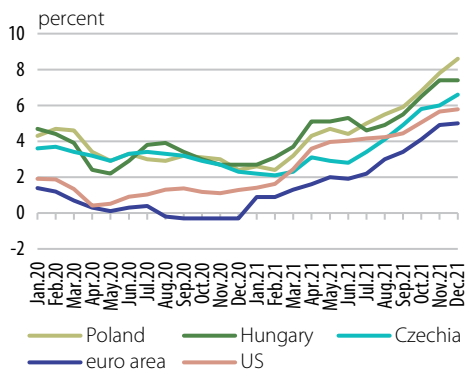
Box 4. The monetary policy stances of major central banks and of those in the region in 2021

In the US, euro area and in Central and Eastern European countries, economic activity witnessed a strong recovery in 2021, albeit uneven during the year, amid new pandemic waves and the ensuing disruptions. Inflation resumed or accelerated considerably its pick-up, especially in H2, and its outlook worsened progressively. This owed to the energy crisis and to bottlenecks in global production and supply chains, but also to some underlying inflation factors in certain countries, essential in terms of calibrating the central banks' monetary policy response.



Note: The annual inflation rate is calculated based on national CPI (Czechia, Hungary, Poland), HICP (euro area) and personal consumption expenditure index (US).

Source: Eurostat, national institutes of statistics, FRED

Chart A
Annual inflation rate in the euro area, US and countries in the region

Thus, the annual inflation rate exceeded significantly the central banks' targets in Q2 (in the US, Poland, Hungary; Chart A) or at the onset of H2 (euro area, Czechia). Moreover, at end-2021, it reached a historical peak in the euro area[1] and the highest readings in approximately 40 years in the US and for the past 10-20 years in countries in the region. The economic rebound was, however, delayed in the early months of the year under review by the resurgence of the pandemic and the reimposition of mobility restrictions. Afterwards, the uncertainties and risks stemming from developments in the epidemiological situation remained considerable, despite the progress in vaccination against COVID-19 and the easing of restrictive measures, particularly during the summer months. Furthermore, as of end-Q3, additional uncertainties and risks to economic activity came from more severe disruptions in global value chains, as well as from the energy crisis, especially in the case of European economies.

In the euro area, the pandemic wave at the beginning of the year and the tightening of associated restrictions had a relatively stronger impact on the economy. Moreover, the annual inflation rate started to rise from negative levels, while underlying price pressures remained virtually neutral, amid the persistence of significant slack in labour and product markets. At the same time, according to ECB assessments updated in mid-year in the context of the gradual reopening of the economy, the annual inflation rate was expected to increase further in 2021 H2, but to decline in 2022, once with the fadeout of the temporary action of supply-side factors. Underlying inflationary pressures were anticipated to rise gradually, yet the annual rate of core inflation was expected to stay below 2 percent, the same as that of headline inflation.

Under the circumstances, in the first part of the year, the ECB preserved the high degree of monetary policy accommodation, by keeping key rates unchanged[2] and confirming the Governing Council's forward guidance on the future path of interest

1 Data series available since January 1997.

2 The interest rates on the main refinancing operations, the marginal lending facility and the deposit facility were kept at 0.00 percent, 0.25 percent and -0.50 percent respectively.

rates. Specifically, the Governing Council expected key ECB interest rates to remain at their present or lower levels until it saw the inflation outlook robustly converge towards the target within its projection horizon, and such convergence was consistently reflected in underlying inflation dynamics. Moreover, the ECB decided to maintain the volume of financial asset purchases under the pandemic emergency purchase programme (PEPP) at EUR 1,850 billion[3] and extend the horizon for net purchases until the coronavirus crisis phase was over and at least until the end of March 2022. Reinvestment of principal payments from maturing securities purchased under the PEPP was extended until at least the end of 2023, while the future roll-off of the PEPP portfolio would be managed to avoid interference with the appropriate monetary policy stance. At the same time, the Governing Council reconfirmed that net purchases under the asset purchase programme (APP) would continue at a monthly pace of EUR 20 billion and that it expected them to run for as long as necessary to reinforce the accommodative impact of its policy rates, and to end shortly before it started raising the key ECB interest rates[4]. The decisions were aimed at reducing uncertainty and bolstering economic agents' confidence, encouraging consumer spending and business investment, and therefore safeguarding medium-term price stability. Furthermore, in order to prevent a countercyclical tightening of financing conditions, the Governing Council decided in March and June to conduct net purchases under the PEPP at a significantly faster pace in Q2 and Q3 than in the first months of the year.

On 8 July 2021, the Governing Council approved the major changes in the ECB's monetary policy strategy, namely: (i) the adoption of a symmetric 2 percent inflation target over the medium term, with deviations from the target on both sides seen as equally undesirable, and (ii) a conditional commitment to take into account the implications of the effective lower bound on policy rates when conducting monetary policy in an environment of structurally low nominal interest rates, which would require especially forceful or persistent monetary policy measures to avoid negative deviations from the inflation target becoming entrenched. The Governing Council therefore revised its forward guidance on the key ECB interest rates at its 22 July monetary policy meeting, saying that they were expected to remain at their present or lower levels until it saw inflation reaching 2 percent well ahead of the end of the projection horizon, and durably for the rest of the projection horizon, and until it judged that realised progress in underlying inflation was sufficiently advanced to be consistent with inflation stabilising at 2 percent over the medium term. This may also imply a transitory period in which inflation is moderately above target.

The ECB forecast updated in September revised again the inflation projections for 2021 up, owing mainly to the higher cost pressures stemming from temporary

3 The envelope had been increased in December 2020, from EUR 1,350 billion.

4 In addition, the Governing Council reiterated that it intended to continue full reinvestment of principal payments from maturing securities purchased under the APP for an extended period of time past the date when the key ECB interest rates were raised, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation. Moreover, the central bank reconfirmed that it would provide ample liquidity through its refinancing operations, with the third series of targeted longer-term refinancing operations (TLTRO III) playing a major role in supporting bank lending to firms and households.

shortages of commodities, materials and equipment, as well as from energy prices. However, inflation in 2023 was still seen going down to below 2 percent, although it was revised up slightly to reflect the better growth outlook. Against this background, the Governing Council decided on a moderately lower pace of PEPP net asset purchases than in the previous two quarters, given also the favourable financing conditions for firms, households and the public sector.

In December 2021 the Governing Council decided on a step-by-step reduction in the pace of asset purchases over the following quarters[5], implying primarily: (i) a new reduction in the pace of net asset purchases under the PEPP in 2022 Q1 and their discontinuation at end-March 2022, as well as (ii) a monthly net purchase pace under the APP of EUR 40 billion in the second quarter of 2022, EUR 30 billion in Q3 and EUR 20 billion from October 2022 onwards[6]. At the same time, the level of the key ECB interest rates and the forward guidance on the future path of policy rates were reconfirmed, as the Governing Council's assessment showed that monetary accommodation would still be needed for inflation to stabilise at 2 percent over the medium term.

The decisions were taken in a context marked by new mobility restrictions and the uncertainties associated with the pandemic wave triggered by the Omicron variant of the coronavirus, as well as by shortages of materials, equipment and labour, alongside higher energy prices, restraining economic activity in 2021 Q4 and worsening its outlook, yet over the very short term. Under the same circumstances, the annual inflation rate continued to increase at a higher rate than projected in the closing months of 2021, but was expected to decline over the course of 2022, once with the fadeout of the action of supply-side shocks. The new forecast showed, however, that headline inflation tended to return to the Governing Council's target over the medium term, with the contribution of underlying inflation dynamics, amid the gradual pick-up of the economy to full capacity and further improvements in the labour market – reflected in faster wage growth –, to which added longer-term inflation expectations moving closer to 2 percent. Nevertheless, the annual rates of both headline and underlying inflation forecasted for 2024 remained slightly below the ECB target at 1.8 percent.

In turn, the Federal Reserve kept the target range for the federal funds rate at 0.00-0.25 percent in the first three quarters of the year and decided to continue the purchases of Treasury securities and mortgage-backed securities at monthly volumes of USD 80 billion and USD 40 billion respectively. The decisions were taken in a context in which both economic activity and labour market witnessed a swift recovery, but further reflected the effects of the COVID-19 pandemic, with the unemployment rate remaining considerably above pre-pandemic levels in the first half of the year. At the same time, the pick-up in the annual inflation rate, to

5 The parameters of monetary policy instruments and measures had been kept unchanged at the October meeting.

6 In addition, the Governing Council extended until 2024 the reinvestment horizon for the principal payments from maturing securities purchased under the PEPP and reiterated its intention to continue reinvesting, in full, the principal payments from maturing securities purchased under the APP for an extended period of time past the date when it started raising the key ECB interest rates and, in any case, for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation.

more than 5 percent in Q2 and Q3, was largely attributable to transitory factors, including some base effects associated with price declines recorded in the same year-earlier period, as well as to price hikes triggered by supply chain bottlenecks.

In September, however, the FOMC noted some obvious progress toward the central bank's maximum employment and price stability goals, signalling in this context that a moderation in the pace of asset purchases could soon be warranted. This decision was taken in the immediately following meeting, i.e. in November[7]. In December, the FOMC decided on a faster reduction in the monthly pace of net asset purchases[8], as recent developments pointed to a considerably tighter labour market, seen in the steep decline of the unemployment rate to a value compatible with the long-term equilibrium level, according FOMC participants' estimates, as well as in the markedly faster wage growth. Moreover, the forecasted path of the annual inflation rate was revised upwards in the short run, although staying close to 2 percent over the longer horizon, while economic growth was anticipated to remain solid, albeit slightly more moderate than previously forecasted, due to the worsening of the epidemiological situation and the persistence of supply chain bottlenecks[9].

In the region, the Polish central bank kept the monetary policy rate at the historical low of 0.1 percent during the first three quarters of the year and continued to purchase government securities and government-guaranteed debt securities in the secondary market. Behind the decisions stood primarily the transitory nature of the factors that prompted the annual inflation rate to resume and then accelerate its growth, as well as the uncertainties about the pace and magnitude of economic recovery, amid pandemic developments. At the onset of Q4, however, the central bank embarked on a relatively quick rate hiking cycle, raising the monetary policy rate in three consecutive steps of different sizes in October, November and December – by 0.4 percentage points, 0.75 percentage points and 0.5 percentage points respectively – to 1.75 percent[10].

The decisions were taken given that the annual inflation rate had strongly accelerated its rise above the target band in H2[11], *inter alia* with the contribution

7 When the Fed decided to reduce the monthly pace of its net asset purchases by USD 10 billion for Treasury securities and USD 5 billion for mortgage-backed securities.

8 They were to be diminished by USD 20 billion for Treasury securities and USD 10 billion for mortgage-backed securities.

9 Under the circumstances, the December projections hinted at an earlier launch of the rate hiking cycle by the Fed, the median of the anticipated midpoint of the target range for the federal funds rate being revised to 0.9 percent for 2022 (from 0.1 percent in the June projections) and to 1.6 percent for 2023 (from 0.6 percent).

10 Furthermore, the Lombard rate and the deposit rate were increased to 2.25 percent and 1.25 percent respectively, while their corridor was brought to a width of ±0.5 percentage points, from a setup that had become asymmetrical (+0.40/-0.10 percentage points). In addition, starting November, the central bank no longer mentioned in its monetary policy statements the purchases of government securities and government-guaranteed debt securities on the secondary market (the last such transactions were carried out in November) and the refinancing of loans granted by credit institutions to the non-financial sector. Both types of operations had been introduced in response to the pandemic crisis. Moreover, the central bank normalised the required reserve ratio (raising it to 2.0 percent from 0.5 percent) and reiterated the possibility of resorting to forex market interventions, the timing and volume of which were to be determined based on financial market conditions.

11 Inflation rose to 8.6 percent in December from 4.4 percent in mid-year and 2.4 percent at end-2020, owing mainly to increases in fuel, agri-food and electricity prices and in waste disposal charges, as well as under the influence of supply chain disruptions and hike in transport costs.

of its core component[12], in a context marked by faster economic recovery during the first three quarters of the year and by a tightening trend of labour market conditions. The latter was especially reflected by the decline in the unemployment rate close to pre-pandemic lows, as well as by the increasingly steep upward path of wage dynamics. At the same time, the inflation outlook kept worsening. Specifically, according to the November forecast, the annual inflation rate was expected to climb until 2022 Q1 and, after a temporary return to the upper bound of the target band[13], to rise again towards the end of the projection horizon, amid inflationary pressures stemming from the gradual increase in excess aggregate demand. Moreover, the balance of risks to this outlook remained tilted to the upside across the policy-relevant horizon, given the ongoing economic recovery and the labour market tightening trend, but also the potential protraction of the impact exerted by external shocks on price dynamics.

The Czech National Bank embarked in mid-year on a gradual normalisation process of the monetary policy conduct, increasing the key rate in two steps of 0.25 percentage points each in June and August, to 0.75 percent[14], from the level close to the historical low reached in May 2020, i.e. 0.25 percent. However, the monetary authority then hastened considerably the policy rate hiking cycle, raising the key rate in three variable steps October through December, namely by 0.75 percentage points, 1.25 percentage points, and 1 percentage point respectively, up to 3.75 percent[15].

The approach was warranted by the sizeable and steady worsening of inflation developments and outlook in H2, particularly in terms of the core component, under the strong impact of global supply-side shocks, but also as a result of rising underlying pressures. The latter occurred amid the increasingly obvious labour market tightening, reflected *inter alia* by the unemployment rate tending to return towards its pre-pandemic lows, conducive to swifter wage dynamics.

Specifically, the annual inflation rate grew at a considerably faster tempo, also vis-à-vis expectations, climbing in Q3 well above the tolerance band around the target[16], while its anticipated path was revised markedly upwards in the central bank's August and November forecasting rounds[17]. According to the November projection, the annual inflation rate was expected to remain on an upward path

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12 The annual core inflation rate stepped up to 5.3 percent in December 2021 versus 3.5 percent in mid-year and 3.7 percent at end-2020.

13 Amid the fadeout of effects from supply-side shocks.

14 At the same time, the deposit facility rate was kept at 0.05 percent, while the lending facility rate was raised by 0.25 percentage points and 0.50 percentage points respectively, to 1.75 percent. Hence, the width of the related corridor was extended from +0.5/-0.20 percentage points to +1/-0.70 percentage points.

15 Furthermore, the lending facility rate was increased to 4.75 percent at the end of the year, while the deposit facility rate was brought up to 2.75 percent.

16 The annual inflation rate picked up from 2.3 percent in December 2020 to 2.8 percent in June 2021 and to 6.6 percent at end-2021. The annual core inflation rate rose to 8.6 percent in December 2021 against 3.5 percent in June and 3.6 percent at end-2020.

17 At the same time, the updated forecasts indicated an ongoing recovery of economic activity, as progress in the vaccination campaign against COVID-19 rendered unlikely the reimposition of major restrictions. Production and supply chain bottlenecks were, nevertheless, anticipated to weigh on output in certain sectors, especially export-oriented ones. In addition, GDP dynamics in Q3 fared better than expected, with the major contribution of private consumption, underpinned by the relatively quicker wage growth, *inter alia* amid the above-expectations labour market tightening.

until 2022 Q1, reaching around 7 percent, mainly following the step-up in the dynamics of its core component[18], under the influence of the quick rise in import prices, compounded by robust domestic demand[19]. To this added costlier agri-food commodities and the increase in fuel prices and some administered prices at the onset of 2022 (electricity, natural gas). The annual inflation rate was, however, anticipated to fall thereafter and near the target at the end of the monetary policy horizon, mainly amid the moderation of imported inflation. Nevertheless, the possible de-anchoring of inflation expectations was a major risk to this outlook, given *inter alia* the potential stronger inflationary effects from bottlenecks in global production chains, from energy prices and imputed rent, as well as the possible depreciation of the domestic currency, calling for a stronger monetary policy response amid labour market tensions.

Table A. Macroeconomic developments and monetary policy stance in advanced economies and in the region

	Inflation target/ objective[b,c]	Annual inflation rate						Monetary policy rate[b,c]		Output gap[b,g]	General government balance, % of GDP**				Current account balance, % of GDP			
				Forecast*[b,c]									Forecast*				Forecast*	
		2021 (average)	2021 (end of period)	2022 (average)	2023 (average)	2022 Q4	2023 Q4	Dec. 2020	Dec. 2021		2020	2021	2022	2023	2020	2021	2022	2023
Euro area	2 percent ***	2.6[a]	5.0[c]	3.2	1.8	1.9	1.8	0	0	negative, narrowing	-7.1[a]	-5.1	-3.9[d]	-2.4[d]	1.9[d]	2.4	1.8[c]	1.9[c]
US	2 percent	3.9[f]	5.8[f]	2.6	2.3	-	-	0-0.25	0-0.25	negative, narrowing	-15.3[d]	-11.7	-7.9[d]	-6.8[g]	-2.9[d]	-3.6	-3.6[d]	-3.5[d]
Poland	2.5 percent ±1 pp	5.1[e]	8.6[e]	5.8	3.6	4.4	3.6	0.10	1.75	slightly positive, gradually rising	-6.9[a]	-1.9[a]	-1.8[d]	-2.1[d]	2.9[a]	-0.6	2.6[d]	2.9[d]
Hungary	3 percent ±1 pp	5.1[e]	7.4[e]	4.7-5.1	2.5-3.5	-	-	0.60	2.40	quasi-nil	-7.8[a]	-6.8[a]	-5.9[b]	-3.9[b]	-1.0[a]	-3.0	(-2.5)-(-3.4)[b]	(-1.5)-(-2.4)[b]
Czechia	2 percent ±1 pp	3.9[e]	6.6[e]	5.6	2.1	4.1	2.0	0.25	3.75	slightly positive, gradually opening in the near term and gradually narrowing afterwards	-5.8[a]	-5.9[a]	-4.4[b]	-4.2[b]	2.0[a]	-0.8	-0.4[b]	0.5[b]
Romania	2.5 percent ±1 pp	5.05[e]	8.19[e]	-	-	5.9	3.3 (Q3)	1.50	1.75	slightly positive, rising very slowly	-9.3[a]	-7.1[a]	-6.9[d]	-6.3[d]	-5.0[a]	-7.0	-6.3[d]	-6.1[d]

*) forecasted values refer to the latest central bank projections in 2021 and to the European Commission's autumn economic forecast (November 2021) respectively.

**) calculated according to the ESA 2010 methodology

***) below, but close to 2 percent, prior to July 2021

Sources: a) Eurostat, b) national central banks, c) ECB, d) European Commission (AMECO), e) national institutes of statistics, f) US Bureau of Economic Analysis, g) IMF

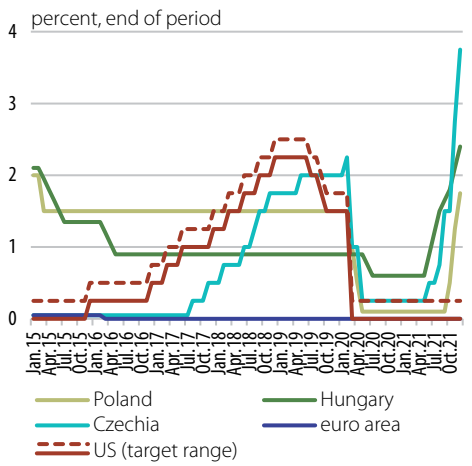
The Hungarian central bank also embarked on a monetary policy rate hiking cycle in mid-year. The base rate was raised however by relatively more uniform increments June through December 2021, i.e. 0.15 and 0.30 percentage points[20],

18 Core inflation dynamics were seen following a similar path, to peak at 6.3 percent in 2022 Q1.

19 The contribution of imputed rent to core inflation dynamics, which grew substantially in 2021, was also anticipated to remain high.

20 The key rate was increased by 0.3 percentage points in June, July, August, November and December, and by 0.15 percentage points in September and October.

although with a somewhat higher frequency, namely seven times. It was thus brought up to 2.40 percent from the historical low of 0.6 percent[21]. Conversely, November through December the central bank hastened considerably the adjustment of the one-week deposit rate[22], raising it to 4.0 percent at end-December[23], after it had previously been increased in step with the base rate (Chart B). Moreover, the Hungarian central bank announced in June the termination of the FGS Go! Programme and, in December, the closure of the Bond Funding for Growth Scheme (for purchases of corporate bonds) and of the government securities purchase programme. In addition, it decided on the phasing out of the FX swap facility providing forint liquidity.



Source: national central banks

Chart B
Monetary policy rate in the euro area, US and countries in the region

The decisions were warranted by the steep rise in the annual inflation rate[24], under the impact of global supply-side shocks, and by the steady worsening of its outlook, implying that the annual dynamics of consumer prices would stay considerably above the tolerance band two quarters longer than previously forecasted. Specifically, according to the December projection, the annual headline inflation rate was expected to peak at around 7 percent in the closing months of 2021, before declining only gradually at the onset of 2022, amid some base effects and the cap on fuel prices. However, it was then seen falling at a faster pace towards end-2022 and returning to the central bank's tolerance band in Q4. By contrast, the annual core inflation rate was anticipated to stick to the upward path[25] and climb towards 6 percent in mid-2022. This was due, *inter alia*, to global production chain bottlenecks, but especially to the tighter labour market, the minimum wage rise at the beginning of 2022 and higher social transfers, implying swift dynamics of wages and disposable income. Afterwards, the annual core inflation rate was expected to go down gradually and return to the tolerance band around the target, also as a result of tightening the monetary policy conduct (Table A). Achieving the medium-term price stability objective was, however, conditional on preventing the second-round effects of the inflation bout, implicitly on the solid anchoring of inflation expectations, which called for a further gradual increase in the monetary policy rate and for the termination of asset purchase programmes.

21 At the same time, the deposit rate was raised to a level similar to that of the monetary policy rate (2.40 percent), while the overnight and one-week collateralised lending rates were both increased to 4.40 percent.

22 During 2021, the central bank continued to set the one-week deposit rate at weekly tenders. In the first half of the year, it stood below the monetary policy rate, the two levels being brought on par in June, at 0.9 percent.

23 Thus, in the period from November to December, the one-week deposit rate was raised by 2.20 percentage points (the advances of 0.7 percentage points and 0.4 percentage points respectively decided in the latter half of November were followed by 0.2-0.3 percentage point adjustments during the next weeks), whereas the base rate was increased by 0.6 percentage points.

24 It climbed from 2.7 percent in December 2020 to 5.3 percent in June 2021 and 7.4 percent at end-2021.

25 It picked up to 6.4 percent in December, from 3.8 percent in June and 3.2 percent in December 2021.