4. BOXES

Box I.4.1: Some technical elements behind the forecast

Given that the future relations between the EU and the UK are not yet clear, projections for 2021 are based on a purely technical assumption of status quo in terms of their trading relations. This is for forecasting purposes only and reflects no anticipation or prediction with regard to the outcome of the negotiations between the EU and the UK on their future relationship.

The United Kingdom withdrew from the European Union as of 1 February 2020. The Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and European Atomic Energy Community (OJ L 29, 31.1.2020, p. 7) entered into force on the same date. It provides for a transition period which will end on 31 December 2020. During the transition period, Union law, with a few exceptions, is applicable to and in the United Kingdom. For the purposes of Union law applicable to it during the transition period, the United Kingdom is treated as an EU Member State, but will not participate in EU decision-making and decision-shaping.

The cut-off date for taking new information into account in this European Economic Forecast was 23 April 2020. The forecast incorporates validated public finance data as published in Eurostat's news release 65/2020 of 22 April 2020.

External assumptions

This forecast is based on a set of external assumptions, reflecting market expectations at the time of the forecast. To shield the assumptions from possible volatility during any given trading day, averages from a 10-day reference period (between 7 and 20 April) were used for exchange and interest rates, and for oil prices.

Exchange and interest rates

The technical assumption regarding exchange rates was standardised using fixed nominal exchange rates for all currencies. This technical assumption leads to an implied average USD/EUR rate of 1.09 both in 2020 and in 2021. The average JPY/EUR is 118.35 in 2020 and 117.78 in 2021.

Interest-rate assumptions 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. As a result, short-term interest rates are assumed to be -0.3% in 2020 and -0.4% in 2021 in the euro area. Long-term euro area interest rates are assumed to be -0.4% in 2020 and -0.3% in 2021.

Commodity prices

Commodity price assumptions are also based on market conditions. According to futures markets, prices for Brent oil are projected to be on average 38.4 USD/bbl in 2020 and 40.2 USD/bbl in 2021. This would correspond to an oil price of 35.1 EUR/bbl in 2020 and 36.9 EUR/bbl in 2021.

Trade policies

As far as trade policy is concerned, this forecast pencils in only the measures that have been implemented until the cut-off date. Compared to the winter interim forecast, there were only limited changes to the baseline scenario.

- On 14/02/2020, the US decided to increase the levy on aircraft imports from the EU from 10% to 15% from 18 March onwards as a follow-up of an ongoing dispute at the WTO regarding a case against Airbus.

- On 27/03/2020, the EU and 15 other members of the World Trade Organization (including China, Canada, Brazil Australia and Mexico) decided on an arrangement that will allow them to bring appeals and solve trade disputes among them despite the current paralysis of the WTO Appellate Body.

- As a result of the COVID-19 pandemic, export prohibitions or restrictions mostly related to medical supplies have increased significantly. According to WTO, eighty countries have introduced new trade barriers in response to the COVID-19 crisis.

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Box (continued)

Table 1:
Technical assumptions

		Spring 2020 forecast			Autumn 2019 forecast		
	2018	2019	2020	2021	2019	2020	2021
3-month EURIBOR (percentage per annum)	-0.3	**-0.4**	**-0.3**	**-0.4**	*-0.4*	*-0.5*	*-0.5*
10-year government bond yields (percentage per annum) (a)	0.4	**-0.3**	**-0.4**	**-0.3**	*-0.3*	*-0.4*	*-0.3*
USD/EUR exchange rate	1.18	**1.12**	**1.09**	**1.09**	*1.12*	*1.11*	*1.11*
JPY/EUR exchange rate	130.38	**122.05**	**118.35**	**117.78**	*121.81*	*119.52*	*119.52*
GBP/EUR exchange rate	0.88	**0.88**	**0.87**	**0.87**	*0.88*	*0.88*	*0.88*
EUR nominal effective exchange rate (annual percentage change) (b)	2.4	**-1.2**	**1.5**	**0.5**	*-1.0*	*-0.1*	*0.0*
Oil price (USD per barrel)	71.5	**64.1**	**38.4**	**40.2**	*63.3*	*57.4*	*56.1*
Oil price (EUR per barrel)	60.6	**57.2**	**35.1**	**36.9**	*56.5*	*51.9*	*50.8*

(a) 10-year government bond yields for the euro area are the German government bond yields.
(b) 42 industrial countries EU-28, TR CH NR US CA JP AU MX NZ KO CN HK RU BR.

Budgetary data and forecasts

Data up to 2019 are based on data notified by Member States to the European Commission before 1 April and validated by Eurostat on 22 April 2020. [1]

Eurostat is **expressing a reservation** on the quality of the data reported by Denmark for the year 2019. This is due to the fact that the Danish Statistical Authorities provided significantly incomplete data for that year, which only allowed Eurostat to carry out very limited verification checks. In addition, a considerable statistical discrepancy for 2019 was observed.

The public finance forecast is made under the 'no-policy-change' assumption, which extrapolates past revenue and expenditure trends and relationships in a way that is consistent with past policy orientations. This may also include the adoption of working assumptions, especially to deal with structural breaks caused by the COVID-19 pandemic. The forecast includes all fiscal policy measures that imply a change to these past policy orientations on the condition that they are sufficiently detailed as well as adopted or at least credibly announced. For 2020 in particular, the annual budgets adopted or presented to national parliaments, as well as Coronavirus relief measures announced before the cut-off date of the forecast, are taken into consideration.

EU and euro area aggregates for general government debt in the forecast years 2020 and 2021 are published on a non-consolidated basis (i.e. not corrected for intergovernmental loans, including those made through the European Financial Stability Facility). To ensure consistency in the time series, historical data are also published on the same basis. For 2019, this implies an aggregate debt-to-GDP ratio which is somewhat higher than the consolidated general government debt ratio published by Eurostat in its news release 65/2020 of 22 April (by 1.9 pps. in the EA19 and by 1.6 pps. in the EU).

[1] Eurostat News Release No 65/2020.

Coronavirus relief measures

In response to the outbreak of the COVID-19 pandemic, many Member States have announced and taken unprecedented and sizeable measures to contain the spread of the virus and to lessen its socio-economic impact. Those measures include additional expenditure to equip healthcare systems with the necessary resources, but also broader economic support measures to ensure the continued supply of basic goods and services to the population, and to support households, firms and the financial sector.

In the forecast, the budgetary impact of such measures are estimated in line with the established "no-policy change" guidelines. In particular, a distinction is made between discretionary measures with a direct budgetary impact and broader liquidity support measures that do not imply an immediate budgetary impact. Concerning the former, those include, for example, increases in healthcare expenditure, lump-sum payments to companies, or the net incremental impact of new policy measures to set up or increase coverage of short-time work or temporary unemployment schemes. In addition, the macroeconomic and budgetary projections in the forecast reflect the effect of automatic stabilisers.

Liquidity provisions in the form of public guarantees or loans to companies are in general included as risks to the budgetary projection. Ex-ante impacts are only included in specific cases, notably in case of standardised instruments, where in accordance with the past practices applied by the national statistical authorities, a certain share of such loans or guarantees can be assumed to have an

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Box (continued)

impact on the government balance ex-ante. This recording is without prejudice to the statistical treatment of these measures by the national statistical authorities and Eurostat. In many cases, the duration of the budgetary measures taken in response to the coronavirus is difficult to assess, as it depends on the duration of decreed lockdowns and the evolution of the pandemic. In light of the activation of the general escape clause, the measures taken in response to the coronavirus outbreak in 2020 are not treated as one-off and are thus not excluded from the estimation of the structural budget balance.

ESA 2010

The current 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. (2)

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 2020 and 2021, implying that adjusted and unadjusted annual growth rates differ only marginally (by up to ±0.1 pps.).

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.

(2) https://ec.europa.eu/eurostat/web/esa-2010/esa-2010-implementation-and-data-quality