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 April. The forecast incorporates validated public finance data as published in Eurostat's News Release 76/2016 of 21 April 2016.

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 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 1.13 in 2016, and 2017. The average JPY/EUR is 124.44 in 2016 and 123.60 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 -0.3 in 2017 in the euro area. Long-term euro area interest rates are assumed to be 0.2% in 2016, and 0.3% 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 41.07 USD/bbl in 2016 and 45.95 USD/bbl in 2017. This would correspond to an oil price of 36.47 EUR/bbl in 2016 and 40.53 EUR/bbl in 2017.

Budgetary data and forecasts

Data up to 2015 are based on data notified by Member States to the European Commission before 1 April and validated by Eurostat on 21 April 2016.

Eurostat is expressing a reservation on the quality of the data reported by Belgium in relation to the sector classification of hospitals. Eurostat considers that, in line with ESA 2010, government controlled hospitals in Belgium should be classified inside government. This is currently not the case. A future reclassification will most likely result in a limited increase in government debt.

Eurostat is expressing a reservation on the quality of the data reported by France in relation to two issues. First, the sector classification of the French Deposit Guarantee and Resolution Funds (Fonds de garantie des Dépôts et de Résolution - FGDR) in 2015 which will most likely result in a limited increase in government debt and a limited decrease in government deficit. Second, the recording of settlement costs related to the restructuring of complex debt instruments undertaken by local government which will most likely result in a limited increase in government deficit for the year 2015.

Eurostat is expressing a reservation on the quality of the data reported by Hungary in relation to the sector classification of Eximbank (Hungarian Export-Import Bank Plc). Eximbank needs to be reclassified inside the general government sector which will result in an increase in government debt.

Eurostat, in cooperation with these national statistical authorities, will clarify the issues and assess the impacts during the coming months.

Eurostat is withdrawing the reservation on the quality of the data for Austria expressed in Eurostat's News Release of 21 October 2015.

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.

EU and euro area aggregates for general government debt in the forecast years 2016-17 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 2015, 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 76/2016 of 21 April 2016 (by 2.2 pps. in the euro area EA19 and by 1.6 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.