EUROPEAN CENTRAL BANK

EUROSYSTEM

Eurosystem staff macroeconomic projections for the euro area

December 2020

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Overview

Following a drop of 15.0% in the first half of 2020, euro area real GDP rebounded by 12.5% in the third quarter, which was a significantly stronger increase than expected in the September 2020 ECB staff projections. Nevertheless, the recent intensification of containment measures in response to a strong resurgence of coronavirus (COVID-19) infections across countries is expected to result in another decline in activity in the fourth quarter. Activity is also expected to be subdued in the first quarter of 2021. Despite this near-term setback, positive news on the development of vaccines gives cause for greater confidence in the assumption of a gradual resolution of the health crisis throughout 2021 and in early 2022. This, together with substantial support from monetary and fiscal policies – partly related to the Next Generation EU (NGEU) package – and the ongoing recovery in foreign demand, should allow a firm rebound during the course of 2021, with real GDP expected to return to its pre-crisis level by mid-2022. Thus, even though the near-term outlook has deteriorated, the path of euro area GDP from 2022 is expected to be broadly similar to that foreseen in the September 2020 ECB staff projections. As the policy measures are expected to be successful in averting large financial amplification effects and limiting the economic scars of the crisis, real GDP in 2023 is expected to stand 2½% above its 2019 pre-crisis level.

As regards inflation, upward base effects associated with the earlier slump in oil prices and upward impacts from the reversal of the VAT rate cut in Germany imply a rebound in headline inflation in 2021. HICP inflation excluding energy and food is expected to show a much more muted recovery in 2021 as broad-based disinflationary effects from weak demand, especially across the services sectors, dominate upward cost pressures from supply side constraints. Over the medium term headline inflation is expected to gradually increase, mainly reflecting a slight rise in the contribution of HICP inflation excluding energy and food which, however, is seen to remain rather subdued, at 1.2%, in 2023. Overall, the baseline foresees HICP inflation rebounding from 0.2% in 2020 to 1.0% in 2021 and then gradually increasing further to 1.1% in 2022 and 1.4% in 2023. Compared with the September 2020 ECB staff projections, HICP inflation has been revised down for 2020 and 2022, on account of weaker incoming data for HICP inflation excluding energy and food and a downward reassessment of inflationary pressures since the previous projections in the context of abundant but diminishing slack in the goods and labour markets.[1]

In view of the continued significant uncertainty regarding the evolution of the pandemic, potential medical solutions (including the distribution and take-up of vaccines) and the degree of economic scarring, two alternative scenarios have again

1 The cut-off date for technical assumptions, such as those for oil prices and exchange rates, was 18 November 2020 (see Box 1). The macroeconomic projections for the euro area were finalised on 25 November 2020. The current macroeconomic projection exercise covers the period 2020-23. Projections over such a long horizon are subject to very high uncertainty, and this should be borne in mind when interpreting them. See the article entitled “An assessment of Eurosystem staff macroeconomic projections” in the May 2013 issue of the ECB’s Monthly Bulletin. See http://www.ecb.europa.eu/pub/projections/html/index.en.html for an accessible version of the data underlying selected tables and charts.

been prepared. The mild scenario sees a more successful containment of the virus, a swift roll-out of vaccines and limited scarring. In this scenario, real GDP would rebound by 6.0% next year, reaching pre-crisis levels as early as the end of 2021, with inflation rising to 1.5% in 2023. In contrast, the severe scenario, with a delayed resolution of the health crisis and substantial and permanent losses to economic potential, would imply a marginal increase in 2021 in real GDP, which would stand in 2023 still almost 2% below its pre-crisis levels, with inflation at only 0.8% in that year.

1 Key assumptions underlying the projections

The baseline rests on a number of critical assumptions concerning the evolution of the pandemic. The baseline assumes that the stringency of containment measures in the euro area in the fourth quarter of 2020 will, on average, be maintained in the first quarter of 2021. The economic costs of the latest measures are assumed to be substantially lower than in the spring, as they are more targeted and efficient as a result of the experience gained in how to deal with the pandemic. Thereafter, as medical solutions, such as effective vaccines, become available and are deployed, a concomitant relaxation of containment measures is assumed to take place with a broad resolution of the health crisis by early 2022. In this context, the currently prevailing high uncertainty is also assumed to gradually decline over the projection horizon. Nevertheless, even after the health crisis is largely resolved, the associated economic losses are assumed to persist – implying sustained losses in economic output compared with the pre-crisis trajectory over the entire projection horizon. Similar assumptions regarding the evolution of the pandemic are made for the international environment (see Box 2).

Significant monetary and fiscal policy measures, including the NGEU package, will support incomes and reduce job losses and bankruptcies and will help to contain adverse real-financial feedback loops. In addition to the monetary policy measures taken by the ECB up to the cut-off date for the projections, the baseline includes discretionary fiscal measures related to the COVID-19 crisis amounting to approximately 4½% of GDP in 2020. These measures include extensive job retention schemes to cushion the impact of the collapse in activity on employment and labour incomes. In particular, firms are receiving substantial subsidies and capital transfers. While many of the emergency fiscal measures currently in place are temporary, some of them have been extended and new packages have been adopted for implementation as of 2021 and included in the baseline. Measures relating to the NGEU recovery fund – amounting to around 0.5% of GDP in each year in 2021-23 (i.e. about half of the NGEU grant envelope over 2021-26) – are included in the baseline. Government loans and guarantees or capital injections, amounting to a total envelope of about 17% of GDP, should contribute to alleviating liquidity constraints. In addition, the monetary, fiscal and prudential policy measures will help to contain adverse real-financial feedback loops throughout the projection horizon.

A further technical assumption is that the trading relationship between the United Kingdom and the EU will default to the World Trade Organization's most favoured nation (WTO/MFN) terms on 1 January 2021, in line with the Autumn 2020 Forecast of the European Commission. As previous Eurosystem/ECB staff projection exercises assumed that the United Kingdom and the EU would move to a free trade agreement, this change in the assumptions implies lower demand for euro area exports to the United Kingdom related to the imposition of tariffs and non-tariff barriers to trade. Nevertheless, it should be noted that, as in the European

Commission’s Autumn 2020 Forecast, only trade effects have been included in the baseline, i.e. possible exchange rate and financial disruptions relating to the move to WTO/MFN terms have not been considered.

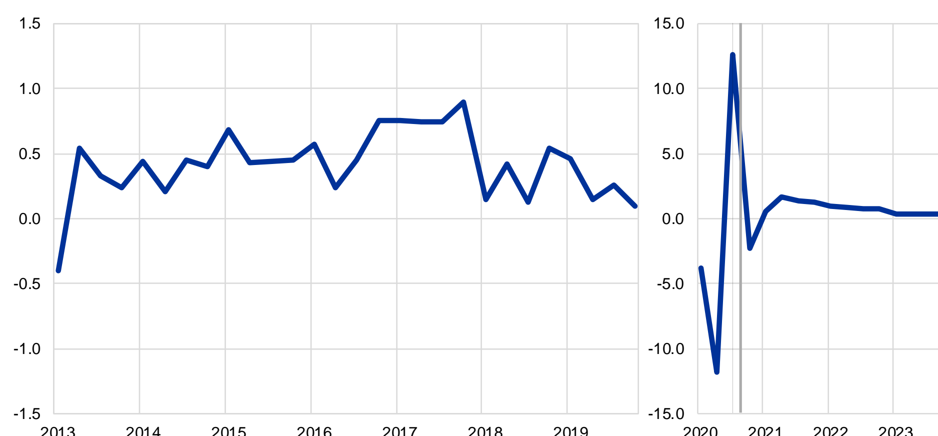
2 Real economy

Real GDP registered a strong, yet incomplete, rebound in the third quarter of 2020. According to Eurostat, real GDP rose by 12.5% in the third quarter (see Chart 1). All euro area countries recorded a rebound from the collapse in activity that occurred in the first half of 2020, with those that had recorded the sharpest declines generally rebounding more strongly. The outcome for the third quarter was substantially stronger than the figure of 8.4% foreseen in the baseline of the September 2020 ECB staff projections and also better than the 9.4% increase entailed in the September mild scenario. Nevertheless, despite the strong increase in activity in the third quarter, the recovery remained incomplete, with the level of real GDP in the third quarter of 2020 being 4.4% below its level in the fourth quarter of 2019.

Chart 1

Euro area real GDP

(quarter-on-quarter percentage changes, seasonally and working day-adjusted quarterly data)



Notes: In view of the unprecedented volatility in real GDP in the course of 2020, the chart shows a different scale from early 2020. The vertical line indicates the start of the projection horizon. This chart does not show ranges around the projections. This reflects the fact that the standard computation of the ranges (based on historical projection errors) would not, in the present circumstances, provide a reliable indication of the unprecedented uncertainty surrounding the current projections. Instead, in order to better illustrate the current uncertainty, alternative scenarios based on different assumptions regarding the future evolution of the COVID-19 pandemic and the associated containment measures are provided in Box 3.

The tightening of containment measures in October and November 2020 across euro area countries is expected to lead to another contraction in real GDP in the fourth quarter. The momentum of economic growth had already levelled out by September. Faced with rapidly increasing numbers of new COVID-19 cases, many euro area countries announced partial lockdown measures starting in mid-October. High-frequency data (such as mobility indicators) suggest that these measures have resulted in a further slowdown in activity into November and the composite output Purchasing Managers' Index (PMI) fell to 45.3 in November, driven by the services sector. However, compared with the lockdown period in the spring, the containment measures announced so far have generally been more targeted towards contact-intensive services sectors where contagion has proved to be particularly acute. Given that factories, schools and nurseries, as well as public services, generally remain open in most countries, these measures are expected to result in

less disturbance to manufacturing and construction activity than in the spring, but would again weigh heavily on activity in the services sector. Recently announced targeted fiscal measures to support the sectors affected by the lockdown will also mitigate the overall decline in activity. Overall, real GDP is expected to decline by 2.2% in the fourth quarter of 2020 and to rebound only marginally in the first quarter of 2021.

Even though some containment measures are expected to remain in place, activity is projected to rebound again during the course of 2021. This expectation of a second rebound is based on the assumption of a steady lifting of containment measures, a gradual decline in uncertainty and a boost to confidence given the prospects for effective vaccines and their timely and successful distribution. In addition, a recovery in foreign demand, supportive policies and some pent-up demand will stimulate activity. Nevertheless, real GDP will recover only gradually, reaching the 2019 pre-crisis level by mid-2022 and exceeding it by 2½% in 2023.

Table 1

Macroeconomic projections for the euro area

(annual percentage changes)

	December 2020				September 2020		
	2020	2021	2022	2023	2020	2021	2022
Real GDP	-7.3	3.9	4.2	2.1	-8.0	5.0	3.2
Private consumption	-8.3	4.3	5.7	1.8	-8.0	5.9	3.4
Government consumption	1.5	2.5	0.6	1.1	1.7	1.7	1.0
Gross fixed capital formation	-10.1	5.0	6.5	3.7	-12.3	6.3	6.1
Exports[1]	-11.0	6.5	4.9	3.5	-13.7	7.4	4.5
Imports[1]	-10.7	6.3	6.1	3.8	-11.7	7.0	5.0
Employment	-1.8	-0.9	1.8	1.0	-2.3	0.1	1.3
Unemployment rate (percentage of labour force)	8.0	9.3	8.2	7.5	8.5	9.5	8.8
HICP	0.2	1.0	1.1	1.4	0.3	1.0	1.3
HICP excluding energy	1.0	1.0	1.1	1.3	1.1	1.0	1.2
HICP excluding energy and food	0.7	0.8	1.0	1.2	0.8	0.9	1.1
HICP excluding energy, food and changes in indirect taxes[2]	0.8	0.7	1.0	1.2	0.9	0.8	1.1
Unit labour costs	4.8	-1.1	-0.3	1.2	4.3	-1.7	0.1
Compensation per employee	-1.1	3.6	2.1	2.3	-1.8	3.1	2.0
Labour productivity	-5.6	4.8	2.4	1.1	-5.8	4.9	1.9
General government budget balance (percentage of GDP)	-8.0	-6.1	-3.9	-3.0	-8.8	-4.9	-3.6
Structural budget balance (percentage of GDP)[3]	-5.5	-3.8	-2.8	-2.6	-2.0	-2.5	-2.6
General government gross debt (percentage of GDP)	98.4	99.9	98.3	97.8	100.7	100.0	98.9
Current account balance (percentage of GDP)	1.9	2.1	1.9	1.9	2.0	2.6	2.6

Notes: Real GDP and components, unit labour costs, compensation per employee and labour productivity refer to seasonally and working day-adjusted data. This table does not show ranges around the projections. This reflects the fact that the standard computation of the ranges (based on historical projection errors) would not, in the present circumstances, provide a reliable indication of the unprecedented uncertainty surrounding the current projections. Instead, in order to better illustrate the current uncertainty, alternative scenarios based on different assumptions regarding the future evolution of the COVID-19 pandemic and the associated containment measures are provided in Box 3.
1) This includes intra-euro area trade.
2) The sub-index is based on estimates of actual impacts of indirect taxes. This may differ from Eurostat data, which assume a full and immediate pass through of indirect tax impacts to the HICP.
3) Calculated as the government balance net of transitory effects of the economic cycle and measures classified under the European System of Central Banks (ESCB) definition as temporary. The revisions compared with the September 2020 projections, especially for 2020, reflect, among other things, a change in the ESCB classification of temporary measures related to the COVID-19 crisis. As a result of these changes, in general, COVID-19 crisis-related measures no longer fall under the ESCB definition of temporary measures and therefore the structural balance includes the budgetary impact of these measures.

Turning to the components of GDP, private consumption is expected to have declined by 8.3% in 2020 and to recover to its pre-crisis level by mid-2022. Private consumption rebounded strongly in the third quarter of 2020 following a cumulated decline of 16.3% in the first half of 2020. The strong, albeit incomplete, rebound in the third quarter is likely to have been driven by an unwinding of previous pent-up demand – notably for durable goods, with new passenger car registrations surging by almost 95% in the third quarter – as well as increased spending on services. Despite the strong rebound in the third quarter, the initial losses in private consumption were only partly recovered. The fluctuations in private consumption in the first three quarters of 2020 contrast with a much more muted profile of real

disposable income, which was stabilised by government support, and this has resulted in sharp changes in the saving ratio. Looking ahead, private consumption is expected to decline again markedly in the fourth quarter of 2020 as a consequence of the tightening of containment measures, resulting in renewed forced savings and likely higher precautionary savings. Thereafter, it is projected to resume recovering in 2021 and to surpass its pre-crisis level in mid-2022. This rebound will be supported by a gradual decline in uncertainty as well as a gradual convergence of the saving ratio to its pre-crisis level, while elevated unemployment and an unwinding of net fiscal transfers will act as a drag on the recovery in consumer spending.

Box 1
Technical assumptions about interest rates, commodity prices and exchange rates

Compared with the September 2020 ECB staff projections, the current technical assumptions include lower long-term interest rates, lower oil prices and a slightly weaker effective exchange rate of the euro. The technical assumptions about interest rates and commodity prices are based on market expectations with a cut-off date of 18 November 2020. Short-term interest rates refer to the three-month EURIBOR, with market expectations derived from futures rates. The methodology gives an average level for these short-term interest rates of -0.4% in 2020 and -0.5% in 2021-23. The market expectations for euro area ten-year nominal government bond yields imply an average annual level of 0.0% for 2020, -0.1% for 2021, 0.0% for 2022 and 0.1% for 2023.[2] Compared with the September 2020 ECB staff projections, market expectations for short-term interest rates are unchanged, while euro area ten-year nominal government bond yields have been revised down by around 20 basis points for 2021-22.

As regards commodity prices, the projections consider the path implied by futures markets by taking the average of the two-week period ending on the cut-off date of 18 November 2020. On this basis, the price of a barrel of Brent crude oil is assumed to decline from USD 64.0 in 2019 to USD 41.6 in 2020 and to increase to USD 46.9 by 2023. This path implies that, in comparison with the September 2020 ECB staff projections, oil prices in US dollars are around 7% lower in the period 2021-22. The prices of non-energy commodities in US dollars are estimated to rebound in 2021 and increase more moderately over the remainder of the projection horizon.

Bilateral exchange rates are assumed to remain unchanged over the projection horizon at the average levels prevailing in the two-week period ending on the cut-off date of 18 November 2020. This implies an average exchange rate of USD 1.18 per euro over the period 2021-23, which is unchanged from the September 2020 ECB staff projections. The assumption for the effective exchange rate of the euro has been revised down by 0.7% since the September 2020 ECB staff projections.

[2] The assumption for euro area ten-year nominal government bond yields is based on the weighted average of countries' ten-year benchmark bond yields, weighted by annual GDP figures and extended by the forward path derived from the ECB's euro area all-bonds ten-year par yield, with the initial discrepancy between the two series kept constant over the projection horizon. The spreads between country-specific government bond yields and the corresponding euro area average are assumed to be constant over the projection horizon.

Technical assumptions

	December 2020				September 2020		
	2020	2021	2022	2023	2020	2021	2022
Three-month EURIBOR (percentage per annum)	-0.4	-0.5	-0.5	-0.5	-0.4	-0.5	-0.5
Ten-year government bond yields (percentage per annum)	0.0	-0.1	0.0	0.1	0.1	0.1	0.2
Oil price (in USD/barrel)	41.6	44.0	45.7	46.9	42.8	47.5	49.2
Non-energy commodity prices, in USD (annual percentage change)	2.5	8.4	0.4	1.6	1.5	5.8	2.7
USD/EUR exchange rate	1.14	1.18	1.18	1.18	1.14	1.18	1.18
Euro nominal effective exchange rate (EER42) (Q1 1999 = 100)	119.3	121.6	121.6	121.6	119.4	122.4	122.4

The sharp and sudden contraction in housing investment in 2020 is expected to be only gradually reversed over the projection horizon. Housing investment is estimated to have declined by a cumulated 14.2% in the first half of 2020 and to have been hit harder in countries with stricter lockdown measures. The adverse effects on housing demand of subdued disposable income, weaker consumer confidence and higher unemployment are expected to lead to a sluggish recovery in housing investment, which is expected to reach its pre-crisis level only in the second half of 2022.

Business investment is expected to have declined sharply in 2020 and to recover only gradually in 2021, reaching its pre-crisis level in mid-2022. A severe decline in the first half of 2020 was a result of the lockdowns, the collapse in global and domestic demand and a surge in uncertainty. While business investment is estimated to have rebounded strongly in the third quarter, another contraction is expected in the fourth quarter. A gradual rebound is expected to start during the course of 2021, as global and domestic demand recover and also in part supported by the positive impact of the NGEU plan on business investment. However, as uncertainty is assumed to fade only gradually, and in view of elevated levels of spare capacity and concerns about longer-term demand trends, firms are likely to step up investment only gradually, suggesting that the rebound will gain some strength only in 2022. As a result, euro area business investment is expected to reach its pre-crisis level in mid-2022.

The gross indebtedness of non-financial corporations (NFCs) is projected to increase significantly in 2020 before declining moderately but remaining above its pre-crisis level at the end of the projection horizon. NFC gross indebtedness has increased significantly in 2020 from an already elevated level on account of the marked fall in corporate profits in the first half of the year and the resulting increased recourse to debt financing to compensate for liquidity shortfalls. Corporate gross indebtedness is expected to increase slightly further in the near term, before declining moderately but remaining clearly above the end-2019 level in 2023. The observed increase in the NFC debt ratio is expected to limit business investment growth over the projection horizon, as firms take steps to restore their balance sheet health. Nevertheless, corporate gross interest payments have declined to record low levels in

the past few years and are expected to increase only modestly in the next few years, easing possible debt sustainability concerns.

Box 2
The international environment

Incoming data point to a stronger recovery in economic activity and trade in the third quarter of 2020 than expected in the September 2020 ECB staff projections. Overall, global real GDP (excluding the euro area) is seen to have expanded at a rate of 6.7% in the third quarter (2.0 percentage points more than foreseen in the September 2020 projections). Global imports (excluding the euro area) also rebounded vigorously in the third quarter, driven by the recovery in economic activity, particularly in the manufacturing sector, and resilient global value chains. Following a double-digit contraction in the second quarter (-13.4%, quarter on quarter), global imports are estimated to have rebounded by 10.9%, quarter on quarter, in the third quarter (4.8 percentage points more than foreseen in the previous projections).

Recent survey data point to continued, but moderating, growth momentum in global economic activity and trade at the start of the fourth quarter. In October the global composite output PMI (excluding the euro area) improved further to 54.1 (from 53 in September), supported by a marked improvement in the services sector and a modest increase in the manufacturing sector, thus suggesting a broadening of the economic recovery. The global manufacturing PMI for new export orders (excluding the euro area), which correlates well with global trade, declined somewhat, falling to 50.3 in October, suggesting some moderation in trade growth momentum at the start of the fourth quarter. Overall, the resurgence of COVID-19 infections is expected to weigh on the pace of global real GDP growth (excluding the euro area) in the fourth quarter, while the negative fallout for global import growth is seen to be somewhat cushioned by some assumed stockpiling of imports in the United Kingdom, ahead of the end of the Brexit transition period. This stockpiling is assumed to unwind in early 2021.

After contracting by 3.0% in 2020, global real GDP (excluding the euro area) is projected to expand by 5.8% in 2021 and to grow at an average rate of 3.8% over 2022-23. The rebound in economic activity is projected to be stronger in emerging market economies compared with the advanced economies. This pattern is mainly driven by China, which stands out in the global context as it managed to successfully contain the spread of the virus at an early stage and, having already returned to pre-pandemic levels of activity in mid-2020, its economy is expected to have grown in 2020. In the United States, the economy is projected to rebound in 2021 and the real GDP growth rate is projected to gradually normalise by 2023. At the end of the projection horizon the global economic recovery is seen to be incomplete, as the level of economic activity is projected to remain below the pre-pandemic trajectory. Compared with the September 2020 projections, global real GDP growth (excluding the euro area) has been revised up for 2020 and down for 2021, while it is broadly unchanged for 2022.

Global trade (excluding the euro area) is projected to contract by 9.2% in 2020 before rebounding by 7.1% in 2021 and expanding at an average rate of 3.7% over 2022-23. The sharp fall in global imports (excluding the euro area) in 2020 reflects their strong procyclicality, especially during economic downturns, but also the specific nature of the COVID-19 crisis. Temporary disruptions in global supply chains and increased trade costs owing to the COVID-19 containment measures indeed took a toll on global trade in the first half of 2020. Global imports (excluding the euro

area) are projected to contract in 2020 at a slower pace than envisaged in the September 2020 projections, largely reflecting better than expected growth in the third quarter, and to grow at a slightly faster pace in 2021 on the back of a stronger than expected rebound in trade in emerging market economies. Euro area foreign demand is projected to decline by 10.7% in 2020, to grow by 6.6% in 2021 and to grow at an average rate of 3.7% in 2022-23. Compared with the September 2020 projections, this entails a slight downward revision for 2021. This downward revision reflects to a large extent the negative effect of the change in the assumption for the EU-United Kingdom trade relationship from January 2021 (see Section 1), which is partially offset by an improved outlook for imports of other key economies (e.g. the United States, China and other emerging market economies).

The international environment

(annual percentage changes)

	December 2020				September 2020		
	2020	2021	2022	2023	2020	2021	2022
World (excluding euro area) real GDP	-3.0	5.8	3.9	3.6	-3.7	6.2	3.8
Global (excluding euro area) trade[1)]	-9.2	7.1	3.9	3.4	-11.2	6.8	4.0
Euro area foreign demand[2)]	-10.7	6.6	4.1	3.2	-12.5	6.9	3.7

1) Calculated as a weighted average of imports.
2) Calculated as a weighted average of imports of euro area trading partners.

Exports are expected to be disproportionately hit by the pandemic in 2020, compared with imports, suggesting an overall negative net trade contribution this year and a neutral contribution on average thereafter. In the first half of 2020 supply chain disruptions and lower foreign demand had a severe impact on already weak exports, especially in the automotive, machinery and chemical sectors, while tourism restrictions led to plummeting exports of hospitality and transport services. The lockdowns introduced to contain the pandemic also resulted in a sharp decline in imports. However, pent-up demand in export-oriented industries and the lifting of many restrictions contributed to a strong rebound in imports and exports in the third quarter. Services exports face new restrictions in the fourth quarter and although trade in goods is not expected to be affected by factory closures in response to the pandemic, it will continue to suffer from subdued final demand. From 2021 the end of the Brexit transition period will imply a worsening of bilateral trade conditions with the United Kingdom, a key trading partner absorbing 14% of euro area exports. Over the medium term euro area trade will be dampened by the euro appreciation since the start of the pandemic, which has affected euro area competitiveness. As a result, export market shares are expected to remain below pre-pandemic levels until the end of the projection horizon. Net trade contributions to GDP will stay rather muted from 2021 and will not offset the negative contribution in 2020.

Despite a muted increase in unemployment in recent months, the labour market situation is expected to worsen substantially before normalising towards the end of the projection horizon. The unemployment rate increased from 7.6% in the second quarter to 8.6% in the third quarter, which was lower than expected in the September 2020 ECB staff projections. The lower reading in the third quarter was mainly due to much stronger than expected employment growth. Employment in the third quarter of 2020 was, nevertheless, still 2.2% below the level recorded in the

fourth quarter of 2019. The labour force partly recovered in the third quarter from a sharp contraction in the second quarter. While the number of workers in job retention schemes declined significantly in the third quarter, this is expected to reverse in the fourth quarter of 2020 in view of the recent tightening of lockdown measures. As the labour force continues to normalise and workers exit from job retention schemes, the unemployment rate is projected to increase further to a peak of 9.3% in 2021 before declining to 7.5% in 2023 as the economy recovers. This projection assumes that a high share of workers in job retention schemes can return to regular employment. By the end of the projection horizon, the unemployment rate and the number of persons employed are seen to return broadly to the levels recorded in the fourth quarter of 2019.

Labour productivity growth per person employed is projected to decline in 2020 and to recover thereafter over the projection horizon. Following the recovery from the sharp drop in the first half of the year, labour productivity per person employed is projected to decline again in the fourth quarter of 2020 owing to the intensification of containment measures and the related increases in the usage of job retention schemes in many countries. The growth of labour productivity per person employed is projected to recover in the first half of 2021 before gradually moderating over the remainder of the horizon.

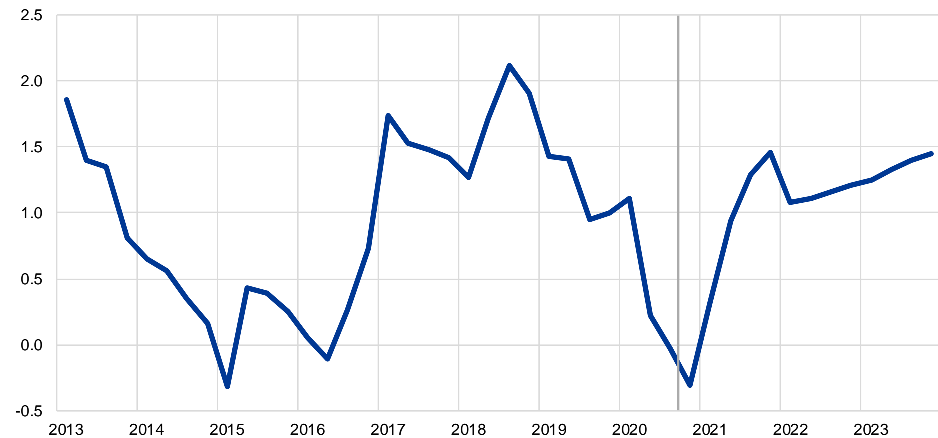
Compared with the September 2020 ECB staff projections, the profile of real GDP growth has been revised down in the short term in view of the recent resurgence of the pandemic, but is seen to broadly recover to the level of the September baseline over the medium term, reflecting additional fiscal stimulus, a stronger rebound as containment measures are lifted and confidence effects. Real GDP growth is revised up for 2020, reflecting the much better than expected outcome in the third quarter which more than compensates for the downward revision to the fourth quarter due to the resurgence of the pandemic. A downward revision to growth in the first quarter of 2021 also relates to the change in the technical assumption regarding the trade relationship between the United Kingdom and the EU (see Section 1). A stronger rebound in quarterly terms during the course of 2021 related to the relaxation of the second wave of containment measures and also to additional fiscal stimulus, in part from the NGEU plan, does not fully compensate for the lower carry-over effect into the year. In 2022 the upward revision mostly reflects a higher statistical carry-over, as well as some positive impact of lower long-term interest rates and lower oil prices.

3 Prices and costs

HICP inflation is expected to bounce back from 0.2% in 2020 to 1.0% in 2021 and then increase gradually further to 1.4% in 2023 (see Chart 2). The bounceback in 2021 reflects, to a large extent, base effects in HICP energy inflation related to the sharp fall in oil prices at the onset of the global COVID-19 outbreak, as well as the reversal of the VAT tax cut in Germany. In 2022 and 2023 HICP energy inflation is expected to stand around 1.6% and thus to have an upward impact on headline inflation. HICP food inflation is expected to show a somewhat opposite pattern to energy inflation in the short term, initially unwinding from the surge in 2020 caused by the outbreak of COVID-19 and subsequently increasing from mid-2022 to stand at 1.8% in 2023. The expected gradual increase in headline inflation to a rate of 1.4% in 2023 is thus significantly bolstered by the more volatile HICP items.

HICP inflation excluding energy and food is expected to gradually increase from 0.7% in 2020 to 1.2% in 2023. Excluding the impact of changes in indirect taxes, this projection implies a more protracted weakness in underlying inflation extending into 2021 and a noticeable, albeit still gradual, increase starting only later that year. The subdued underlying inflation dynamics in the shorter term reflect weak demand stemming from the dampening of activity and income developments by COVID-19-related restrictions. These dampening effects are expected to be only partly offset by upward price and cost pressures from supply side disruptions arising for example from hampered global value chains and from social distancing measures. The expected gradual increase in HICP inflation excluding energy and food over the second half of the projection horizon reflects rising demand in the context of the continuing economic recovery, while upward pressures from adverse supply effects linked to the pandemic are expected to diminish.

Chart 2
Euro area HICP



Notes: The vertical line indicates the start of the projection horizon. This chart does not show ranges around the projections. This reflects the fact that the standard computation of the ranges (based on historical projection errors) would not, in the present circumstances, provide a reliable indication of the unprecedented uncertainty surrounding the current projections. Instead, in order to better illustrate the current uncertainty, alternative scenarios based on different assumptions regarding the future evolution of the COVID-19 pandemic and the associated containment measures are provided in Box 3.

Job retention schemes imply high volatility in compensation per employee growth but buffer the impact of movements in economic activity on firms' wage costs. These schemes safeguard employment in the presence of a significant reduction in hours worked, pushing down the annual growth rate of compensation per employee, which is projected to drop by 1.1% in 2020, but to rebound strongly by 3.6% in 2021 on account of base effects. As the impact of the job retention schemes fades and labour market developments normalise, compensation per employee is expected to stand at rates slightly above 2.0% at the end of the projection horizon, which is broadly comparable to the rates seen prior to the pandemic.

Growth in unit labour costs is likely to show strong fluctuations over the projection horizon but is expected to provide, on balance, only muted inflationary pressures. The strong fluctuations largely reflect expected developments in productivity rather than in wages. Strong labour productivity growth in 2021 when production recovers but labour markets remain sluggish, and, to a lesser extent, in 2022, is expected to lead to negative unit labour cost growth in those two years before it moves back into positive territory in 2023. In cumulative terms, unit labour cost growth is seen to be slightly higher than 1.0% per annum over 2020-23 and thus implies only muted upward pressure on domestic price inflation.

Profit margins are expected to broadly buffer the strong swings in unit labour costs over the projection horizon. As a result, they are envisaged to drop in the near term, in line with activity and productivity growth, and to recover notably thereafter when labour cost pressures unwind. In 2020-21 profit margins are somewhat distorted by the government support schemes for wages. Towards the end of the projection horizon profit margins are expected to have a broadly neutral impact on inflationary pressures, which, by that time, stem essentially from labour costs again.

Import price dynamics are expected to display a similar pattern to those of oil prices, implying moderate growth in the second half of the projection horizon. The annual growth rate of the import deflator is expected to move from a very negative rate in 2020 to moderate positive rates in 2021-23. The positive import price inflation rate in these years reflects some upward price pressures from commodity prices but also the impact of global price dynamics more generally in a recovering world economy. These effects are partly offset by a dampening impact of the appreciation of the euro over the course of 2020.

Compared with the September 2020 ECB staff projections, the projection for HICP inflation is revised down for 2020 and 2022. HICP energy inflation is revised up for 2021 and down for 2022, reflecting the assumption embedded in the oil price futures curve. HICP food inflation shows the same revision pattern, which relates to a more delayed unwinding of the COVID-19-related surge in 2020. HICP inflation excluding energy and food is revised down for 2020, 2021 and 2022 on account of recent weaker data outturns and a downward reassessment of inflationary pressures since the previous projections in the context of abundant but diminishing slack in the goods and labour markets.

Box 3
Alternative scenarios for the euro area economic outlook

As significant uncertainty about the future evolution of the COVID-19 pandemic and its economic consequences persists, analysis based on alternative scenarios remains warranted. This box outlines two scenarios, representing alternatives to the December 2020 Eurosystem staff projections baseline, in order to illustrate a range of plausible impacts of the COVID-19 pandemic on the euro area economy.

The scenarios vary according to different assumptions about the pandemic and how the economy will respond. These assumptions concern the evolution of the pandemic and the severity and duration of containment measures, as well as the timing and successful implementation of medical solutions. Assumptions about the economy concern the behavioural responses of economic agents adjusting to economic disruptions and the longer-lasting effects on economic activity, once all containment measures have been lifted. The broad narratives for the development of these factors also determine the scenario-specific projections for euro area foreign demand as well as assumptions for fiscal policies and for bank lending rates. Other conditioning assumptions, such as those for the oil price, the exchange rate and government bond yields, are the same as for the baseline.

The mild scenario assumes the pandemic is successfully contained during the course of 2021, while the severe scenario assumes prolonged and tighter containment measures and sustained economic scarring. Besides the updates needed to reflect the recent resurgence of the virus and the intensification of containment measures, as well as the latest news about effective vaccines being in the pipeline, the narratives for both scenarios remain broadly similar to those included in the September 2020 ECB staff projections. The mild scenario assumes a stabilisation of infections after the recent rise and very successful economic responses by authorities and economic agents. The severe scenario envisages a strong resurgence of the pandemic, leading governments to tighten further the stringency of containment measures in the first quarter of 2021 but with more limited effectiveness. The sustained efforts to prevent the spread of the virus in the severe scenario

would continue to significantly dampen activity across all sectors of the economy until medical solutions were successfully implemented. The latter is assumed to occur by the end of 2021 in the mild scenario, whereas some containment measures need to be kept in place until the end of 2023 in the severe scenario. Compared with the narrative for the baseline, the severe scenario features more pronounced economic scarring and greater and more persistent weakness in activity across sectors. This is amplified by increased insolvencies, which lead to credit frictions that adversely affect the borrowing costs of households and firms. At the same time, monetary, fiscal and prudential policies are assumed to contain very severe financial amplification effects.

Alternative macroeconomic scenarios for the euro area

	December 2020 projections											
	Mild scenario				Baseline scenario				Severe scenario			
	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
Real GDP	-7.2	6.0	4.3	2.1	-7.3	3.9	4.2	2.1	-7.6	0.4	3.0	2.9
HICP inflation	0.2	1.1	1.3	1.5	0.2	1.0	1.1	1.4	0.2	0.7	0.6	0.8
Unemployment rate	7.9	8.8	7.5	6.9	8.0	9.3	8.2	7.5	8.1	10.3	9.9	9.4
	September 2020 projections											
	Mild scenario				**Baseline scenario**				**Severe scenario**			
	2020	**2021**	**2022**	**2023**	**2020**	**2021**	**2022**	**2023**	**2020**	**2021**	**2022**	**2023**
Real GDP	-7.2	8.9	3.5	-	-8.0	5.0	3.2	-	-10.0	0.5	3.4	-
HICP inflation	0.3	1.2	1.8	-	0.3	1.0	1.3	-	0.3	0.7	0.7	-
Unemployment rate	8.3	7.8	6.6	-	8.5	9.5	8.8	-	8.9	11.4	11.2	-

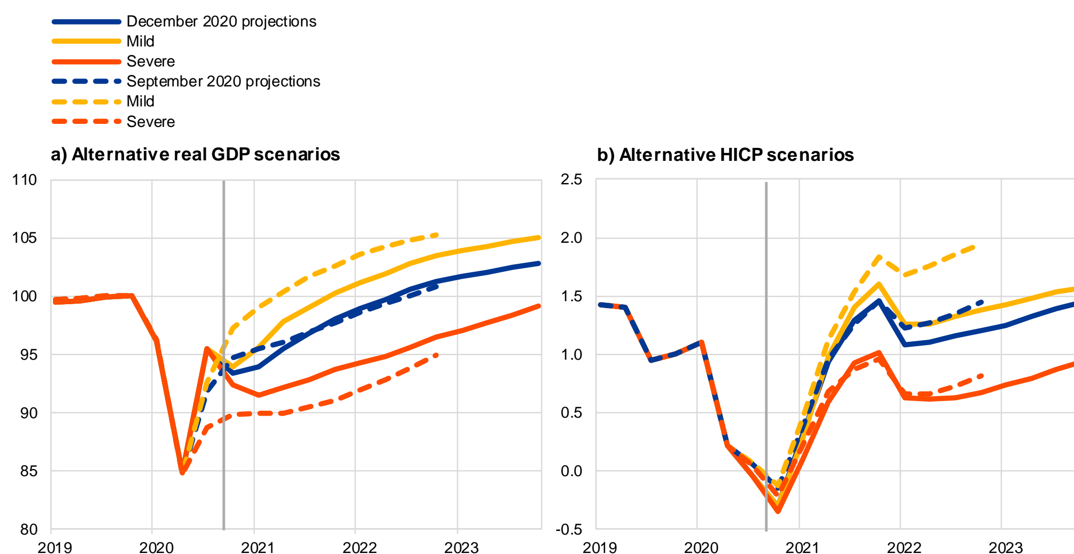
Note: The unemployment rate is measured as a percentage of the labour force.

The same broad narratives underlie the scenarios for the global economy and thus for euro area foreign demand. As a result of the high procyclicality of global trade with respect to global activity, at the end of 2023 euro area foreign demand would stand about 11% above its pre-crisis level in the mild scenario, while in the severe scenario it would stand around 2% below its pre-crisis level.

Euro area real GDP would fall by 1.6% and 3.2% respectively in the mild and severe scenarios in the fourth quarter of 2020, while an effective containment of the spread of the virus would be crucial to ensuring a robust recovery thereafter (see the Chart). The mild scenario sees a notable rebound in the first half of 2021 and a further strengthening of economic activity in the remainder of 2021, triggered by the assumed swift implementation of medical solutions which gives rise to confidence effects. The negative effects of the pandemic are projected to largely fade out by the end of 2022 when GDP in the mild scenario returns close to the level of GDP envisaged in the pre-crisis December 2019 Eurosystem staff projections. Under the severe scenario, economic activity declines further at the start of 2021 before recovering moderately thereafter. Economic growth continues to be subdued in the severe scenario until the first half of 2022, owing to the assumed further tightening of containment measures in the first quarter of 2021 and greater stringency of these measures throughout the projection horizon, further compounded by significant ongoing uncertainty and financial amplification effects and only partly mitigated by policy support measures. A somewhat more vigorous recovery in growth, compared with the baseline, is projected in the severe scenario only from late 2022, given strong catch-up potential, while not all losses in real GDP compared with its pre-crisis level are expected to be recouped by the end of the projections horizon.

Alternative scenarios for real GDP and HICP inflation in the euro area

(index: Q4 2019 = 100 (left-hand chart); year-on-year rate (right-hand chart))



Note: The vertical line indicates the start of the projection horizon.

Euro area labour markets would recover in the mild scenario, as policies would largely succeed in preventing hysteresis effects that are only partially contained in the severe scenario. In the mild scenario, the unemployment rate follows similar dynamics as in the baseline, peaking in 2021 after the currently expected end of most of the government support measures and reverting quickly to its pre-crisis level in 2022. Conversely, in the severe scenario the unemployment rate does not return to the pre-crisis level recorded in the fourth quarter of 2019 and it remains significantly elevated, reflecting higher reallocation needs across sectors, notwithstanding a gradual decline from the peak reached in the second quarter of 2021.

As regards HICP inflation, both scenarios see some rebound in the short term. This reflects the fact that the key drivers of the pick-up in inflation in the short term in the baseline (namely the oil price assumptions, base effects in the energy component and the impact of the temporary VAT changes in Germany) apply equally to the alternative scenarios.

Beyond the short term, the path of inflation varies more between the two scenarios owing to differences in the balance of supply and demand. Downward demand and upward supply effects on inflation are both expected to be larger in the severe scenario than in the mild scenario, but excess supply is envisaged to be higher in the severe scenario than in the mild one, depressing inflation. HICP inflation is expected to rise from 1.1% in 2021 to 1.5% in 2023 under the mild scenario, while it would hover around 0.7% over the projection horizon under the severe scenario.

4 Fiscal outlook

Substantial fiscal support has mitigated the macroeconomic impact of the COVID-19 crisis in 2020. The fiscal stance[3] is assessed to be highly expansionary in 2020. This is mainly underpinned by the extraordinary fiscal measures taken by all euro area countries in response to the pandemic. For the euro area as a whole, these measures amount to about 4½% of GDP, most of which is additional spending in the form of transfers and subsidies to firms and households, including under job retention schemes. Compared with the September 2020 ECB staff projections, the size of the COVID-19 crisis support package remains broadly unchanged in 2020.

The emergency support is expected to unwind mainly in 2021, but, compared with the September 2020 projections, some measures have been prolonged and new recovery packages adopted or presented in the context of the 2021 national budgets. Based on government approved or legislated measures at the cut-off date for fiscal assumptions, most of the pandemic-related programmes are temporary (amounting to around 3% of GDP) and unwind gradually mostly in 2021 and, to a smaller extent, in 2022. At the same time, government stimulus measures relating to the NGEU recovery fund – amounting to around 0.5% of GDP in each year in 2021-23 (i.e. about half of the NGEU grant envelope over 2021-26) – are now included in the baseline. Uncertainty remains with respect to the size, timing and composition of the fiscal stimulus to be funded by the NGEU package. Overall, the fiscal stance for 2021 indicates a reduction of the stimulus, although to a lesser extent than assumed in the September 2020 ECB staff projections.

The euro area budget deficit is projected to increase substantially in 2020 and to decline somewhat in 2021 and more sharply in 2022 and 2023. The increase in the budget deficit in 2020 stems from the emergency fiscal measures and the negative cyclical component, which reflects the worsening of macroeconomic conditions. The decline in the budget deficit in 2021 mainly relates to the partial unwinding of the emergency fiscal measures, while the cyclical component recovers only marginally. The more sizeable improvement in the budget balance in 2022 is due to a more favourable cyclical component and a further unwinding of the stimulus measures. Finally, in 2023, with a broadly neutral fiscal stance and better cyclical conditions, the budget balance is projected to improve further to -3% of GDP.

The euro area debt ratio is projected to increase in 2020, peak in 2021 and decline somewhat in 2022 and 2023. The surge in the debt ratio in 2020 is due to the debt-increasing interest rate growth differential (the snowball effect) and the high primary deficit. Debt is expected to peak at almost 100% of GDP in 2021, when the adverse effect of the primary deficit is higher than the favourable snowball effect. The slight decline thereafter is owed mainly to favourable interest growth differentials as the economies recover, which more than offset continuing primary deficits. Compared with the September 2020 ECB staff projections, the euro area budget balance and

[3] The fiscal policy stance is measured as the change in the cyclically adjusted primary balance net of government support to the financial sector.

debt ratios have been revised down for 2022, broadly in line with the revisions to the discretionary measures, cyclical conditions and interest payments.

Box 4
Sensitivity analysis

Projections rely heavily on technical assumptions regarding the evolution of certain key variables. Given that some of these variables can have a large impact on the projections for the euro area, examining the sensitivity of the latter to alternative paths of these underlying assumptions can help in the analysis of risks around the projections.

This sensitivity analysis aims to assess the implications of alternative oil price paths. The technical assumptions for oil price developments underlying the baseline, based on oil futures markets, predict an increasing profile for oil prices, with the price per barrel of Brent crude oil reaching USD 46.9 in 2023. Two alternative paths of the oil price are analysed. The first is based on the 25th percentile of the distribution provided by the option-implied densities for the oil price on 18 November 2020, which is the cut-off date for the technical assumptions. This path implies a gradual decrease in the oil price to USD 33.4 per barrel in 2023, which is 28.9% below the baseline assumption for that year. Using the average of the results from a number of staff macroeconomic models, this path would have a small upward impact on real GDP growth (around 0.1 percentage points in 2021, 2022 and 2023), while HICP inflation would be 0.4 percentage points lower in 2021, 0.5 percentage points lower in 2022 and 0.3 percentage points lower in 2023. The second path is based on the 75th percentile of the same distribution and implies an increase in the oil price to USD 55 per barrel in 2023, which is 17.5% above the baseline assumption for that year. This path would entail HICP inflation being higher by 0.3 percentage points in 2021, 0.2 percentage points in 2022 and 0.1 percentage points in 2023, while real GDP growth would be slightly lower (by 0.1 percentage points in 2021 and 2022).

Box 5
Forecasts by other institutions

A number of forecasts for the euro area are available from both international organisations and private sector institutions. However, these forecasts are not strictly comparable with one another or with the Eurosystem staff macroeconomic projections, as they are finalised at different points in time. They are also based on different assumptions about the future evolution of the COVID-19 pandemic. Additionally, these projections use different methods to derive assumptions for fiscal, financial and external variables, including oil and other commodity prices. Finally, there are differences in working day adjustment methods across different forecasts (see the table).

The Eurosystem staff projections are well within the range of other forecasts for growth for 2021 and at the upper end thereafter, while for inflation they are broadly in line with most other forecasts. The current projection for real GDP growth in 2022 is notably higher than other forecasts, possibly on account of a stronger rebound from the weaker short-term outlook and also additional fiscal measures. As regards inflation, differences are much less pronounced, and the December 2020 Eurosystem staff projection is broadly in line with those of other forecasters.

Comparison of recent forecasts for euro area real GDP growth and HICP inflation

(annual percentage changes)

	Date of release	GDP growth				HICP inflation			
		2020	2021	2022	2023	2020	2021	2022	2023
Eurosystem staff projections[1)]	December 2020	-7.3	3.9	4.2	2.1	0.2	1.0	1.1	1.4
OECD	December 2020	-7.5	3.6	3.3	-	0.3	0.7	1.0	-
Eurozone Barometer	November 2020	-7.6	5.0	2.5	0.7	0.3	1.0	1.3	1.3
Consensus Economics	November 2020	-7.3	4.7	2.8	1.9	0.3	0.9	1.3	1.4
European Commission	November 2020	-7.8	4.2	3.0	-	0.3	1.1	1.3	-
IMF	October 2020	-8.3	5.2	-	-	0.4	0.9	-	-
Survey of Professional Forecasters	October 2020	-7.8	5.3	2.6	-	0.3	0.9	1.3	-

Sources: MJEconomics for the Euro Zone Barometer, 19 November 2020, data for the years 2022 and 2023 are taken from the October 2020 survey; Consensus Economics Forecasts, 12 November 2020, data for the years 2022 and 2023 are taken from the October 2020 survey; European Commission Autumn 2020 Economic Forecast; ECB Survey of Professional Forecasters, for the fourth quarter of 2020, conducted between 2 October and 9 October 2020; OECD December 2020 Economic Outlook 108. IMF World Economic Outlook, 13 October 2020.
Notes: 1) The ECB and Eurosystem staff macroeconomic projections report working day-adjusted annual growth rates, whereas the European Commission and the IMF report annual growth rates that are not adjusted for the number of working days per annum. Other forecasts do not specify whether they report working day-adjusted or non-working day-adjusted data. This table does not show ranges around the ECB staff projections. This reflects the fact that the standard computation of the ranges (based on historical projection errors) would not, in the present circumstances, provide a reliable indication of the unprecedented uncertainty surrounding the current projections. Instead, in order to better illustrate the current uncertainty, alternative scenarios based on different assumptions regarding the future evolution of the COVID-19 pandemic and the associated containment measures are provided in Box 3.

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