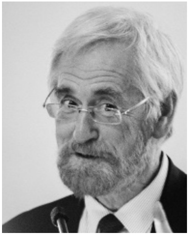
Lars Peter Hansen is Professor of Economics at the University of Chicago. He is a leading expert in economic dynamics who works at the forefront of economic thinking and modelling. He has made fundamental advances in our understanding of how economic agents cope with changing and risky environments. He is the recipient of the 2013 Nobel in Economics Sciences for developing methods to explore the interconnections between macroeconomic indicators and asset price movements.



Peter Praet is a macro-economist with wide-ranging hands-on policy experience. He holds a PhD in economics from Université Libre de Bruxelles and speaks four languages fluently. He served as chief economist for a commercial bank, executive director of the National Bank of Belgium and most recently as executive board member and chief economist of the ECB in the period 2011-2019.

Moderator Eric Bartelsman
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The central bank cannot be the only game in town

A conversation between Lars Peter Hansen and Peter Praet in memory of Jan Tinbergen

This conversation took place shortly after Peter Praet's retirement from the board of the European Central Bank. Praet guided the ECB through the sovereign debt crisis, dramatically expanded its supervisory arm, and conceived the euro area version of quantitative easing.

Bartelsman: "Do you sleep better now you are retired, Peter?"

Praet: "It was okay. I went through difficult times, but I worked very closely with my colleagues, Mario Draghi and the others, which helped when working under stress. We absolutely faced never seen situations: we had a banking crisis, we had a sovereign debt crisis and we had fears about the collapse of the euro area. Additionally, we had a problematic lack of standard instruments. Interest rates fell very quickly to zero and then we had to carefully design unconventional instruments to stabilize the economy."

The second participant in this conversation is Lars Peter Hansen. Hansen is an American macro-economist who has worked his entire career in academia and teaches at the University of Chicago since 1981. He received the 2013 Nobel in economics for his contribution to the understanding of asset price movements. His recent work focusses on how economic agents cope with changing and risky environments.

Bartelsman: "Could the ECB have been prepared better if they had better knowledge of economic literature and economic history?"

Hansen: "Some of my academic colleagues have made claims that they anticipated the crisis, but actually I think very few economists really did so, particularly when it comes to the magnitude of the crisis. It was really a collective surprise and it exposed gaps in our knowledge. At least I was surprised by it.
I would prefer not to speculate that something went wrong with monetary policy. There are a couple of things that come to mind there.
I think we expect too much from monetary policy, we expect too much of it. And this actually goes back to something Tinbergen already dealt with when he was building econometric models for policy analysis. Given multiple objectives and limited tools, when macro-economic problems occur a monetary fix alone cannot necessarily prevent a sluggish macro-economic response.
Besides monetary policy, there is a role for financial market oversight. Also, fiscal policy is important. In the U.S., we face some very big fiscal challenges and the same goes for some areas of Europe.
And finally, I think the press talks about monetary policy a lot because its actions are visible and concrete. Yes, the central bank is going to decide on interest rate policy, but other policy challenges and other actors are really important too and they interact with monetary policy."

Praet: "I agree with Lars that too much is expected from the central bank. The central bank was extremely powerful in the financial markets during the crisis, because it has the power to create liquidity. This however primarily allows it to buy time needed to address more fundamental problems."

Bartelsman: "You both warn about expecting too much from monetary policy, does this warning also extend to other tasks of the central bank? Central banks *have taken on, or have been given, a much larger role in macroprudential and financial oversight, next to their already increased role as lenders of last resort."*

Hansen: "Yes. I worry that we are asking central banks to do too much in terms of financial market stability. I think when it comes to financial regulatory oversight, we have to look beyond central banks.
For example, there are thoughts about requiring cyclically-varying capital restrictions on financial institutions. Even though we are currently in a very different monetary situation than when Milton Friedman was talking about monetary policy and 'long and variable lags', his insights apply here too. There is still so much for us to understand and we should be careful not to overstate our knowledge base and our ability to control markets. Simpler targets that are clear to the private sector would therefore probably make some more sense."

Bartelsman: "Some people say that the financial deregulation that took place in the U.S. in the late 1990s was a very direct precursor to the financial crisis and the Great Recession."

Hansen: "There is an interesting case to be made that the financial regulation loosened up in the US without putting alternative rules and regulation in place to deal with financial stability. There is a big challenge in all this though and that's the following: if you regulate the banking sector some activities are going to be pushed out towards shadow banks.
The question is therefore: where do you draw the circle? What is regulated, what is not. The things that are not regulated, should be allowed to fail. But of course, if we become spooked about too much lending, we find it hard to let an enormous bunch of non-regulated activities fail. This represents a drag on the whole financial system.
Of course, there are people who in response want to regulate everything. I do not see that as a very good answer."

Praet: "Since 2008 there has been special focus on regulating the banking sector. This regulation has had basically two objectives. The first one is to reduce the cyclicality of the banks and I agree with Lars that objective was

probably a bridge too far. The financial sector has remained as procyclical as before, in spite of the regulation.
The second objective of regulation was to make the banking sector less sensitive to liquidity crises. History will tell of course, but I think we have made big progress there. There is good evidence that it looks better than before."

Hansen: "Relying on the models of the financial institutions to assess their own overall risk exposures is itself risky. In the past, the larger banks – not surprisingly – seem to have understated the risk exposure. Relying on bank's self-reporting alone is asking for trouble."

Praet: "Well that is true. We run two sorts of stress tests, one top-down and one bottom-up. In the top-down one we take the published information and try to test the system by looking at the impact on the biggest banks. This allows us to challenge the results obtained from the bottom-up test. The difficulty with the bottom-up stress test is that banks learn to game the system as they understand how we work."

Hansen: "Yes."

Praet: "The other more complicated thing is that banks in their stress tests do not take their collective behaviour into account, which is the so-called fallacy-of-composition. If everybody cuts their position, it makes sense from the banks' perspective, but not from the macro perspective as these assets must be held by somebody. In reality, you get a run on the system. It is very difficult to bring systemwide consolidation in the micromodel though."

Hansen: "That is a fascinating issue actually. Conceptually, because this is where network feedback becomes important. How do you design a stress test that tracks banks' interaction with each other conditional on the expected central bank's response?"

Bartelsman: "Lars, you have said in the past that you should do a worst-case analysis if you want to get a robust system. But can you do that if you do not know the general equilibrium feedbacks?"

Hansen: "Sure, let me give a slight refinement of your question. When I say worst case, I always mean in some structured or refined way. Unrestrained worst-case analyses can give you very extreme outcomes that are not very revealing or helpful. So, you always have to find the range of realistic uncertainties. If you do not do that, you just get very silly answers.
As soon as you say 'we think this is a possibility', you can start to structure stress testing. Then, in your tests you should have some speculation on the type of feedbacks you consider, so you probably need models to help you do this. Well-conceived stress testing is not a trivial thing to do, but I think how to design such testing is a very fascinating and important area for research."

Bartelsman: *"Lars, you have stated that our incomplete knowledge and understanding of what we are actually doing increases the appeal of simple solutions."*

Hansen: "Now you hit upon a theme I like indeed. And how I translate that in practice is non-trivial. I do think there is a danger in committing to any particular explanatory model. Its specificity can be somewhat inappropriate and the complexity of the model can itself be a contributor to uncertainty.
When the financial crisis hit, academics said: 'Well financial market oversight is a very complex problem, so it requires a complex solution.' I agree with the first one. It could indeed be a complex problem. But when your knowledge is limited, that is not necessarily a situation where you want to jump to a complex answer.
Not willing to go for a complex solution because you do not understand the problem in its full detail is however something different than not solving the problem. I would like to make that absolutely clear! There are plenty of structural things you could do.
There is a really interesting analogy here with monetary policy. Many people in the US have the notion to make everything rule based and transparent. For monetary policy this means engaging in things like forward guidance. It is however virtually impossible for central banks to conduct forward guidance properly, because the central bank always wants to have a bit of a wiggle room as there are complexities out there, that might hit them by surprise."

Bartelsman: "I would like you to follow up on that, Peter. One of the problems of very tightly pre-committed rules is that it opens the door to opportunistic behaviour. Having a little bit of flexibility in how the central bank is going to respond, keeps people a bit more on their toes. What is your take on this?"

Praet: "Well it is a very complicated question because the environment in the last ten years has been extremely difficult. We have had a banking crisis, a sovereign debt crisis et cetera. We have had to clarify the reaction function of the central bank while these events unfolded. The ECB's reaction function is not a simplistic Taylor rule; it is much more complicated. Judgement plays an important role.

When the central bank says 'the rates are going to remain at the present level for the next six months', it is truncating the distribution of outcomes for the markets. By doing so, it reduces uncertainty in the market, because the central bank has strong liquidity tools and interest rate tools at its disposal to deliver on its promise.

But over time, and that is a very serious point, you need to be careful. You cannot use forward guidance with the idea that you always know better than the markets. You will make mistakes and then you will need to come back on what you said and that could harm your credibility.

For the time being, forward guidance has been quite useful for the ECB. We made a big impact on financial conditions and on economic outcomes. Now, of course, the results are not all what we wanted. We think policy did reasonably well, given the circumstances.

Finally, I would like to make a point about financial market dominance. It is often framed as who dominates who, but what I see is that we listen to the markets and the markets listen to us. It is usually a two-way street, but when a big part of the banking system is about to fail, the markets expect the ECB to do something.

At some point, the moment of truth is going to come though and you are going against the markets. Then you have to be sure that the regulatory framework is sufficiently strong to withstand the impact. Markets should not collapse, if you go against them. So, as Lars already mentioned, the regulatory infrastructure that you have is really important. How strong it should be, is an empirical question though."

Hansen: "I do get concerned if monetary policy seems to be pampering the financial markets. Monetary policy gets stuck by saying 'if financial markets react badly to what we do, that is going to be a big problem'. But maybe some of those reactions are short term only. Also we should remember that the financial sector is just a part of the economy."

Bartelsman: "Let us bringing the discussion back to Tinbergen. He was very interested in the correct identification of effects, but only for instruments that were policy relevant. Will we be able to understand in a fine way how these instruments will affect heterogeneous actors?"

Praet: "To address Tinbergen's search for identification of the effects of instruments, you need data. There is much more data now than in the time of Tinbergen and this availability is only increasing.
Think about the transmission of monetary policy via the banking system. The ECB issues funding to banks for lending to private non-financial firms (the TLTRO-program). With current granular data we can trace the money: we know the balance sheets of individual banks, we know what liquidity they are taking from the central bank and we see their lending behaviour to individual firms, including the pricing. This gives us a very good idea about the effects of the program. In the past, you did not really know what was going to be transmitted to where in the economy if you lowered the rates."

Hansen: "This type of work is very productive. I often mention though that data seldom speaks for itself and that we have to think about how to really structure the data whilst the data comes in as well. Both elements are needed to provide answers to the questions that we want.
I think how you inject financial resources into new businesses and the engines of growth is very important. Again, this is not what I see as just a monetary policy challenge. The standard banking channel is only one way to do that and there are also ways to stimulate financing beyond monetary policy. These new data sets can help us understand that as well."

Bartelsman: "Besides being a researcher, Tinbergen also built institutions, which are of course necessary to create the adequate knowledge base Lars keeps *pointing at. I was wondering: the ECB received the mandate to regulate the systemic banks some years ago. Peter, what knowledge did the ECB have in place at that time?"*

Praet: "At that time I was also head of Human Resources at the ECB and we basically took a thousand supervisors from the national supervisory authorities. We quickly built a good team. I would not say it was easy, but it was feasible.
The more difficult question is about managing conflicting interests of monetary policy and supervision in the central bank. Supervisors tend to 'gamble for resurrection' because when something goes wrong it may be the consequence of failures of supervision. In the last couple of years, we had several cases of tension between monetary policy and banking supervision.
We solve this by separation of the decision-making process. The supervisory boards for banks are autonomous from the rest of the central bank. But I wouldn't say the system as it is today at the ECB is stable in terms of governance. At the end of the day, the governing council of the ECB has to decide and approve the decisions of the supervisory board. This requires balancing two tasks."

Bartelsman: "This requires well trained and ethical staff. Lars, you are in the business of training people to work at central banks. Can you give students enough disinterested passion to do a good job, or are you sometimes worried that they will do whatever pleases their boss?"

Hansen: "The classes I give are not designed to give explicit policy advice. But in them uncertainty, and the consequences of it, are featured a lot and I would hope that that helps to shape their own thinking.
This please-the-boss-thing is a serious issue, but it depends on the boss. For some bosses the whole notion of uncertainty is a distraction. They want to be told a number and what to do. If it only were so simple... but there are also very intelligent bosses.
I hope students stay open and honest to themselves and what insights they can offer. I hope they realize that when they encounter a bad boss there are plenty of employment options at other policy institutions and research departments."

Praet: "The culture of central banking in general and in Europe in particular has changed very much. Traditionally, central banks had almost a military sort of organization, because they were involved in the payment and production of banknotes and these things require extremely strict discipline.
But the last ten to fifteen years central banks have become much more open. We would not have done what we have done in terms of new instruments if the staff hadn't been allowed to express their creativity. Beside DSGE models, the staff builds practical satellite models tailored to, for example, the financial sector. Also, we have expanded satellite models to deal with heterogeneous agents, for example differences across households in savings behaviour."

Hansen: "I actually agree that central bank researchers have really been at or near the frontier. The research departments have been very productive and employ lots of high-quality people, especially in comparison to some other government entities. I am a bit frustrated that central banks embrace needlessly complex New Keynesian DSGE models with the pretence that they can actually deliver fully reliable answers. I am glad to hear from Peter about the staffs' flexibility in using and augmenting these models wisely.
I do worry where we are headed in the future in the U.S. Policy institutions have various vacant positions which would usually have been filled by qualified academics. I am not sure whether the current trend downward is going to continue and I am not sure what the long-term consequences of are, but I certainly hope that research support continues to be emphasized."

Bartelsman: "I briefly want to touch on the problems with fiscal policy both in the EU and in the US and what that means going forward."

Hansen: "I was one of those naive non-European economists who thought the idea of having a monetary union without a fiscal union was not the smartest thing to do. It was my initial thought that the Europeans were making a start with monetary union and that a fiscal union would naturally emerge within a couple of years.
We have not yet seen the fiscal part. Still, the monetary union has been remarkably resilient and survived much longer than I actually expected. This has been a surprise to me. I do think that the fiscal challenges are important,

but in Europe the situation seem to be very heterogeneous. How that is going to play out over the next decade or two is something quite interesting.
In the U.S., our national finances are not great as we are having spending increases and tax cuts at a time when we are booming and should be doing the opposite. State finances are heavily burdened by pension obligations."

Bartelsman: "Let's say we will get a very adverse shock in the next nine months. Is Europe better poised to deal with it? It has more fiscal space on average."

Hansen: "I think I will take a pass on that one as I just do not have the expertise. Peter, I would be curious to hear the views of you on this."

Praet: "It is indeed very odd to have a monetary union without having some integration of fiscal policy or at least strong coordination such that the policy stance in terms of stabilization would be appropriate. In 2010 and 2011 during the banking crisis this led to a kind of catch-22 situation. Some of the governments had been tightening fiscal policy very much because if they did not the markets would panic about the sustainability of finances. But because they tightened their finances, their economy deteriorated which necessitated further tightening of government finances. That is how the ECB became what we called 'the only game in town' while fiscal policy was quite restricted.
Given the sort of shocks that we have today, I am not sure monetary policy is the most appropriate tool when the main uncertainties are related to trade and protectionism and the big shocks are technological disruptions. Of course, monetary policy can remain accommodative, but that would not address the main issue.
Yes, we can hope that intelligent structural reforms supported by some fiscal policies will be decided. Especially when rates are extremely low, we have a lot of sympathy for that. And in textbooks that looks very convincing, as is does in analysis of the OECD. We know however that the reality of political economy is quite different.
We need more fiscal coordination within the Euro area and a better articulation between monetary and fiscal policies. For the years to come that is the main debate. You know that fiscal policy will have to play a bigger role in

stabilisation policy. But it has to be linked with structural reforms and that is usually what does not happen.
That being said, it makes sense to invest when you can borrow at minus forty basis points for a ten-year period and there are all these structural things that need to be done. But only if you can find good governance for the projects. Otherwise you might suddenly be looking at a minus ten percent return."

Bartelsman: "Later in his career, Tinbergen shifted from positive economics, working on methodology and on tools that helped identify policy effects, to normative economics that furthered his views on society. Lars, if you were to go full normative on me, what would you be doing?"

Hansen: "There are a few different policies that I would personally want to have some attention focused on. I certainly would like to see the U.S. to be taking a much greater leadership in protecting the environment and the climate. And I would like to see U.S. be more forthcoming in terms of potential carbon taxation policy and be an example setter for the world there. Also, I worry about our long-term fiscal challenges. I worry about the problems we will be passing on to my son.
Let me also comment on government investment in infrastructure. I am curious whether the low rates are actually available for all these projects. How will these projects be funded in practice and will the government be able to execute these projects in a way that the returns outweigh the opportunity costs of the private resources utilized.
To encourage prudent policy design, you need to do a serious job considering the social costs and benefits. It is too often that people in the US say: 'the private sector is not doing it' and then magically expect governments to do it well. There are too many examples of governments doing it poorly. Nevertheless, I would be open to making some sort of support to infrastructure investments which are well-structured and well-conceived."

Bartelsman: "Peter, now that you are retired from your official duties at the ECB, in what areas would you personally want to influence the policy debate."

Praet: "I am a strong believer in multilateralism; it is essential for future wealth and I think it is in danger. The matter of trade protection is a very big concern. The recent tariff moves of the US worries me very much. Lars mentioned environmental questions and I think these are common problems for humanity. We have to work on that.
The other point, of course, is European integration. Seventy-five percent of Europeans are in favour of the Euro – that is quite a high number. But we cannot say that the union is positioned very well in terms with real economic divergence across the countries. So, we have to tackle these problems and have to finalize what we call the capital market union to get better sharing of private sector risk. I think that's the top priority for the union.
But then comes the question about fiscal union, which may be a bit too much. But we have to address these issues nevertheless. The EU continues to have a lot on its plate."