the monetary policy of the ECB. So, until quite recently the deflation risk had basically been eliminated. Now towards the end the graph you can see that it's climbing up a little bit, but the bigger story is the gigantic mass which is in the below 1.5 territory.

So, in other words, I think that the investor's assessment is we think you're going to avoid deflation, we're not so confident you're going to get inflation close to but below 2 percent. And in that kind of scenario again it's important to take that seriously because we know everywhere if inflation expectations get deanchored, if inflation expectations go too low, then there's a momentum in inflation which is undesirable.

Now let me talk about the macro situation, and what we have is a very unusual situation, it's that the blue bar shows you, if you like, the quite strong performance in 2017 essentially, and the 1016 through 2017 the European economy was growing very well.

So, so if you like, there was an assessment that maybe there was, you know, unusual temporary factors, so the fact that in 2018 the economy began to slow down, initially you could point to, well, maybe this is partly just returning to potential growth rates, maybe we can point to some one-off factors, and the worse from one-off factors like, weather shocks, some regulatory changes in the car industry, and so on.

But basically what's happened is, it looks like that slowdown is more persistent than might have been assessed a year ago, and when you have a persistent slowdown, given the lead time in monetary policy, then essentially the assessment is look, this is not -- we can't just wait and see, we've got this persistent slowdown, we need -- we need to take that into account.

But what's interesting about the slowdown is it's very sector specific, and I know it's very similar in other parts of the world, including the U.S., which is essentially a dramatic reversal in manufacturing, in industry, but basically the services sector remaining quite resilient.

That is quite unusual. Historically the correlation between manufacturing and services is really high, so if the shock driving the economy is a macro shock, like say financial conditions or other -- some other shock which is basically pervasive across the economy, these sectors will move together.

What we have right now is a shock that looks like it's disproportionately in the manufacturing sector. Now, those obvious factors behind that, we know there's a slowdown in world trade, which is mostly in manufacturing, and we know there are trade disputes in the world which basically are about manufacturing goods and agriculture.

So, we have this asymmetry and so, for example, another way we look at it is the correlations between manufacturing and services, and what this shows you is typically the correlations are really high, 0.7, 0.8, 0.9, they've basically have come down a lot. And all this is just saying, we've got a big slowdown in manufacturing, and services so far remain quite resilient.

And you can see this also in the asymmetry in the leading indicators such as PMIs, a huge reversal in manufacturing, some slowdowns in services, but more or less remaining in positive territory.

So, we think this is an interesting situation, it helps to explain why a big -- because every day you're going to read a newspaper or look online and see some negative news about manufacturing,

and with the temptation to extrapolate from manufacturing to GDP it's many times may be a good idea, but when you think about what's going on now, it's not necessarily going to be a good guide to overall GDP.

And so, when you have a pretty strong services sector, pretty strong consumption still in the economy, what we're seeing is also going to come back to inflation, is the labor market remains quite strong and actually in an increasing way.

So what this graph shows you we've inverted the unemployment to make it more -- easier to read. We've got this big improvement in unemployment from above 12 to mid-7s, and for a couple years when we saw unemployment falling we didn't see wage inflation, because essentially going from very weak to weak labor markets, doesn't create too much wage pressure.

But going into a strong labor market that's when you begin to see wage pressure. So, what we see now is significant wage increases in the euro area in line with, if you like, versions of the wage Phillips Curve, which basically says when the labor market is hot enough you do see that.

So the transmission mechanism from slack to wages is there. What we're seeing right now is basically lofty rates, the increase in labor cost being absorbed in lower profit margins, and that's when the big, you know, debates about how much of that is sustainable.

I know there's a similar debate here in the U.S., but maybe the economics of profit margins in the U.S. and Europe are quite different given the different evolutions of profits. So, if you like, there is a momentum in inflation, there is a momentum in the economy excluding manufacturing, and so this is why even though inflation is essentially, core inflation is kind of moving sideways around 1, it remains the case we have a projection where inflation is going to climb over the next two years.

So, the yellow line is the current forecast which says inflation is going to climb from around -- you know, core from around 1 to 1.5 over the next two years, and this is why it remains the case that our outlook remains less optimistic than before, but still a reasonably positive picture. We're not -- we are seeing a slowdown, but it's not macro pervasive. We are seeing this momentum in the labor market, so we do think the case is there and -- these are, you know, if you like, we try to have robust forecasts, so these are not kind of on the edge of forecasting models, they're more or less in the middle of a different range of forecasts.

So we do see a climb in inflation, but importantly compared to, say, December 2018, it's going to take longer, and, you know, two years ahead forecast is at now 1.5 when it was 1.8 from the point of view of last year. So again, this explains why we want it to move.

And then maybe the last piece of data that's interesting to think about is what's been going on in the bond markets. And this year has been very interesting both in the U.S. and in Europe, so clearly part of this is a global factor where there's been a big movement in the tenures (phonetic), and it's very interesting to think about: well, why is that?

One version is just the world's investor community believes that the world is not going to grow very quickly, and also the world's investor community puts some degree of pessimism about the delivery of the inflation targets of central banks, including especially the ECB.

So we've seen this big downward drift in the tenure, and essentially, you know, to the extent it's signaling a risk of deanchoring of inflation expectations is signaling a probability that demand would be weak in the world economy. Again that reading would reinforce the case for action.

So reactors (phonetic), reactors in a packaged type way because of course when you have already fairly accommodative monetary policies, you do have to think about making sure that the -- the monetary space you have is efficiently managed. So the deposit facility rates are key policy rates, and we move down from minus 0.4 to minus 0.5.

We started net purchases at 20 billion a month, we have this targeted lending program, started with 3 which we extended the maturity and made the financing cheaper, and to provide some relief to the Bank's holding access liquidity we exempted some of their excess liquidity from the negative rate.

And then very importantly -- so those are kind of actions we took, but we also gave more detail for guidance about, well, what are our future actions going to look like, and essentially this is the most concrete version of forward guidance that we have provided compared to the past, which is essentially saying, we want to see inflation converge to our targets, both in terms of the forecasts, but also in terms of the actual inflation being close enough that the remaining gap between actual and projected is not too -- not too distant so people can be confident that these low rates will remain in place until the inflation has really come back.

Very importantly, this is the contingent, we're not saying this is a calendar because the world is quite uncertain. So some people choose to focus on downside scenarios, but let me point out there are also upside scenarios in the world, especially given when you have some of the reasons for the slowdown are political, discussions about the future of European relations between the U.K. and the EU27, globally in terms of the various trade disputes, and so on.

So those can be resolved in more favorable or less favorable ways, and this forward guidance is an automatic adjuster. If there's good news the rates -- the date of liftoff will move forward, if there's bad news the rate of -- the expected rate of liftoff will move backwards.

And then let me say that this is not -- this is a highly considered decision, we now have five years of data on these unconventional policies and, by the way, this year when you had that really big move in the bond markets that's a very interesting piece of data, and saying, well, what's going on this year.

And so we are confident that these policies are helpful. We have a wide range it's been a very creative and stimulating time for monetary economists, so the people, our very good staff do all sorts of different studies to try and work out what's the contribution. And if I focus on 2018, the most recent year in this study, we're saying overall, if we think about in terms of say the tenure rates, we think these policies mean that tenure rates are about 1.2, 1.3 percentage points lower than otherwise, and that's quite a lot of stimulus.

That's quite a lot of stimulus, and we think a large fraction of is our asset purchase program, but also we think that it's been very helpful that the negative interest rates, so it was a contribution from negative short-term rates, and also from the forward guidance.

So let me emphasize, for example, the fact that the interest rates, deposit rate is negative with the forward guidance, means we have this very interesting pathway, expected pathway for future interest rates. So the market believes that as of now the deposit rate is minus 0.5, they believe that if conditions get worse we may go more negative.

So, if you like there's this belly effect in the curve, that they think a few months from now maybe interest rates would go more negative, and then they will start to move less negative over time. And that this is not saying we're going to do this, but the fact that the market believes we

have the option to go more negative does mean that financing conditions are cheaper than otherwise. We think the asset purchase program, I'll say has a big effect, especially at longer maturities, so when we look at the fact when we buy bonds, how the yield curve responds, will have this effect across the yield curve, but it's most powerfully at the longer end.

Let me -- the economics of negative interest rates, which I know the U.S. has not yet entered into that world, but it's quite interesting, because if you split up the euro area between the stronger and weaker economies, you have seen in the stronger economies banks -- at least with their corporate depositors -- being willing to charge these corporate depositors negative rates.

So, now in these countries, you know, a significant fraction of deposits is being charged the negative rate, so in other words the banks are able to pass on the negative rates to depositors, at least in the non-financial corporates. And what's very interesting, and in this a fantastic study is in our bank level data by a group of internal/external auditors, the Altavilla our paper which you can -- it's in our published series.

And what this shows is, if you look at country -- at the banks which have been brave enough to pass along negative rates and those that have not, in fact, those that have passed along the negative rates have been doing fine. They've been able to grow loans. They're not losing depositors in any significant way. And this study tries to do all the causality and they're controlling for it, sample selection and all of that, that you can find.

So I think there's a lot of evidence when you start looking for it, that the negative rates are -- have been effective. We absolutely accept every single side effect people list, we have to quantify all of those side effects against the fact that it does provide stimulus. And so in the end the core issue for us and for anyone trying to track, you know, are we hitting the reversal rate, is are these wholesale market conditions being passed along into lending rates to firms and households? Yes, they are.

What you see here on the right, and even throughout 2019, so this is up-to-date evidence, we are seeing the lending rates for nonfinancial corporates and for households, coming down this year. So in terms of the transmission mechanism about making financing conditions for the real economy easier, it remains quite effective. And I'll skip a little. At the base we also think the targeted lending program is also helpful.

And finally, in terms of the interesting mechanics of excess liquidity which, by the way, because we are now restarting the networks it's going to go up now, so the black line is telling you the stock of excess liquidity, and what we've done now is we're saying, we're exempting a fraction of that.

We have to set the exemption level to avoid having the interbank market get deanchored from our deposit rates. And what the right graph shows you, it's basically where the excess liquidity is does mean and there's not going to be any deviation from the floor, but that it does provide a significant relief for those banks with a lot of excess liquidity.

And then maybe in terms of what we care about in the end, is this helpful for inflation and output? And again, this is a kind of a robust aggregation of a lot of different ways of trying to calculate it. We do think all of these programs put together have had a significant contribution to the recovery in European GDP, and the counter-factor where we haven't done this the inflation performance would have been significantly worse.

So, again, we can all lament the world we're in, in terms of super-low interest rates, all of that, but we do think, given the world we're in, the policy response we've taken has been helpful.

Maybe let me stop there to allow time for Q&A. As we think our assessment is this slowdown can't be attributed just to the one-off factors, there is a persistent slowdown. That, as night follows day, has led to a delay and a partial reversal in the inflation pathway so we had to take action. Where we think our monetary policy is effective and so we do, you know, we're not kind of -- it's just not crossing your finger, we have the evidence that our monetary policy has been effective.

With the forward guidance, it's basically saying, look, we're not just telling you what we're doing today, we're telling you what the future pathway is going to be depending on the state of the world.

And maybe the last point, it's essentially we're also saying, by the way, under these scenarios with the slowdown and what a pretty horizontal profile for interest rates, fiscal multipliers for those countries their fiscal space will be significant. And if governments which had that fiscal space did engage in counter-cyclical fiscal policy, it does mean our monetary policy would be more effective, because the level of demand on the economy would improve.

So with that, let me stop. And we'll see what questions you have. (Applause) MR. WESSELL: Well thank you very much for that comprehensive and lucid

presentation. I felt particularly honored to be watching you put slides up, all of which say, ECB confidential, on the top right corner. (Laughter)

MR. LANE: Okay.

MR. WESSELL: It made me feel very special. It did make worry a little bit about the security of your information at the ECB, but we won't -- we won't dwell on that.

I wonder, because it's so timely, if we could talk for a minute about Brexit. As, you know, we seem to be taking this -- or not we -- the British and the Europeans seem to be taking this down to the wire, and maybe today we'll know whether there's a deal to separate the U.K. from the European Union.

As I understand it your forecast assumes a deal, so a couple questions. Is getting a deal going to make a difference to the European Union, to the eurozone economy? Is there going to be some, you know, everybody will feel better because there's a deal? Is it inconsequential, and I'm sure you've spent the last three years thinking about what happens if there is no deal if we don't have a deal on October 31<sup>st</sup> does that change your outlook at all?

MR. LANE: So, I didn't mention it in the presentation but, throughout this year we've been -- the way we handled wait and see in March was, we had this forecast and we have cleared the downside risk that is not in the forecast, but when you have a kind of a weakening forecast, and you add in downside risk, again that's essentially why we are highly vigilant in terms of monitoring the economy.

So, what do you do when you have this uncertainty about Brexit? So, the decision was at the baseline is there's going to be a deal, because that's what -- essentially what everyone was trying to find, was to find a deal, and so in the scenario where there were no deal, then that would be a realization of the downside risk, and we'd have to adjust our forecast.

Let me emphasize, so the deal itself, and of course if there is a deal, there's no doubt about the ranking, a deal is better than no deal. That's a great deep insight isn't it? So a deal is better than no deal, so in that sense it'll be good to avoid the downside risk, but it'd be very important and, you know, when I was Governor Central Bank or Ireland, it had always been -- I made a lot of speeches about Brexit. Is even a deal is, you know, inferior for economics to the U.K. never having entertained the option to leave the EU.

A deal will still be quite disruptive in terms of the future labor markets for the EU, where

the mobility of people between U.K. and the EU27 has I think, you know, been a very important part of the -- I think, I mean if you know Europe you know the demand of that, mobility for many people between the U.K. and the rest of the European economy, so I think that's -- first, typically when we talk about trade and so on, as trade in goods, services when the -- unless it's perfectly regulatory alignment, which is not part of it, I think, the discussion did the kind of nature of services trade in Europe, which is extensive. That will be fractured.

So even the -- so the kind of outlook for everyone is that a deal is very welcome, but it's in no way diminishing the fact that a Europe where the U.K. is outside the EU is that not the first test from the economic point of view.

I imagine if there's a deal, there's a transition period, so there isn't also even these negative effects will be delayed for a while, but compared to many investors have been waiting, so now there is -- if there is a deal the clarity for that will mean, compared to our worst scenarios, the elimination of that uncertainty will lead to, you know, some good news that I'm sure for the U.K. economy and the euro area.

Let me emphasize though, there is an asymmetry, the U.K. is, I think, about 14 percent of EU GDP, so even really bad outcomes for the U.K., for the euro area, mechanically is negative but it's -you know, it's not -- it doesn't pass through one-for-one. You know, shocks to the U.K. do not pass through one for one to the euro area. Unless there was a kind of a contagion effect, where there's some kind of negativity in the U.K. financial system, led to more risk aversion in the European financial system. But the mechanics of that is not super clear if that's super likely at the moment.

MR. WESSELL: So, when you look at why Europe has slowed one of the common explanations you mentioned it, and others have harped on it is, oh, there's all this trade uncertainty, there's a slowdown in global trade, it's all Donald Trump's fault, and if only that would go away, we could go back to the way things used to be.

But in many respects some people in Europe think of Europe as if it's a small, open economy, and for a long time Europe has benefited from the very huge appetite that China has had for European exports. As the Chinese economy slows, not only because of the trade war, it seems to me that Europe has to rethink its business model, and it's not quite clear to me that the European economic

leaders have figured out what that means. How do you think about this?

MR. LANE: So, I would generally agree, that regardless of the trade war, which has been very unfortunate, and let me generalize it, absolutely China, but more broadly as emerging markets' income levels go up, you know, the mechanics of convergence mean they're going to grow more slowly. On top of that as you know there's this middle-income trap hypothesis where maybe, it's turning out in some countries where they level off is that -- a lower level of income than might have been expected.

So, there's I think a general sense that the prospects, you know, the engine which has been so important, especially during the crisis and afterwards, the engine of the world economy has been China, and more broadly, the emerging world, if that engine is weaker, then those who've profited from exporting to those countries need to have a rethink.

And let me emphasize, when you look at the forecasts we all know that the -- it's in the IMF this week, there's a slowdown in world GDP, the slowdown in world trade is more intense than that, and the slowdown in euro area exports is more intense again. So there's a pivot because what's happening is the composition of world GDP is changing as well, which is fairly obvious, that China is much more focused now on domestic consumption, on domestic services which, again, is a natural part, and a natural rebalancing of the world economy.

But as you say, if one part of the world economy balances, other parts of world economy have to rebalance also. And so moving away from an export engine towards a domestic engine for the European economy, you know, in parts, the ECB monetary policy has helped us. But that there maybe need to be questioning -- I've mentioned already, maybe there's a role for fiscal, more broadly the perennial debate about, broadly the European policy is this -- is the European policy set up in terms of innovation, structural reform, dynamism? Is a set up to deliver to the environment in which the European economies are going to perform well.

So there's a large fraction to the world economy, the euro area and the EU essentially, does need to have I think -- I agree, does need to have an internal assessment of, you know, how we can develop the conditions for the economy to grow -- to grow well.

MR. WESSELL: It looks like the fiscal authorities learned a lesson during the crisis and they'll come and open the spigots if we have a rerun of 2008. Mario Draghi has been quite forceful in his

exit interview saying, it would be nice to have a little more expansionary fiscal policy soon, before we get to the crisis, do you think there's a reasonable prospect that looking across the eurozone that fiscal policy will loosen in time to make 2020, or 2021 stronger than they'd otherwise be?

MR. LANE: So, I think this is a nuanced debase. And this is why it's so important to think about that debate in different ways. So, first of all it's, I think, very good news that the tail risk of a scenario where you've a big crisis, if anyone was wondering would the fiscal authorities be passive about that, the clear signal is no. They clearly have signaled that if there's a major crisis they will step in.

And that given that the fiscal balance sheets of, you know, some of the major countries have improved quite a bit that's credible it's credible having accumulated all of its fiscal space that that kind of reserve intervention power is there.

Now the debate is also -- which is maybe something that maybe takes a while for that debate to fully develop, which is historically for cyclical downturns you might say the monetary policy can do the job because fiscal -- a target might say, well, if I try and do the fiscal expansion, and I might get it wrong, because by the time I've done the expansion maybe the economy has recovered.

I might be -- the multiplier might be negated because the Central Bank hikes rates, because they see inflation. And so basically I think now the accumulating evidence is, where we are now is the inflationary pressures -- I'm not -- I don't think they're zero, but they're sufficiently moderate, that I think if there were a fiscal expansion in these current conditions, the multiplier will be quite big.

And so then the question is, that this goes back to finance ministers thinking about fiscal policy as a macro tool. And, you know, for academics or, you know, economists might say well, okay, let's flip switch, let's flip the switch and say, well, it's -- we were now in that world. But given political systems, political cultures, the process by which that analysis becomes normalized and sufficiently widespread that it enters the decision-making, fiscal decision-making.

Now in these weeks, the budgets have been set for 2020, let's see how much of that gets transmitted into decision-making and, you know, let's see what happens next year.

But I think Mario Draghi, and myself, and the central banking world is basically saying, look, you need -- if you're curious about our reaction function, our assessment is inflation is muted, but with the forward guidance you know the interest rates will only move if there's a persistent improvement in

inflation.

And so under those conditions, when you are trying to assess your fiscal position you can understand that the likelihood of fiscal multipliers being big is significant. But again all of that has been --has been nuanced where that's a very conditional message, it's a message to those countries which are in good fiscal shape. It's not a message for taking fiscal risk in those countries which are, you know, closer to the risk area.

MR. WESSELL: You talk a lot about the effects that you think monetary policy has had to date on growth and on inflation expectations that you're -- you think the tools have made a difference. Are you confident that you have the tools to meet your inflation target in the medium term without some big changes in fiscal policy or something else?

MR. LANE: So let me emphasize then, we always try to be crystal clear about this, is our mandate is unconditional. It doesn't say in the treaty only if fiscal policy does its job.

MR. WESSELL: Right.

MR. LANE: It's unconditional. So, we know, our attitude is we will -- let me say two points. One is, we will continue to review all of the instruments we do use and also instruments we haven't used to see what else might be helpful. Let me emphasize this, we have a medium-term perspective so it's not the case we feel that we need to kind of pull out every possible instrument in order to get inflation back towards too super guickly. We're prepared to be patient.

But it's important that the momentum is there. It cannot be the case that we allow a lockin of inflation expectations at too low a level, we have to demonstrate that even if in this world it takes longer than normal, we have to make sure the momentum is there.

But, you know, I think we remain -- our assessment is it remains the case, first of all, that we have more policy options, but second it's important to emphasize, is we do see inflation momentum, we see it in labor markets, we do see that, the fact we've done so much easing, the historical pattern which is built into our forecast is that inflation is going to climb from where it is now towards, you know, the two-year ahead is 1.5.

So, we do think our work where we achieved that is important --

MR. WESSELL: So where we are now is like 0.9?

MR. LANE: One.

MR. WESSELL: One?

MR. LANE: Yes. So, we're going from 1 to 1.5 is a significant -- I want to see that delivered, but if -- we if we deliver that, then asking well, moving from there closer towards the target. And, you know, by the way that that's the forecast before we made a policy move, so it's the forecast going into the meeting. I think the policy move itself will accelerate, and strengthen the inflation dynamic and that, you know, the stat -- next our forecasts will be in December.

MR. WESSELL: So as you know there's been a lot of attention to the disagreements on the Governing Council.

MR. LANE: Mm-hmm.

MR. WESSELL: Everybody thought it was time to ease but not everybody wanted to ease in the same way. Do you think there's a risk that that very public difference of opinion shakes people's confidence that the ECB actually has the will to do whatever it takes to get inflation back?

MR. LANE: So I think, again, it's a multi-level interpretation. One is, after 20 years of the Euro, maybe there are positives to this, maybe there's a positive to -- so let's say that there was a disagreement maybe historically in the past, but where essentially it was kept inside the Governing Council. It wasn't there as perfectly rehearsed as this has been.

Does that mean the disagreement didn't exist? Did that mean that the kind of a solidity of future monetary policy was more secure? So that said, that one issue is disagreement, a second issue is open disagreement. And so I think that's an interesting issue about, I think in the end, you know, we -- I mean obviously, I know the Fed is going through its review and has changed its (inaudible), but I think it's been very important that we have this pretty detailed statement after the monetary policy meeting, and then which is reinforced by the press conference.

And then when we publish the accounts a few weeks later you can see the nature of the debate inside the ECB. So when you come down to the core of this, the most important message is there was general agreement we needed to act.

When you have all of these unusual tools, you know, I guess it's natural that people have different views about the effectiveness of the different instruments, and we do have these very unusual --

have conditions in the -- in the world economy, so I'm not overly bothered by the fact we've had this high public discussion of the different instruments.

But what's important, and which I've tried to convey to you today, is this is not arbitrary, the decisions we made were based on very careful analysis by you know -- through the -- a lot of work goes into making these calculations. And, you know, that's led by the ECB staff. Most of the expertise, in terms of what's going on, is with the ECB staff and, you know, I and the other members of the Governing Council have to take their work and study it.

We remain responsible policy making, the Governing Council but when -- if you ask, well, could a different policy package -- what other policy package could have delivered the same amount of monetary stimulus in the world where we already have negative interest rates, you know, if we hadn't done the asset purchase program, then the logic of that -- of it would have been, maybe we would need to do more, say on negative interest rates, and there's no easy choices here.

MR. WESSELL: Mm-hmm. So, I think there was a view in the U.S. not so long ago that, well, rates will be going up soon, and we don't -- we'll avoid any kind of financial instability that's caused by very accommodative monetary policy and loan equilibrium rates of interest. Now of course the Fed is easing, you've made clear that you're not going to tighten any time soon. You pointed out that the ECB believes that negative interest rates have a very -- haven't hurt as some people predicted.

But are you at all concerned that telling everybody that rates are going to be low for a long time, monetary policy is going to be accommodative, in some cases some of the post-crisis banking regulations are being rolled out, capital --

MR. LANE: Yes.

MR. WESSELL: -- requirements are being diluted, that we're taking risks to financial stability now?

MR. LANE: So, I think it's a very interesting question because on the one side why are we easing, and also the market is telling us, is that there's a fair degree of pessimism about the future. So the classic conditions for financial stability when there's excessive optimism. So, the mid-2000s people had, you know, this time it's different, all sorts of constructed fables about why it's okay to build a lot of houses, and have hyper-high loan-to-value ratios, all of that.

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So, number one is, we're not particularly seeing this. Obviously there's going to be people taking more risk, we always signal that now the banks are pretty heavily supervised and regulated, but the non-bank sector maybe there's more risk. And then you have to ask, who's taking that risk? And is that risk going to be a systemic problem?

So we also spend a lot of time, and maybe compared to the U.S., more of the macroprudential frameworks is in place. You know, every month a lot of macroprudential policy in Europe is country-by-country, every month you see more and more countries putting in the safeguards, whether it's countercyclical capital buffer, whether it's a borrower-based measures for mortgages. Very innovative like the French macroprudential targets, this disincentive for lending to highly-indebted corporates.

A lot is going on to ring-fence those risks, but the core of it is at -- if the question is, should you not do monetary stimulus for fear of financial stability risk, I think that there's a pretty strong consensus in the economics literature is that that's self-defeating. That, you know, if you don't make sure inflation goes to target, if you don't make sure the economy is stable, then it's a pretty high price that pays for -- interest rates are to blunt a tool for financial stability management.

Having said all that, we care, we do look at it, it's obvious that if we didn't care about finance we could -- you know, it would be much more aggressive, so we do -- we do go incrementally, we do take moderate steps to contain those risks but the classic conditions for a lot of risk-taking is not there.

And by the way, we also know at this period of time there's more -- there is more indications of kind of a risk on attitude, so even the investor base is not as gung-ho as in some periods of time.

MR. WESSELL: All right. I guess the definition of a good European Central Banker, is someone who can find a silver lining in a gloomy and pessimistic outlook. I really admire that.

We have time for some questions. I think I'm going to take a few, and we'll do. Do we have the mics? Can we start over here with -- if you would -- it will help us if you would tell us who you are, and stand up -- John, can you stand up? Tell us who you are, and remember that -- to be fair to the rest of the people -- it would be good if you asked a question. You can start, and then we'll go here, yes, please.

QUESTIONER: All right. Grace Khu, Josina Capital. Thank you for the presentation,

very interesting. So I have a quick question, on what set of conditions needs to be met for you to start raising interest rates to zero or above? And under the current circumstances do you actually see an exit?

MR. WESSELL: Okay. In front of you. John?

QUESTIONER: John Posetti, PIA. The announcement at the last meeting of the Governing Council that you're going to resume asset purchases has drawn the attention on the limitation of this policy in terms of the portfolio of sovereign bonds you can buy. So, the more you go the more you're going to buy bonds issued by high-debt countries. How do you see this limitation in terms of the implication for the effectiveness of the policy?

MR. WESSELL: All right. We'll take one more, right over here.

QUESTIONER: Hi. Carl Garwood. Historically under the Bretton Woods Agreement the dollar was supposed to be redeemable internationally for gold, of course that was abandoned. Is there any potential in the future for a geopolitically neutral kind of Bretton Woods, where every country's monetary yield would be redeemable in gold that would actually circulate this money to create stability for everyone?

MR. WESSELL: Thank you. Why don't you start with John's question about, are you pushing up against the limits of how much you can buy of any one country's bonds, and is that a constraint?

MR. LANE: So our assessment is that this did not particularly come up in September because the calculation is that this is not an issue for an extended period of time. So within the current limits we think we can go for quite a long time, and buy and respect the principles we've always respected in terms of the mix of what we buy.

So I mean, and that's discrete, you know, at some point -- like this goes back to the statecontingent forward guidance, in the scenario we're in a situation when this extended period of time concludes, and we still have a problem, then we have a kind of -- have to make a new calculation, and it's clear in the pursuit of our mandate, that what we do has to be proportionate to the challenge we face.

If we're in a situation when we hit those limits and we're still below target, then we have to look at it. But there's no particular reason to take that on today. I mean of course everyone wants to do everything immediately but, you know, I think it's proportionate to say, there's a value to these limits,

there's a value to the current limits at -- they were put in place for good reasons, and if we hit a conflict where the limits conflict with deliveries, inflation targets, then we have to see what we do.

MR. WESSELL: Well at the current pace of APP, are we talking years away from the limits, or months?

MR. LANE: Yes. So, I mean it all -- the implementation of the APP, there's a lot of tactical decisions as we move along, so it's not that we don't -- I mean I'm not going to give you a fixed number because it depends, but it's sufficiently far on the horizon that it's not something we felt we needed to factor into the decision in September. And, you know, it's well beyond a year at least. I don't want to go into more detail than that. But people who say it's weeks or months, it's not true.

MR. WESSELL: Okay. I think you've stated pretty clearly what it'll take to raise rates.MR. LANE: Right.MR. WESSELL: Sustained forecasts of the inflation target.MR. LANE: Yeah. Plus, actual inflation being close enough.

MR. WESSELL: I see.

MR. LANE: So, it's a double lock. So we have to project -- because people say, well -because it's interesting, you have historical periods when inflation jumps by a percentage point within a short period of time, but we're not going to -- given that that's based on the history of where there's been lots of high inflation, a forecast where we always say, well, actually, hey presto, there's going to be a big job. We're not going to have that, so actual inflation has to be sufficiently close towards the projection that the last -- the last mile, if you like, is credible.

MR. WESSELL: I'm going to change the gentleman's last question a bit. So, one of the ways that monetary policy works is by moving exchange rates. Obviously the euro exchange rate will move more if other central banks are not easing at the same time. Do you have any concern that if we have this global easing that your effectiveness of your policy will be limited by the -- you know, the inability to depreciate the euro?

MR. LANE: We don't overly focus on the exchange rate channel. So let me emphasize, I mean, it it's hyper visible in 2014, so after the -- whatever it takes in 2012 there'd been a significant appreciation of the euro. So, if you like, when you're in the situation, 2014, when actually -- you could

say, actually we think the euro is overvalued. The fact in 2014 early 2015 there was a big depreciation of the euro.

So, some people say, well, that's the key we worked through the big depreciation, but that was a very particular circumstance. In recent times the euro has been basically flat. As we've already discussed, it's not the case we think that the way for the European economy to recover is through kind of a massive drive in exporting.

So, I mean, we're focus on the domestic channels, it's not exchange rate channel. So I mean I think the same I'm sure for any large central bank, is the way the exchange rate matters is primarily in a situation of some kind of unexpected, large and persistent surge in the exchange rate, then you may want to think about it.

So, when it moves away from fundamentals, but it's not -- under these conditions it's not -- so long as the exchange rate is more or less in a pretty broad zone of being connected to fundamentals, it's not the channel for (crosstalk) --

MR. WESSELL: Is there's any reason that we need a new Bretton Woods, or a --

MR. LANE: So let me come back. I mean the other thing is, monetary easing by us or by anyone else is good for the world economy, so I celebrate the fact more and more emerging markets are able to do monetary easing. So we see around the world because now they have more domestic currency financial systems that are able to, when they have a slowdown, they're able to do easing.

And the usual message is, easing has positive spillovers. There might be a margin of exchange rate channel, but by and large there are positive spillovers, so easing everywhere is good for everyone.

MR. DOYLE: Peter Doyle here.

MR. WESSELL: Peter, can you stand up, so the mic can find you?

MR. DOYLE: Peter Doyle. Two questions if I may. You mentioned that we should take confidence in the immediate outlook by the fact that one of the measures was the forecasts whether the -- would be the inflation goes back to target and then -- but I would point out that that condition has held ever since 2007, when consistently the ECB has been behind the curve.

So then you emphasize the fact that you added a new condition which is that the actual

developments in inflation should also reflect some movement back to (inaudible). My question is: what does that mean? Does that mean that some measure of inflation is no longer falling for some period of time? Does it mean that it's flat for some period of time? Does it mean that it's flat for some period of time? Does it mean that it's going up by a certain percentage? The risk being obviously that any interpretation of that, whichever you come to, may repeat the behind-the-curve problems that we have -- had in the past.

My second question is about the high risks in the future what happens with them. If I recall correctly from your charts, you say that the unconventional measures have a combined effect so far of about 2 percentage points effect on long yields. So my question to you is, how much is left? How much ammunition have you got left in the unconditional ammunition stock to deal with any shocks that may come up?

A and the reason that's important is various, but one is that if there's not very much left that adds to your point about the need for fiscal support, but if there is actually quite a lot left, and the fiscal authorities will say to you, you've got plenty left, we don't to do anything.

MR. WESSELL: Thank you. Can you pass it to the right there?

MR. PAPADAKIS: Bill Papadakis, Lombard Odier. I have a somewhat related question. You've shown how past easing measures have helped the output and inflation outlook changed. And anyone who looks at credit growth turning from deeply negative to positive today can testify to that. But if today's source of risk is no longer a broken credit Channel, but much more global conditions and uncertainty that depress demand for credit, then how exactly do you think about the effectiveness of these instruments in this very context? Thank you.

MR. WESSELL: There so many questions there. Okay. You can pick and choose.

MR. LANE: Sure. Well, I'll try and get them. So, the last one is, what's interesting -- it's interesting how people think about the world. It's we have this manufacturing slowdown, and so I've heard this from very -- well, how is monetary policy going to fix the manufacturing slowdown? I'm not saying it's going to fix the manufacturing slowdown, but other parts of the economy can take up the baton.

So, you know, it's the case that we still have a pretty strong services sector, we still have households who are -- their financial conditions are improving. So we do think, you know, we are not picking and choosing about, well, which firms or which households are going to respond, and the kind of

people who are looking to borrow today may be different to those who might responded in a different circumstance?

So there's many channels through which monetary policy works so -- and the importance of the different channels and, you know, the different geographies for that matter, and different industries will rotate. But as you say credit is in the -- it's varying across countries, but in the aggregate credit growth is pretty solid, you know.

Peters question on the -- what's left. Our assessment is, we're not at the edge, of course we're closer to the edge than we were, so there's no doubt about that but, you know, I don't have certainty about where the edge is, it's very -- it's going to be interesting, and is why we are incremental, we're saying we're incremental, we're not -- we're going to move in small steps because, let's imagine we gone from minus-40, you know, than a much bigger short rate cuts. If we were -- you know, we could have entertained that, but I think it's safer to go in smaller steps and then check and see how effective that is.

But I mean I don't think -- I mean, the fiscal debate is -- I'll say it's a maturing debate where the more people look at it the more the outside world looks at it, the more we look at it, the more people working in the finance ministries look at it.

You know, it's fairly striking that now that so much physical capital has been accumulated, after a lot of years or austerity the -- that that's about whether fiscal expansion can be counterproductive by raising risk premia. For, you know, important countries in Europe now there can be no doubt that they would not see a rise in risk premia if there was a moderate fiscal expansion. That they can be confident there wouldn't be an offset and rise in monetary policy rates.

So I mean this accumulating evidence with the power of fiscal policy is pretty strong. But we don't get in -- we're not getting into a game of -- the games of, we have to be straightforward. We call it as we see it. We are saying scientifically we think fiscal multipliers would be quite big in the scenario, but it's not a case that we condition our policy on what the fiscal --

MR. WESSELL: There seems to be -- let me rephrase what you're saying. You don't want to say, we can't deliver on our objective with our monetary policy tools. So that's not meddling with fiscal policy. If you really couldn't meet your objectives you could say that.

But you seem to be careful not to say that. What you seem to be saying is, look, we think

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we can meet our objective, there's a lot of uncertainty, we have a lot of ammo left, it would be easier to meet our objective if we had some fiscal policy, and it would make our job -- our life better.

MR. LANE: Yes. And it's important to say also the -- it's important in the grand -because, you know, in grand narratives of, you know -- if you take into grand narratives, of course monetary policy space is less than if interest rates were a lot higher, of course it's true. But it's also the case, we've seen in recent year -- I mean go back to 2014. So, the fact that there was a fair degree of success in eliminating worse outcomes from 2014 to now, I think provides a strong evidence base.

It doesn't carry forward to the future one for one, but this is why we're heavily emphasizing the continuous assessment of what's going on now. And this is why it's so important to be data-driven and evidence-based. So, the fact now we have a really -- and because we now have so much Bank-level data we can really go into -- because someone may have narrative base on a certain type of bank. I say okay, fine, but the wide distribution banks, that particular problem is not generally true in terms of where the transmission mechanism.

So, my assessment, David, is first of all, let me emphasize again, although we can focus on the downward revisions and so on, that's a downward revision around a path that remains positive, and we are -- a very important development in the last year-and-a-half is the recovery in wage inflation.

A big debate is how long can firms absorb that in their profits and, you know, I think the history is, they don't they don't continually absorb them. They eventually, if the cost base is high enough, if they feel confident enough about demand conditions, they will raise prices.

So, you know, our baseline -- remember our baseline is inflation is -- remains on an upward path. So this kind of a trap situation where we're kind of trapped or something, under today's conditions I don't see it.

Let's see what happens in the future, but it's important to say we have momentum to European economy, we have momentum in wage inflation, and that we think and we've been quite -- you know, the ECB has been quite creative in pushing the boundary of monetary policy and we don't think we're done, yes, if we if we need to.

MR. WESSELL: Okay. I think we are out of time. Please join me in thanking Philip Lane. (Applause)

I hope you'll come back sometime when we can get to more questions.

We would appreciate -- our staff would appreciate if there are papers or coffee cups at

your feet to put them in trash can at the end -- at the back of the room.

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