

5. BOXES

Box 1.5.1: Some technical elements behind the forecast

The cut-off date for taking information into account in this European Economic Forecast was 25 October 2021.

Exchange and interest rates

The forecast builds on the technical assumption of fixed nominal exchange rates for all currencies (see Table 1).

Assumptions for interest rates are market-based. Short-term interest rates for the euro area are derived from futures contracts. Long-term interest rates for the euro area, as well as short- and long-term interest rates for other Member States, are calculated using implicit forward swap rates, corrected for the current spread between the interest rate and swap rate. In cases where no market instrument is available, the fixed spread vis-à-vis the euro area interest rate is taken for both short- and long-term rates.

Commodity prices

Assumptions for Brent oil prices are based on futures markets, using the average over the 10-day reference period between 7 and 19 October.

Trade policies and assumptions

Also for trade policy, this forecast pencils in only the measures that have been implemented until the cut-off date. There have been no major changes regarding trade policies as compared to the summer interim forecast.

ESA 2010

The forecast is based on the ESA 2010 system of national accounts for all Member States, the EU and the euro area aggregates. Information on data quality under ESA 2010, including effects of the Covid-19 pandemic, are available on Eurostat's

website.

Calendar effects on GDP growth and output gaps

The number of working days may differ from one year to another. The Commission's annual GDP forecasts are not adjusted for the number of working days, but quarterly forecasts are.

The working-day effect in the EU and the euro area is estimated to be limited in 2021, 2022 and 2023 implying that adjusted and unadjusted annual growth rates differ only marginally (by up to ±0.1 pps.), but it may be significant in the case of some member states.

Estimations of potential GDP and output gaps are not adjusted for working days. Furthermore, since the working-day effect is considered temporary, it is not expected to affect cyclically-adjusted balances.

The inclusion of the Recovery and Resilience Facility in the forecast.

The macroeconomic and budgetary projections in the forecast include the impact of the implementation of the Recovery and Resilience Facility (RRF). Unless mentioned otherwise, the forecast includes the measures incorporated in the Recovery and Resilience Plans as submitted to the Commission. The cash disbursement and expenditure profiles implicit in the forecast are consistent with the time profile of milestones and targets as specified in the Plans (and - if adopted - the relevant Council Implementing Decisions).

In all cases where the RRP was not yet endorsed by a Council Implementing Decision, the incorporation of the RRP in the forecast rests on the working assumption of a positive assessment by the Commission and future endorsement by a

Table 1:

Technical assumptions

	Autumn 2021 forecast				Spring 2021 forecast		
	2020	2021	2022	2023	2020	2021	2022
3-month EURIBOR (percentage per annum)	-0.4	-0.5	-0.5	-0.3	-0.4	-0.5	-0.5
10-year government bond yields (percentage per annum) (a)	-0.5	-0.3	-0.1	0.1	-0.5	-0.3	-0.1
USD/EUR exchange rate	1.14	1.19	1.16	1.16	1.14	1.20	1.20
GBP/EUR exchange rate	0.89	0.86	0.85	0.85	0.89	0.87	0.87
RMB/EUR exchange rate	7.87	7.67	7.46	7.46	7.87	7.82	7.82
JPY/EUR exchange rate	121.8	129.99	130.54	130.54	121.81	129.70	130.31
EUR nominal effective exchange rate (annual percentage change) (b)	3.94	1.30	-1.30	0.00	3.94	2.28	0.13
Oil price (USD per barrel)	43.4	71.6	78.9	72.3	43.4	63.9	61.6
Oil price (EUR per barrel)	38.0	60.4	68.1	62.5	38.0	53.1	51.2

(a) 10-year government bond yields for the euro area are the German government bond yields.

(b) 42 industrial countries EU-27, TR CH NR US UK CA JP AU MX NZ KO CN HK RU BR.

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Box (continued)

Council Implementing Decision. The inclusion of transfers from the EU in revenue projections and the time profiles of cash disbursements included in the forecast is based on the assumption of a timely completion of milestones and targets. The working assumptions in the forecast do not pre-judge the outcomes of future Commission and Council decisions.

Transactions related to the RRF in the forecast are recorded in line with Eurostat's 'Guidance note on the statistical recording of the Recovery and Resilience Facility' of 7 October 2021. In particular, this implies that, except for 2020, the budgetary impact any expenditure or other costs financed with non-reimbursable transfers ('grants') from the RRF is neutralised in revenue projections by matching transfers received from the EU (in 2020, expenditure and other costs retroactively financed by RRF grants are offset by transfers from the EU in the year of adoption of the Council Implementing Decision). Expenditures financed by loans from the RRF increase the deficit, while the actual loans by the RRF are recorded as Member States' debt towards the EU.

Budgetary data and forecasts

The forecast incorporates validated public finance data up to 2020 as published in Eurostat's news release 119/2021 of 21 October 2021.

Eurostat is withdrawing the reservation on the quality of the data reported by Luxembourg for the year 2020. The Luxembourgish statistical authorities have provided the missing information on the tax revenue deferred in the context of the COVID-19 pandemic.

The public finance forecast is made under the 'no-policy-change' assumption, which extrapolates past revenue and expenditure trends and relationships in line with past policy orientations. This may also include the adoption of working assumptions, in particular to deal with structural breaks caused by the COVID-19 pandemic. The no-policy-change forecast includes all fiscal policy measures that imply a change to past policy orientations on the condition that they are sufficiently detailed as well as adopted or at least credibly announced. For 2022, draft budgets are taken into consideration. The short-term emergency measures taken in response to COVID-19 crisis adopted in 2020 and 2021 are not treated as one-off and are thus reflected in the estimation of the structural budget balance.

In line with Eurostat's press release, EU and euro area aggregates for general government balance and debt are based exclusively on the Member States' balances and debt. For debt, whereas Eurostat publishes the consolidated figures (corrected for intergovernmental loans, including those made through the European Financial Stability Facility), the projections in the forecast years 2021, 2022 and 2023 are published on a non-consolidated basis. To ensure consistency in the time series, historical data are also published on the same basis. For 2020, this implies an aggregate debt-to-GDP ratio that is somewhat higher than the consolidated general government debt ratio published by Eurostat in its news release 119/2021 of 21 October 2021 (by 2.0 pps. in the EA and by 1.7 pps. in the EU).