Jens Weidmann: Low rates, loud talk?

Speech by Dr Jens Weidmann, President of the Deutsche Bundesbank and Chairman of the Board of Directors of the Bank for International Settlements, at the 48th Konstanzer Seminar, Constance, 31 May 2017.

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1. Introduction

Ladies and gentlemen, dear Jürgen von Hagen,

Thank you very much for your kind invitation to this seminar - it is a pleasure to be back. I must confess that this is a very moving moment for me, as it brings back many positive memories. The last time I attended this conference was when I was still working with Manfred Neumann at Bonn University, having just completed my PhD thesis. So it was probably twenty or more years ago.

For me, as for Manfred's other doctoral students, the Konstanz Seminar was always the high point of our academic year. Having the opportunity to listen to and discuss with so many eminent scholars who we knew mostly from the literature was very exciting and stimulating.

But Manfred wouldn't have been Manfred if he had not carefully monitored whether our contributions lived up to his expectations. And we all knew that, in the end, our thesis would have to stand the test of a presentation at the Konstanz Seminar. So I guess we felt some ambivalence towards this event.

I also remember the seminar because it sought to connect theory and practice. This is why today I am by far neither the first attendee nor the first speaker from a central bank. Another reason I enjoyed coming here as a PhD student was that I was long on theory and short on practice. Nowadays it's rather the other way round. So for me, being here today brings theory and practice a little bit closer to balance, and I hope the same goes for you.

At least I will speak on a topic that demonstrates how theory and practice can benefit each other: central bank communication. The role of communication in monetary policy has increased dramatically over the last few decades. This change has been the result of several mutually reinforcing developments in policy making and economic thinking. In addition, the question of whether there should be changes to the ECB's forward guidance is an important topic at the moment.

2. Manfred J M Neumann

But although I am aware that you have already commemorated Manfred, please allow me first to seize the opportunity to say a few more words about him.

Like many of you, I owe a lot to Manfred. The time under his supervision at the Institute for International Economics - with my fellow doctoral students Katrin Assenmacher and Susanne Janeba - was indeed a time I fondly remember.

As a thesis supervisor, Manfred struck the right balance between freedom and direction, motivation and criticism, respect and provocation. Almost every day during that time, we went to lunch together in the no-frills university canteen. This was the time to discuss progress in our academic endeavours. But Manfred also had us apply our theoretical economic knowledge to practical topical issues and political questions. In fact, to him, such applications were not just brainteasers or amusing thought experiments. Rather, economic thinking and research had to be both rigorous and of practical relevance.

Drawing on both his impressive academic expertise and his excellent economic intuition, in the 1990s he repeatedly and prominently intervened in the public discussions surrounding the creation of the monetary union.

All in all, I would characterise Manfred as a "doctoral father" or as an advisor in the best sense of the word. I owe him my passion for monetary policy and my interest in the empirical facets of our profession.

Even after I left his institute for the IMF, we never lost touch. Over time, I gained a close and supporting companion during the subsequent steps of my career. In his straight-spoken way he remained an advisor throughout who, in a fatherly and friendly way, continued to challenge me, visiting me at the Bundesbank with a multitude of charts and regression results, pointing out emerging issues or questioning traditional positions. I miss his clear voice in the debate, and I miss a friend.

3. Central bank communication

One issue we would have discussed for sure is how vital the communication has become for central banks.

For a long time, central bankers did not attach any great importance to communicating monetary policy decisions. In the 1970s, when the first Konstanz seminars took place, central banks still held the firm conviction that monetary policy makers must be tight-lipped and unpredictable. And the Federal Reserve, for example, did not begin communicating its interest rate target until 1994.

Forrest Capie, the historian of the Bank of England, provides a succinct example of how uncommunicative central bankers were at that time. He once recalled how the first press officer of the Bank of England was instructed to "keep the Bank out of the press and the press out of the Bank".

The doctrine that communication has little part in monetary policy still applied when Alan Greenspan was chairman of the Fed. His by now famous remark to journalists: "I guess I should warn you, if I turn out to be particularly clear, you've probably misunderstood what I've said" is a memorable proof of this attitude.

All this began to change in the 1990s. On the practical side, policy makers began to make central banks more independent. And the flipside of more central bank independence is more transparency and central bank accountability.

At roughly the same time, the advent of inflation targeting acted as a catalyst for enhanced transparency and communication. It was increasingly recognised that having a clear monetary policy objective was making monetary policy more credible and helped anchor inflation expectations.

In addition, more central banks came to appreciate the fact that a well-understood monetary policy strategy would allow market participants and the public to form expectations about how the central bank reacts to economic and monetary developments. For this strategy to work, monetary policy makers had to clearly communicate their objective, explain how they plan to achieve it and inform the public about their economic outlook and inflation forecast.

As a Bundesbanker, I cannot resist the temptation to mention that some consider the Bundesbank to be a forerunner in this regard. The Bundesbank always assigned great importance to explaining to the public the value of stable prices. We were - and still are - convinced that a stability-oriented monetary policy ultimately depends on a public that not only has an abstract notion of stable prices, but also values the concrete advantages of a stable currency. This is why the Bundesbank engaged very early on in communication with the public.

Already in 1970, the Bundesbank participated in issuing a brochure “on money", which illustrated in plain words the importance of money for society.

And Manfred Neumann had certainly a valid point, when he later said that the introduction of monetary targets in the 1970s was used by the Bundesbank to provide guidance about its intended policy course[1].

With hindsight, researchers have confirmed empirically that where communication was used to guide expectations, monetary policy has indeed become more predictable.[2] [3]

Researchers from the Bundesbank have recently re-examined the value of central bank communication. They argue that when the public disagrees about the inflation outlook, market participants rely more than usual on interpreting central bank actions to draw inferences about the true state of inflation.[4] They may then interpret an unexpected loosening of monetary policy as a policy response to a worsening economic outlook and adjust their inflation expectations accordingly. A loosening of the monetary policy stance could then even lower inflation – and vice versa.

There is thus a clear case for explaining our outlook for inflation and the economy to the public to prevent an unintended transmission of a monetary policy impulse.

In fact, it is safe to say that for some time now, the new consensus is that communication plays a central role in monetary policy making. Communication has almost become a monetary policy instrument in its own right. Michael Woodford once summarised this idea with the following words: “Successful monetary policy is not so much a matter of effective control of overnight rates […] as of affecting […] the evolution of market expectations". And expectations depend to a great extent on central bank communication.

Central bankers use a wide variety of tools to communicate their monetary policy, ranging from press statements, press conferences and speeches to monthly reports, research letters and research conferences. From the very beginning, the ECB, for instance, has held press conferences after each monetary policy meeting.

In recent years, the role of communication in monetary policy has increased even further. The quote of Michael Woodford is from 2001. That was long before policy rates reached or even came close to the effective lower bound in large parts of the advanced economies. But if policy rates are beginning to be constrained by the effective lower bound, it is becoming harder for market participants to draw inferences about how the central bank assesses the economic outlook from the policy rates alone, and how it can react in future when policy rate cuts are no longer possible. Technically speaking, the central bank’s reaction function is growing more complex.

At the effective lower bound, there is therefore a need to undertake greater efforts to clarify the reaction function and to explain future policy intentions. And there is a need to explain future policy intentions over a potentially longer time horizon, not least because changes to the short-term rate can be substituted, at least in part, by shaping the public’s expectation about the future path of short-term rates.

So when interest rates are close to the zero lower bound, central banks do not talk louder, but more.

To guide markets, monetary policy makers must engage more intensively in communicating their expectations about the economic outlook – for instance, if they believe that economic conditions warrant low interest rates for longer than the market expects. This is called Delphic forward guidance, because it relies on a forecast, like the prophecies of the Oracle of Delphi. It is important to recognise that Delphic forward guidance does not constitute a commitment to future monetary policy actions. It merely gives guidance about the expected level of future interest rates, depending on the economic outlook.

In the academic discussion we also find a different form of forward guidance: one in which the central bank commits to maintaining low rates for longer than economic conditions would warrant.[5] This second form of forward guidance is also referred to as Odyssean forward guidance. It commits the central bank to remain inactive, even when the inflation outlook has changed, just as Odysseus committed himself to remaining on his ship even when he heard the sirens.

It is thus no surprise that central banks increasingly resorted to forward guidance as nominal policy rates began approaching the zero lower bound. The Bank of Japan did so as far back as the late 1990s, the Federal Reserve introduced forward guidance in August 2011, and the Bank of England followed in August 2013.

4. The ECB’s forward guidance

The ECB first introduced forward guidance into its introductory statements at the press conference in July 2013, saying that it “expects the key ECB interest rates to remain at present or lower levels for an extended period of time". This is also referred to as expansionary bias with respect to interest rates.

When the asset purchases began, forward guidance was augmented by the assertion that the “net asset purchases are intended to continue […] until the Governing Council sees a sustained adjustment in the path of inflation". One may refer to this as an “exit criterion".

In addition, forward guidance also states that the Governing Council “stands ready to increase our asset purchase programme in terms of size and/or duration". This is the expansionary bias with respect to asset purchases.

Mario Draghi emphasised at this year’s ECB watchers conference that the Eurosystem’s monetary policy currently consists of three main elements: the key interest rates, asset purchases and forward guidance. This underlines that forward guidance currently plays a prominent role.

The ECB’s forward guidance is clearly a Delphic form of forward guidance. It formulates expectations with respect to the future evolution of interest rates and the volume of asset purchases. It is not a commitment to maintain a looser monetary policy stance for longer than is consistent with price stability.

This is no accident. An Odyssean form of forward guidance – at least in an extreme form of a commitment to an unconditional interest path – would not be consistent with our mandate. This was recently also emphasised by Benoît Cœuré.[6]

Because our forward guidance conveys expectations about the future course of monetary policy, it depends, of course, on the economic outlook. If the outlook changes, this will eventually have to be reflected in our forward guidance.

4.1 Economic outlook

As a matter of fact, the economic outlook for the euro area has improved over the past 12 months. Real GDP growth accelerated in 2016, from +0.2 % in the second quarter to +0.5 % in the final quarter. And the euro-area economy maintained this momentum at the beginning of this year. At the same time, the cyclical recovery is firming. Growth is broad-based and is widening to increasingly more countries. The ECB currently predicts the economy in the euro area to grow by 1.8 % this year and 1.7 % next year.

And with the robust economic recovery, the ECB also forecasts an ongoing decline in unemployment and a rise in wage growth. Hence, domestic price pressure in the euro area is expected to rise gradually.

The improving economic outlook moves one particular element of our forward guidance more into the focus of public attention: the officially stated precondition for ending the net asset purchases. Many people are asking: “What exactly does a ‘sustained adjustment’ in the rate of inflation mean?"

There is a temptation to answer: “You’ll know it when you see it.” But monetary policy isn’t that easy. It requires greater precision - in particular since central bank communication has taken on a more prominent role.

In fact, we have established four criteria to assess whether there is a sustained adjustment in the path of inflation consistent with our definition of price stability.

- First, headline inflation has to converge to levels below, but close to 2 % over a medium-term horizon.
- Second, the return of inflation into that range has to be durable, that is not only transitional.
- Third, and this is rather self-evident, this development must hold for the euro-area average and not just for individual countries.
- Fourth and finally, the convergence of inflation has to be self-sustained in the sense that inflation will return to the area consistent with our definition of price stability and will remain there even when the current level of monetary policy support is withdrawn.

This last condition clearly requires an estimate of how much the asset purchase programme is contributing to current and future inflation. In other words, one has to quantify the effect of the asset purchases on inflation.

And this is where monetary policy making leans heavily on academic research.

Quantifying the effect of economic policy measures is always difficult, because you don’t know what the circumstances would have been if a certain policy measure had not been taken. Thus, we have to construct counterfactuals from macroeconomic models, and in building these models we want to be close to the research frontier.

5. SAPI task force

To operationalise the concept of “sustainable adjustment", the Eurosystem acted as any public authority would: it set up a task force - a task force on a sustained adjustment in the path of inflation - the SAPI task force.

One important task assigned to it was to quantify the effects of the asset purchases on inflation and output.

The economists at the Bundesbank contributed by providing the task force with two simulations to identify the counterfactual situation. Both use a state-of-the-art DSGE model[7].

As you know, the first step in applying such a model is to think about why asset purchases should affect prices at all. After all, at the effective lower bound, central bank money and (short-term) government bonds are close substitutes. In a perfect capital market, central bank purchases of government bonds merely boil down to an asset swap by the banking system. They would have no impact on the real economy or the prices of goods.

But capital markets aren’t perfect. So, in practice, there are multiple channels through which asset purchases by the central bank can have an effect on the economy.

Our two DSGE models are based on different such channels. The first model works through the portfolio-rebalancing channel. Banks substitute government bonds sold to the central bank by corporate bonds. Purchasing government bonds by the central bank therefore increases the price of corporate bonds. Owners of these bonds receive capital gains which they use to finance additional investments.

The second model also depends on the portfolio-rebalancing channel. But in this model, banks not only invest in government bonds and bonds used to finance private investment. They also extend bank credit which they value at par. As in the first model, banks supply of credit depends on how much equity they hold. Asset purchases by the central bank lead to higher valuations of the banks' assets and therefore ultimately result in higher bank equity and increased lending.

We have used both models to simulate the effect of the ECB's asset purchase programme as it was initially announced in January 2015: A purchase of public and private sector assets at a volume of €60bn each month over a period of 19 month – implying a total volume of €1140 bn[8].

The models suggest that the asset purchases increase inflation by between 0.1 and 2.5 percentage points after two years. Real GDP increases by 0.1 % and 1 % over the same horizon.

In the first model, the positive effects of the asset purchases relax the so called loan-in-advance constraint of investors and therefore investment demand increases notably.

The second model yields much smaller results. This is because asset purchases by the central bank have two opposing effects. On the one hand, higher asset prices boost banks' equity. On the other hand, low interest rates reduce banks' profitability and hence bank equity. This partially offsets the first effect.

In my view, it would be fair to assume that the Bundesbank results provide a lower and upper bound for the size of the effects of our asset purchases - with respect to both output and inflation. But they also demonstrate vividly that the exact size of the effect is highly uncertain. Asset purchases work through many channels, and the total magnitude of the effect depends on the relative importance of these channels.

So what does this mean with respect to the question of whether there is a sustained adjustment in the inflation path of the euro area?

First of all, the asset purchase programme has certainly raised inflation, although it is rather uncertain to what extent. I do believe it is important to also consider the negative effects of our policies on bank profitability.

Second, the strengthening of the economic recovery makes it increasingly likely that the rise in inflation we have seen since August 2016 is not just a flash in the pan, but that we would have higher inflation rates compared to previous years even under a reduced degree of monetary policy accommodation.

It is also true, though, that the increase in headline inflation since last year is mainly driven by higher energy prices. But higher inflation in itself reduces the real interest rate as long as our key interest rates remain unchanged. This will further contribute to a strengthening of domestic price pressure - perhaps not immediately, but in the medium term.

And last but not least, our definition of price stability is a medium-term, forward-looking concept. Inflation does not always have to be in the target range of close to, but below two percent. Given the long and variable time lags in monetary policy, we do not fine-tune the inflation rate. These lags are sometimes shorter and other times longer. And in the current situation in which we are still in the aftermath of a financial crisis, this lag is probably longer.

In my view, the current economic outlook together with the improvement in the balance of risks suggests that the Governing Council is beginning to discuss whether and when it will be time to adjust our forward guidance.

6. Conclusion

Ladies and gentlemen,

I recently read a new book entitled “The seventh function of language". It’s a novel about the murder of a linguist who discovered how to unleash the language’s magical powers of persuasion.

If central banks had these powers, life would be much easier.

But Laurent Binet’s book is fiction - and happily so, I would add. Communication is not so easy in the real world, at least not for central banks. It always contains an element of trial and error: we have to see what works best. And in doing so, we keep a close watch on what suggestions research has in store. So let me conclude with these words: Keep up the good work.

Thank you.

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[2] W Poole and R H Rasche (2003): The Impact of Changes in FOMC Disclosure Practices on the Transparency of Monetary Policy: Are Markets and the FOMC Better “Synched"?

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[8] Deutsche Bundesbank (2016): The macroeconomic impact of quantitative easing in the euro area. Monthly Report 06/2016.