

3.2. WHAT IS BEHIND THE SLOWDOWN? A MODEL-BASED ANALYSIS OF GROWTH DRIVERS

Real GDP of the euro area is forecast to grow at 1.1% in 2019 and 1.2% in 2020, which is 0.2 pps. below the potential growth estimate in both years, and constitutes a pronounced slowdown compared to the annual average growth of 2.1% in 2016-18. The forecasts for the individual Member States reveal marked differences and signal an asymmetric reaction to external developments. Looking at the two largest euro area Member States, real GDP growth in Germany is forecast to slow down to 0.4% in 2019 and to be at 1.0% in 2020, below its long-run trend and after an average annual growth rate of 2.1% in 2016-18. The French economy, by contrast, is forecast to grow at 1.3% annually in 2019 and 2020, which is close to its long-run trend growth.

This special topic discusses the main growth drivers of the euro area in both 2019 and 2020 through the lens of a structural model. The structural model decomposes macroeconomic dynamics based on a rich information set. In particular, the model identifies the driving forces of the forecast on the basis of restrictions imposed by structural equations, i.e. by economic theory, across variables and over time. The sign and size

of the different demand and supply shocks⁽⁹⁷⁾ depends on their ability to fit not only GDP, but also other observables, such as economy-wide consumption, investment, trade, and employment. The special topic also includes a discussion of the forecasts for Germany and France to illustrate the heterogeneity across countries implied by particular drivers of growth.

The analysis builds on the Global Multi-Country model, which is a macroeconomic model in the New-Keynesian tradition.⁽⁹⁸⁾ The analysis uses a configuration with two regions, the euro area and the rest of the world (RoW) for the euro area forecast; and a three-region set-up (individual Member State, rest of the euro area, RoW) for the identification of growth drivers in Germany and France, thus providing further granularity. Once the model has been estimated using historical data from 1999-Q1 to 2019-Q2, the time series are extended by the European Commission's Autumn 2019 forecast for the set of available variables. The estimated model then recovers the shocks that are necessary to fit the forecast given the estimated model parameters and the historical data.

A strong reduction in export demand drives the growth slowdown in 2019-2020...

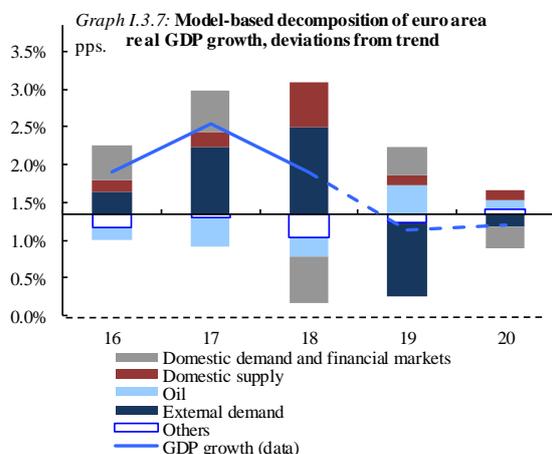
Graph I.3.7 provides a model-based decomposition of annual real GDP growth in the euro area. The solid blue line depicts the historical data (2016-18), and the dashed line the European Commission's forecast for 2019-20. The coloured bars identify the driving forces contributing to deviations of GDP growth from its long-run trend of 1.3%.⁽⁹⁹⁾ Bars above (below) the solid vertical axis indicate positive (negative) contributions to GDP growth relative to the long-term trend in a given year. The sum of positive and negative

⁽⁹⁷⁾ The term "shocks" refers to the exogenous factors that drive the deviations of endogenous variables in the model from their long-run trend paths.

⁽⁹⁸⁾ The Global Multi-Country (GM) DSGE model has been developed by DG ECFIN and the Joint Research Centre of the European Commission. A detailed description of the GM model can be found in: Albonico, A., L. Calès, R. Cardani, O. Croitorov, F. Di Dio, F. Ferroni, M. Giovannini, S. Hohberger, B. Pataracchia, F. Pericoli, P. Pfeiffer, R. Raciborski, M. Ratto, W. Roeger and L. Vogel (2019). 'The Global Multi-Country Model (GM): an Estimated DSGE Model for the Euro Area Countries'. *ECFIN Discussion Paper No. 102*. European Commission.

⁽⁹⁹⁾ The large number of shocks (the model includes 36 types which reflect the rich dataset) are summarised into groups. For additional details, see also Box I.1 of the European Commission's Spring 2019 forecast. Note that trend growth of real GDP is determined by trend productivity and trend labour force growth.

contributions matches the data (solid blue line) for any point in time and the forecast (dashed line) for 2019-20.



From the perspective of the estimated model, the deceleration of euro area GDP growth in 2019 is explained predominantly by declining export demand (Graph I.3.7). This group of shocks⁽¹⁰⁰⁾ alone (dark blue bar) would signal a 2.1 pps. decline in GDP growth in 2019 compared to 2018. The decline in exports is led by a slowdown in world import demand (excluding euro area), which is forecast to continue weighing negatively on euro area exports over 2019-2020, although more so in the current year. The slowdown in world import demand is stronger than suggested by the slowdown in global activity alone. It affects not only euro area exports, but also feeds through to employment and consumption growth (see below).

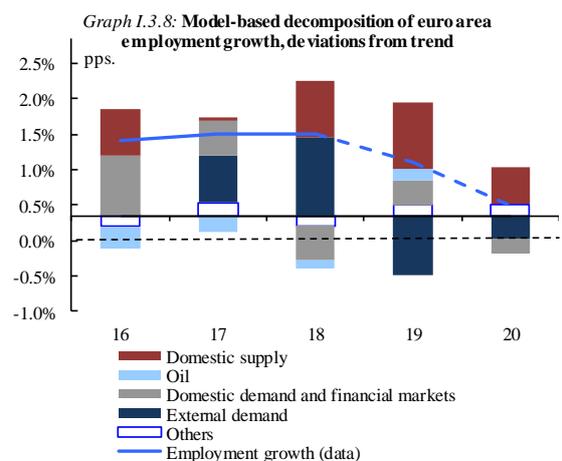
The negative impact of external demand on growth in 2019 is estimated to be partly attenuated by lower oil prices (light blue bar). Domestic demand and financial market shocks⁽¹⁰¹⁾ (grey bar) also play a positive role in 2019, which is associated notably with still robust investment growth (in the euro area as a whole) in 2019 and a depreciation of the nominal effective exchange rate of the euro in line with the forecast's external assumptions. Domestic labour and goods market ("supply-side") factors (red bar) contribute on the upside in 2019 and 2020. These are shaped by positive labour supply shocks consistent with a decline in the NAWRU and a sluggish response of labour

⁽¹⁰⁰⁾ The group "external demand" summarises shocks to foreign demand and shocks to the trade equations, where the latter affect trade volumes and prices for given levels of foreign demand. Together, these shocks affect euro area (net) exports.

⁽¹⁰¹⁾ Financial market shocks include among others exchange rate shocks.

demand (i.e. stabilisation of labour income) to the slowdown in growth ("labour hoarding"), lifting GDP growth in 2019-20.

With euro area growth failing to rebound swiftly, the labour market outlook is less bright compared to the recent past. Employment growth is projected to decelerate, from 1.5% on average in 2016-2018 to 1.1% in 2019 and 0.5% in 2020. Lower external demand translates into declining GDP growth, which requires less labour input (Graph I.3.8).

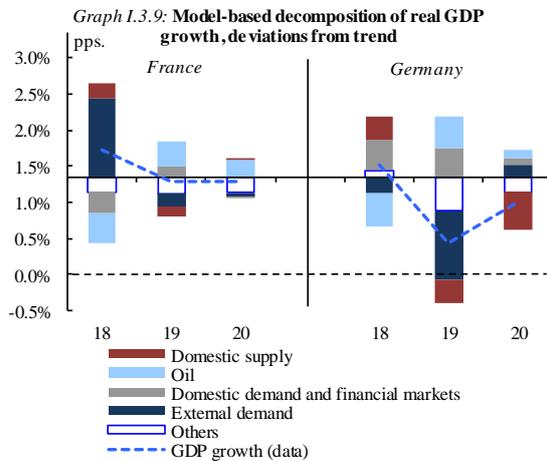


The slowdown of employment growth in the forecast is less pronounced than the slowdown in euro area real GDP growth, however. The model attributes the stronger resilience of employment growth mostly to stabilising factors in the labour market itself. In particular, employment continues to grow faster than the labour force, leading to a (further) decline in the rate of unemployment in 2019-2020. Despite this decline in unemployment, real wage and labour cost growth are projected to remain below trend, which is consistent with positive labour supply adjustments (wage moderation). Labour demand, furthermore, adjusts sluggishly to the slowdown in economic activity, which the model attributes to "labour hoarding". The two labour-market factors account for most of the positive "supply-side" component (red bar) in Graph I.3.8. In addition to the labour market factors, oil prices, domestic demand and financial market factors support employment in line with their positive contribution to GDP growth in 2019.

...with different effects across Member States.

The decline in external demand growth, which has been identified as the main driver of the current downturn at the euro area level (Graph I.3.7), hides marked differences across euro area Member

States, as shown in the decomposition of GDP growth in Germany and France (Graph I.3.9).

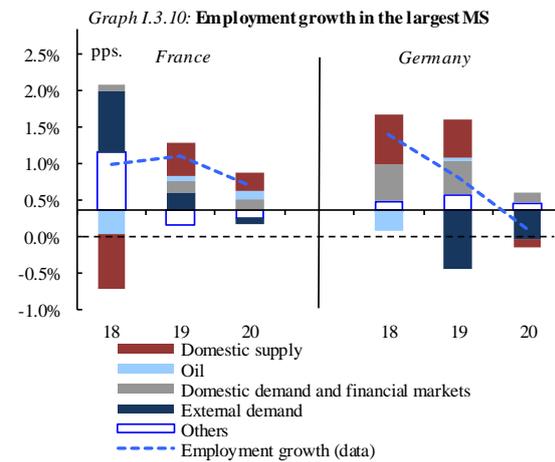


In effect, the downside contribution of external demand shocks to real GDP growth in 2019 (Graph I.3.9) is moderate in France, compared to a large drag on GDP growth in Germany, which is in line with stronger (net) export growth in France compared to Germany in the forecast for 2019. The different growth contribution of external demand (difference of 0.8 pps.) can almost fully account for the growth differential (0.9 pps.) between France and Germany in 2019. The stronger negative contribution to growth in Germany is partly driven by market share losses of German exporters, which further highlights the asymmetric nature of the shock.

Concerning other factors, the projected decline in oil prices contributes positively to growth in 2019 and 2020, in line with the results for the euro area aggregate. Domestic demand factors play a less positive role in France, due to a reduction in government spending relative to GDP as incorporated in the forecast. Fiscal policy plays a more stabilising role in Germany, where government consumption and investment spending is projected to rise relative to GDP.

Domestic supply shocks dampen real GDP growth in Germany. The GDP deflator growth picks-up in 2019 and remains broadly stable in 2020, despite the slowdown in economic activity this year. The model attributes the sluggish response of prices to economic activity to an increase in the price mark-up that has negative implications for domestic activity and weakens the recovery in 2020. The model also suggests sluggish adjustment of prices in France in 2019 and 2020. The negative impact of the temporary price mark-up increase on

economic activity in France is, however, largely offset by wage moderation (notably a decline in nominal unit labour costs in 2019 linked to changes in social security contributions of the CICE), which in the model is a negative wage mark-up shock that strengthens employment and GDP growth.



The drivers of employment dynamics in Germany and France (Graph I.3.10) are similar to those highlighted for GDP growth. The slowdown in export demand, which is the main factor behind the slowdown between 2018 and 2019, also dampens employment growth in both countries and more substantially so in the case of Germany. Domestic demand and financial factors, together with the lower oil price incorporated in the forecast, strengthen employment growth in France in 2019 and 2020 compared to 2018. For Germany the model suggests a decline in the contribution of domestic demand factors in 2020.

Contrary to the decomposition of GDP growth, domestic supply factors play a more positive role for employment in both countries. As for GDP growth the identified price mark-up increase dampens employment growth, whereas declining wage costs in France (wage mark-up decline) strengthen labour demand and employment in 2019. In addition, labour hoarding stabilises employment in both countries, although it is more pronounced in the case of Germany, in light of the magnitude of the growth slowdown.