European monetary policy in times of high uncertainty

Lecture at ZEW – Leibniz Centre for European Economic Research

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Check against delivery.

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1 Certain uncertainty

Ladies and gentlemen,

Thank you very much for your invitation and kind welcome. I am delighted to be with you here in Mannheim today.

With this series of events, the ZEW (Zentrum für Europäische Wirtschaftsforschung GmbH) has been providing a forum for political, economic and academic exchange for more than three decades now. You have set out your expectations very clearly: "Pressing economic policy issues and recent developments are the focus."

At present, pressing issues and developments are indeed coming thick and fast. Take, for example, the numerous pivots in trade policy by the US (United States) Administration. Sometimes the issues are already outdated before you have even had a chance to address them. In any case, one thing is clear: we have a lot to discuss today.

Ladies and gentlemen,

When the ZEW (Zentrum für Europäische Wirtschaftsforschung GmbH) proposed a topic to me just over two months ago, I had no doubt in my mind: there was no chance that the chosen topic would already be outdated. And why not? As Alan Greenspan, former Chairman of the US (United States) Federal Reserve, once said: "Uncertainty is not just an important feature of the monetary policy landscape; it is the defining characteristic of that landscape."[1]

Greenspan said this in 2003. The term "the Great Moderation" had just been coined to describe a period of exceptional macroeconomic stability.[2] Uncertainty seemed to be relatively low at that time. Nevertheless, Greenspan stressed the factor of uncertainty. And he is not alone in this. I would imagine that none of you have ever heard a central banker say that uncertainty is currently negligible.

From my own experience, I can confirm that, when making monetary policy decisions, we are always faced with uncertainty. It is, after all, in the nature of the matter: the decisions impact a future that cannot be precisely predicted. Dealing with uncertainty is therefore part of the job description of monetary policymakers. What is constantly changing are the causes and degree of uncertainty. And that brings us to the heart of today's topic: European monetary policy in times of high uncertainty.

In my lecture today, I will address three key questions: How should monetary policy deal with uncertainty in general? What are the main causes of uncertainty at present and in the future? How is monetary policy in the euro area navigating the current period of high uncertainty?

2 Monetary policy under uncertainty

Let us start with the subject that we have just touched upon: the impact of monetary policy unfolds only gradually. The decisions of today affect the inflation of tomorrow. The gap between decisions and their impact necessitates a forward-looking approach. Or, to put it another way: when we are out in the monetary policy landscape, we are also looking to our more distant surroundings.

This means that a core part of preparing for monetary policy meetings is to assess future developments. And, unlike with the weather, for example, the current situation is not entirely clear, either. A broad set of data and diverse economic models are therefore helpful for us. Like a magnifying glass and a pair of binoculars, they make it easier for us to examine our environment as closely as possible. Following on from this, we can differentiate between two types of uncertainty: data uncertainty and model uncertainty.

Data uncertainty arises because not all of the information is available to obtain a picture of the "true" state of the economy. There are a number of reasons for this: not all of the data that would be of interest are recorded statistically or can be recorded in their entirety. Some data are only available with a considerable time delay. Some are subject to measurement issues, so the data need to be revised later.

To give one example: for economic activity in the euro area, Eurostat (European statistical office) provides a preliminary flash estimate around four weeks after the end of a quarter. This is based on a very limited dataset, and especially the figures for the third month of the quarter need to be estimated. The actual flash estimate is released two weeks later. But even this does not yet include any details or nominal data. Another two to three weeks later, it is followed by an initial estimate with a more detailed breakdown by components. However, even then, changes should still be expected, and these can sometimes be considerable.

This demonstrates how we have only incomplete knowledge of the present in real time. The description and assessment of the current situation are therefore already subject to uncertainty.

In addition to this, there is model uncertainty. In order to be able to examine macroeconomic processes, complex realities must be simplified. This simplification is achieved through models. They are confined to a small number of interrelationships that are as relevant as possible. All others are disregarded. In monetary policy, we use models, for example, to predict the development of inflation or to estimate the effects of our monetary policy measures. However, there is plenty of room for discussion on whether the simplifications in each model are always adequate.

But even if we were all in agreement on the model framework, other sources of uncertainty still remain. This concerns, for one thing, the parameters. These reflect the assumed strength and dynamics of the relationships within a given model. The parameters are usually estimated on the basis of past observations. The estimation results therefore also depend on the selected investigation period. Furthermore, parameters can evolve over time, for example as a result of structural change. Particularly if this happens abruptly and the structural breaks are not detected immediately, the model results can then be misleading.

For another thing, models often make use of variables that cannot be observed directly, such as potential output or natural interest rates. These must themselves be estimated, which entails considerable uncertainty.[3] This also shows how closely data uncertainty and model uncertainty are intertwined.

To summarise: models arrive at different results due to uncertainties in their structure, parameters and estimation variables, which may lead us to different conclusions. Assessment by experts then often determines the final forecast picture.

In practice, data uncertainty and model uncertainty are especially relevant when unexpected events occur. At these times, monetary policymakers' need for comprehensive information is, of course, particularly great. This is because the appropriate monetary policy response depends on the nature of the unexpected events in question. However, data uncertainty and model uncertainty make it difficult to definitively ascertain the exact nature and magnitude of a shock that is currently taking place. There is a relatively high risk of being wrong. What can monetary policymakers do against this?

First of all, we draw on many different sources of information to obtain as complete a picture of the current situation as possible. For example, in 2019 and 2020, we at the Bundesbank began to regularly survey households and firms about their assessments and expectations. Since 2020, we have been measuring the activity of the German economy using a weekly index. Since the start of the war in Ukraine, models have been developed that explicitly take gas price shocks into account.

In addition, we are continually working on improving our forecast models even further. Artificial intelligence now offers new possibilities, such as capturing non-linear relationships, analysing large sets of data, and automating and accelerating analytical processes. We are intensively examining all of these possibilities at the Bundesbank. And we have already achieved some promising successes in this regard. I will come back to touch upon one specific prototype later on.

Given the data uncertainty and model uncertainty, we in monetary policy are well advised to pursue a strategy that is as robust as possible. To stick with the image of Alan Greenspan: in the monetary policy landscape, you should best avoid flip-flops. Sturdy footwear is needed here. A robust strategy produces good results under various assumptions and prevents particularly costly mistakes.

The more uncertain the setting, the greater the risk of policy errors. That is why, when uncertainty is high, monetary policymakers are also in demand as risk managers. We have to consider various scenarios, assess the likelihood that they will materialise as well as their implications, and also weigh up the costs and benefits of different monetary policy paths that lead to the inflation destination. How do these considerations affect our decisions? The short answer is: it depends.

A gradual approach might make sense when uncertainty is high.[4] It is human nature: when the room you are entering is dark, you do not simply rush in. You proceed slowly, taking small steps. Applying this analogy to monetary policy, the costs of reversing policy following an error could outweigh the costs of acting too late. "Flip-flopping" could itself add to the uncertainty and destabilise expectations. Moreover, abruptly changing direction can precipitate greater volatility in financial markets and pose risks to financial stability.

That said, it will not always be the case that cautious monetary policymaking is a good response to high uncertainty. I am talking about situations in which a "wait-and-see" attitude increases the risk that the outcome will be particularly unfavourable. Going back to the dark room I mentioned just now: if the flames are right behind you, you should not edge your way forwards in small steps. A scenario where inflation expectations risk drifting off might be just such a case. Then, a vigorous response would be appropriate to protect yourself from this worst-case scenario. As you can see, it may be necessary to respond swiftly and comprehensively, precisely because uncertainty is high.

Clearly, monetary policymakers acting as risk managers would be well advised to take robust control approaches into account when making decisions in particularly uncertain times.[5]

3 Drivers of uncertainty

3.1 Trade policy flip-flopping

Ladies and gentlemen,

Right now, these considerations are anything but mere theory. And that is due, not least, to the White House. Since the change of administration in the United States, no little uncertainty has been rippling across the Atlantic. The waves caused by US (United States) trade policy have been particularly huge.

Since April, the United States has been imposing additional tariffs of at least 10 % on all its trading partners. Tariffs that are higher still apply to imports of steel and aluminium as well as to cars and automotive parts. Tit-for-tat tariff hikes by the United States and China drove tariff rates to more than 100 % at times. In mid-May, the two countries agreed to lower them significantly for a time.[6] Even so, the average effective US (United States) tariff rate has climbed by more than 13 percentage points in the year to date, reaching its highest level since the 1930s.[7] In addition, there is a risk of tariffs going higher still as of July if bilateral negotiations fail.

The shock waves unleashed by US (United States) trade policy are not only having an impact via the actual tariff burden. Their unpredictability and the doubts they have raised about US (United States) economic and fiscal policy are also leaving a mark, as reflected by the sometimes severe fluctuations in financial markets. The tariff hikes announced on 2 April, for example, caused implied stock market volatility to spike significantly higher. This points to a high degree of uncertainty among market participants – in the United States especially, but also in the euro area.

Measured in terms of the number of mentions in newspaper articles, trade policy uncertainty peaked this spring.[8] And that is hardly surprising given how many questions this topic is raising: which tariffs will be put into effect, temporarily suspended or withdrawn – and when? What retaliatory measures will follow in each case? To what degree will goods flows in global trade be diverted? What will be the fallout from this? Will action be taken to curb these diversions? And, if so, by whom? You could keep going like this ad infinitum.

Even in times when trade policy moves in straight lines, forecasts of the economic impact of upheavals in the tariff regime would be no more than rough approximations. But we are dealing with an almost unpredictable cycle of events: tariffs are threatened, put into force, partially withdrawn, and then threatened again.

One example of this is the US (United States) tariff policy imposed on the EU (European Union). First, on 12 March, the United States imposed general tariffs of 25 % on steel and aluminium. A little time later, additional blanket tariffs of 25 % were imposed on cars and automotive parts as well. On 2 April 2025, President Trump also announced what he called "reciprocal" tariffs for a host of trading partners depending on the bilateral trade deficit and amounting to at least 10 %, and, in the case of the EU (European Union), 20 %. But then, with turmoil raging in financial markets, President Trump, on 9 April, suspended the tariffs for 90 days, initially in order to reach "deals". The minimum 10 % tariff and the additional 25 % tariff on cars, steel and aluminium were left in place, though. On 23 May, President Trump threatened the EU (European Union) with 50 % tariffs, starting on 1 June – a threat he withdrew two days later. This means that forecasts are based on a footing that is less stable than usual.

As far as economic growth is concerned, at least the direction of travel seems to be clear: Germany, like the euro area as a whole, is likely to suffer marked losses as a result of US (United States) tariff policy. First, the higher tariffs will make European goods less competitive in the US (United States) market. This will probably shrink exports to the United States. Second, sluggish economic activity in the United States and other trading-partner countries will dampen demand for products from Europe. Third, the high degree of uncertainty makes longer-term planning more difficult. Enterprises could therefore postpone investment decisions in the hope of quieter times.[9]

The Bundesbank has simulated the impact of US (United States) tariff policy effective in mid-April, China's retaliatory measures, and the immediate exchange rate response. The results suggest that economic output in the euro area could be just under half a percentage point lower over the medium term.

The direction in which the trade dispute will move inflation in the euro area, however, remains unclear. On the one hand, weaker growth tends to dampen prices. Potential diversion effects resulting from more goods from China in the European market might also leave inflation somewhat lower. On the other hand, any retaliatory tariffs imposed by the EU (European Union) would fuel inflation.

How the exchange rate will evolve going forward remains to be seen. In theory, the expected response to the US (United States) tariffs would be a stronger dollar. If anything, this would tend to drive prices higher in the euro area. But things have played out differently so far. In the wake of the tariff discussions, trust in the US (United States) dollar has declined, at least temporarily, causing the currency to depreciate markedly since 2 April. In the euro area, this has dampened inflation.

Thinking beyond day-to-day terms, it is conceivable that longer-term effects will materialise as well. For example, tariffs can have a particularly negative impact on trade in intermediate goods.[10] This is because they shake the calculations upon which global production networks are based.

Enterprises have fine-tuned their supply chains to forge highly cost-efficient pro-
duction structures. However, the trade barriers are putting a spanner in the
works of global value chains. Enterprises will have no option but to recalculate
their supply chains and tweak some of their relationships with suppliers. They
will build up new partnerships and no doubt pay particular attention to strength-
ening their resilience. This will not happen overnight, especially with political
conditions as unsettled as they are right now.[11] In the process, they may well
relinquish some of the efficiency gains they have reaped. Over the medium term,
this could generally drive up their costs and, as a result, their prices as well.

3.2 Structural change is progressing

The reconfiguration of global value chains is working in tandem with other struc-
tural changes: among them, first and foremost, climate change and the transi-
tion to a climate-neutral economy. The ageing of society is also playing a role,
with more people entering retirement and fewer people still in the workforce.
And let us not forget digitalisation, which brings with it great opportunities for
increased productivity but also considerable change in many professional fields,
as well as the risk of giving individual big players more market power.

All of these factors could influence the inflation environment. It is often unclear
in which direction inflation is heading, and it may change over time. Overall,
these structural drivers make it difficult to assess medium-term inflation
developments.

3.3 New geopolitical realities

Alongside structural change and the almost fully unpredictable developments in
the tariff dispute, there is a third factor of uncertainty. Old security policy certain-
ties have given way to new geopolitical realities. This is creating new challenges
for Europe: we will thus need to invest significantly more in our own security.

In order to sufficiently bolster our defence capabilities, considerably greater
funds are required. There is a strong case against financing such ad hoc needs in
the short term solely by rebalancing budgets. The European Commission, for
instance, proposes activating the national escape clause in the
EU (European Union) fiscal rules in order to temporarily allow countries greater
scope for borrowing.[12]

I think this is a justifiable approach. It would allow countries to gradually adjust to higher defence spending. However, it must be clear that this would only be a transitional period. Increased deficits cannot become a permanent state of affairs. A resilient Europe that is capable of action rests on a stable foundation. This includes sound public finances whereby key items are funded in the core budget and through current revenue.

Overall, there are signs of a more expansionary fiscal policy stance for the euro area. Whether or not greater debt also leads to greater price pressures in the euro area depends on many factors, such as what the additional money is spent on, how quickly it flows out, and how much money flows in from abroad. These uncertainties make it more difficult to forecast developments. In any case, the ECB (European Central Bank) Governing Council is keeping a close eye on risk. As stated in the account of our April meeting: "A boost in defence and infrastructure spending could also lift inflation over the medium term."

4 Monetary policy stance in the euro area

The current high level of uncertainty is a slight dampener on the gratification brought about by positive developments: since the beginning of the year, the euro area inflation rate has fallen from 2.5 % to 2.2 % in April. This has finally brought the target within reach. We are on the right path, even if it remains rocky. The core rate has recently risen again. At 4 %, prices for services, in particular, have seen surprisingly steep growth.

The ECB (European Central Bank) Governing Council will continue to steer the monetary policy stance in such a way that the inflation rate stabilises at 2 % over the medium-term. You may now be asking yourselves: "What exactly does that mean for the next meeting in June? Will there be another interest rate cut?" Pressing as these questions are, I unfortunately cannot answer them today.

Since July 2022, we on the ECB (European Central Bank) Governing Council have been following a data-dependent approach, making decisions on a meeting-by-meeting basis. This approach has proved successful when dealing with the heightened uncertainty of recent years, such as during the aftermath of the COVID (coronavirus disease)-19 pandemic and in the wake of Russia's war of aggression against Ukraine. We have stayed flexible and have continuously assessed how the incoming data change the medium-term inflation outlook. Here, we supplemented our baseline – which is the most likely outcome – with scenario analyses. This also allowed us to assess the probability of less likely but still conceivable outcomes.

Using this approach, I believe that we are well equipped to deal with the current high level of uncertainty, too. As I explained earlier, inflation could be higher or lower than the latest expectations, depending on how the tariff dispute develops as well as other influencing factors like the exchange rate, services prices and fiscal packages. In light of this, it seems to me more advisable than ever to make decisions meeting by meeting on the basis of the latest data. If we had not already been operating so flexibly, we would have had to start doing so now, at the latest. It would be impossible to reliably commit to a specific interest rate path at the current juncture.

In June, the ECB (European Central Bank) Governing Council will have a fresh set of data and an up-to-date forecast. These will help us to align the monetary policy stance in a way that will bring us another step closer to our goal. Our destination is clear: we want the inflation rate to reach the target of 2 % soon and to stabilise there on a sustainable basis. Of that, there is no doubt. In doing so, we are thus providing a stable anchor for inflation expectations.

Anchored inflation expectations make it easier for monetary policymakers to bring inflation back to target after unexpected events. The successes in the fight against the far too high inflation rates of the past few years were achieved at relatively low economic cost.[13] This was partly attributable to the fact that inflation expectations were better anchored than before. But we cannot rest on our laurels with regard to the future, because the starting position has changed. We no longer have decades of moderate inflation rates behind us. For many people, the experience of such strong price surges was new and dramatic. The memory of this is unlikely to fade quickly.[14]

Inflation expectations, as well the associated price and wage setting, may now respond more quickly or more strongly to future inflation shocks. We therefore need to be particularly vigilant when it comes to the evolution of inflation expectations. For instance, medium-term inflation expectations amongst euro area households and firms were recently on the rise again. Concerns about rising prices caused by tariff policy are not only on American minds, then. We will keep a close eye on this development.

Ensuring that inflation expectations are firmly anchored is a permanent task for monetary policymakers. This can be achieved by ensuring that our commitment to stability is highly credible and that our communication is clear.

To further improve clarity, we have since implemented AI (artificial intelligence)-assisted text analysis methods, too. In this vein, the Bundesbank has developed a novel AI (artificial intelligence) model that can produce detailed and transparent evaluations of monetary policy texts.[15] This allows us to assess, for example, whether certain statements are likely to send the desired signals. After all, we do not want our communication to trigger undesirable market reactions or create additional uncertainty. AI (artificial intelligence) analysis does not replace human expertise. But it can help us to further improve our understanding of monetary policy communication and its impact.

5 Conclusion

Ladies and gentlemen,

If you are currently wondering whether this speech was generated by AI (artificial intelligence), or, indeed, if it will ever end, I can assure you that real people were involved in the speech-writing process, and I have now come to my closing remarks. Our AI (artificial intelligence) model is currently used to evaluate texts. Incidentally, this speech was classified as "neutral" in monetary policy terms.

Alan Greenspan would probably have pushed the model to its limits. His statements were often so cryptic that the media and financial markets took to seeking out other clues: for example, when it came to monetary policy decisions, they looked at the thickness of his briefcase. A slim briefcase was thought to indicate an uneventful meeting without interest rate changes, whilst a bulging briefcase signalled a need for discussion and an adjustment to the policy rate.[16] During his term in office, Mr Greenspan was once asked whether there was any truth to this theory. His answer: "The thickness of my briefcase depended on whether or not I had packed a sandwich."[17]

Unfortunately, not all uncertainties can be so easily erased from the monetary policy landscape. But, as we can see, asking direct questions and talking to each other often contributes to greater clarity. Which makes me all the more excited for our discussion!

Thank you very much.

Footnotes:

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