

Framing the ECB's rate cutting cycle

Using a macro fundamental framework to guide easing cycle

Macroeconomic Research



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Key points

- Market pricing was a poor predictor of actual ECB decisions in the last interest rate hiking cycle. Detailed analysis suggests market expectations more than two to three weeks before an ECB meeting should be viewed with great caution
- The Orphanides-Wieland rule suggests some upside to our – and the market's – baseline of a 25-basis-point (bp) ECB rate cut in June. Further out, the Taylor rule highlights that rates could fall by more than the 125bp we predict by end-2025
- We believe it is worth stepping back from these well-known, yet simple, policy rate rules. The ECB is likely to maintain a more holistic approach, including risk management
- A cautious approach to using these rules is paramount, reinforced by two key uncertainties – the Eurozone faces multiple large (negative) supply structural changes, which may imply higher price pressures than in the past. Second, fiscal policy in the context of the new Eurozone framework may also be more inflationary than in the past

Pinning rate expectations - (renewed) challenges

The European Central Bank (ECB) deployed extraordinary monetary policy measures in the wake of the Eurozone's sovereign debt crisis (EDC). While possibly these were most remembered for quantitative easing and negative interest rates, it also included the introduction of interest rate forward guidance by the ECB. For most of the past decade, these policies have reinforced one another, pushing actual and expected interest rate levels as well as volatility to historical lows. ECB analysis shows that interest rate forward guidance was the most impactful on mid-maturity while it also suggests it played a stabilising role on interest rates¹.

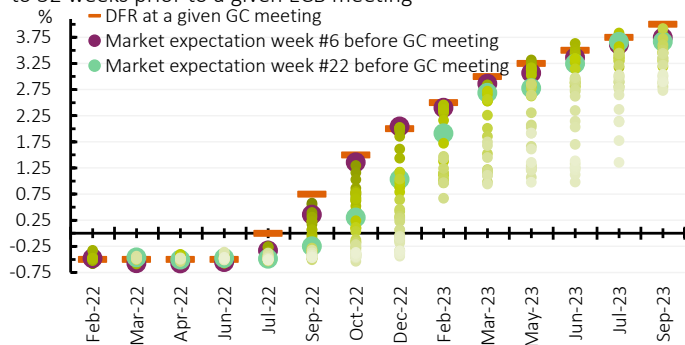
However, the subsequent, and compounding shocks of COVID-19, the Ukraine conflict, and ensuing policy responses, generated an abrupt regime shift. Given that interest rates had been in negative territory for almost a decade, the unprecedented nature of these shocks implied very high uncertainty about the future path of short (and medium) term rates. As the cost of borrowing has returned to positive territory, the ECB has provided only limited guidance on the pace of hikes and refrained from opining on the required peak. This has resulted in significant market undershooting of anticipated interest rates for almost every single ECB Governing Council meeting during the entire hiking cycle (Exhibit 1). Instead, the ECB emphasized its data-dependence, which increased the backward-looking skew of its reaction function (versus its own forecasts) and reduced its ability to guide market expectations.

¹ Altavilla, C., Lemke, W., Linzert, T., Tapking, J. and Von Landesberger, J., "Assessing the efficacy, efficiency and potential side effect of the ECB's

[monetary policy instruments since 2014](#)", ECB's Occasional paper series, December 2021

In this research paper, we take stock of the mismatch between market expectations of policy rate and actual ECB decisions during the recent tightening cycle (Exhibit 1). This comes in a context of sharp market rate cut expectations repricing since the fourth quarter (Q4) of 2023, having significantly faded for both the March meeting as well as throughout this year. As the macroeconomic shocks fade, paving the way for lower policy rates, we review the policy rules which used to guide the ECB's rate setting pre-EDC. We conclude by highlighting key uncertainties on the future interest rate trajectory: multiple large supply shock(s) and fiscal policy, which may prove more inflationary than in the past.

Exhibit 1: Market rate expectations persistently undershoot ECB rate decision and market expectation vintages up to 52 weeks prior to a given ECB meeting

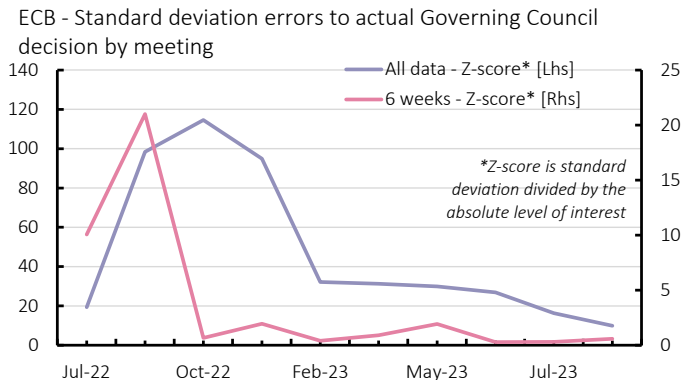


Source: Bloomberg and AXA IM Research, February 2024

Taking stock of market expectations

After 450bps of rate hikes over 10 consecutive meetings, the ECB has kept its policy rate at 4.0% since last October. Ahead of a widely anticipated cutting cycle expected to start this year, we address the following questions – how did market expectations pan out during the tightening cycle? And when were they at their best? We consider two stages. First, taking all available data up to a year prior to a given ECB Governing Council meeting and second, the six weeks preceding a meeting. Markets tend to reset expectations after each meeting, in light of both the decision made, and ECB communication.

Exhibit 2: Rate normalisation: A learning process



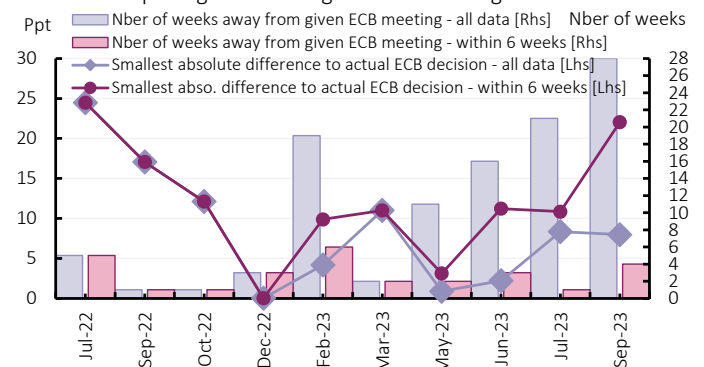
Source: Bloomberg and AXA IM Research, February 2024

By and large, market expectations have been poor predictors, consistently undershooting ECB rate decisions. However, looking more closely at seven-day averages, we conclude that between July 2022 and September 2023 there was something of a learning process, as the standard deviation in the forecast error to an ECB decision tended to diminish from an earlier peak (Exhibit 2). While not too surprising, we think this is noteworthy as market expectations ahead of any formal communication about the upcoming easing cycle contain little valid information.

Exhibit 3 illustrates the best market pricing – the absolute minimum difference and its related timing – for a given ECB rate decision. It concurs with the learning process mentioned above, but also highlights significant differences in July and September 2022 and the ‘surprise’ decision to hike rates in September 2023.

Unsurprisingly, the closer to a rate decision – between the second and third week prior to the meeting – on average, the better the forecast. This suggests the market is incorporating the most recent economic and financial data, as well as ECB communication, before the central bank's purdah period starts seven days before the Governing Council meeting. This emphasises that market pricing any earlier has not been a reliable guide to what the ECB will actually do and should be taken with great caution.

Exhibit 3: Expectations only a good guide close to meetings. Best market pricing ahead of a given ECB meeting



Source: Bloomberg and AXA IM Research, February 2024

The economic regime shift, since early 2022, has brought market interest rate expectations back to life after a period of stasis. Rate expectation volatility has tended to diminish, and accuracy has been reasonable just ahead of an ECB meeting (and even then, has included a couple of misses).

As such, we suggest that past aggressive and current (much faded) market rate cut expectations should be taken with a great pinch of salt, both in terms of starting date and magnitude. This is also consistent with the ECB's non-committal message at this early stage and its data-dependent assessment. Following January's policy meeting, our baseline expectation for the first cut to come in June remains unchanged but we acknowledge

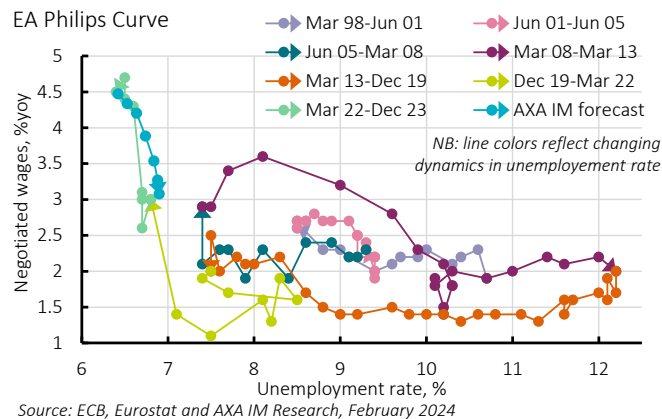
that an April cut cannot be ruled out. Although the timing and magnitude of cuts remain hard to predict, there is little question that barring a new shock, rate cuts are coming this year.

Towards more normal (policy) times

Amid a highly uncertain macro environment, we have found convincing evidence that the inflation shock is unlikely to be self-sustained. And a waning inflation shock should mean the ECB cuts rates in 2024, while a fast decline in headline inflation implies a tightening in *real* financing conditions, all else being equal.

Several factors point to a softer inflation outlook. First, industrial input prices (an original source of the inflation shock) have adjusted sharply lower. In fact, manufacturing producer prices (excluding energy) have been in slight deflationary territory on a three-month rolling basis on average since May 2023.

Exhibit 4: Waning inflation and mild labour market loosening consistent with (fast) wage growth deceleration



Second, tight labour markets are seemingly generating little endogenous wage pressures, suggesting a steep(er) Phillips curve – the inverse relationship between inflation and unemployment – with wage growth at historically high levels, has mainly responded to the inflation shock rather than to labour market tightness, at least so far. This supports our view that wage growth should soften as the inflation shock wanes – after the wage catch-up process is done – all the more so as we expect a mild loosening of the labour market (Exhibit 4). This is despite still elevated domestic service producer price inflation, which seems to have limited influence on inflation (consumer and market based) expectations.

Third, fiscal policy played a crucial role in absorbing the COVID-19 and inflation shocks. It is also set to normalise. Exhibit 5 shows the French government’s significant economic support and its continued withdrawal planned for this year. The European Commission (EC)’s assessment of the euro area’s fiscal stance is similar as it highlights in its assessment of 2024 draft budgets “the aggregate fiscal stance is projected to be

contractionary in 2024 on the back of an almost complete phase out of the remaining energy-related measures”. This makes us comfortable that fiscal policy is likely to work jointly with monetary policy in taming domestic demand and domestic inflationary pressures.

Exhibit 5: France: Withdrawing fiscal support, albeit slowly

In % of GDP	France fiscal support measures				
	2020	2021	2022	2023	2024
Measures to support the economy during COVID - Maastricht accounting	2.5	2.2	0.5	0.1	0.0
Recovery plan net of EU financing - national accounting	0.1	0.3	0.3	0.2	0.1
Measures to fight inflation shock	-	0.2	1.6	1.3	0.5

Source: Rapport économique, social et financier 2024 de la Direction générale du Trésor français and AXA IM Research, October 2023

However, two factors moderate the view that fiscal policy would no longer support inflation dynamics: First, fiscal stance could have been tighter. As shown in Exhibit 5, fiscal support is to come down very significantly but not be entirely withdrawn, with still 0.5% of GDP worth of measures in place this year. This echoes the EC’s assessment of the 2024 Eurozone draft budgets that: “most Member States are phasing out energy measures, but the projected fiscal stance would be more restrictive in 2024 if Member States had planned to use all the savings from energy measures to reduce their deficits, as recommended by the Council”.

Second, the removal of capped electricity and gas prices, policy tools particularly used in France, implies temporarily higher inflation. This is a key difference explaining why we project France’s headline inflation (2.5%) to remain above that of Germany (2.0%) and Italy (1.6%) this year.

Playing by the rules?

For now, the ECB looks set to retain its data dependant approach – it is unlikely to provide clear and obvious guidance to markets. As such, we reviewed broader policy rules to consider how much of a guide these will provide for future rates. Two of the most famous are the Taylor and the Orphanides-Wieland rules, which provide rate prescriptions based on the cyclical position of the economy and where inflation stands relative to target. The simple nature of these rules suggests these should rather be seen as a guide, not a precise policy prescription.

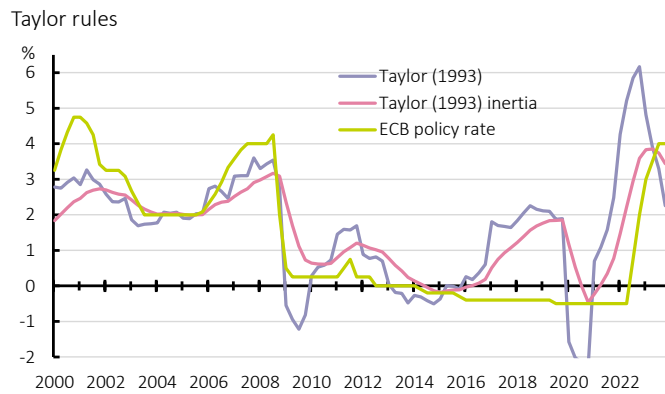
We note that none of these rules account for extraordinary monetary policy tools and specifically the change in the balance sheet. We leave this discussion to one side for now, since the ECB has consistently communicated that interest rate policy will remain its primary policy tool, and quantitative tightening is set on a slow and gradual pace – implying minimising tensions are expected on money market rates before the end of our forecast horizon.

The Taylor rule is named after the US Federal Reserve (Fed) economist John Taylor who developed the initial formulation in 1993 as a description of the Fed’s behaviour. Although its original formulation is fairly simple there are several variants which have historically done a good job of reflecting the level of Fed policy rates. But they have one main drawback – they require the inputs of two unobservable variables, the output gap and the real natural interest rate.

Rather than focusing on the level, the Orphanides-Wieland (OW) rule provides estimates for the change in the ECB’s policy rate with the expected deviation, at some future date, of both inflation from the ECB’s target, and real GDP growth from potential real GDP growth. As such, this rule requires input from just one unobservable variable (potential growth). Although the OW rule formulation is similar to Taylor’s, we highlight two key differences. The OW rule assumes a stable neutral rate and uses expected values for inflation and growth (versus coincident values for the Taylor rule in its standard formulation).

We examine below both these rules. During the most recent monetary policy tightening, both the Taylor and OW rules suggest the ECB should have started tightening earlier – in 2021 rather than 2022. Moreover, the Taylor rule suggests the ECB has caught up with prescribed levels of interest rates (Exhibit 6).

Exhibit 6: Back testing the Taylor rule



Source: Refinitiv and AXA IM Research, February 2024

Academic studies have shown that the OW rule has performed better in immediate/very short-term forecasts, while the Taylor measure tends to work better over a one-to-two-year horizon². The neutral rate is more likely to be stable over short time periods – and as such is stripped out from the OW rule compared to the Taylor rule.

We inject our baseline forecasts for the required variables into several specification of the Taylor and OW rules³. Adding to the original version of the Taylor rule, the “inertia” specification simply adds the policy rate at the previous period. The “forward”

² Belke, A. and Klose, J., "Forecasting ECB policy rates with different monetary policy rules", Ruhr Economic Papers, No. 815

specification (labelled as ‘fwd’ in Exhibit 7) uses the one-year-ahead forecast for both growth and inflation, reflecting that the future path of policy rate account for monetary policy transmission lags. For the OW asymmetric specification dummy variables add additional weights to growth and/or inflation if they are above the potential growth/ inflation target. Finally, the last OW specification shown in Exhibit 7 adds a parameter of credibility based on average inflation in the past four quarters against the ECB’s inflation target.

Exhibit 7: Diverging message from policy rules

Eurozone multiple policy rate rules				
In percentage points	Dec 23 - June 24	Dec 23 - Dec 24	Dec 23 - Jun 25	Dec 23 - Dec 25
Taylor (1993)	-193	-220	-260	-281
Taylor (1993) inertia	-69	-123	-169	-208
Taylor (1993) inertia, fwd	-90	-158	-202	-230
OW fwd	-13	-30	-30	-30
Estimated OW fwd	7	-2	-2	-2
Estimated OW, fwd asym	7	-5	-5	-5
Estimated OW, fwd credibility loss	20	13	14	15

Source: AXA IM Research, February 2024

Exhibit 7 presents the different policy prescriptions. We draw the following conclusions.

Regarding the short-term outlook, we focus on the OW rule as per the abovementioned academia. It suggests some upside to our – and the market’s – baseline forecast of a 25bp rate cut in June. Specification that accounts for asymmetry – above the inflation target (until Q3 2025 in our forecasts) – as well as credibility loss actually suggests a slight increase in the interest rate.

The Taylor rule argues in favour of an aggressive rate cutting cycle. There are two key drivers to this. First, the Taylor rule (without inertia) prescribed an earlier and higher peak of the policy rate (as shown in Exhibit 6). Much smaller differences against the inflation target (and increasingly smaller going forward) than last year is a key reason for the prescription for significantly lower rates. The Taylor rule with inertia corrects for this difference in level. Second, our growth forecasts include a rapidly increasing negative output gap (up to -1.2% by Q4 2025) implying still a significant rate cut cycle up to the end of 2025. However, the significant uncertainty around the scale of large (negative) supply shocks makes us cautious of this assessment. If supply growth is genuinely weaker, the aggressive path of cuts suggested here would be much softer (more below).

Even with the aggressively downbeat perspectives provided by the Taylor rule, it is consistent with nominal rates remaining firmly anchored in positive territory confirming the regime shift after the Eurozone sovereign debt crisis.

³ The ECB’s policy rules compass (2023), Barclays Research

All in all, owing to the simplicity of these rules, and the large uncertainty that lies with supply, we find it difficult to draw definite and clear conclusions. As mentioned above, the OW rule suggests some upside to our, and the market's, baseline of a 25bp rate cut next June. Meanwhile, we cautiously acknowledge the indication of possible downside risks to our baseline of 125bp worth of cuts until the end of the forecast horizon as suggested by the Taylor rule.

The ECB is likely to maintain a holistic view. First, this is likely owing to an increasing set of data (such as the new wage trackers developed recently⁴) feeding its data dependence as well as a wide range of integrated models which embed a proper theoretical framework as well as offering more nuance than (over)simplified rules.

Furthermore, rules/models are only likely to be one of many inputs that the ECB's Governing Council members use to decide on future policy rates. Adding to data dependence, we also think risk management is going to be key. The ECB suffered a wide and seemingly persistent deviation to its inflation target, critically coming right after the publication of its strategy review in July 2021. The reviewed inflation target has been deemed symmetric, though not flexible, nor averaging. In a nutshell, this means the more the target has been overshoot, the more the ECB will want to ensure landing right on the target looking ahead (not below, nor above). This is a more concise version of a conclusion from ECB Chief Economist Philip Lane's recent speech: "In terms of an overall evaluation of our policy trajectory, we need to be further along in the disinflation process before we can be sufficiently confident that inflation will hit the target in a timely manner and settle at target sustainably"⁵.

Broader caveats

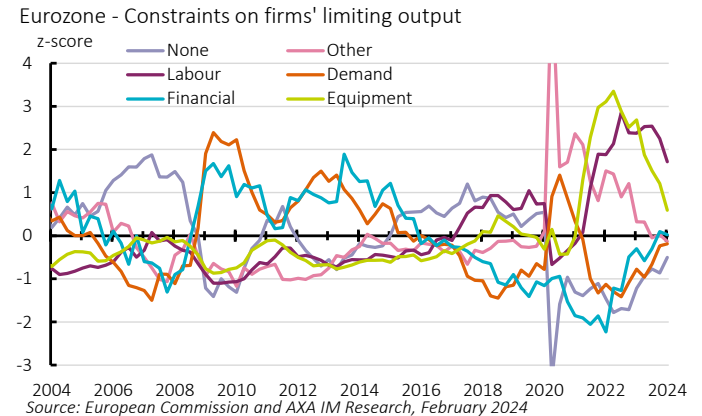
Maintain focus on supply-side developments

There is little question the Eurozone is facing multiple supply transition challenges reflecting shifts in demographics, energy, environmental trends, neo-globalisation, geopolitics and digitalisation. Uncertainty is paramount as to the timing and magnitude of these respective effects – and they are notoriously difficult to monitor in real time.

Amid significant data scarcity, we find the EC's quarterly survey on constraints faced by companies in limiting their output useful. It shows demand issues are on the rise, but supply labour and equipment – factors though receding, continue to constitute meaningful constraints across the industry, services and construction sectors (Exhibit 8). These add to our doubts of an increasingly negative output gap implied in our Taylor rule calculations.

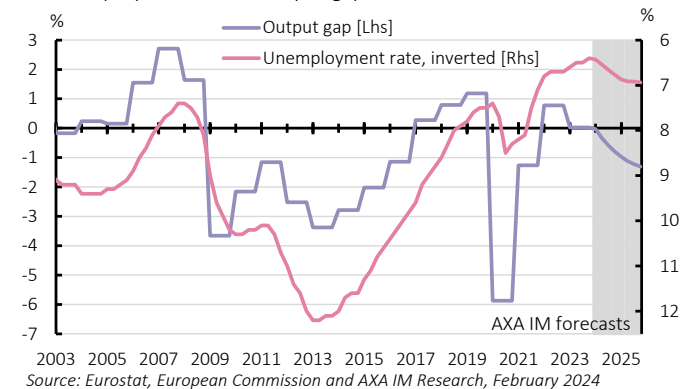
⁴ ECB occasional paper, *A forward looking tracker of negotiated wages in the euro area*, February 2024

Exhibit 8: Supply factors by no means have disappeared



A tight labour market also questions the size of the output gap (Exhibit 9). Despite very subdued GDP growth in the past year, the unemployment rate in the euro area remains at a historical low (6.4%), while the employment rate has been on a continuous upward trajectory, reaching new historical highs above 70%. Our forecasts are consistent with an output gap falling to the tune of -1.2% (from 0% today) by end-2025. If the output gap was more consistent with the expected outlook for unemployment, it could be argued to be above 1%, which would reduce cuts suggested by the Taylor rule of around 50bp by the end of our forecast horizon.

Exhibit 9: Unemployment rate suggests less slack than output gap



Both the Taylor (more so) and OW (less so) rules rely on an assessment of the supply side of the economy. If anything, the Taylor rule has more scope to explicitly account for a period of structural change – once it can be adequately recognised in real time. Latest estimates from ECB staff suggest the neutral rate may be up to 30bp higher compared with levels prior to the pandemic.

Mind the new fiscal rules

On 20 December, Eurozone finance ministers agreed on a revised fiscal framework. While the full application will only start from 2025,

⁵ Lane, P., *Disinflation in the euro area*, ECB, 8 February 2024

this year's European Semester – an annual cycle of policy coordination – may reflect an application ‘in the spirit’ of these new rules.

Fiscal policy should be closely monitored since it is one of the key tools to address the aforementioned supply issues, unlike monetary policy which typically mostly affects demand, by design.

The deal reached endorses most of the EC's initial proposals. One key change will be the new focus on “net primary expenditure” which will exclude interest payments. Furthermore, the deficit-based excessive deficit procedure will treat favourably additional expenses towards the interest rate burden. These should help governments in allocating resources to lean against the business cycle – theoretically good news given limited fiscal space⁶.

However, we are yet to be convinced about improved enforceability which makes us doubt that countries' economic policies will respect the new guidelines – the application of the previous rules suggests strong asymmetry around the key public deficit (3%) and debt to GDP (60%) ratios. ECB modelling⁷ showed that inflation reacts positively to government spending with a maximum elasticity just short of 0.5 of the simulated 1% of GDP shock. Crucially, the maximum effect comes about eight quarters after the initial shock. While it is too early to be worrying about fiscally-led inflation, fiscal policy is a key factor going forwards and should be monitored closely.

Take rules over expectations to guide uncertain supply effects

As the effects of the combined COVID-19 shock and immediate economic ramifications from the Russia-Ukraine war diminish, there is little question that the ECB will cut rates this year. Our analysis of the previous hiking cycle shows market pricing has been a poor predictor and consistently undershot ECB policy decisions. While there has been a learning process at play, minimal errors in expectations against subsequent actual policy decisions have only occurred a couple of weeks before the meetings.

We find it difficult to draw definite and clear conclusions from simple policy rules. The ECB is likely to maintain a more holistic approach encompassing more theoretically robust models as well as risk management perspectives. Meanwhile, we cautiously acknowledge the indication of possible downside risks to our baseline of 125bp worth of cuts until the end of the forecast horizon as suggested by the Taylor rule.

Besides the simple nature of these rules, and inherent uncertainty gauging potential growth and the neutral rate of interest (or r^*), significant structural changes affecting supply and future fiscal policy are additional challenges that need to be closely monitored. This is even more so from a monetary policy standpoint since both are likely to add more to inflation than in the past.

⁶ Cabau, F., “[Eurozone public debt sustainability: Make hay while the sun shines](#)”, AXA IM Macro Research, 31 July 2023

⁷ [ECB occasional paper series, monetary-fiscal policy interactions in the euro area, September 2021](#)

Appendix 1 – Policy rules in details

We present below the generic formula of the two policy rules discussed.

- Taylor rule:

$$i_t = \rho i_{t-1} + (1 - \rho)[r^* + \pi^* + \alpha(\pi_{t+j} - \pi^*) + \beta(y_{t+j} - y^*)]$$

- OW rule:

$$i_t - i_{t-1} = \alpha(\pi_{t+j} - \pi^*) + \beta(\Delta y_{t+j} - \Delta y^*)$$

π^* , target inflation rate (%)

r^* , real neutral rate (%)

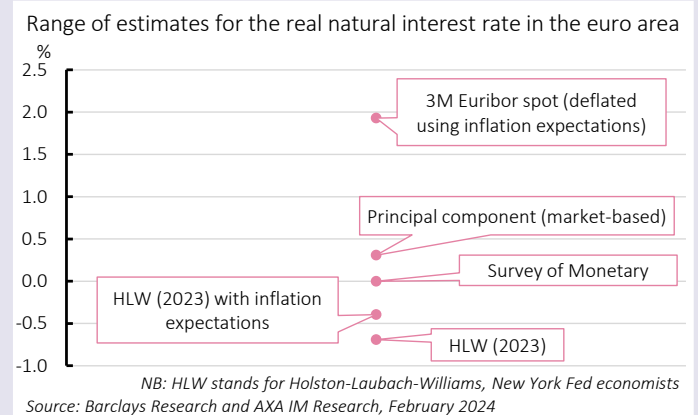
ρ , interest rate inertia parameter

α , weight on inflation gap

β , weight on output gap

After the conclusion of the recent ECB strategy review (2021), we take π^* equal to 2% at all times. Real neutral rate is an unobservable variable, where lies no overarching consensus on either methodological measurement, nor on estimated values. Exhibit 10 shows a broad range of estimates. Acknowledging very high uncertainty, a recent ECB study⁸ argues that r^* may be on the rise by c.30bps compared with levels prior to the pandemic. Finally, following literature, Taylor rule sets ρ at 0, in its initial formulation, and at 0.8 to account for some inertia. Weights on inflation and output gaps are set at 0.5 unless estimated.

Exhibit 10: R*estimates: an uncertain quest



If you have any further questions please contact your local AXA IM contact

⁸ Brand, C., Lisack, N. and Mazelis, F., Estimates of the natural interest rate for the euro area: an update, (2024)

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