

# „Prediction is very difficult, especially if it's about the future.“

geschrieben von Friederike Spiecker | 26. September 2023

Whoever this bon mot is attributed to, it makes one smile and takes the heat out of a debate that should be about the matter at hand and not about dogmatism. Predicting economic development in times as turbulent as the present is indeed a delicate business for anyone who dares to do it. But since assessments of the future development of a country's or continent's economy are important for forward-looking economic policy, it is precisely then that the quality of forecasts on which decision-makers rely must be closely scrutinised.

The actual problem with macroeconomic forecasts is not that they can't take unforeseeable shocks into account or that they are simply wrong by chance, but if they are systematically subject to errors of judgement. Because forecasts with such errors lead economic policy astray systematically and not accidentally. It is particularly fatal when the forecasts are considered objectively neutral due to the use of complex mathematical models in calculating the figures. As a result, both the advisors and the advised may feel somehow protected or at least justified in their assessment. If things turn out differently than calculated by the models, misjudgements are quickly blamed on the inadequacy of the models in turbulent times.

However, this shortcoming of model forecasts is known *in advance*. If one nevertheless wants to base economic policy decisions on them in turbulent times, it is therefore necessary to check whether the changes in the model-based forecasts can be interpreted meaningfully. By feeding in new ex post data, the forecasts are constantly adjusted to actual developments, whether or not they involve unforeseeable shocks. At the current margin, they therefore necessarily reflect reality. However, this does not mean that – beyond unforeseeable new shocks – they also reflect the processing of shocks *that have already occurred* in a reasonably coherent economic way for the forecast horizon. If the model forecasts demonstrably fail to do the latter, they are useless.

## **Interdependence of monetary policy and macroeconomic development**

In my opinion, this problem can be seen in the three past forecasts of the European Central Bank (ECB). The Executive Board of the ECB cannot retreat to the position that the projections are made independently and quasi-objectively by the staff of the central bank and that it, the Executive Board, merely reacts to them with its policy. For of course monetary policy influences economic events at all times and is therefore part of both the actual and the expected processes. In fact, just as the ECB seeks to incorporate the behaviour of economic agents and their expectations into its decisions, the economic agents do the same with the implemented and expected monetary policy. The interdependence of both sides must be taken into account in any ex post analysis and in any forecast.

The following tables list the annual rates of change of various macroeconomic indicators of the Eurozone, which are taken from the ECB's three forecasts of [March](#), [June](#) and [September 2023](#), the essential basis for the interest rate decisions. The rows contain the values of the indicators for the past year 2022, the current year 2023 and the subsequent forecast period 2024 and 2025. In the March projection, the data for 2023 were largely forecast values, as most of the year was still in the future and the statistics naturally always lag the current edge by a few weeks. By contrast, in the latest forecast from September - apart from revisions by the European Statistical Office - the short-term monthly and quarterly indicators for the first half of 2023 and partly beyond are now largely known and to that extent set the figures for 2023 as a whole to a considerable extent.

### **The shrinking growth forecast**

The ECB projection for the growth rate of price-adjusted gross domestic product - also known as real GDP - in the Eurozone (Table 1) shows that the ECB officials are now more pessimistic about the development compared to the spring (then still +1.0 per cent). This is mainly due to the fact that the actual development up to and including the third quarter of 2023 has been worse than expected. In the forecast, which contains an outdated, overestimated value from Eurostat for the quarter-over-quarter rate of change for the second quarter and which estimates stagnation for the third quarter, the development still to come for the fourth quarter is set at +0.1 percent (not shown here), three tenths of a percentage point weaker than in June, but still positive. The growth rate has also been revised

downward for 2024 (from 1.6 to 1.0 percent).

<b>Development of the ECB forecast</b>				
		March 2023	June 2023	September 2023
<i>annual rate of change in %</i>				
<b>GDP, price adjusted</b>				
	2022	3,6	3,5	3,4
	2023	1,0	0,9	0,7
	2024	1,6	1,5	1,0
	2025	1,6	1,6	1,5
Source: ECB Macroeconomic Projection Database.				

Table 1

However, monetary policy has not reacted to overall disappointing growth expectations by halting its rate hikes or even cutting rates. The target rate for the consumer price index of two percent continues to be missed and is even increasingly missed over the course of the three forecasts (Table 2): Instead of 5.3 per cent, the price level is now estimated to increase by 5.6 per cent on average in 2023. The forecast values for 2024 have also been raised since March from 2.9 percent to 3.2 percent.

<b>Development of the ECB forecast</b>				
		March 2023	June 2023	September 2023
<i>annual rate of change in %</i>				
<b>consumer price index</b>				
	2022	8,4	8,4	8,4
	2023	5,3	5,4	5,6
	2024	2,9	3,0	3,2
	2025	2,1	2,2	2,1
Source: ECB Macroeconomic Projection Database.				

Table 2

And this is precisely the central bankers' reasoning for the further tightening of their monetary policy: In their eyes „inflation“ is not falling fast enough in the short and medium term, but is proving stubborn. Therefore, demand must be dampened further in order to accelerate the process of calming the rates of price increases, the ECB says.

The crucial question is: Is the ECB's assessment of the effect of its interest rate policy on both the rate of price increases and the overall economic development correct or at least consistent in the course of its forecasts?

I discussed possible reasons why the rate of increase in consumer prices is not declining as quickly and has so far reacted less to the interest rate policy than the ECB would have liked in the article „[Lob für die deutschen Unternehmen](#)„. If my analysis captures the essence of the problem correctly, the ECB's rationale for its current policy is on shaky ground. For then the rate of price increases would fall even without the extreme monetary tightening and Europe could avoid the negative side effects of this policy.

But from the ECB's point of view, these side effects are not that serious - it is not predicting a recession in the Eurozone. But are the ECB's assumptions on the development of aggregate demand in the Eurozone plausible? After all, it is of no use correcting expectations in the actual data that turn out to be too positive at the current margin, but simply holding on to the positive expectations themselves and only shifting them a little further into the future without taking an unbiased analytical look at the question of why things have not turned out as expected. Those who fail to come up with halfway satisfactory answers here must expect to be accused that a positively forecast dynamic is based more on wishful thinking than on well-founded, objective considerations.

### Consumption forecasts contradict each other over time

To better understand the GDP forecast, we need to look at the two main components of domestic demand: price-adjusted private consumption and fixed capital formation. Let us start with private consumption (Table 3).

<b>Development of the ECB forecast</b>				
		March 2023	June 2023	September 2023
		<i>annual rate of change in %</i>		
<b>private consumption, price adjusted</b>				
	2022	4,3	4,4	4,1
	2023	0,7	0,2	0,3
	2024	1,3	1,9	1,6
	2025	1,4	1,5	1,6
Source: ECB Macroeconomic Projection Database.				

Table 3

In the course of the three forecasts, the de facto increasingly weak development of private consumption for 2023 is tracked - by necessity, as it is increasingly statistically proven: instead of +0.7 per cent, the monetary guardians now assume only +0.3 per cent. It is interesting to see how the ECB experts assess the development of private consumption for the coming year. They see it growing more strongly than in 2023, which they justify with high wage settlements on the one hand and the expected decline in price increase rates on the other.

It is curious, however, that this assessment in September (+1.6 per cent for 2024) has strengthened compared to the one from March (+1.3 per cent), although the „inflation“ forecast for 2024 has turned out less favourable in the meantime. (Although the central bankers revised downwards again their idea of consumption growth in June from +1.9 per cent, it is still higher in the September projection than in March).

If one takes into account that the assessment of wages (compensation per employee) has not changed since the spring (Table 4), one wonders why hopes for a pick-up in private consumption have increased. Its current development shows a flattening at best, and there is no impulse for an acceleration in sight that was not already known in March. Rather, the ECB itself believes in an impulse for the worse when it revises its forecast of the growth rate of the price level upwards.

<b>Development of the ECB forecast</b>				
		March 2023	June 2023	September 2023
<i>annual rate of change in %</i>				
<b>nominal labour compensation per employee</b>				
	2022	4,6	4,6	4,3
	2023	5,3	→ 5,3	→ 5,3
	2024	4,4	→ 4,4	→ 4,3
	2025	3,6	3,6	3,8

Table 4

Now, one may consider a few tenths of a percentage point change in the assessment of the price level development to be not so decisive for private consumption. But if one takes this view, one cannot at the same time claim that one wants to dampen demand with interest rate hikes in order to force the rate of price increases more quickly to the two-percent level. Either one sees the overall

decline in the rate of price increases as a reason for more consumption; then the correction of expectations on the price front towards the negative must also worsen the assessment of the consumption outlook. Or one sees the connection between consumption and price increases as rather loose, in which case one should not explicitly justify the tightening of monetary policy with the dampening of demand, of which private consumption is the largest part. Here is an argumentative contradiction that the monetary guardians would have to face.

### **Projected real wages rise more slowly than projected private consumption**

A simple rough calculation based on the forecast values yields the following: In the current year, wages will rise by 5.3 per cent in nominal terms (Table 4) and consumer prices by 5.6 per cent (Table 2), which results in a decrease in real wages of about 0.3 per cent. According to the ECB, real private consumption should react to this with +0.3 per cent growth. It can only do so if one assumes a reduction in the propensity to save of private households or that people will work more or longer. The sideways movements that employment and unemployment in the Eurozone have been displaying since the beginning of the year do not speak in favour of the second variant.

For the coming year, the same rough calculation shows that real wages will increase by 1.1 per cent (calculated as 4.3 - 3.2). If private consumption were actually to rise by 1.6 per cent, this would mean that once again more would have to be worked and/or less would have to be saved. Both seem unlikely in view of a slight increase in unemployment forecast by the ECB. In other words, an acceleration of consumption growth from 0.3 per cent to 1.6 per cent is very optimistic despite the assumed increase in real wages.

For a realistic assessment of consumer behaviour in the coming months, one has to ask the following: How will wage earners below the median react to the abolition of non-tariff inflation compensation payments (i.e. one-off payments), such as those agreed in many German collective agreements? After all, the price level is not falling in absolute terms. Anyone who can barely make ends meet today can only generate more consumption from a wage increase that starts from a lower base (namely the one without one-off payments) if the increase more than makes up for the one-off payment, if the person works longer and/or gets into debt. All three variants are not very likely.

Above all, however, these prospects also face all those who are not yet so badly off materially that they currently have to spend their entire earned income. However, this group is likely to fear that they could end up in such a situation. Against this background, their propensity to save will tend to remain constant or even increase. The prudence principle is also likely to gain weight among private individuals because they fear that the energy price brakes will be abolished due to the European fiscal rules or the German debt brake. After all, the ECB has explicitly called on the governments of the EU countries to take such steps. Even if the energy price brakes do not currently take effect, concerns about a renewed rise in energy prices could strengthen the propensity to save among the middle class. Then there will be no economic recovery driven by private consumption.

### **The current investment forecast does not reflect the statistics at the current margin**

However, the figures that the monetary authority assumes for the development of real investment are particularly questionable (Table 5). Last year, investment activity was not exactly exuberant at +2.9 per cent when compared to pre-Corona times (e.g. 2019 +6.9 per cent). For the current year, the ECB has noticeably revised upwards its rather pessimistic assessment in March (+0.3 per cent), which was presumably based on concerns about the energy crisis, to +1.7 per cent in September - despite the further significant increase in key interest rates in the meantime. How does this fit in with the statement that the transmission of monetary policy into the real economy is strong?

The +1.7 per cent figure is also astonishing because Eurostat indicates the two growth rates, i.e. the rate of change compared to the previous quarter, for the first and second quarter of 2023 at +0.3 per cent each. To reach +1.7 percent growth in 2023 as a whole, the growth rates in the second half of the year would have to more than double, e.g. to +0.8 per cent each quarter.

Development of the ECB forecast				
		March 2023	June 2023	September 2023
		<i>annual rate of change in %</i>		
<b>fixed capital formation, price adjusted</b>				
	2022	3,7	3,8	2,9
	2023	0,3	1,5	1,7
	2024	1,4	1,1	-0,4
	2025	1,8	2,1	1,4
Source: ECB Macroeconomic Projection Database.				

Table 5

What impulse should underlie this forecast turn for the better remains a secret of the central bankers. At least this secret corresponds with the following paragraph from a [speech given by the ECB president in Jackson Hole at the end of August](#): *“Most importantly, we are likely to see a phase of frontloaded investment that is largely insensitive to the business cycle – both because the investment needs we face are pressing, and because the public sector will be central in bringing them about.”*

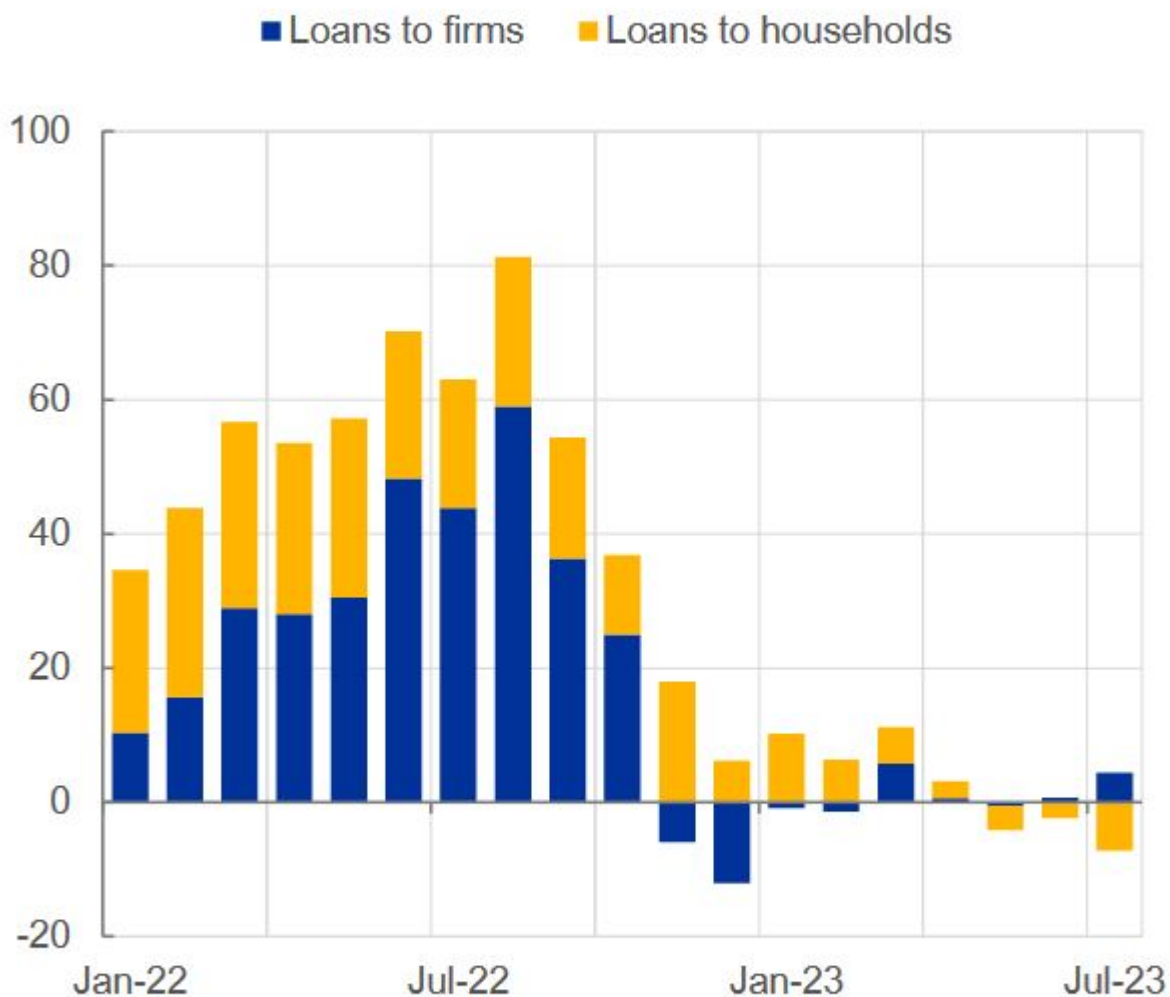
Does Christine Lagarde really think that because investment needs are pressing, investment will actually be made? Does that mean that you only have to write down what you think is necessary and then it will happen? No, that is not enough as a basis for an investment forecast. Even more so if at the same time fiscal policy is instructed to tighten its belt. In a market economy, private investors cannot simply be forced to put money into a „green“ capital stock whose return – due to a lack of sufficient utilisation prospects – they consider too low compared to the interest rate level determined by monetary policy.

It is important to understand that monetary policy, which primarily affects investment, thereby affects not only demand today, but above all the supply of goods in the future. If investments are curbed, existing bottlenecks on the supply side will not be eliminated or will be eliminated more slowly and new ones may arise. The cited idea of the ECB president shows that the ECB leadership does not pay sufficient attention to the effect of its interest rate policy on the real economic *supply side*. It is thus making it more difficult to achieve its own target of a two percent rate of price increase. By the way, the 2023 investment forecast is clearly at odds with the development of the credit volume that banks in the Eurozone are granting to companies and private households: This collapsed to



around 0 billion euros in the first half of the year (after more than 40 billion euros per month in the same period last year). This can be seen in a chart from a [set of slides available on the ECB's website](#), used by ECB Executive Board member Isabel Schnabel on the occasion of a meeting with the German Banking Association (see the figure below).

## Bank loans to firms and households (monthly flow in EUR bn)



Sources: ECB (BSI).

Notes: Loans to households and firms are adjusted for sales and securitisation. Loans to firms are also adjusted for cash pooling.

Latest observation: July 2023.

The title of the corresponding slide is therefore consistent: „Strong transmission to funding costs and bank lending“. The volume of loans granted by banks in the Eurozone fell right after the key interest rate hike in June 2022 - a lag structure

between 4 and 6 quarters, as the ECB usually assumes, is nowhere to be seen. And this also explains why the quarterly figures on investment activity published by Eurostat are so low: The increasingly tightened interest rate brake is curbing fixed capital formation rapidly and across the board. How can a recovery be expected before the end of the year?

After all, the ECB significantly corrected its investment forecast for 2024 between March and September 2023, namely from an increase of 1.4 percent to a decrease of 0.4 percent. For 2025, the ECB believes that investment in the Eurozone will only increase by 1.4 percent, despite all the necessities of structural change and all the support measures. This would be a slowdown caused by monetary policy that Europe should not afford. But they are not so noticeable in the forecast GDP growth rate „thanks“ to the predicted upswing in consumption.

## **Conclusion**

And so, in mid-September, the majority of the ECB Executive Board was apparently able to consent with the hawks' proposal to raise interest rates again with a clear conscience, namely in the forecast-supported conviction that, on the one hand, the further interest rate hike would already not have such a bad effect on the real economy and, on the other hand, [the „greedy beast“ inflation](#) could only be tamed with a firm hand.

The analysis of the three most recent forecasts presented here shows that the previous misjudgements are only taken into account technically, so to speak, in the form of corrections at the current margin, but are not taken as an opportunity to question the considerations on which the original forecast was based. This suggests that, contrary to what they publicly say, the monetary authorities are not so much taking a logical approach to monetary policy based on ex-post data but rather work to present an up-to-date forecast that is not superficially at odds with the intended hard monetary policy. This will not end well for the real economy and will encourage political radicalisation in Europe.