

IN-DEPTH ANALYSIS

Requested by the ECON committee

Monetary Dialogue Papers, September 2024



From Aggressive Rate Hikes to Gradual Easing:

The ECB's Evolving Monetary Policy Stance
Amidst Persistent Services Price Pressures



EGOV
MONETARY POLICY

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From Aggressive Rate Hikes to Gradual Easing

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Abstract

The ECB's interest rate hikes since 2022 aimed to curb inflation by tightening financial conditions and dampening aggregate demand. While price pressures for food and goods have eased, persistent inflation in the services sector remains a key concern. Although the ECB is expected to gradually ease its restrictive stance by 2025, inflation challenges could re-emerge. The ECB should be careful not to undermine its commitment to price stability by loosening monetary policy too aggressively.

This document was provided by the Economic Governance and EMU Scrutiny Unit at the request of the Committee on Economic and Monetary Affairs (ECON) ahead of the Monetary Dialogue with the ECB President on 30 September 2024.

This document was requested by the European Parliament's Committee on Economic and Monetary Affairs.

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Manuscript completed in September 2024
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This document was prepared as part of a series on “Assessment of the ECB’s monetary policy stance”, available on the internet at:

<https://www.europarl.europa.eu/committees/en/econ/econ-policies/monetary-dialogue>

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LIST OF ABBREVIATIONS

APP	Asset purchase programme
ECB	European Central Bank
EP	European Parliament
EU	European Union
GDP	Gross domestic product
HICP	Harmonised index of consumer prices
PEPP	Pandemic emergency purchase programme
TLTRO	Targeted longer-term refinancing operations
TPI	Transmission protection instrument
USD	US dollar

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EXECUTIVE SUMMARY

- **The ECB implemented aggressive interest rate hikes to swiftly achieve a restrictive monetary stance and alleviate price pressures by curbing aggregate demand.** The ECB's response to the historic inflation surge involved an unprecedented series of steep rate increases starting in July 2022. However, it wasn't until 2023 that the short-term real rate turned meaningfully positive, signalling the start of a restrictive monetary policy. This restrictive monetary policy is currently estimated to slow the expansion of aggregate demand and ease price pressures.
- **Monetary analysts and financial markets anticipate that the ECB will gradually implement further interest rate cuts, reaching a broadly neutral rate by the end of 2025.** The key interest rate was held at 4% for nine months before the ECB made its first rate cut in June 2024. The ECB will now progressively unwind its restrictive monetary policy stance. Quantitative tightening will persist, leading to a gradual normalisation of the term premium, which, all else being equal, will exert upward pressure on long-term yields.
- **Growth in the euro area is likely to remain sluggish in Q3 2024. While the service sector continues to expand slowly, the industry and construction sectors remain in recessionary territory.** Capacity utilisation is low in the industrial sector but near normal across the broader economy. The strong labour market supports the view of adequate capacity utilisation overall, with employment continuing to rise and the unemployment rate remaining historically low and declining.
- **Inflation in the euro area decreased to 2.2% in August, down from 2.6% in July, primarily due to a base effect from energy prices.** However, inflation rates in the services sector remain persistently high (4.2% in August), keeping core inflation elevated (2.8% in August).
- **Monthly price momentum in the services sector has remained strong since the start of the year, with prices increasing at an average annualised rate of 5% per month.** Given the high weight of services in the consumer price index, the overall index has risen by 2.6% per month, surpassing the ECB's inflation target. The pressure on service prices is broad-based, with distributional measures showing significant deviations from historical averages.
- **Disinflationary pressures on non-energy industrial goods and food may be ending, as producer prices have begun to rise again.** This trend presents an upward risk to inflation. Another risk to the inflation outlook is the increase in real incomes of private households over the coming years. Combined with an improved consumption climate, this could lead to heightened price pressures, especially given the ongoing weak productivity growth in the euro area.
- **Currently, inflation rate divergence among euro area member countries is at a historically modest level, especially compared to the high divergence observed in 2022 and 2023.** This convergence in inflation rates across the euro area makes it easier for the ECB to establish a consistent and effective monetary policy stance.
- **The ECB should be careful not to undermine its commitment to price stability by loosening monetary policy too aggressively.** While initial steps towards a neutral stance might be warranted given the sluggish aggregate demand and downside economic risks, a rapid reduction of interest rates amid inflation still significantly above target could signal a lower priority on regaining price stability. Interest rates should be lowered gradually to safeguard the attainment of the inflation target, as the central bank's credibility is its most valuable asset—particularly in light of the recent inflation surge that has significantly impacted many citizens across the euro area.

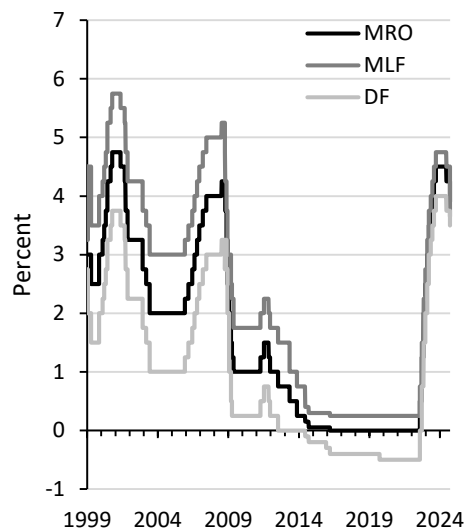
1. MONETARY POLICY REACTION TO THE INFLATION SURGE

1.1. Interest rate reaction and monetary policy stance

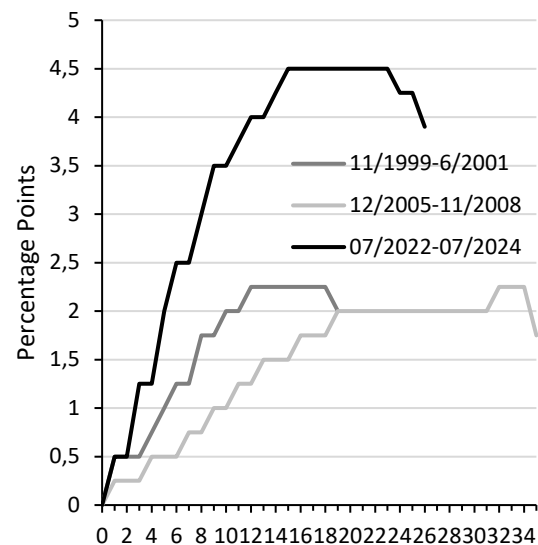
The key interest rate was stuck at zero percent and below for more than 10 years. The deposit facility rate was lowered to zero percent in July 2012 (Figure 1 a). It was first set in negative territory in June 2014. Then it was lowered step by step to -0.5% by September 2019. In an abundant reserve system the deposit facility rate determines short-term interbank money market rates and therefore can be interpreted as the key interest rate (Sonnenberg, 2023).

Figure 1: Interest rate corridor of the ECB and hiking cycles in perspective

a) Interest rate corridor of the ECB



b) Hiking cycles in perspective



Source: ECB, LSEG Datastream, own elaboration.

Note: Panel a depicts the interest rate corridor of the ECB: Deposit Facility (DF), Main Refinancing Operations (MRO), Marginal Lending Facility (MLF). Panel b depicts the months since the past hiking cycles were initiated on the x-axis and the total amount of interest rate hikes in percentage points with reference to the interest rate level, when the hiking cycle was started.

The ECB responded to the historic inflation surge with an unprecedented series of steep interest rate hikes. Inflation began rising sharply from 2% in May 2021 to 5% by December 2021, and further surged to 8.6% by June 2022. Despite this rapid price increase, the ECB only began raising interest rates in July 2022. The Federal Reserve started its interest rate hikes 4 months earlier and many central banks in developing economies reacted even earlier. However, prior to the first interest rate hike, longer-term interest rates had started to climb in December 2021 as the ECB signalled an end to asset purchases and indicated upcoming rate hikes, starting to tighten financial conditions. The ECB initiated the monetary tightening cycle with substantial rate hikes: 0.5 percentage points in July, 0.75 percentage points in both September and November, and another 0.5 percentage points in December 2022, bringing the deposit facility rate to 2% by the end of the year. Further hikes of 0.5 percentage points continued until March 2023, followed by smaller 0.25 percentage point steps until September, when the deposit facility rate finally reached 4%, where it remained constant for nine months. This tightening cycle was exceptionally steep compared to previous ones, with a total increase of 4.5 percentage points—double the amount of prior cycles (Figure 1 b).

The ECB raised the key interest rate aggressively to quickly reach a restrictive stance and contribute to a cooling of price pressures by reducing aggregate demand. The goal of the ECB was to quickly establish a restrictive monetary policy stance. A key concept in understanding the stance of monetary policy is the real natural interest rate, defined theoretically as the rate at which monetary policy is neither expansionary nor restrictive and which aligns with the time preferences of economic agents. Originally the concept of the natural rate of interest goes back to Knut Wicksell (1898).¹ It is also incorporated into the modern business cycle theories (Woodford, 2003). In terms of today's economic concepts, the real interest rate is neutral if GDP grows along its potential path and the inflation rate lies stable at the inflation target. If the real rate is lower (higher) than its natural level monetary policy is stimulating (dampening) economic activity, and the monetary policy stance can be interpreted as expansionary (restrictive). The natural interest rate is not directly observable and has to be estimated. Numerous approaches to estimate the natural interest rate have been suggested in the literature which deliver a broad range of results at any given point in time (Fiedler et al., 2019). In addition to the model uncertainty, the point estimates are surrounded by large confidence intervals (Beyer and Wieland, 2019).

While the natural interest rate offers a framework for interpreting monetary policy and rationalising decisions, it has limited practical utility in the day-to-day conduct of monetary policy. Policymakers can use it as a guide, but real-world decision-making, especially in a world filled with uncertainties, is often more an art than a science, requiring a careful balancing of various risks. The concept has been likened to “navigating by the stars”, which, while helpful, is far less precise than navigating by GPS.²

In economic models, the real interest rate affects household and company decisions on saving, consumption, and investment. In economic theory, a higher real interest rate encourages saving (future consumption), discourages today's consumption and raises the hurdle rate for investments, hence investment projects with a low expected return are not realised. Lower consumption and investment finally lead to lower aggregate demand in response to a restrictive monetary policy stance. Conversely, lower real rates boost aggregate demand by an increase in today's consumption and investment.

The ECB's estimates of the real natural rate hover around zero percent. In January 2024, Brand et al. (2024) presented estimates on the real natural interest rate from the ECB's model battery. The various models suggested that the median from the different point estimates of the natural interest rate was around zero percent from 2014 to 2019, dipped slightly during the pandemic, and started to recover by 2022 (Figure 2 a). Note, however, that there is a significant range of model point estimates (-0.5% to +1%), indicating substantial uncertainty with respect to the neutral level. To assess the stance of monetary policy, for simplicity, a natural interest rate of zero percent is assumed in the following as a point of reference. Alternatively, deviations of the short-term real rate from the longer-term real rate can also serve as an indication of the monetary policy stance (Project Group Joint Economic Forecast, 2013).³

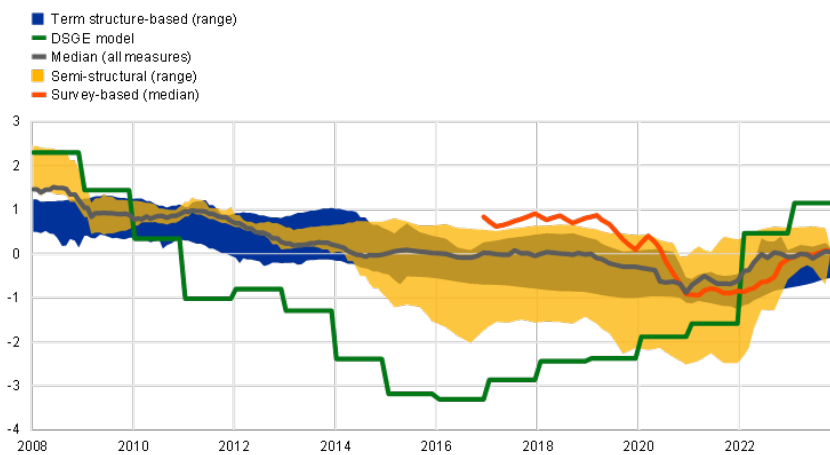
¹ The concept has been incorporated in business cycle theories by Nobel laureate Hayek (1933), where an overly expansionary monetary policy leads to a credit-fuelled economic boom period. More recently also the financial cycles literature incorporated the concept (Borio, 2014).

² The phrase refers to the common notation of the natural real rate as r^* , see e.g. Borio (2021), Powell (2023), Schnabel (2024 a).

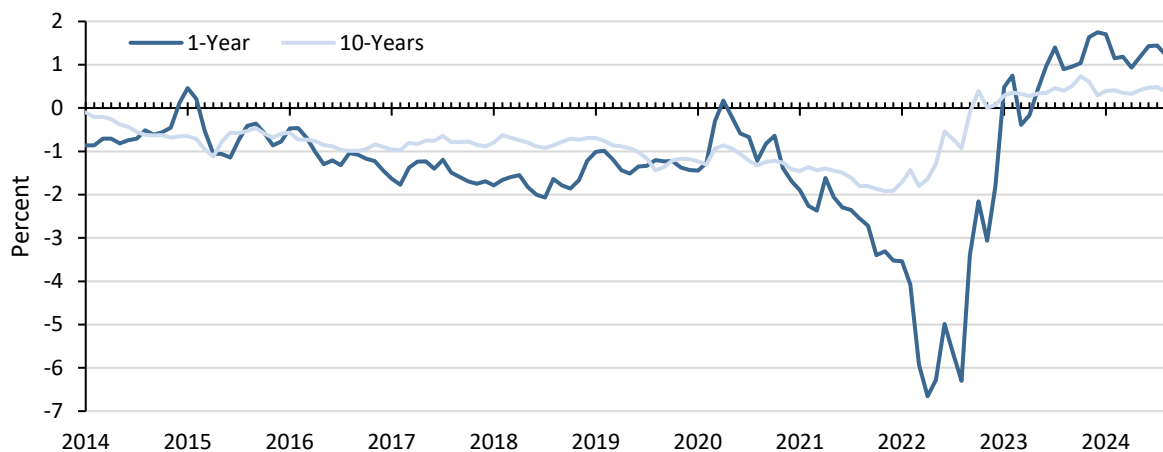
³ Here the short-term real rate is equal to the difference between 1- year interest rate expectation and 1-year inflation expectations for the euro area (proxied by 1-year Overnight Index Swaps (OIS) minus 1-year Inflation Linked Swaps (ILS)). For the long-term real rate 10-year maturities are used.

Figure 2: Estimates of the natural real interest rate and short- and long-term real interest rates in the euro area

a) ECB's estimates of the natural real interest rate



b) Short-term and long-term real interest rate



Source: ECB, LSEG Datastream, own elaboration.

Note: Panel a depicts the estimates of the natural real interest rate in the euro area by Brand et al (2024). Panel b depicts the short- and long-term real interest rates in the euro area. The short-term real rate is equal to the difference between 1-year interest rate expectations and 1-year inflation expectations for the euro area (proxied by 1-year Overnight Index Swaps (OIS) minus 1-year Inflation Linked Swaps (ILS)). For the long-term real rate, 10-year maturities are used.

A surge in inflation expectations drove the short-term real interest rate deeply negative in 2022, counteracting the ECB's inflation-fighting goals. Despite nominal interest rate hikes starting in July 2022, the sharp rise in prices and inflation expectations caused the short-term real rate to drop significantly in 2022 (Figure 2b). According to economic theory, this would stimulate today's consumption, reduce saving incentives, and boost investment—opposite to the ECB's objectives at that point in time of reducing aggregate demand and thereby contribute to a decrease of price pressures. However, these results derived from economic theory must be put into the real-world context. Events such as the 2022 uncertainty shock, driven by soaring energy prices due to Russia's invasion of Ukraine, had a significant impact on economic decisions. Consumer confidence plummeted, and precautionary saving motives increased, despite the deeply negative real interest rate.

By mid-2023, the short-term real rate turned persistently positive, indicating the beginning of the restrictive effect of monetary policy. Until December 2022 the ECB hiked interest rates by 2.5%

and more interest rate hikes were expected. At the same time, inflation reached 9.2% in December 2022, but was expected to decrease over the next 12 months. This led to a slightly positive short-term real interest rate. When compared to the longer-term real rate, it also wasn't until mid-2023 that the short-term real rate surpassed it, marking a shift to a restrictive monetary policy stance. Up to August 2024 the stance can be assessed as restrictive, although the ECB started to cut interest rates in June 2024. While financial markets expect further interest rate cuts in the next 12-months, the expected inflation rates are lower, hence resulting in a positive short-term real rate of 1.2% in August 2024. This relatively high short-term real rate, compared to the estimates of the ECB (Brand et al., 2024) or the long-term real rate of 0.4% in August 2024, incentivizes saving and thus lowers today's consumption, while the financing conditions for investments remain tight.

The impact of monetary policy on the economy can be conceptualised through theoretical models that are estimated based on historical data. These models enable simulations of the effects on the real economy and inflation, though they inherently carry uncertainties, both in the model structure and in the parameter estimates, which are surrounded by uncertainty bands. In May 2024, the ECB Chief Economist Philip Lane presented findings from six different models (Lane, 2024). The models compare the effects on GDP growth and inflation in the period of 2022 up to 2026 against a counterfactual scenario where the ECB would not have raised interest rates. The results include the expected interest rate path for the period up to 2026. This path already factors in expected rate cuts by the ECB, indicating a gradual easing of the restrictive stance of monetary policy.

Currently the restrictive monetary policy stance is estimated to lower aggregate demand expansion. The results suggest that since interest rates were hiked in 2022, the expansion of real GDP has been curtailed by an average of 2% per year between 2022 and 2026 (Lane, 2024). The most significant impact occurred in 2023, with a reduction of 4% in the expansion of real GDP. In the current year, this effect has already diminished to -2%, and it is expected to disappear over the next two years, as these projections already take into account the anticipated rate cuts and the subsequent easing of monetary policy.

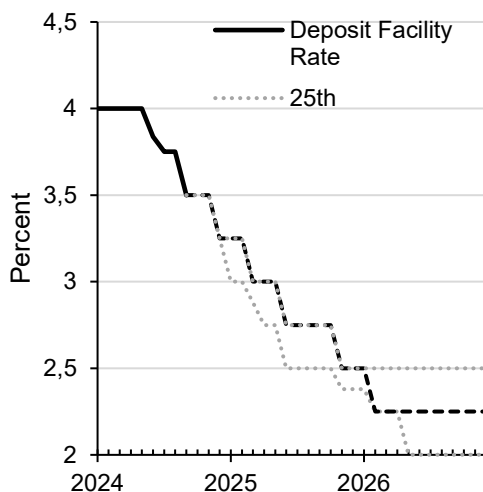
The interest rate hikes reduced price pressures. On average, inflation is projected to be 2% lower during the 2022 to 2026 period than in the counterfactual (Lane, 2024). The most pronounced effects on inflation are expected in the current and in the upcoming year. In 2022, when interest rates increases started, this did not immediately impact inflation; however, by 2023, monetary tightening had already begun to curb inflation.

1.2. Monetary policy outlook and real economic activity

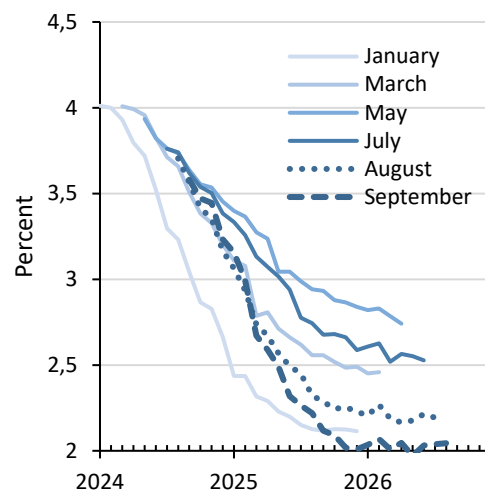
The key interest rate was kept at 4% for 9 months before the ECB advanced with a first interest rate cut in June 2024. The deposit facility rate was lowered to 3.75% at the meeting of the Governing Council in June. However, at the next meeting in July the ECB did not follow up with another rate cut. The ECB communicated that it wants to proceed cautiously and take into account upside risks to the inflation outlook. Based on its communications, it appears likely that the ECB will cut rates again when the staff presents updated projections, reflecting the latest inflation dynamics. This was indeed the case in September, when the ECB reduced interest rates by 0.25 percentage points to 3.5%. Another rate cut in October seems unlikely, as no new projections will be available. However, with updated projections in December, the ECB could implement another cut, potentially bringing the key interest rate to 3.25% by the end of the year.

Figure 3: Deposit facility rate expectations from the September ECB Survey of Monetary Analyst (SMA) and financial markets

a) Survey expectations in July 2024



b) Financial market expectations in 2024



Source: ECB, LSEG Datastream, own elaboration.

Note: Panel a depicts the aggregated expectations on the deposit facility rate of the September's ECB Survey of Monetary Analysts (SMA). Panel b depicts the expected path of the deposit facility rate in financial markets since the beginning of the year 2024.

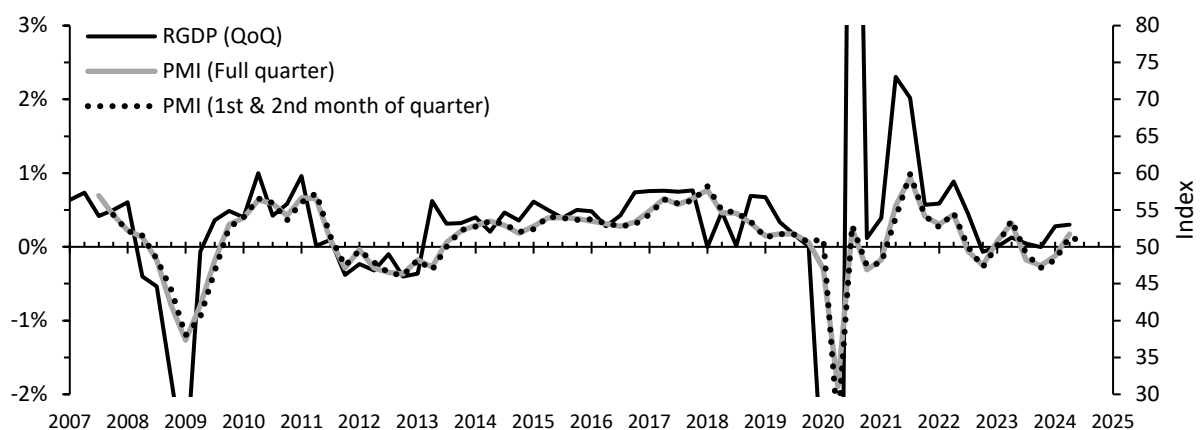
At the beginning of the year, financial markets expected very rapid and sizable interest rate cuts by the ECB in the course of 2024, but expectations were gradually adjusted. In January 2024, market participants anticipated interest rate cuts of 1.6 percentage points for 2024 (Figure 3 b). By March, these expectations had already declined, and by May, only rate cuts of 0.5 percentage points were expected. After the actual rate cut of 0.25 percentage points in June, additional cuts of 0.6 percentage points were expected in August. For 2025, a decrease of 1 additional percentage point, to 2.2%, was priced in. Currently in September expectations for 2024 are roughly equal to the August values. However, for 2025 more interest rate cuts of up to 1.25 percentage points are expected.

Surveyed monetary analysts also expect that the ECB advances slowly with interest rate cuts and reaches a broadly neutral level of interest rates by the end of 2025. The distributional measures (25th and 75th percentile and median) of the single answers to the ECB Survey of Monetary Analysts (SMA) in September 2024 point to 0.25 percentage points of cuts in 2024 and 0.75 to 1 percentage points of cuts in 2025. By mid-2026 the deposit facility rate would lie between 2 and 2.5%. The September forecast of the Kiel Institute assumes 0.25 percentage points of cuts in 2024 and 1

percentage point cut in 2025. Both expectations in financial markets (implying interest rates of 2% in November 2025) and expectations of monetary analysts (with an interest rate between 2.25% to 2.5% by the fourth quarter of 2025) would mean that the monetary policy stance in the second half of 2025 could be broadly neutral.⁴ The restrictive effects on aggregate demand could thus vanish in the course of 2025 (Lane, 2024).

Interest rate policy is the primary tool for setting the monetary policy stance, while the phasing out of unconventional monetary policy instruments is a passive process. In addition to setting short-term interest rates, expectations about the future path of these rates also significantly influence medium- to long-term interest rates. The ECB can shape these expectations through its communication strategy, known as forward guidance. The gradual reduction of the bond holdings is expected to put upward pressure on long-term interest rates over time, though this process is anticipated to be relatively slow (see Box 1: Quantitative tightening as a passive process).

Figure 4: Real GDP growth and PMI



Source: Eurostat, LSEG Datastream, own elaboration.

Note: The figure depicts the quarter-on-quarter (QoQ) growth rate of real gross domestic product (GDP) on the left-hand side and the PMI index on the right-hand side. The PMI index is published on a monthly frequency. For the third quarter of 2024 the results from the PMI of July and August are considered. The forecasting power of the PMI for QoQ GDP is analysed by De Bondt and Saiz (2024).

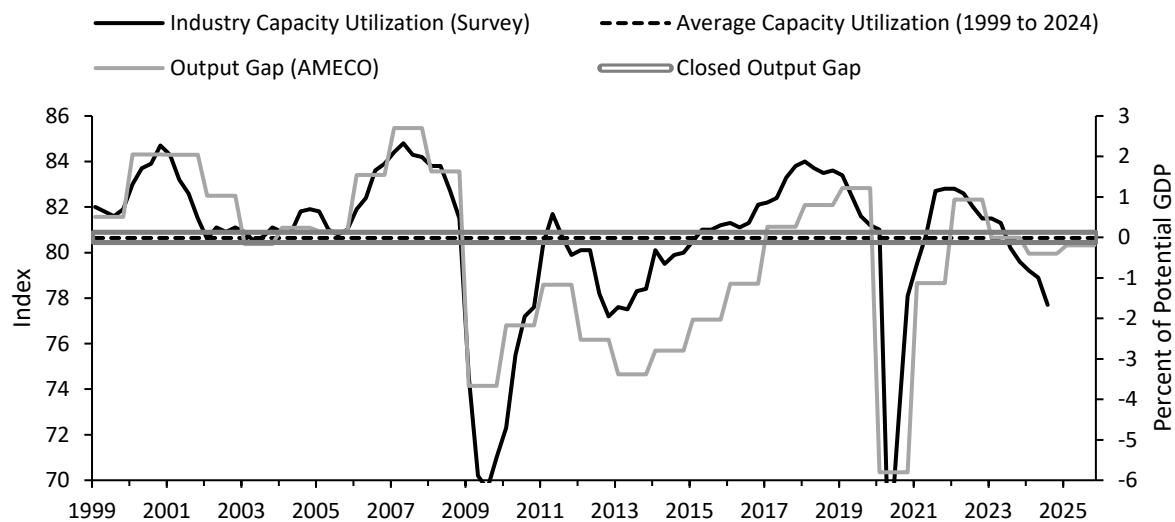
Growth in the euro area will probably remain sluggish in Q3 2024, according to the Purchasing Managers' Index (PMI) Tracker. The PMI can serve as a simple forecasting tool for near-term growth of the euro area (De Bondt and Saiz, 2024). Larger models often struggle to beat the forecasting performance of this simple correlation. The results for the composite PMI of July and August with 50.2 and 51.0, respectively, are suggesting a sluggish expansion of quarterly GDP from the 0.3% clip registered in the first and second quarter of this year. While the PMI for the service sector signals continued expansion, the index for the manufacturing sector is indicating contraction for more than two years now. The construction sector, which is typically particularly sensitive to interest rates, is also in the doldrums. A gradual easing of the monetary policy stance, all else being equal, can be expected to work as a tailwind for the parts of the economy that are currently not doing so well. It appears that credit demand, which has been at a low level, is starting to increase modestly. This rise may be a response to the recent small decline in loan interest rates.

⁴ The point estimates for the natural real interest rate of the ECB (Brand et al 2024) range from (-0.5% to +1%). Taking into account the ECB's inflation target of 2% this would translate to a natural nominal interest rate of 1.5% to 3%.

Capacity utilisation in the euro area is low in industry, but close to normal in the whole economy.

Capacities in manufacturing are increasingly underutilised, according to European Commission survey data. Capacity utilisation is declining since the second quarter 2022, when it peaked at 82.7, and has fallen to 78.0 in the third quarter 2024, significantly below the long-run average of 81. The estimate of the deviation of output from its potential in the whole economy – the output gap – is, however, indicating only modest underutilisation. In the latest European Commission spring forecast the output gap is estimated at -0.4% in 2024 and -0.2% in 2025. The robust labour market is supporting the view of a decent utilisation of capacities in the whole economy: Employment remained on its upward trend and the unemployment rate is historically low and still declining.

Figure 5: Industry capacity utilisation and output gap in the euro area



Source: European Commission, AMECO, LSEG Datastream, own elaboration.

Note: The figure depicts the euro area industry capacity utilisation from the EU Commission survey on the left-hand side. On the right-hand side the estimated output gap of the European Commission is plotted.

Box 1: Quantitative tightening as a passive process

Asset purchases at the zero-lower bound acted as an essential unconventional tool to lower long-term yields and support economic expansion. From 2015 to 2019 around EUR 2.6 trillion of assets were bought in the “regular” asset purchase programme (APP). Combined with purchases in the pandemic emergency purchase programme (PEPP) the holdings were increased to 4.95 trillion by the end of 2022 (Figure 17, annex). By purchasing bonds, central banks expanded their balance sheets, altering the structure of bond ownership to become more public-centric with a shrinking share of private investors. According to economic models, the shift in bondholder composition compressed the term premium, which resulted in lower long-term yields compared to a scenario without such purchases (Eser et al., 2019). The easing of financial conditions facilitated by these lower yields stimulated the real economy, making long-term borrowing, such as housing or investment loans, more affordable. The peak effect of this term premium compression was reached in 2021 and was estimated around 1.8 percentage points (Lane, 2024). By 2024 the effect decreased to around 0.9 percentage points.

The impact of asset purchases on long-term yields depends on the total amount of purchased bonds, not running net purchases, with quantitative tightening gradually reversing this effect and normalising long-term yields. The effectiveness of asset purchases is linked to the volume of bonds accumulated on the central bank's balance sheet compared to those held by private investors. As the central bank reduces its bond holdings through quantitative tightening, the relative structure of bondholders shifts back towards private investors, decreasing the influence of public sector ownership. The ECB pursues a passive approach of quantitative tightening, i.e. maturing bonds are rolled-off the balance sheet, but the ECB does not actively sell bonds. The relation of public and private ownership is also influenced by expectations regarding future deficits and the pace of bond portfolio reduction, which can affect the half-life of the impact on the term premium (Eser et al., 2019). For example, the half-life of the APP has been estimated to be around 5 years (Eser et al., 2019). Consequently, quantitative tightening gradually normalises the term premium, leading to a slow but steady rise in long-term yields over time. In contrast quantitative easing – at least in model estimates – led to a more rapid compression of the term premium. This suggests that quantitative easing and tightening impact the term premium and thereby long-term yields at different speeds (asymmetric effects).

Since mid-2023 bond holdings have been reduced by EUR 510 billion (10% of total holdings). In the first quarter of 2023 the bond portfolio lay at EUR 4.94 trillion. From March to June 2023 the bond portfolio has been reduced through a partial redemption of maturing bonds, then from July 2023 onwards through a full redemption of the maturing securities in the regular bond purchase programme. The pace of the monthly balance sheet reduction averaged roughly EUR 30 billion per month. In the second half of the year 2024, the pace increases by EUR 7.5 billion per month, when the maturing bonds from the pandemic emergency purchase programme are no longer fully reinvested. Full redemption will then take place from 2025 onwards. In the end of August 2024 the bond portfolio reached EUR 4.44 trillion. Hence since the start of quantitative tightening in March 2023 the bond portfolio has been reduced by 10%.

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Surveyed monetary analysts in September 2024 expect that the ECB proceeds with quantitative tightening. It is expected that the pace of quantitative tightening increases to over EUR 40 billion in 2025, when the ECB stops the partial reinvestments of the maturing securities of the pandemic emergency purchase programme. It is expected that the ECB will scale back the pandemic emergency purchase programme significantly by 2033. The expectations range between EUR 49 billion and 534 billion (25th and 75th percentile). For the regular asset purchase programme it is expected that the holdings will be decreased to EUR 465 to 1,301 billion (25th and 75th percentile). The median expectation is that the total bond holdings will decrease to EUR 1,022 billion by 2033 (EUR 758 billion APP + EUR 264 billion PEPP). The monetary analysts thus do not expect a complete roll-off of the bond portfolio, which is in line with the communication of the ECB itself, as it announced that it targets a structural asset portfolio in the medium-term (Schnabel, 2024 b).

Long-term yields are influenced by various factors beyond quantitative tightening, making it challenging to isolate its effects. Long-term yields depend primarily on the expected future interest rate path, but also international bond markets, particular developments in the United States, play a role. Furthermore, for long-term yields risk premia like default risk and inflation risk are important. While quantitative tightening aims to normalise the term premium, it operates passively in the euro area, depending on the maturity profile of the bond holdings. Estimates suggest that the suppressive effect on the term premium is currently still at approximately 0.8 percentage points (Lane, 2024), and it will be reduced only very gradually over time. The ECB could theoretically increase the roll-off by actively selling bonds and thereby shortening the half-life of the effect, but this remains an unlikely scenario.

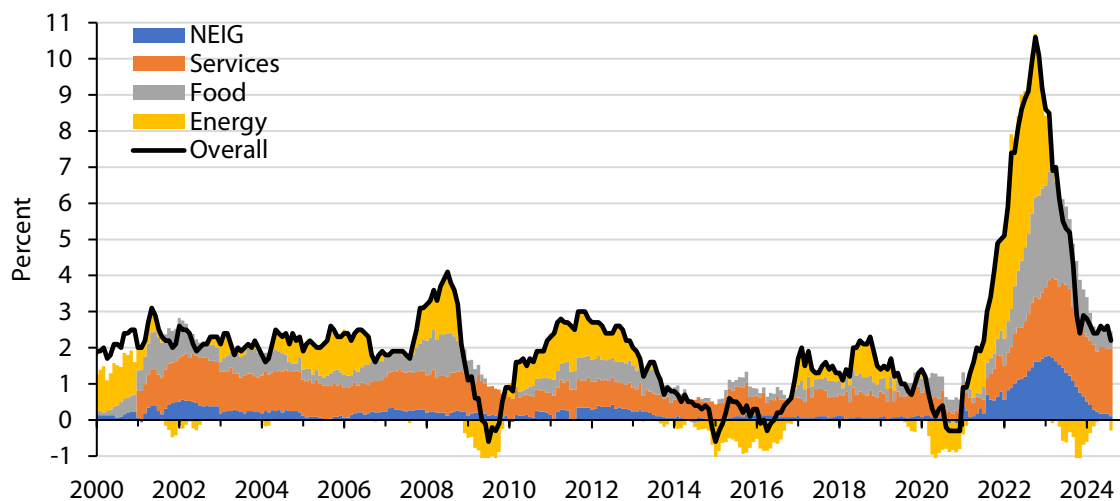
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2. INFLATION DYNAMICS AND DIVERGENCES

2.1. Inflation dynamics

Inflation in the euro area decreased to 2.2% in August, down from 2.6% in July. This is the lowest rate recorded in three years. But in August, the energy rate dropped significantly to -3%, largely due to the high energy prices seen in August of the previous year (base effect), which pushed down the headline figure. A particular concern for the ECB remains the persistently high year-over-year rate of services prices, which grew by 4.2% in August. Given the substantial weight of services (45%) they dominate the overall inflation rate and more so the core rate (consumer prices excluding energy), which continued to increase by 2.7%.⁵ Non-energy industrial goods saw a modest increase of 0.4%, while food prices rose by 2.4%.

Figure 6: Inflation in the euro area and contributions of energy, services, non-energy industrial goods and food



Source: Eurostat, LSEG Datastream, own elaboration.

Note: The figure depicts the monthly inflation rate in the euro area since 2000. It also contains the inflation contribution of the aggregates: non-energy industrial goods (NEIG), services, energy and food & alcohol & tobacco.

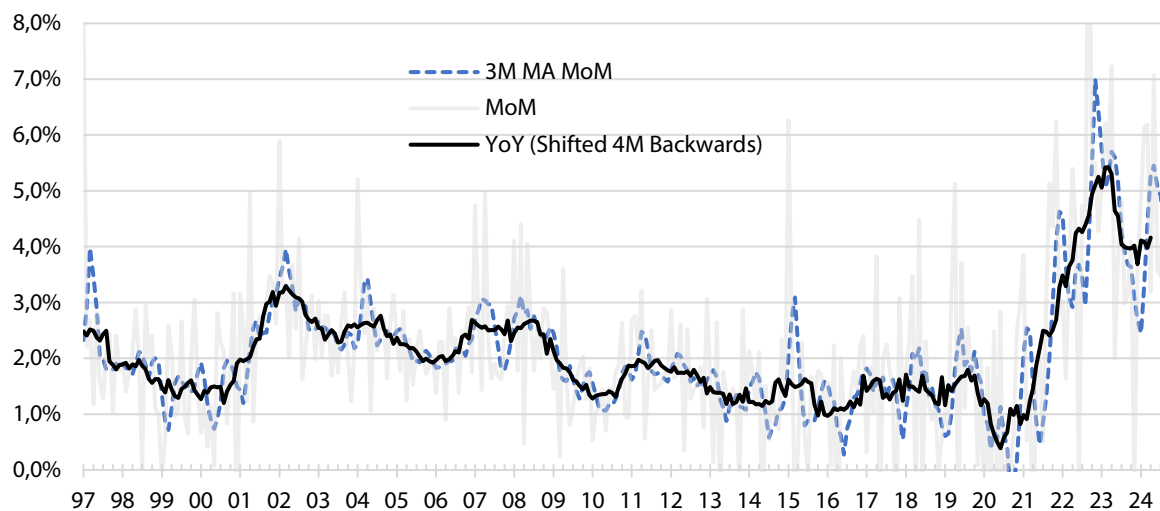
Monthly price increases since the beginning of the year continue to show significant price pressures in the services sector, with prices rising at an average annualised rate of 5% per month. In contrast, non-energy industrial goods have seen a modest increase of just 0.5% per month. Processed and unprocessed food prices have risen by 2.7% and decreased by 1% per month, respectively. All in all, since the start of the year the overall index is growing at an annualized rate of 2.6% per month, which remains above the ECB's inflation target. As long as the monthly price momentum remains that high, inflation rates as year-over-year rates will not decrease meaningfully in the next months.

The high monthly price increases in the service sector point to persistent 4% year-over-year rates in the coming months. The data since the beginning of the year does point to year-over-year rates for services being stuck at 4% for some time (Figure 9). Thus, the sole contribution to overall

⁵ The contributions to the 2.2% inflation print in August 2024 were 1.9 percentage points from services, 0.5 pp. from food, 0.1 pp. from non-energy industrial goods and -0.3 pp. from energy. So, the overall inflation is largely determined by the year-over-year rate of services prices.

inflation of services prices would be 1.8 percentage points. A closer and persistent return to the inflation target necessitates a cooling of the monthly price increases in the services sector.

Figure 7: Monthly price momentum in the services sector and year-over-year rates



Source: Eurostat, LSEG Datastream, own elaboration.

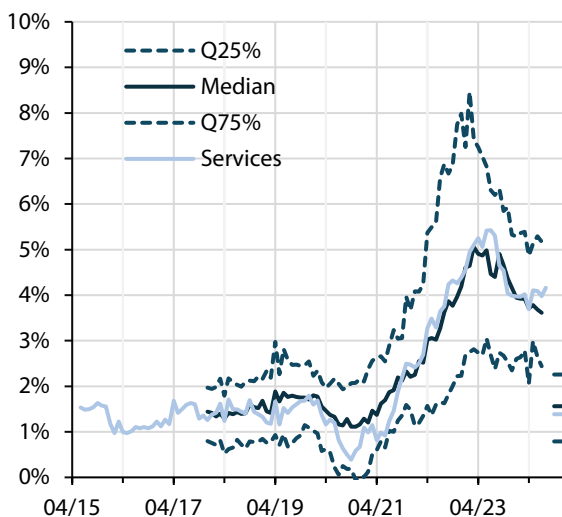
Note: The figure depicts the year-over-year and month-over-month rates of services for the euro area since 1997. The month-over-month rates of the seasonally adjusted service price series serve as an indication to where year-over-year rates will settle in the next months. The year-over-year rates are shifted backwards by 4 months.

The price pressures in the service sector are broad-based. An analysis of the distribution of price increases of the individual indices within the services component reveals that this upward trend is widespread. Figure 10 a presents the distributional measures—such as the 25th and 75th percentiles and the median—of the year-over-year rates for all individual price series within the services component at a 5-digits level (86 single price indices). Panel b illustrates the month-over-month annualised price increases based on a three-month-moving-average of these series. Additionally, the figures highlight the year-over-year and month-over-month rates of the seasonally adjusted services aggregate, which, unlike the distributional measures, considers the specific weights of the individual services. The longer-term averages for all measures are shown on the right-hand side. The data indicates that the weighted services aggregate aligns closely with the median of the individual price series, reflecting the overall trend in the sector.

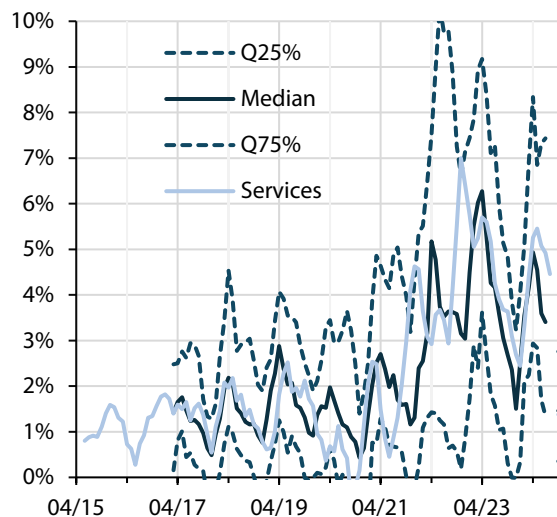
For the distributional measures of the year-over-year rates, the values in July still show a significant deviation from historical averages. The current 25th percentile stands at 2.4%, which is notably above the historical 75th percentile (2.2%). The median is at 3.6%, while the 75th percentile has reached 5.2%, underscoring the extent of price increases in the sector. Similarly, the distribution measures of the monthly price increases indicate a notable shift. The 75th percentile is currently at 7.4%, and the median at 3.4%, both well above the long-term averages of 2.8% and 1.4%, respectively. The 25th percentile also remains elevated (1.3% to 0.3%).

Figure 8: Services prices distribution (YoY and MoM)

a) Year-over-year services prices distribution



b) Month-over-month services prices distribution



Source: Eurostat, LSEG Datastream, own elaboration.

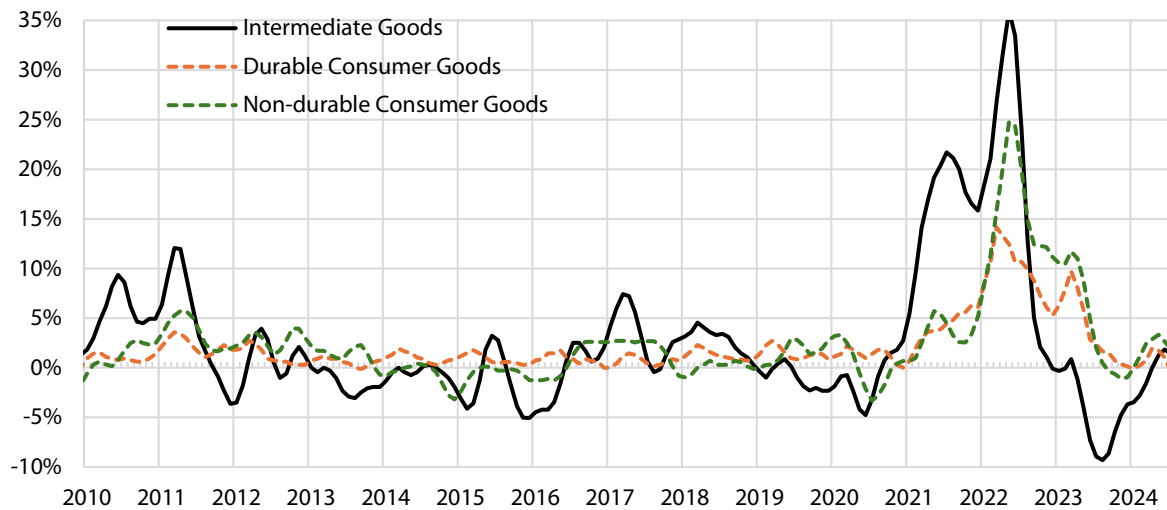
Note: Panel a depicts the services inflation rate (year-over-year) for the aggregate and distributional measures (25th and 75th percentile and median). The distributional measures are calculated on the year-over-year rate of 86 single service prices (5-digits). Panel b depicts the month-over-month rate of a smoothed 3-month-moving-average for the services price aggregate (SA) and distributional measures (25th and 75th percentile and median). The distributional measures are calculated on the month-over-month rates of 86 single service prices (5-digits).

Looking ahead, monthly price increases are expected to ease somewhat. Historical patterns show that monthly price increases often reach their local peak in March or April, as services prices are largely adjusted at the start of the year, which influences the three-month-moving-average. This pattern is also observed, though less pronounced, in the seasonally adjusted series of the services aggregate. Based on this historical trend, monthly price pressures in services should moderate slightly in the remaining months of the year. However, another adjustment of prices at the start of next year is likely. It will take time before services prices year-over-year rates consistently return to their historical averages, as the monthly price momentum is still too strong.

Disinflationary forces for non-energy industrial goods and food may be fading, which represents an upward risk to inflation. The latest year-over-year rate for non-energy goods stood at 0.7%, which is close to the long-term average of 0.6% observed between 2000 and 2019. However, the disinflationary forces seen at the upstream producer price level appear to be gradually fading (Figure 11). Since the spring, monthly annualised price increases (measured by a three-month-moving-average) have turned positive again. This marks a shift from the period since April 2023, when prices had been on a decline after experiencing dramatic increases from early 2022, driven by global supply chain disruptions and shipping delays during the pandemic. One factor contributing to this trend could be the increased freight rates from China to Europe. Due to attacks by Houthi rebels in the Red Sea, many ships are now taking longer routes around the Cape of Good Hope, which adds to transportation costs. However, there are currently no significant indications of a severe disruption in global supply

chains⁶, suggesting that while there are pressures, they are not indicative of a broader or more pronounced supply chain crisis.

Figure 9: Price momentum of producer prices in the euro area



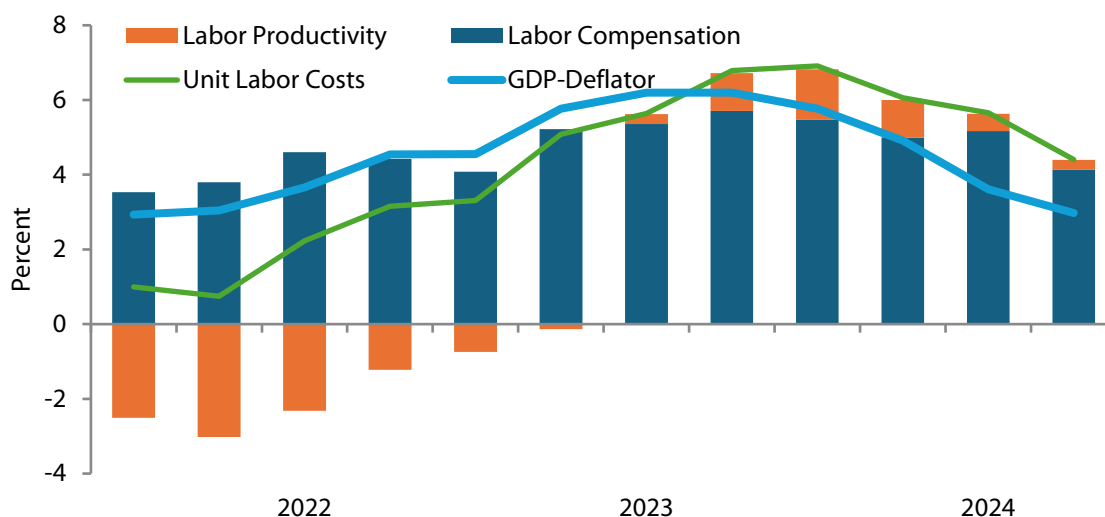
Source: Eurostat, LSEG Datastream, own elaboration.

Note: The figure depicts the month-over-month price increases for a 3-month-moving average of producer prices, intermediate goods, nondurable and durable consumer goods in the euro area.

Another general risk to the inflation outlook is that the purchasing power of households increases in the next years, which in combination with an improvement in the consumption climate could increase price pressures. Rising disposable incomes are compensating for past losses in purchasing power in the euro area. Nominal wages continued to rise strongly until recently. In the first quarter for which data is available, the increase in collectively agreed wages accelerated from 4.5% to 4.7%, and hourly wages even rose by 5.4% (ECB, 2024). The ECB's Wage Tracker, which provides an indication of the expected development of wages over the next 12 months on the basis of existing wage agreements (Bing et al., 2024), suggests that wage growth in the euro area will slow somewhat in the coming months, but remain relatively high at around 4%. This is also the conclusion reached by the Wage Tracker of the internet platform Indeed, which is calculated from the wages offered for jobs advertised on this platform.⁷ With an inflation rate 2% to 3%, this will result in significant real wage gains this year and probably also next year, which will be roughly similar to the losses recorded in 2022 and 2023. Although the strong rise in wages is likely to support private consumption, it will counteract the process of disinflation, especially as productivity in the euro area remains anaemic (Figure 11). Finally, a continued rise in unit labour costs is also likely to stress companies' margins.

⁶ See the Federal Reserve Bank of New York Global Supply Chain Pressure Index (GSCPI): <https://www.newyorkfed.org/research/policy/gscpi#/interactive>.

⁷ See Hiring Lab - Economic Research by Indeed: <https://www.hiringlab.org/uk/blog/2024/07/10/wage-growth-in-europe-remains-high/>.

Figure 10: Unit labour costs in the euro area

Source: Eurostat, LSEG Datastream, own elaboration.

Note: The figure depicts the year-over-year rate of the GDP deflator and unit labour costs and its contributions of labour compensation and labour productivity.

2.2. Inflation divergences

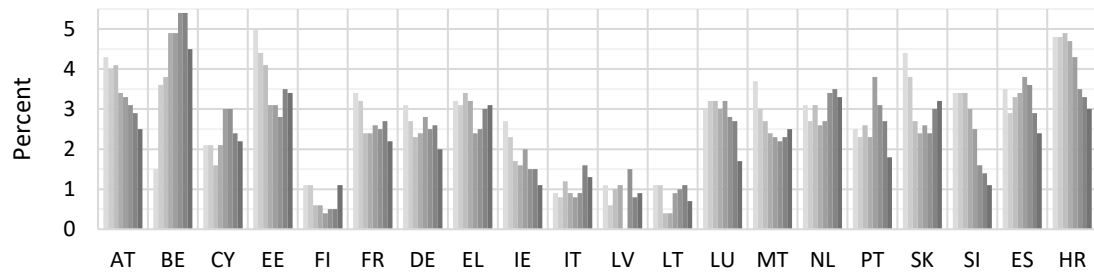
The following analysis compares the inflation rates, or year-over-year rates, of various consumer price aggregates—namely, services, industrial goods excluding energy (NEIG), food, and energy (fuels, electricity and gas)—across the 20 member countries of the euro area. To assess the variability of inflation rates among these countries, the standard deviation is used as a measure of dispersion. A higher standard deviation indicates greater variability of the year-over-year rates around the average for the 20 member countries, highlighting differences in inflationary pressures within the euro area.

The dispersion analysis is conducted not only for all 20 current euro area member countries but also for two specific subgroups. The first subgroup includes the 12 original founding members of the euro area, providing insights into inflation patterns among the longest-standing participants. The second subgroup comprises all member countries except Estonia, Latvia, Lithuania and Croatia, which joined the euro area in a later stage in 2011, 2014, 2015 and 2023 respectively. This approach helps to identify differing inflation dynamics within the euro area and the factors that may be contributing to these variations.

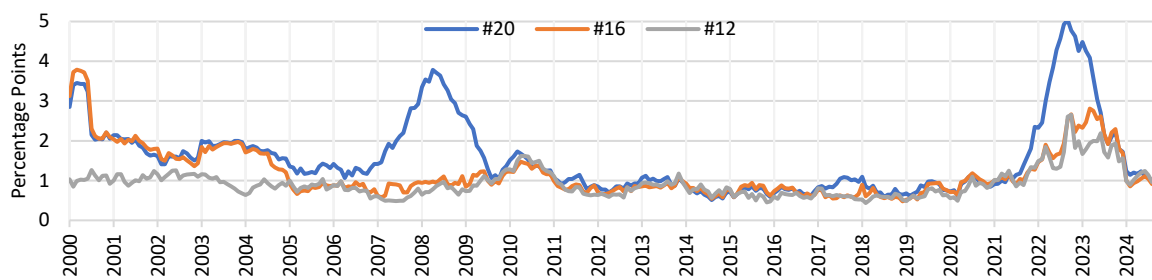
2.2.1. Overall index

Figure 11: Headline inflation rates and divergence

a) Inflation rates (January to August 2024)



b) Inflation divergence



Source: Eurostat, LSEG Datastream, own elaboration.

Note: Panel a depicts the inflation rates from January to August 2024 for the 20 member states of the euro area. Panel b depicts the inflation divergence, measured by the standard deviation, between the 20 member states of the euro area since 2000.

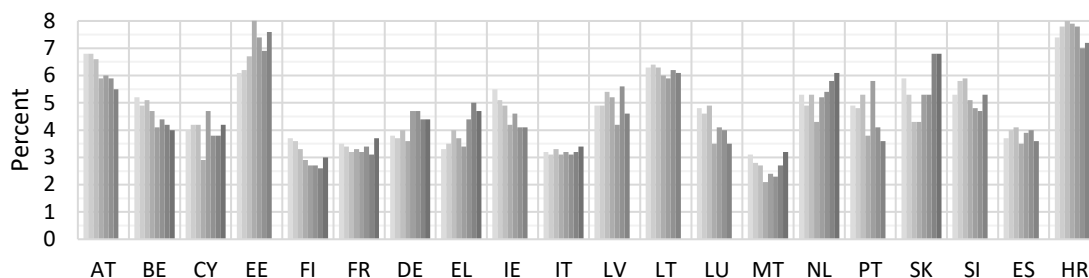
This year, the average inflation rate across the 20 euro area member countries stands at 2.6%.

Although inflation rates have generally been on a downward trend since the start of the year, they have stabilised around 2.5% since April. This represents a significant reduction from the peak rates of 12.3% observed in September and October 2022. However, inflation trends vary across the euro area (Figure 12 a). Belgium and Croatia have recorded higher inflation rates of 3% to 5%, while inflation is notably low in Finland, Italy, Lithuania, and Latvia, where rates are close to 1%. Despite the general decline in inflation since the beginning of the year, temporary upticks have been observed in Belgium and Spain, and more recently, inflation rates have risen again in Estonia, Greece, Italy, the Netherlands, and Slovakia. Currently, inflation rate divergence among member countries is at a historically modest level for all country aggregates (Figure 12 b), especially compared to the high divergence seen in 2022 and 2023. The recent convergence of inflation rates across the euro area simplifies the task for the ECB in setting a consistent and appropriate monetary policy stance, as it faces a more uniform inflation landscape among its Member States.

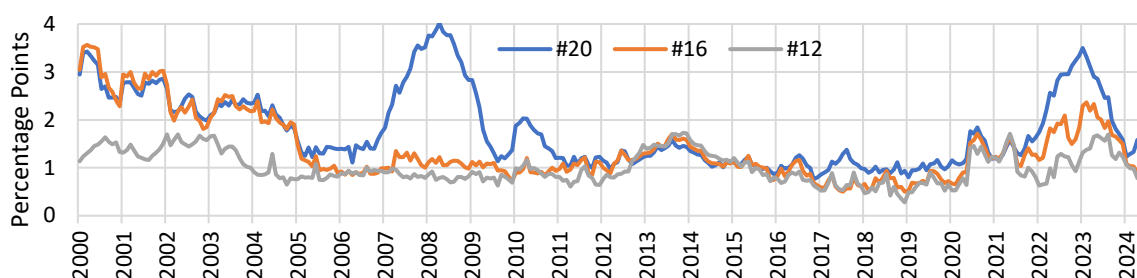
2.2.2. Services

Figure 12: Services inflation rates and divergence

a) Services inflation rate (January to August 2024)



b) Services inflation divergence



Source: Eurostat, LSEG Datastream, own elaboration.

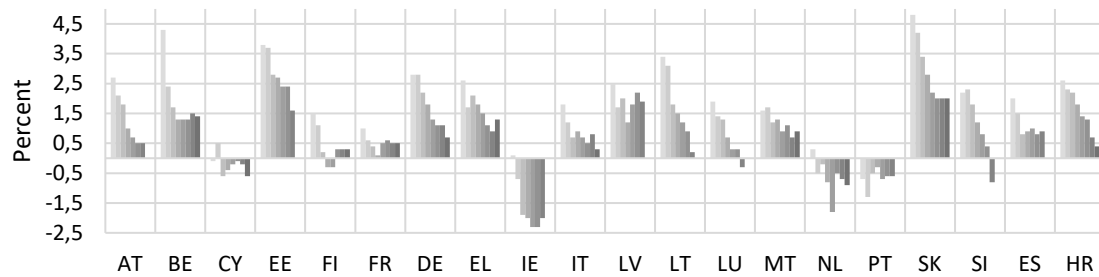
Note: Panel a depicts the services inflation rates from January to August 2024 for the 20 member states of the euro area. Panel b depicts the services inflation divergence, measured by the standard deviation, between the 20 member states of the euro area since 2000.

Since the beginning of the year, the average year-over-year inflation rate for services across the 20 euro area member countries has been 4.6%, with rates showing little variation overall. Countries such as Croatia, Estonia, Austria, and Lithuania have reported notably higher year-over-year rates, ranging from 5% to 6%. Conversely, Italy, Malta, France and Finland have experienced significantly lower rates, around 3%. Currently, the divergence in year-over-year inflation rates among the various country aggregates is relatively modest, reflecting a notable decrease from the exceptionally high levels seen in 2022 and 2023. This reduced divergence suggests a more uniform inflationary environment regarding services across the euro area.

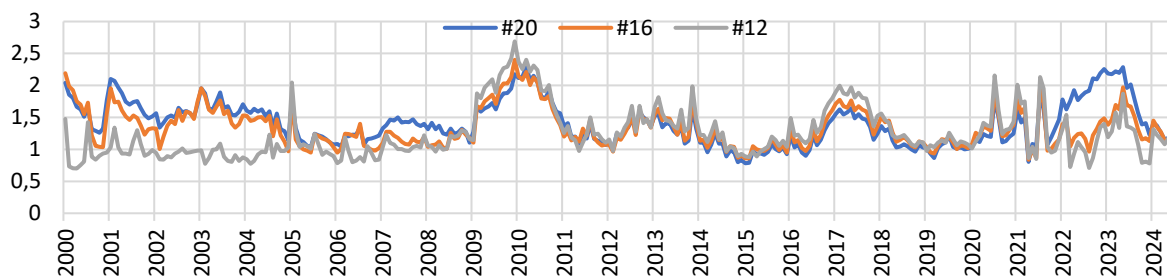
2.2.3. Non-energy industrial goods

Figure 13: Non-energy industrial goods inflation rates and divergence

a) Non-energy industrial goods inflation rate (January to August 2024)



b) Non-energy industrial goods inflation divergence



Source: Eurostat, LSEG Datastream, own elaboration.

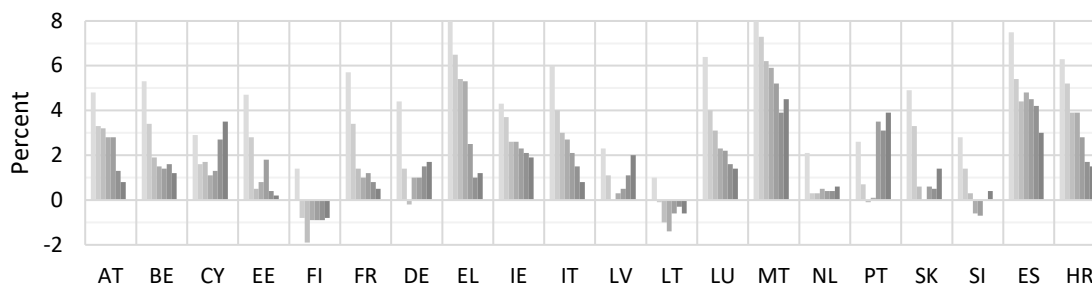
Note: Panel a depicts the non-energy industrial goods inflation rates from January to August 2024 for the 20 member states of the euro area. Panel b depicts the non-energy industrial goods inflation divergence, measured by the standard deviation, between the 20 member states of the euro area since 2000.

Since the start of the year, the inflation rate for non-energy industrial goods has averaged 1.2%. This represents a decline from the peak year-over-year rate of 7.6% recorded in March 2023. In recent months, inflation rates for these goods have been decreasing. Countries such as Ireland, the Netherlands, Portugal, and Cyprus have seen a drop in prices for goods. Conversely, at the beginning of the year, particularly high inflation rates were observed in Estonia, Lithuania, and Slovakia. On the other hand, inflation rates are notably low in France, Finland, and Italy. In Latvia, however, the year-over-year rates have recently increased from previously low levels. Currently, the divergence in year-over-year inflation rates across different countries is relatively low. This follows a pattern seen in 2022 and 2023, where divergence also remained modest (for the 12 and 16 countries aggregate), reflecting a generally uniform trend in non-energy industrial goods prices across the euro area. The Baltic countries and Croatia however experienced higher rates during this period.

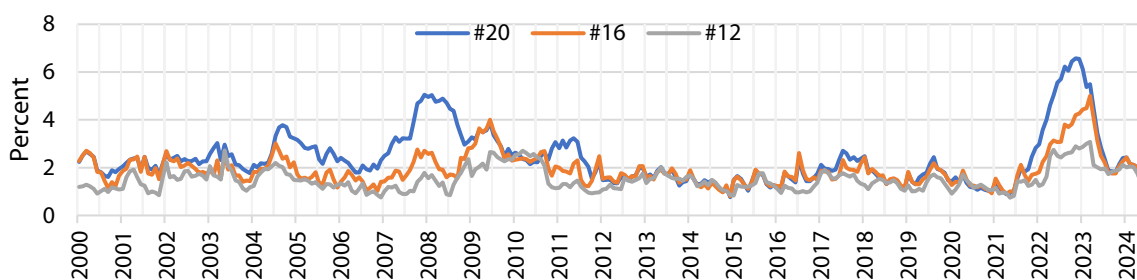
2.2.4. Food

Figure 14: Food inflation rates and divergences

a) Food inflation rate (January to August 2024)



b) Food inflation divergence



Source: Eurostat, LSEG Datastream, own elaboration.

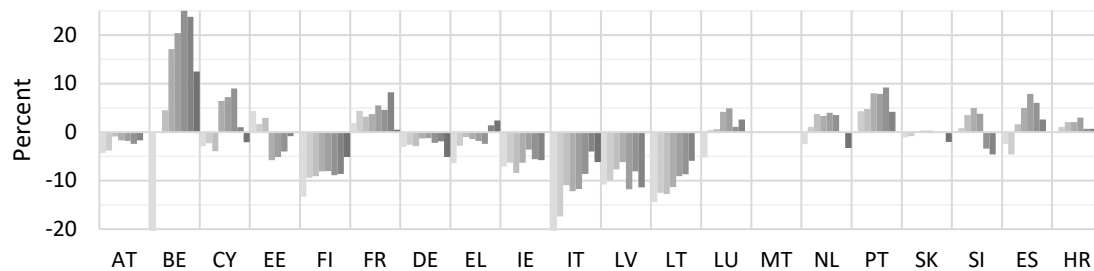
Note: Panel a depicts the food inflation rates from January to August 2024 for the 20 member states of the euro area. Panel b depicts the food inflation divergence, measured by the standard deviation, between the 20 member states of the euro area since 2000.

Since the beginning of the year, the inflation rate for food has averaged 2.2%. Although this marks a decline from earlier in the year, the rate has only reduced marginally since March. Notable price reductions have been observed in Finland, Lithuania, and Slovenia. In contrast, inflation rates remain particularly high in Greece, Malta, Croatia, and Spain. In recent months, there has been a slight uptick in inflation rates in Cyprus, Germany, Latvia, and Portugal. Overall, the divergence in inflation rates among different countries is currently at a historically low level, significantly reduced from the peaks experienced in 2022 and 2023.

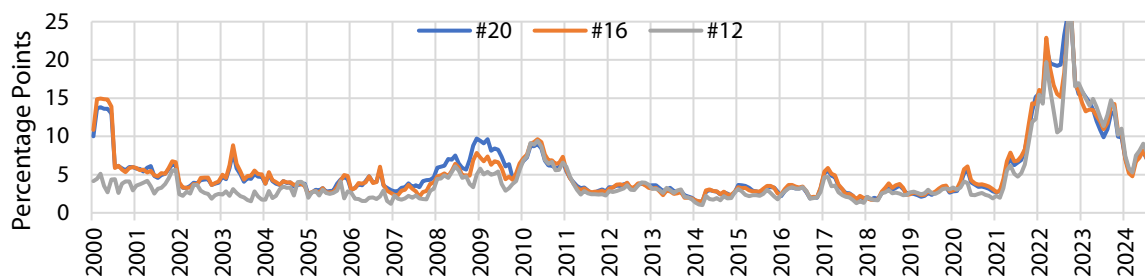
2.2.5. Energy component

Figure 15: Energy inflation rates and divergences

a) Energy inflation rates (January to August 2024)



b) Energy inflation divergence



Source: Eurostat, LSEG Datastream, own elaboration.

Note: Panel a depicts the energy inflation rates from January to August 2024 for the 20 member states of the euro area. Panel b depicts the energy inflation divergence, measured by the standard deviation, between the 20 member states of the euro area since 2000.

Since the beginning of the year, the average inflation rate for the energy component across the 20 euro area member countries has averaged -1.3%. Initially, this rate was declining sharply; however, since April, it has been showing slightly positive values. The rate peaked at 43% in September 2022, highlighting a significant decrease since that time. This year, Belgium stands out with particularly high energy prices, largely due to recent adjustments in gas prices. In contrast, significant price reductions have been observed in Finland, Ireland, Italy, Latvia, and Lithuania. While energy price increases are still present in Portugal, France, the Netherlands, and Spain, they are notably lower than those in Belgium. The divergence in energy prices, which increased in 2021 and further widened in 2022 and 2023, remains slightly elevated this year and has not yet returned to historically normal levels. This persistent divergence is partly attributed to varying government regulations on gas and electricity prices, differences in contract terms related to duration and price adjustments, and diverse procurement strategies among suppliers.

For gas, divergence has surged again due to extremely high year-over-year rates, exceeding 75% in Belgium. Even prior to this rise, divergence was elevated but significantly lower than the levels observed in 2022 and 2023. Significant price declines have been noted in Austria, France, Greece, Estonia, Ireland, Italy, Lithuania, Portugal, and Spain. Electricity prices also show a high level of divergence, although this has been decreasing from the peaks reached in 2022 and 2023. France, Estonia, Portugal, and Spain continue to experience particularly high year-over-year rates, while Finland, Ireland, Italy, Latvia, Lithuania, and the Netherlands have seen notable price reductions.

3. CONCLUSION

The ECB has adopted – in retrospect late and later than other central banks – a robust monetary policy response to combat the historic inflation surge. The tightening cycle initiated in July 2022 was exceptionally steep compared to previous ones, with a total increase of 4.5 percentage points—double the amount of prior cycles. A restrictive monetary policy stance was reached roughly by mid-2023, with the short-term real rate turning meaningfully positive. Currently the ECB still aims to slow the expansion of aggregate demand and thereby ease price pressures.

Looking ahead, the ECB is expected to gradually implement further rate cuts, targeting a broadly neutral rate by the end of 2025. While the initial rate cut was made in June 2024, the ECB will continue to unwind its restrictive stance only gradually. Quantitative tightening will continue as a passive process and leads to a normalisation of the term premium, which, all else equal, puts upward pressure on long-term yields.

Economic growth in the euro area is anticipated to remain sluggish in Q3 2024, with the service sector expanding slowly while industry and construction face recessionary conditions. Despite low capacity utilisation in the industrial sector, the strong labour market provides a cushion, with rising employment and historically low unemployment rates supporting overall capacity utilisation. In particular the industry and construction sector, all else equal, might profit from a less restrictive monetary policy.

The ECB faces the challenging task of finding the right policy stance to calm persistent price pressures in the services sector and finally achieve its inflation target. While the overall inflation rate has decreased to 2.2% in August, driven by base effects from energy prices, inflation in the services sector remains elevated, with rates still high at 4.2%. The persistence of strong monthly price momentum for services should be a concern for the ECB and still must be addressed by a restrictive monetary policy stance. The potential end of disinflationary pressures on non-energy industrial goods and food poses an ongoing inflationary upward risk. Inflation rate divergence among euro area member countries has diminished, facilitating a more consistent monetary policy approach by the ECB.

The ECB should be careful not to undermine its commitment to price stability by loosening monetary policy too aggressively. While initial steps towards a neutral stance might be warranted given the sluggish aggregate demand and downside economic risks, a rapid reduction of interest rates amid inflation still significantly above target could signal a lower priority on regaining price stability. Interest rates should be lowered gradually to safeguard the attainment of the inflation target, as the central bank's credibility is its most valuable asset—particularly in light of the recent inflation surge that has significantly impacted many citizens across the euro area.

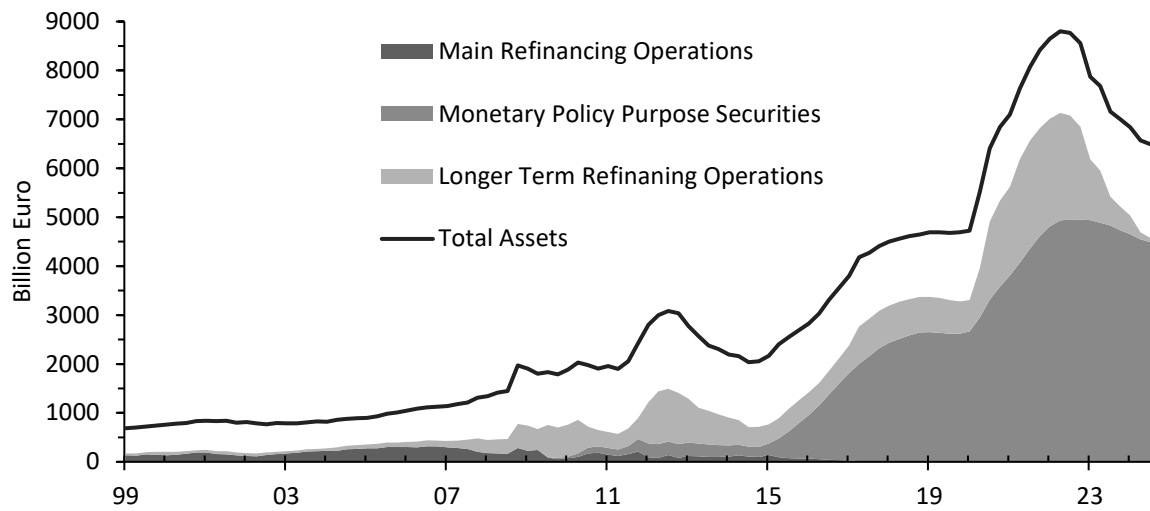
The ECB's communication strategy, which emphasizes the data dependency of its decisions, is appropriate in the current environment. This approach, while reducing the clarity on the future path of interest rates, avoids the impression that rate cuts are inevitable regardless of inflation developments. As the key interest rate has been cut before the inflation target is reached, it is crucial to ensure that the ECB does not appear complacent about the risks of inflation remaining above target.

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ANNEX

Figure 16: Eurosystem balance sheet

Source: ECB, LSEG Datastream, own elaboration.

Note: The figure depicts the asset side of the Eurosystem balance sheet, which is dominated by longer-term refinancing operations and monetary policy purpose securities.

The ECB's interest rate hikes since 2022 aimed to curb inflation by tightening financial conditions and dampening aggregate demand. While price pressures for food and goods have eased, persistent inflation in the services sector remains a key concern. Although the ECB is expected to gradually ease its restrictive stance by 2025, inflation challenges could re-emerge. The ECB should be careful not to undermine its commitment to price stability by loosening monetary policy too aggressively.

This document was provided by the Economic Governance and EMU Scrutiny Unit at the request of the Committee on Economic and Monetary Affairs (ECON) ahead of the Monetary Dialogue with the ECB President on 30 September 2024.

PE 760.252

IP/A/ ECONMD/FWC/2020-002/C10/SC14

Print ISBN 978-92-848-2279-9 | doi:10.2861/ 8638016| QA- 01-24-026-EN-C

PDF ISBN 978-92-848-2278-2 | doi:10.2861/ 4847089| QA- 01-24-026-EN-N