Box I.5: Some technical elements behind the forecast

The cut-off date for taking new information into account in this European Economic Forecast was 22 January. The forecast incorporates validated public finance data as published in Eurostat's News Release 186/2015 of 21 October 2015.

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 5 and 18 January) 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 1.11 in 2015, and 1.08 in 2016 and 2017. The average JPY/EUR is 134.31 in 2015, 127.91 in 2016, and 127.90 in 2017.

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 -0.2% in 2016 and 2017 in the euro area. Long-term euro area interest rates are assumed to be 0.6% in 2016, and 0.9% in 2017.

Commodity prices

Commodity price assumptions are also, as far as possible, based on market conditions. According to futures markets, prices for Brent oil are projected to be on average 35.80 USD/bbl in 2016 and 42.50 USD/bbl in 2017. This would correspond to an oil price of 33.01 EUR/bbl in 2016 and 39.19 EUR/bbl in 2017.

Budgetary data and forecasts

Data up to 2014 are based on data notified by Member States to the European Commission on 1 October and validated by Eurostat on 21 October 2015.

Eurostat expressed a reservation on the quality of the data reported by Austria in relation to an insufficient adherence to the accrual rules of recording of expenditure and revenue, as required in ESA2010, notably at the budgetary central government level ("Bund"). Currently, a significant number of transactions are recorded on a cash basis in national accounts. This situation creates uncertainty on the quality of the figures and the risk that data will be revised in the April 2016 EDP exercise.

Eurostat withdrew its earlier reservation on the quality of the data reported by Bulgaria expressed in Eurostat's News Release of 21 April 2015 in relation to the sector classification of the Deposit Insurance Fund and to the impact on the government deficit of the fund's repayment of the guaranteed deposits in the Corporate Commercial Bank. Following an analysis by Eurostat in cooperation with the Bulgarian statistical authorities, the Deposit Insurance Fund was reclassified inside general government, leading to an increase in the deficit of BGN 2.6 bn and a decrease in the debt by BGN 0.13 bn in 2014.

Eurostat withdrew its earlier reservation on the quality of the government deficit data reported by Portugal for 2014 expressed in Eurostat's News Release of 21 April 2015, due to uncertainties of the statistical impact of the capitalisation of Novo Banco in 2014 for an amount of EUR 4.9 bn. The deficit of Portugal for 2014 was increased by that amount, as the sale of Novo Banco did not occur within one year after the capitalisation.

Eurostat made no amendments to the data reported by Member States.

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 a limited number of working assumptions, especially to deal with possible structural breaks. The forecast reflects all fiscal policy measures that imply a change to these past policy orientations on

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Box (continued)

the condition that they are sufficiently detailed as well as adopted or at least credibly announced. For 2016 in particular, this implies that the annual budgets adopted or presented to national parliaments are taken into consideration.

EU and euro area aggregates for general government debt in the forecast years 2015-17 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 2014, 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 186/2015 of 21 October 2015 (by 2.4 pps. in the euro area EA19 and by 1.8 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.

However, the working-day effect in the EU and the euro area is estimated to be limited over the forecast horizon, implying that adjusted and unadjusted annual growth rates differ only marginally (by up to ±0.1 pps.). The calculation of potential growth and the output gap does not adjust for working days. Since the working-day effect is considered as temporary, it should not affect the cyclically-adjusted balances.