# 4. BOXES

# Box 1.4.1: Some technical elements behind the forecast

Given the ongoing ratification process of the revised Withdrawal Agreement in the UK, projections for 2019, 2020 and 2021 are based on a purely technical assumption of status quo in terms of trading relations between the EU27 and the UK. This is for forecasting purposes only.

The cut-off date for taking new information into account in this European Economic Forecast was 24 October 2019. The forecast incorporates validated public finance data as published in Eurostat's news release 161/2019 of 21 October 2019.

#### **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 8 and 21 October) 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 1.12 in 2019 and 1.11 both in 2020 and in 2021. The average JPY/EUR is 121.81 in 2019 and 119.52 in both 2020 and 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 -0.4% in 2019 and -0.5% in 2020 and 2021 in the euro area. Long-term euro area interest rates are assumed to be -0.3% in 2019, -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 63.3 USD/bbl in 2019, 57.4 USD/bbl in 2020 and 56.1 USD/bbl in 2021. This would correspond to an oil price of 56.5 EUR/bbl in 2019, 51.9 EUR/bbl in 2020 and 50.8 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 summer interim forecast, there were a number of limited changes to the baseline scenario.

- On 01/08/2019, the trade conflict between Japan and Korea escalated. Japan introduced export controls for tech material shipments to Korea and removed Korea from the white list of countries that benefit from minimum traderelated restrictions and procedures. Later, Korea also removed Japan from a list of preferred trading partners.
- On 01/08/2019, despite ongoing trade talks, the US announced a 10% tariff on the remaining 300 billion USD of imports from China, which were not yet subject to new tariffs. The US administration decided that part of the tariff will take effect on 1 September except for some tariffs on consumer goods which will be implemented from 15 December onwards.
- On 23/08/2019, China retaliated by announcing 5% and 10% tariffs on 75 billion USD of imports from the US to be phased in in two stages (on 1 September and 15 December) along with resuming the 25% duty on US automobiles and auto parts from 15 December onwards. The US administration reacted by increasing the tariff on 300 billion USD of imports from China to 15% and announced raising the 25% tariff already in place on 250 billion USD of Chinese imports to 30% from 15 October onwards.
- On 25/09/2019, the US and Japan announced a partial trade agreement in which Japan would lift its tariffs on some agricultural products in exchange for the US lifting tariffs on some industrial goods.

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Box (continued)

Technical assumptions

Table 1:

		Autumn 2019 forecast			Spring 2019 forecast		
	2018	2019	2020	2021	2018	2019	2020
3-month EURIBOR (percentage per annum)	-0.3	-0.4	-0.5	-0.5	-0.3	-0.3	-0.3
10-year government bond yields (percentage per annum) (a)	0.4	-0.3	-0.4	-0.3	0.4	0.1	0.2
USD/EUR exchange rate	1.18	1.12	1.11	1.11	1.18	1.13	1.13
JPY/EUR exchange rate	130.38	121.81	119.52	119.52	130.38	125.57	125.73
GBP/EUR exchange rate	0.88	0.88	0.88	0.88	0.88	0.86	0.86
EUR nominal effective exchange rate (annual percentage change) (b)	2.4	-1.1	-0.1	0.0	4.8	-1.5	-0.1
Oil price (USD per barrel)	71.5	63.3	57.4	56.1	71.5	69.2	67.8
Oil price (EUR per barrel)	60.6	56.5	51.9	50.8	60.6	61.3	60.2

(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.
- On 11/10/2019, the US announced that a "phase one" agreement with China has been reached. As a result, the US suspended the tariff increase from 25% to 30% on 250 billion USD imports from China, which were planned to go into effect on 15 October. In exchange, the Chinese authorities committed to increasing purchases of US agricultural products.
- On 18/10/2019, the US decided to apply countermeasures against imports from the EU as a consequence of the World Trade Organization (WTO) ruling in the Airbus case.

# **Budgetary data and forecasts**

Data up to 2018 are based on data notified by Member States to the European Commission before 1 October and validated by Eurostat on 21 October 2019. (1)

Eurostat is **withdrawing the reservation** on the quality of the data reported by Hungary in relation to the sector classification of the Hungarian Association for the Stockpiling of Hydrocarbons (MSZKSZ) and of the foundations created by the Hungarian National Bank. The foundations and all their subsidiaries as well as the association, were reclassified into general government. Due mainly to the combined effect of these reclassifications the debt has increased by 0.4 pp of GDP in 2017 and by 0.3 pp in 2015, 2016 and 2018, while the deficit has increased by 0.2 pp of GDP in 2017 and by 0.1 pp in 2015 and 2016.

Eurostat is **withdrawing the reservation** on the quality of the data reported by Slovakia in relation to the recording of certain expenditures incurred by government, following the revision implemented by the Slovak statistical authorities that led to an increase in the deficit by 0.2% of GDP in 2018.

EU and euro area aggregates for general government debt in the forecast years 2019-21 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 2018, 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 161/2019 of 21 October (by 2.0 pps. in the EA19 and by 1.5 pps. in the EU).

#### **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.

# 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.

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The public finance forecast is made under the 'nopolicy-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 a limited number of working assumptions, especially to deal with possible structural breaks. 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, draft budgets presented before the cut-off date of the forecast are taken into consideration.

<sup>(1)</sup> Eurostat News Release No 161/2019.

# Box (continued)

The working-day effect in the EU and the euro area is estimated to be limited in 2019 and 2021, implying that adjusted and unadjusted annual growth rates differ only marginally (by up to  $\pm 0.1$  pps.). In 2020, this difference will be close to  $\frac{1}{4}$  pps. in the euro area.

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.